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1 AS3.0.90 version information

1.1 New functions

Programming



New text editor

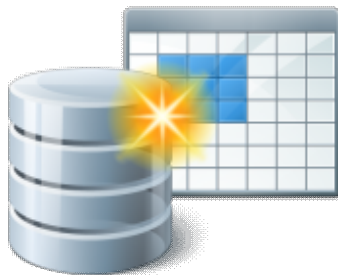
The new text editor provides functions such as outlining, code snippets, highlighting changed lines and more. This makes programming and navigating in the code even more efficient.

```
class BasisAxis
{
    // public members
public:
    REAL Disabled;
    REAL Standstill;
    REAL Position;
    REAL Velocity;

    // private members
private:
    UDINT axisRef;
```

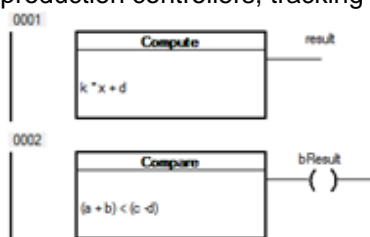
Object orientation with C++

The use of C++, a recognized and established OOP language, increases the reusability of source code and opens up whole new possibilities for modularizing machines.



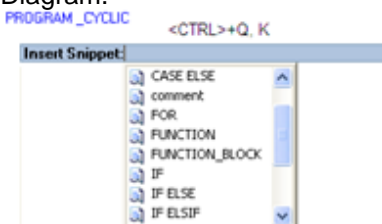
Linking to databases

The AsDB library for linking to databases provides extensive options for storing data on SQL servers, linking to production controllers, tracking products, etc.



New Ladder Diagram functions

The new Compute and Compare functions make it even easier to display and manage complex tasks in Ladder Diagram.



Code snippets

Code snippets can be used to define code fragments for frequently used statements in textual programming languages.



Torque control

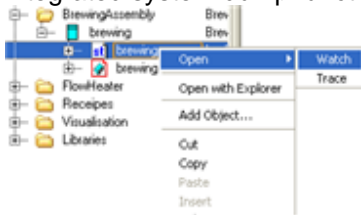
New PLCopen function blocks make it easier to detect and evaluate torque control applications. These function blocks are seamlessly integrated in the PLCopen Motion Control environment.

Diagnostics



System Diagnostics Manager

The I/O and axis monitors in SDM increase the efficiency of commissioning and service. The newly integrated system dump function simplifies support and documents the actual state of the machine.



Watch in logical view

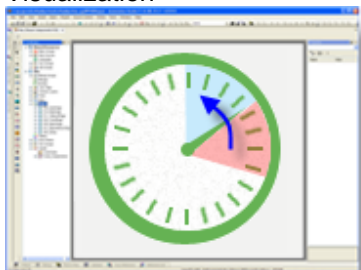
Access to the watch function has been simplified. Direct access to the watch function from the logical view simplifies debugging during development and when performing service.



Save source code to CF

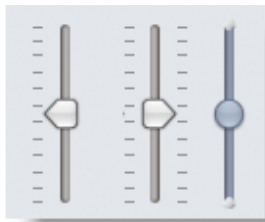
The ability to automatically save the source code to a CF card ensures that the correct project is always available on the machine or system, protected by an optional password.

Visualization



Need for speed

The Visual Components editor has been optimized to increase speed and reduce memory capacity.



Slider control

The slider control helps the machine operator when entering parameters by providing a visual representation of a numeric value.



Gauge control

Using a gauge, measurement values can be displayed in a clear form that can be quickly read.



Installing language resources

Language resources for the visualization application can be copied to the CompactFlash later during runtime, without having to build the project.



Handwheel operation

With displays that have a handwheel, it is possible to navigate on the page and change values in entry fields.

Motion



Simulation of drives

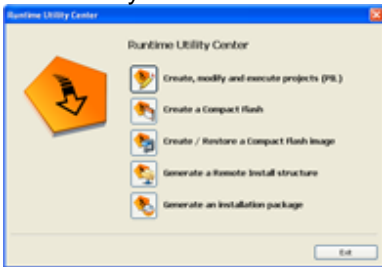
The motion simulation now makes it even easier to switch between operating real hardware and the simulation – without making any changes to the hardware or software configuration.



SDM Motion

The integration of motion diagnostics places actual status info, logbooks and oscilloscope functions at your fingertips.

Productivity



Runtime Utility Center

The Runtime Utility Center is a tool integrated in Automation Studio to help users install and distribute projects.

1.2 Important notes

1.2.1 Motor temperature model was deactivated (only in V1.181 – V1.183)

When current was applied to the motor, the temperature of the motor temperature model (TEMP_MOTOR_MODELL) hardly changed. This can cause thermal damage to the motor windings. Small motors (rated current < 5A) are especially susceptible when peak current is applied, as are motors without a temperature sensor when the current applied is higher than the rated current.

1.2.2 CHM files can no longer be opened from the network after Windows update

Changes must be made to the registry file in order to start CHM files from a network drive again. This can be done as follows:

Making a change using the registry editor (regedit.exe)

define the following registry key:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\HTMLHelp\1.x\HHRestrictions]
"MaxAllowedZone"=dword:00000005
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\HTMLHelp\1.x\ItssRestrictions]
"MaxAllowedZone"=dword:00000005
```

Making a change using the registry file:

A file with the name EnableCHMStartFromNetworkPath.reg can also be found on the AS Installation CD in the folder "**Setups/RevInfo**". This file is used to automatically define the necessary registry keys. Double-click on the file to execute and click "Yes" when the notification appears.

1.2.3 MFC applications lose GDI objects on computers running Windows XP

If an MFC application (Microsoft Foundation Classes) is executed on a computer running Microsoft Windows XP Service Pack 2 (SP2), memory leaks may be determined for GDI objects (Graphics Device Interface) when creating or closing lower-level windows. GDI objects from the process can be displayed in the Task Manager to

view the memory leak.

Microsoft explains this in the following article: <http://support.microsoft.com/default.aspx?scid=kb;en-us;319740>

This problem also occurs on Windows Server 2003 computers if the design service is started. By default, the design service is disabled in Windows Server 2003.

1.2.4 "Find in files" crash

A Windows XP bug causes Automation Studio to crash when starting the "Find in files" function. If "Find in files" is selected, the SFCs in the project are opened with their sub-editors in the background and then closed again. In Windows XP, 6 GDI objects hang when opening and closing MDI child windows in MFC applications.

When "Find in files" is carried out 2–3 times in an open project, the 10000 GDI object limit for AS is reached, and the MFC framework crashes.

Microsoft describes this in the following article and has prepared a hotfix for this problem: <http://support.microsoft.com/default.aspx?scid=kb;de-de;319740>.

1.2.5 Installing .NET Framework 2.0 on Windows XP

According to Microsoft, **Service Pack 2** is required to install Microsoft .NET Framework 2.0 on Windows XP systems.

Microsoft provides information about this in the system requirements for .NET Framework 2.0: <http://www.microsoft.com/downloads/details.aspx?FamilyID=0856eacb-4362-4b0d-8edd-aab15c5e04f5&DisplayLang=en>

1.2.6 Online Info dialog box aborted after installing MS Office XP

After Office XP is installed, a program interruption occurs when setting the date in the Online Info dialog box. This is because the calendar control (MSCAL) was not registered properly when Office XP was installed.

Microsoft explains this in the following article: <http://support.microsoft.com/default.aspx?scid=kb;en-us;311219>

Solution:

- Opens the Windows System folder (e.g. `..\winnt\system32*` for NT and W2k systems, `..\windows\system*` for 9x and ME systems, or `..\windows\system32*` for XP systems.)
- Rename `mscal.ocx` to `mscal.old` (save the old version of the calendar DLL)
- Copy `mscal.ocx` from the Office directory or CD to the Windows System directory (new version of the calendar DLL)
- Register `mscal.ocx` with `"regsvr32 mscal.ocx"` (registration of new version)
- Unregister `mscal.ocx` with `"regsvr32 -u mscal.ocx"` (unregistration of new version)
- Rename `mscal.ocx` to `mscal.new` (save the new version)
- Rename `mscal.old` to `mscal.ocx` (bring back the old version)
- Register `mscal.ocx` with `"regsvr32 mscal.ocx"` (registration of original version)

1.3 B&R Revision Information (06.09.2011) Version 3.0.90.18 Automation Software

The current revision information can be downloaded from the B&R Homepage download area (<http://www.br-automation.com/download>).

1.3.1 Contents

- [Requests and problems by product/version](#)
- [Requests and problems by product/component](#)

1.3.2 Requests and problems by product and version

1.3.2.1 1A4000.02 (2.0 Automation Runtime SG4)

ID	valuation	solved since	known since	Description
265455	Problem	V3.00.90.14	V3.00.90.12	POWERLINK: Default value for asynchronous timeout changed from 25 s to 50 s
258187	Problem	V3.00.90.11	ARSG4_3.07.2_B03.07	Firmware Update for SafeMC did not complete.
400041692 , 400043900	Problem	V3.00.81.17	ARSG4_2.96.6_F02.96	When using the X20CS1070, CANdftab() returns Status 26061 when the task containing CAN operation is overloaded
400007523	Problem	–	V3.0.71.16 SP01	AslMA ignores time zone information
400007523	Problem	–	V3.0.71.16 SP01	AslMA ignores time zone information
400066089	Problem	–	V2.7.0.4102 [V2.94]	30479, 27306 when starting 7CP570.60–1 with four AF modules
400066089	Problem	–	V2.7.0.4102 [V2.94]	30479, 27306 when starting 7CP570.60–1 with four AF modules
400066089	Problem	–	V2.7.0.4102 [V2.94]	30479, 27306 when starting 7CP570.60–1 with four AF modules
400066089	Problem	–	V2.7.0.4102 [V2.94]	30479, 27306 when starting 7CP570.60–1 with four AF modules
400055446	Problem	–	V2.7.0.0015 SP08	Address error occurs when a breakpoint is reached on a command that is 1 byte long
400055446	Problem	–	V2.7.0.0015 SP08	Address error occurs when a breakpoint is reached on a command that is 1 byte long
400055446	Problem	–	V2.7.0.0015 SP08	Address error occurs when a breakpoint is reached on a command that is 1 byte long
400008018	Problem	–	V2.7.0.0010 SP03	If a 7XX408.50–1 module is operated using an X20BC0083 and a BT9100, the PWM outputs do not function properly
400055836	New function	–	–	PP45 could fail at low temperatures
400055836	New function	–	–	PP45 could fail at low temperatures
400055836	New function	–	–	PP45 could fail at low temperatures
400067831	Problem	–	–	Memory management problem with task overload corrected with library version V2.80.1 and up
400037284	New function	–	–	Improved response time for PP065 touch screen
400037284	New function	–	–	Improved response time for PP065 touch screen
400059335	Problem	–	–	Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly
268630	Problem	–	ARSG4_4.00.17_Q04.00	ARwin on Windows 7 doesn't work in Shared mode (when using more than

				2GB DRAM)
268405	Problem	–	ARSG4_4.00.16_P04.00	Problems with ARwin in Windows 7 when firewall is on
238445	Problem	–	ARSG4_3.08.1_A03.08	StaleData on local X2X Link interface when X2X cycle > system cycle
400069705	Problem	–	ARSG4_3.07.5_E03.07	Backup of remanent data to SRAM doesn't complete if ARwin is operated in Shared mode.
400069705	Problem	–	ARSG4_3.07.5_E03.07	Backup of remanent data to SRAM doesn't complete if ARwin is operated in Shared mode.
400065938	Problem	–	ARSG4_3.07.4_D03.07	–c command line argument in the ARwin configuration disables not only the COM2 interface but also COM1.
400066308	Problem	–	ARSG4_3.06.22_V03.06	Error copying CAN CMS objects
400066308	Problem	–	ARSG4_3.06.22_V03.06	Error copying CAN CMS objects
400055674	Problem	–	ARSG4_3.06.22_V03.06	Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem
400046190, 400041900	Problem	–	ARSG4_3.06.22_V03.06	Upgrade to AR Version E3.01 can cause the CPU to continuously reboot
400072106	Problem	–	ARSG4_3.06.22_V03.06	Accessing the "Safety" and "Fieldbus" logbooks via library (with an index) causes a PageFault. The problem can be avoided by specifying the names "\$safety" or "\$fieldbus."
400072106	Problem	–	ARSG4_3.06.22_V03.06	Accessing the "Safety" and "Fieldbus" logbooks via library (with an index) causes a PageFault. The problem can be avoided by specifying the names "\$safety" or "\$fieldbus."
400072106	Problem	–	ARSG4_3.06.22_V03.06	Accessing the "Safety" and "Fieldbus" logbooks via library (with an index) causes a PageFault. The problem can be avoided by specifying the names "\$safety" or "\$fieldbus."
400054833	Problem	–	ARSG4_3.06.22_V03.06	PP065: Warning "26061 Cannot configure minimum reduced cycle time due to old firmware" because of different drivers or POWERLINK firmware
400048657	Problem	–	ARSG4_3.06.22_V03.06	PP045 with IF24 (L2DP) returns incorrect data when odd addresses are read in the Profibus image
400054833	Problem	–	ARSG4_3.06.22_V03.06	PP065: Warning "26061 Cannot configure minimum reduced cycle time due to old firmware" because of different drivers or POWERLINK firmware
400054111	Problem	–	ARSG4_3.01.9_I03.01	Debugger terminates online connection
400054111	Problem	–	ARSG4_3.01.9_I03.01	Debugger terminates online connection
400054111	Problem	–	ARSG4_3.01.9_I03.01	Debugger terminates online connection
400054111	Problem	–	ARSG4_3.01.9_I03.01	Debugger terminates online

				connection
400039843	Problem	–	ARSG4_3.01.1_A03.01	Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC
400039843	Problem	–	ARSG4_3.01.1_A03.01	Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC
400039843	Problem	–	ARSG4_3.01.1_A03.01	Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC
400042900	Problem	–	ARSG4_3.00.22_V03.00	ModuleOK status for screw-in modules is not determined correctly in some cases
400035792, 400020837	Problem	–	ARSG4_3.00.22_V03.00	Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC
400035792, 400020837	Problem	–	ARSG4_3.00.22_V03.00	Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC
400035792, 400020837	Problem	–	ARSG4_3.00.22_V03.00	Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC
400005281	Problem	–	ARSG4_2.94.22_V02.94	INA online connection to X20CS1020 stops working when the modem configuration is also activated
400048512	New function	ARSG4_4.00.9_I04.00	V3.00.80.31 SP01	It is not possible to use C variables larger than 16 MB.
251322	Problem	ARSG4_4.00.9_I04.00	ARSG4_3.06.22_V03.06	POWERLINK: ACOPOSmulti with SafeMC as chained station
400055971	Problem	ARSG4_4.00.9_I04.00	ARSG4_3.06.22_V03.06	ARemb terminates INA connection if an attempt is made to access a non-existing partition via FTP
400054674	Problem	ARSG4_4.00.9_I04.00	ARSG4_3.00.22_V03.00	Module transfer to target not saved if there is not sufficient memory in the back-up partition.
400060887	New function	ARSG4_4.00.8_H04.00	V3.00.81.22 SP01	CANopen slave not started by the master if it sends only an emergency telegram with data =0 instead of a Boot-Up message
400055699	Problem	ARSG4_4.00.8_H04.00	V3.00.81.22 SP01	VC Windows Terminal: Changes to Enum variables are not updated on the terminal, but changes from the terminal are updated on the CPU
400053004, 400052525	Problem	ARSG4_4.00.8_H04.00	V3.00.81.18	Trigger condition not working
400039937	Problem	ARSG4_4.00.8_H04.00	V3.00.80.25	CANIO slaves are not always found

				after startup
400050977	Problem	ARSG4_4.00.8_H04.00	–	AsIMA doesn't adjust for daylight savings time when reading the time from a peer station
400055614	Problem	ARSG4_4.00.8_H04.00	PVI3.00.00.3119	"VT_DATE local" wrong for DCOM routines – in leap years the date is offset by one day
400060899	Problem	ARSG4_4.00.8_H04.00	ARSG4_3.07.4_D03.07	Due to an error in the task queue of the Modbus driver, packages that are received may no longer be allocated to the sent queries, thereby causing a connection timeout.
400055610	Problem	ARSG4_4.00.8_H04.00	ARSG4_3.07.1_A03.07	DT and DATE_AND_TIME variables are converted incorrectly by VT_DATE when they are written.
400057308	Problem	ARSG4_4.00.8_H04.00	ARSG4_3.01.9_I03.01	Target crashes with page fault in the web server module when an ASP write command is run from a website with more than 9 variables.
400057456	Problem	ARSG4_4.00.8_H04.00	ARSG4_3.01.7_G03.01	Update to ARwin configurator
400053444	Problem	ARSG4_4.00.8_H04.00	ARSG4_3.00.22_V03.00	Variable values sometimes displayed incorrectly on ASP pages
400002467, 400058853, 400058855	New function	ARSG4_4.00.7_G04.00	V3.00.81.23 SP02	Task class stack can only be configured up to a size of 1MB.
400058109	Problem	ARSG4_4.00.7_G04.00	V3.00.81.22 SP01	It can take very long to install I/O mappings, which can result in the connection being terminated due to a time violation.
400051942	Problem	ARSG4_4.00.7_G04.00	–	ModbusTCP doesn't start all slaves
400060652	Problem	ARSG4_4.00.7_G04.00	ARSG4_3.07.3_C03.07	CANrwtab() returns invalid data
400057809	Problem	ARSG4_4.00.7_G04.00	ARSG4_3.01.8_H03.01	Using logger functions in fast task classes can lead to cycle time violations
400056892	Problem	ARSG4_4.00.6_F04.00	V3.00.81.22 SP01	If the requested bur_heap_size (C++) is too large, the installation error ERR_LOADER_USERHEAP (5150) is now triggered
400007099, 400044198	Problem	ARSG4_4.00.6_F04.00	V2.7.0.0010 SP03	AsMemPartFree returned –8 byte free memory size
400011003	Problem	ARSG4_4.00.6_F04.00	ARSG4_4.00.3_C04.00	TIM_musec returns incorrect time when the system tick isn't a whole number multiple or factor of 10 milliseconds
245157	New function	ARSG4_4.00.6_F04.00	ARSG4_3.08.3_C03.08	The value specified for AsMemPartCreate now corresponds to the largest allocated block
400056515	Problem	ARSG4_4.00.6_F04.00	ARSG4_3.07.2_B03.07	Watchdog after CanWrite() on IF060 with IF621
400057340	Problem	ARSG4_4.00.6_F04.00	ARSG4_3.07.2_B03.07	POWERLINK reports error 27306 when starting a visualization application
400051015	Problem	ARSG4_4.00.6_F04.00	ARSG4_3.07.1_A03.07	Support for barcode scanner Cino F788–G
400054123, 400055855	Problem	ARSG4_4.00.6_F04.00	ARSG4_3.06.22_V03.06	When downloading in one cycle mode, an interrupt block can cause an I/O cycle time violation (27306)

400059082	Problem	ARSG4_4.00.6_F04.00	ARSG4_3.06.22_V03.06	Creating a new logger module using AsArLogCreate() deletes any existing tasks with the same name
400047724	Problem	ARSG4_4.00.6_F04.00	ARSG4_3.01.9_I03.01	When multiple Ethernet interfaces are used, interference in the routing table causes Error 29004 when the function block CfgSetDefaultGateway() is called
400053732	Problem	ARSG4_4.00.5_E04.00	V3.00.81.18	Priority of Profibus master can be configured
400055674	Problem	ARSG4_4.00.5_E04.00	ARSG4_3.06.22_V03.06	Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem
400056272	Problem	ARSG4_4.00.5_E04.00	ARSG4_3.06.22_V03.06	Priority of CANopen master can be configured
400046190, 400041900	Problem	ARSG4_4.00.4_D04.00	ARSG4_3.06.22_V03.06	Upgrade to AR Version E3.01 can cause the CPU to continuously reboot
400054457	Problem	ARSG4_4.00.4_D04.00	ARSG4_3.06.22_V03.06	CANopenSDOWriteData() terminates after downloading several hundred bytes due to a full CAN buffer
400054911	Problem	ARSG4_4.00.4_D04.00	ARSG4_3.06.22_V03.06	Function blocks from AsXML library ignore enable input
400055214	Problem	ARSG4_4.00.4_D04.00	ARSG4_3.01.8_H03.01	Using CANopenNMT() can prevent a task download from completing
400054360	Problem	ARSG4_4.00.3_C04.00	V3.00.81.20 SP01	With the function block CanOpenGetState(), when enable=FALSE the function block freezes during execution
400048657	Problem	ARSG4_4.00.3_C04.00	ARSG4_3.06.22_V03.06	PP045 with IF24 (L2DP) returns incorrect data when odd addresses are read in the Profibus image
400055463	Problem	ARSG4_4.00.3_C04.00	ARSG4_3.01.9_I03.01	CANopenSDOWrite8() only sends every second SDO
253632	New function	ARSG4_4.00.16_P04.00	nicht relevant	Detection of POWERLINK hardware using AS-IO-Diag
400068763	Problem	ARSG4_4.00.16_P04.00	ARSG4_3.08.11_K03.08	Naming of POWERLINK devices from other vendors in AsIODiag
400060016	Problem	ARSG4_4.00.16_P04.00	ARSG4_3.07.2_B03.07	Error 26051 in logbook when X20CS2770 after X20BCx083 on APC or Power Panel
400065938	Problem	ARSG4_4.00.15_O04.00	ARSG4_3.07.4_D03.07	–c command line argument in the ARwin configuration disables not only the COM2 interface but also COM1.
400069009	Problem	ARSG4_4.00.15_O04.00	ARSG4_3.07.4_D03.07	VC application blocks netX data communication
400069276	Problem	ARSG4_4.00.14_N04.00	ARSG4_3.08.10_J03.08	Using a handle that has already been closed can cause a page fault (read, write, or close on a handle)
400065540	Problem	ARSG4_4.00.12_L04.00	V3.00.81.24 SP0x	ARwin shows incorrect amount of available DRAM memory in SDM
400057456	Problem	ARSG4_4.00.12_L04.00	ARSG4_3.01.7_G03.01	Update to ARwin configurator
400048318	New function	ARSG4_4.00.11_K04.00	V3.00.80.31 SP01	New function blocks FileWriteEx() and FileTruncate()
400052213	Problem	ARSG4_4.00.11_K04.00	V3.00.80.31 SP01	ENUM data types in ASP functions
400035047, 400036404	Problem	ARSG4_4.00.11_K04.00	ARSG4_3.08.25_Y03.08	If a breakpoint is reached in the INIT SP, then it is no longer possible to

				leave the breakpoint. Execute (F5), Step Over (F10) or Step Into (F11) do not have an affect.
258192	Problem	ARSG4_4.00.11_K04.00	ARSG4_3.07.2_B03.07	Firmware Update for SafeMC did not complete.
400066313	Problem	ARSG4_4.00.11_K04.00	ARSG4_3.06.22_V03.06	If, for example, the X2X timer is used as the system clock, then remanent variables aren't saved when there is a power failure
400030702	New function	ARSG4_4.00.11_K04.00	ARSG4_2.95.22_V02.95	New function block L2DPGetNode() for reading Profibus station number
400030702	New function	ARSG4_4.00.11_K04.00	ARSG4_2.95.22_V02.95	New function block L2DPGetNode() for reading Profibus station number
400038864	New function	ARSG4_4.00.10_J04.00	V3.00.80.25	Function blocks now return the error 20709 (fiERR_FILE_DEVICE) if a device is not present
400064601	Problem	ARSG4_4.00.10_J04.00	ARSG4_3.08.8_H03.08	Insufficient logbook entry when ArConfig has double channels/QLinks.
400062576	Problem	ARSG4_4.00.10_J04.00	ARSG4_3.07.4_D03.07	Error handling SYSCONF module in SYSROM
400062449	Problem	ARSG4_4.00.10_J04.00	ARSG4_3.07.4_D03.07	When using multiple netX CANopen master modules, a different handle is used for each module, which speeds up asynchronous function block processing.
400064575	Problem	ARSG4_4.00.10_J04.00	ARSG4_3.07.3_C03.07	Attempt to download AsCANopen library to ARsim rejected with error 9650 "Library function not available"
400062877	Problem	ARSG4_4.00.10_J04.00	ARSG4_3.06.22_V03.06	Remanent/permanent variables not saved when exiting ARsim
400063458	New function	ARSG4_4.00.10_J04.00	ARSG4_3.06.22_V03.06	DevLink() blocks other file actions for a relatively long time
400038864	New function	ARSG4_3.08.9_I03.08	V3.00.80.25	Function blocks now return the error 20709 (fiERR_FILE_DEVICE) if a device is not present
400013287	New function	ARSG4_3.08.9_I03.08	V3.0.71.20 SP02	Use the Diagnostics System Manager to list modules' diagnostics data points
400062877	Problem	ARSG4_3.08.9_I03.08	ARSG4_3.06.22_V03.06	Remanent/permanent variables not saved when exiting ARsim
400054674	Problem	ARSG4_3.08.9_I03.08	ARSG4_3.00.22_V03.00	Module transfer to target not saved if there is not sufficient memory in the back-up partition.
400028352	Problem	ARSG4_3.08.9_I03.08	ARSG4_3.00.15_O03.00	If global variables mapped to I/O points receive new addresses due to a change to the project, it is possible that the variable values are no longer transferred to the I/O points.
400028352, 400065604	Problem	ARSG4_3.08.9_I03.08	ARSG4_3.00.15_O03.00	If global variables mapped to I/O points receive new addresses due to a change to the project, it is possible that the variable values are no longer transferred to the I/O points.
400060157	Problem	ARSG4_3.08.9_I03.08	ARSG4_2.96.12_L02.96	The status BUSY can remain set for up to 120 minutes if the connection is lost when using the function block DirInfo() over a network
400060887	Problem	ARSG4_3.08.8_H03.08	V3.00.81.22 SP01	CANopen slave not started by the

				master if it sends only an emergency telegram with data =0 instead of a Boot-Up message
400053004 , 400052525	Problem	ARSG4_3.08.8_H03.08	V3.00.81.18	Trigger condition not working
400039937	Problem	ARSG4_3.08.8_H03.08	V3.00.80.25	CANIO slaves are not always found after startup
400055836	New function	ARSG4_3.08.8_H03.08	–	PP45 could fail at low temperatures
400050977	Problem	ARSG4_3.08.8_H03.08	–	AslMA doesn't adjust for daylight savings time when reading the time from a peer station
400055614	Problem	ARSG4_3.08.8_H03.08	PVI3.00.00.3119	"VT_DATE local" wrong for DCOM routines – in leap years the date is offset by one day
400058774	Problem	ARSG4_3.08.8_H03.08	ARSG4_3.08.4_D03.08	Incorrect version of rtosdrv.dll
400060899	Problem	ARSG4_3.08.8_H03.08	ARSG4_3.07.4_D03.07	Due to an error in the task queue of the Modbus driver, packages that are received may no longer be allocated to the sent queries, thereby causing a connection timeout.
400055610	Problem	ARSG4_3.08.8_H03.08	ARSG4_3.07.1_A03.07	DT and DATE_AND_TIME variables are converted incorrectly by VT_DATE when they are written.
400053444	Problem	ARSG4_3.08.8_H03.08	ARSG4_3.00.22_V03.00	Variable values sometimes displayed incorrectly on ASP pages
400053444	Problem	ARSG4_3.08.8_H03.08	ARSG4_3.00.22_V03.00	Variable values sometimes displayed incorrectly on ASP pages
400057308	Problem	ARSG4_3.08.8_H03.08	–	Target crashes with page fault in the web server module when an ASP write command is run from a website with more than 9 variables.
400002467 , 400058853 , 400058855	New function	ARSG4_3.08.7_G03.08	V3.00.81.23 SP02	Task class stack can only be configured up to a size of 1MB.
400058109	Problem	ARSG4_3.08.7_G03.08	V3.00.81.22 SP01	It can take very long to install I/O mappings, which can result in the connection being terminated due to a time violation.
400058774	Problem	ARSG4_3.08.7_G03.08	ARSG4_3.08.4_D03.08	Incorrect version of rtosdrv.dll
400060652	Problem	ARSG4_3.08.7_G03.08	ARSG4_3.07.3_C03.07	CANrwtab() returns invalid data
400056892	Problem	ARSG4_3.08.6_F03.08	V3.00.81.22 SP01	If the requested bur_heap_size (C++) is too large, the installation error ERR_LOADER_USERHEAP (5150) is now triggered
–, 400047408 , 400049937	Problem	ARSG4_3.08.6_F03.08	V3.00.81.12	Error 29009 occurs when reading the default gateway
400007099 , 400044198	Problem	ARSG4_3.08.6_F03.08	V2.7.0.0010 SP03	AsMemPartFree returned –8 byte free memory size
400051942	Problem	ARSG4_3.08.6_F03.08	–	ModbusTCP doesn't start all slaves
400058774	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.08.4_D03.08	Incorrect version of rtosdrv.dll
400011003	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.08.4_D03.08	TIM_musec returns incorrect time when the system tick isn't a whole number multiple or factor of 10 milliseconds
400056515	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.07.2_B03.07	

				Watchdog after CanWrite() on IF060 with IF621
400057340	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.07.2_B03.07	POWERLINK reports error 27306 when starting a visualization application
400057746	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.06.4_D03.06	Calling the function block CfgSetEthConfigMode() with the same mode that is already in use triggers Error 29003
400054123 , 400055855	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.06.22_V03.06	When downloading in one cycle mode, an interrupt block can cause an I/O cycle time violation (27306)
400046190 , 400041900	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.06.22_V03.06	Upgrade to AR Version E3.01 can cause the CPU to continuously reboot
400059082	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.06.22_V03.06	Creating a new logger module using AsArLogCreate() deletes any existing tasks with the same name
400047724	Problem	ARSG4_3.08.6_F03.08	ARSG4_3.01.9_I03.01	When multiple Ethernet interfaces are used, interference in the routing table causes Error 29004 when the function block CfgSetDefaultGateway() is called
400057809	Problem	ARSG4_3.08.6_F03.08	–	Using logger functions in fast task classes can lead to cycle time violations
400053732	Problem	ARSG4_3.08.5_E03.08	V3.00.81.18	Priority of Profibus master can be configured
400053957	Problem	ARSG4_3.08.5_E03.08	–	Time calculation incorrect for logger entries in SDM
400056381	Problem	ARSG4_3.08.5_E03.08	ARSG4_3.06.22_V03.06	Priority of CANopen master can be configured
400049979	Problem	ARSG4_3.08.5_E03.08	ARSG4_3.01.7_G03.01	SDM – Update problems with dynamic page content
400062152	Problem	ARSG4_3.08.4_D03.08	V3.00.81.24 SP0x	Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem
400051015	Problem	ARSG4_3.08.4_D03.08	ARSG4_3.07.1_A03.07	Support for Cino F788–G barcode scanner
400055674	Problem	ARSG4_3.08.4_D03.08	ARSG4_3.06.22_V03.06	Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem
400054457	Problem	ARSG4_3.08.4_D03.08	ARSG4_3.06.22_V03.06	CANopenSDOWriteData() terminates after downloading several hundred bytes due to a full CAN buffer
400054833	Problem	ARSG4_3.08.4_D03.08	ARSG4_3.06.22_V03.06	PP065: Warning "26061 Cannot configure minimum reduced cycle time due to old firmware" because of different drivers or POWERLINK firmware
400055463	Problem	ARSG4_3.08.4_D03.08	ARSG4_3.01.9_I03.01	CANopenSDOWrite8() only sends every second SDO
400055214	Problem	ARSG4_3.08.4_D03.08	ARSG4_3.01.8_H03.01	Using CANopenNMT() can prevent a task download from completing
400054360	Problem	ARSG4_3.08.3_C03.08	V3.00.81.20 SP01	With the function block CanOpenGetState(), when

				enable=FALSE the function block freezes during execution
400037524	Problem	ARSG4_3.08.3_C03.08	V3.00.80.25	Error "9098 – System I/O cross-link task cycle time violation" is generated when a SafePLC and standard PLC are linked and a breakpoint is set on the standard PLC.
400054911	Problem	ARSG4_3.08.3_C03.08	ARSG4_3.06.22_V03.06	Function blocks from AsXML library ignore enable input
237362	New function	ARSG4_3.08.2_B03.08	–	Logbook entry for firmware update now contains old and new version
400040758	New function	ARSG4_3.08.2_B03.08	–	Old and new firmware version entered in logbook
400051743	Problem	ARSG4_3.08.2_B03.08	ARSG4_3.06.22_V03.06	If no destination directory is specified for DirCopy(), copying to ARsim doesn't work.
257265	New function	ARSG4_3.08.16_P03.08	nicht relevant	Detection of POWERLINK hardware using AS–IO–Diag
400065938	Problem	ARSG4_3.08.15_O03.08	ARSG4_3.07.4_D03.07	–c command line argument in the ARwin configuration disables not only the COM2 interface but also COM1.
400069009	Problem	ARSG4_3.08.15_O03.08	ARSG4_3.07.4_D03.07	VC application blocks netX data communication
400068763	Problem	ARSG4_3.08.14_N03.08	ARSG4_3.08.11_K03.08	Naming of POWERLINK devices from other vendors in AsIODiag
400069276	Problem	ARSG4_3.08.14_N03.08	ARSG4_3.08.10_J03.08	Using a handle that has already been closed can cause a page fault (read, write, or close on a handle)
400061758	Problem	ARSG4_3.08.14_N03.08	ARSG4_3.06.22_V03.06	ACOPUS synchronization problem 6002 in cascading POWERLINK networks when POWERLINK cycle time > 2ms
400055409	Problem	ARSG4_3.08.14_N03.08	ARSG4_3.01.9_I03.01	EpISDORead() stays in the status "Busy" after the enable FB is set to FALSE
400065540	Problem	ARSG4_3.08.12_L03.08	V3.00.81.24 SP0x	ARwin shows incorrect amount of available DRAM memory in SDM
400068762	New function	ARSG4_3.08.12_L03.08	nicht relevant	Read ACOPOS device type using AsIODiag function block
400060016	Problem	ARSG4_3.08.12_L03.08	ARSG4_3.07.2_B03.07	Error 26051 in logbook when X20CS2770 after X20BCx083 on APC or Power Panel
400055409	Problem	ARSG4_3.08.12_L03.08	ARSG4_3.01.9_I03.01	EpISDORead() stays in the status "Busy" after the enable FB is set to FALSE
400048318	New function	ARSG4_3.08.11_K03.08	V3.00.80.31 SP01	New function blocks FileWriteEx() and FileTruncate()
400052213	Problem	ARSG4_3.08.11_K03.08	V3.00.80.31 SP01	ENUM data types in ASP functions
400066313	Problem	ARSG4_3.08.11_K03.08	ARSG4_3.06.22_V03.06	If, for example, the X2X timer is used as the system clock, then remanent variables aren't saved when there is a power failure
400057308	Problem	ARSG4_3.08.11_K03.08	ARSG4_3.01.9_I03.01	Target crashes with page fault in the web server module when an ASP write command is run from a website with more than 9 variables.
400059335	Problem	ARSG4_3.08.10_J03.08	–	

				Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly
400037284	New function	ARSG4_3.08.10_J03.08	–	Improved response time for PP065 touch screen
400064601	Problem	ARSG4_3.08.10_J03.08	ARSG4_3.08.8_H03.08	Insufficient logbook entry when ArConfig has double channels/QLinks.
400062576	Problem	ARSG4_3.08.10_J03.08	ARSG4_3.07.4_D03.07	Error handling SYSCONF module in SYSROM
400062449	Problem	ARSG4_3.08.10_J03.08	ARSG4_3.07.4_D03.07	When using multiple netX CANopen master modules, a different handle is used for each module, which speeds up asynchronous function block processing.
400064575	Problem	ARSG4_3.08.10_J03.08	ARSG4_3.07.3_C03.07	Attempt to download AsCANopen library to ARsim rejected with error 9650 "Library function not available"
400063458	New function	ARSG4_3.08.10_J03.08	ARSG4_3.06.22_V03.06	DevLink() blocks other file actions for a relatively long time
257375	Problem	ARSG4_3.08.10_J03.08	ARSG4_3.01.11_K03.01	PP065 in combination with a 4PP065.IF23–1 no longer booting due to a faulty flash access after a firmware update
400069276	Problem	ARSG4_3.07.9_I03.07	ARSG4_3.08.10_J03.08	Using a handle that has already been closed can cause a page fault (read, write, or close on a handle)
400009063, 400065339	New function	ARSG4_3.07.8_H03.07	V3.0.71.16 SP01	Find unconfigured POWERLINK stations with ASIODiag
400066313	Problem	ARSG4_3.07.8_H03.07	ARSG4_3.06.22_V03.06	If, for example, the X2X timer is used as the system clock, then remanent variables aren't saved when there is a power failure
400057456	Problem	ARSG4_3.07.8_H03.07	ARSG4_3.01.7_G03.01	Update to ARwin configurator
400065562	Problem	ARSG4_3.07.7_G03.07	ARSG4_3.07.6_F03.07	SDM 1 (Automation Studio 3.0.80) doesn't work with Firefox 4.0 and higher
400062576	Problem	ARSG4_3.07.7_G03.07	ARSG4_3.07.4_D03.07	Error handling SYSCONF module in SYSROM
400062449	Problem	ARSG4_3.07.7_G03.07	ARSG4_3.07.4_D03.07	When using multiple netX CANopen master modules, a different handle is used for each module, which speeds up asynchronous function block processing.
400065361	Problem	ARSG4_3.07.7_G03.07	ARSG4_3.07.3_C03.07	IF1063–1 doesn't work on the BC1083
400064575	Problem	ARSG4_3.07.7_G03.07	ARSG4_3.07.3_C03.07	Attempt to download AsCANopen library to ARsim rejected with error 9650 "Library function not available"
400065239	Problem	ARSG4_3.07.7_G03.07	ARSG4_3.07.2_B03.07	Firmware Update for SafeMC did not complete.
400060887	Problem	ARSG4_3.07.6_F03.07	V3.00.81.22 SP01	CANopen slave not started by the master if it sends only an emergency telegram with data =0 instead of a Boot-Up message
400058109	Problem	ARSG4_3.07.6_F03.07	V3.00.81.22 SP01	It can take very long to install I/O mappings, which can result in the

				connection being terminated due to a time violation.
400053447	Problem	ARSG4_3.07.6_F03.07	V3.00.81.20 SP01	In some circumstances, the watchdog may be triggered during debugging because a required system resource (Mutex) is not available
400053004, 400052525	Problem	ARSG4_3.07.6_F03.07	V3.00.81.18	Trigger condition not working
400039937	Problem	ARSG4_3.07.6_F03.07	V3.00.80.25	CANIO slaves are not always found after startup
400055836	New function	ARSG4_3.07.6_F03.07	–	PP45 could fail at low temperatures
400059335	Problem	ARSG4_3.07.6_F03.07	–	Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly
400060899	Problem	ARSG4_3.07.6_F03.07	ARSG4_3.07.4_D03.07	Due to an error in the task queue of the Modbus driver, packages that are received may no longer be allocated to the sent queries, thereby causing a connection timeout.
257430	Problem	ARSG4_3.07.6_F03.07	ARSG4_3.01.11_K03.01	PP065 in combination with a 4PP065.IF23–1 no longer booting due to a faulty flash access after a firmware update
400060157	Problem	ARSG4_3.07.6_F03.07	ARSG4_2.96.12_L02.96	The status BUSY can remain set for up to 120 minutes if the connection is lost when using the function block DirlInfo() over a network
–, 400047408, 400049937	Problem	ARSG4_3.07.5_E03.07	V3.00.81.12	Error 29009 occurs when reading the default gateway
–, 400047408, 400049937	Problem	ARSG4_3.07.5_E03.07	V3.00.81.12	Error 29009 occurs when reading the default gateway
400051942	Problem	ARSG4_3.07.5_E03.07	–	ModbusTCP doesn't start all slaves
400060652	Problem	ARSG4_3.07.5_E03.07	ARSG4_3.07.3_C03.07	CANrwtab() returns invalid data
400057746	Problem	ARSG4_3.07.5_E03.07	ARSG4_3.06.4_D03.06	Calling the function block CfgSetEthConfigMode() with the same mode that is already in use triggers Error 29003
400057746	Problem	ARSG4_3.07.5_E03.07	ARSG4_3.06.4_D03.06	Calling the function block CfgSetEthConfigMode() with the same mode that is already in use triggers Error 29003
251317	Problem	ARSG4_3.07.5_E03.07	ARSG4_3.06.22_V03.06	POWERLINK: ACOPOSmulti with SafeMC as chained station
400060965	Problem	ARSG4_3.07.5_E03.07	ARSG4_3.06.22_V03.06	POWERLINK: ACOPOSmulti with SafeMC as chained station
400047724	Problem	ARSG4_3.07.5_E03.07	ARSG4_3.01.9_I03.01	When multiple Ethernet interfaces are used, interference in the routing table causes Error 29004 when the function block CfgSetDefaultGateway() is called
400057308	Problem	ARSG4_3.07.5_E03.07	ARSG4_3.01.9_I03.01	Target crashes with page fault in the web server module when an ASP write command is run from a website with more than 9 variables.

400048959	Problem	ARSG4_3.07.5_E03.07	ARSG4_2.96.10_J02.96	ModbusTCP master doesn't work on AC141
400053732	Problem	ARSG4_3.07.4_D03.07	V3.00.81.18	Priority of Profibus master can be configured
400056515	Problem	ARSG4_3.07.4_D03.07	ARSG4_3.07.2_B03.07	Watchdog after CanWrite() on IF060 with IF621
400057340	Problem	ARSG4_3.07.4_D03.07	ARSG4_3.07.2_B03.07	POWERLINK reports error 27306 when starting a visualization application
400057827	Problem	ARSG4_3.07.4_D03.07	ARSG4_3.07.1_A03.07	Maximum number of device handles exceeded with approx. 400 safety modules
400053957	Problem	ARSG4_3.07.4_D03.07	ARSG4_3.06.22_V03.06	Time calculation incorrect for logger entries in SDM
400056381	Problem	ARSG4_3.07.4_D03.07	ARSG4_3.06.22_V03.06	Priority of CANopen master can be configured
400055214	Problem	ARSG4_3.07.4_D03.07	ARSG4_3.01.8_H03.01	Using CANopenNMT() can prevent a task download from completing
400049979	Problem	ARSG4_3.07.4_D03.07	ARSG4_3.01.7_G03.01	SDM – Update problems with dynamic page content
400051015	Problem	ARSG4_3.07.3_C03.07	ARSG4_3.07.1_A03.07	Support for Cino F788–G barcode scanner
400054123, 400055855	Problem	ARSG4_3.07.3_C03.07	ARSG4_3.06.22_V03.06	When downloading in one cycle mode, an interrupt block can cause an I/O cycle time violation (27306)
400055674	Problem	ARSG4_3.07.3_C03.07	ARSG4_3.06.22_V03.06	Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem
400054457	Problem	ARSG4_3.07.3_C03.07	ARSG4_3.06.22_V03.06	CANopenSDOWriteData() terminates after downloading several hundred bytes due to a full CAN buffer
400055463	Problem	ARSG4_3.07.3_C03.07	ARSG4_3.01.9_I03.01	CANopenSDOWrite8() only sends every second SDO
400053444	Problem	ARSG4_3.07.3_C03.07	ARSG4_3.00.22_V03.00	Variable values sometimes displayed incorrectly on ASP pages
400054360	Problem	ARSG4_3.07.2_B03.07	V3.00.81.20 SP01	With the function block CanOpenGetState(), when enable=FALSE the function block freezes during execution
400053201	Problem	ARSG4_3.07.2_B03.07	ARSG4_3.06.22_V03.06	Automation Runtime boots cyclically or crashes addresses in the same subnet are assigned on both Ethernet interfaces
400051241	Problem	ARSG4_3.07.2_B03.07	ARSG4_3.06.22_V03.06	Remanent variables are not initialized with their INIT values when the CF is regenerated and a warm restart is performed.
400053665, 400054105, 400055244	Problem	ARSG4_3.07.2_B03.07	ARSG4_3.06.22_V03.06	I/O cycle time violation during startup due to initialization of graphic card
400054911	Problem	ARSG4_3.07.2_B03.07	ARSG4_3.06.22_V03.06	Function blocks from AsXML library ignore enable input
400046414	Problem	ARSG4_3.07.1_A03.07	ARSG4_3.06.3_C03.06	Pagefault / Memory not in heap
400043785	Problem	ARSG4_3.07.1_A03.07	ARSG4_2.95.20_T02.95	No clear text in the error logbook when data in the SRAM is lost while shutting down

400046213	Problem	ARSG4_3.06.5_E03.06	ARSG4_3.06.3_C03.06	EX350 modules that are configured but not connected hinder other 2005 system modules
400031607	Problem	ARSG4_3.06.4_D03.06	ARSG4_3.06.1_A03.06	Index of Emergency COB IDs can't be overwritten
208190	Problem	ARSG4_3.06.4_D03.06	ARSG4_3.00.12_L03.00	Size limit in the System Diagnostics Manager hardware display
400044495	Problem	ARSG4_3.06.2_B03.06	ARSG4_3.06.1_A03.06	Logbook entry 33300 when ARsim is started in Windows 7 64-bit
229222	Problem	ARSG4_3.06.1_A03.06	ARSG4_3.05.2_B03.05	Logbook entry ERR_DDIOPLK_WRITEPARAM 30296 showed value 0 at Offset 8 in binary data
400042036	Problem	ARSG4_3.06.1_A03.06	ARSG4_3.00.22_V03.00	When the connection to the terminal interface IP fails, the ARwin doesn't start
400031708	New function	ARSG4_3.05.2_B03.05	V3.00.80.22	AsArRead() supports 0 for the parameter lenBin, memBin, lenAscii and memAscii – when 0 is transferred, the respective data isn't copied
400039697	New function	ARSG4_3.05.2_B03.05	–	New functions in ARwin console
400036902	Problem	ARSG4_3.05.2_B03.05	ARSG4_3.00.22_V03.00	If an empty string is written to the AR OPC server, a page fault occurs
400024449	Problem	ARSG4_3.05.1_A03.05	ARSG4_3.04.2_B03.04	Attempting to copy a directory to a subordinate directory is no longer permitted, and generates the error fiERR_INVALID_PATH
400038170	New function	ARSG4_3.05.1_A03.05	ARSG4_3.00.22_V03.00	New AsSNMP library
400031184	Problem	ARSG4_3.04.5_E03.04	V3.0.71.32 SP06	Memory requirements of local remanent variables when copying the PV values in Copy Mode
400019086	Problem	ARSG4_3.04.5_E03.04	V2.7.0.0015 SP08	Newly created global variables are always initialized with 0 during download in Copy Mode instead of with the corresponding initialization value
400019096	Problem	ARSG4_3.04.5_E03.04	V2.6.0.0012 SP02	Copy Mode supports the acceptance of structure elements starting with AR E3.04
400012433	New function	ARSG4_3.04.4_D03.04	V3.0.71.20 SP02	New function blocks: CANopenSDOReadData(), CANopenSDOWriteData()
400032621	Problem	ARSG4_3.04.4_D03.04	ARSG4_2.95.19_S02.95	In PIC mode, programs that change the resolution of the NT timer can reduce the network performance of the ARwin ETH interface.
400027971	Problem	ARSG4_3.04.2_B03.04	V3.0.71.31 SP05	DirRead() reads the wrong time – local time is not considered
400026881	Problem	ARSG4_3.04.2_B03.04	ARSG4_3.00.13_M03.00	When the SemCreate() function block from the AsSem library is called with the parameter values initCount = maxCount, the function block reports the Status 33320 (semaphore could not be generated).
400046190, 400041900	Problem	ARSG4_3.01.9_I03.01	ARSG4_3.06.22_V03.06	Upgrade to AR Version E3.01 can cause the CPU to continuously reboot

400051264	Problem	ARSG4_3.01.9_I03.01	ARSG4_3.06.22_V03.06	Static routing doesn't work with DHCP
400049393	Problem	ARSG4_3.01.9_I03.01	ARSG4_3.01.7_G03.01	Communication places heavy load on the Terminal CPU
400048365, 400048594	Problem	ARSG4_3.01.8_H03.01	V3.00.80.31 SP01	When using the function blocks CANopenSDORed8(), CANopenSDOWrite8(), CANopenSDORedData() and CANopenSDOWriteData() a watchdog error occurs after running for a longer period of time.
400046272	Problem	ARSG4_3.01.8_H03.01	ARSG4_3.00.22_V03.00	Hyperthreading disturbs real-time behavior
400047219	Problem	ARSG4_3.01.7_G03.01	V3.00.80.29 SP01	CAN exception not executed after calling CANwrite.enable = 0
400046758	Problem	ARSG4_3.01.7_G03.01	V3.00.80.25	CANopen master sends incorrect PDO
235290	Problem	ARSG4_3.01.7_G03.01	ARSG4_3.01.6_F03.01	Error 32244 when using 8AC114.60–2 only in NC Mapping table
400047305	Problem	ARSG4_3.01.7_G03.01	ARSG4_3.01.5_E03.01	Empty string not permitted as attribute value
400047610	Problem	ARSG4_3.01.7_G03.01	ARSG4_3.01.5_E03.01	Terminal variables are not updated when they are initialized after startup.
400046901	Problem	ARSG4_3.01.7_G03.01	ARSG4_3.01.3_C03.01	CANopen system task can cause a cycle time violation, among other things
400041502, 400042654, 400043447	Problem	ARSG4_3.01.6_F03.01	V3.00.80.25	Due to an internal AR management problem, the warning "Mutex Table Overflow" is sometimes entered in the logbook. The application program is not affected by this.
400046704	New function	ARSG4_3.01.6_F03.01	–	After updating ARwin from < V3.00 to V3.00 or higher, the following error appears when the ARwin is started: "bradi.dll fehlt"
400035631	New function	ARSG4_3.01.6_F03.01	–	New function blocks CANopenSDORedData() and CANopenSDOWriteData()
400045366	New function	ARSG4_3.01.6_F03.01	–	New AsSNMP library
400045929	Problem	ARSG4_3.01.6_F03.01	ARSG4_3.06.2_B03.06	ARsim doesn't work on Windows XP Embedded
400042627	Problem	ARSG4_3.01.6_F03.01	ARSG4_3.04.5_E03.04	Debugging in ARsim causes memory leak
400045626, 400046770	Problem	ARSG4_3.01.6_F03.01	ARSG4_3.01.4_D03.01	ModbusRTU only works for one interface – simultaneous use of multiple interfaces not possible
400043972	Problem	ARSG4_3.01.6_F03.01	ARSG4_3.00.22_V03.00	The maximum number of parallel asynchronous function block calls is limited to 15
400041072	Problem	ARSG4_3.01.5_E03.01	V3.00.80.25	ReadPlc only reads the top two values of 4–byte values.
400043289	Problem	ARSG4_3.01.5_E03.01	ARSG4_3.01.3_C03.01	The webserver cache mechanism doesn't test the file date – as a result, changed data isn't displayed
400042474	Problem	ARSG4_3.01.5_E03.01	ARSG4_3.01.2_B03.01	Depending on the selected timer device, hardware detection may not

				be completed
400042115	Problem	ARSG4_3.01.5_E03.01	ARSG4_3.00.22_V03.00	Error 28826 when calling the AsL2DP function block with Max_Module > 10 and S7 Profibus
400041949, 400043852	Problem	ARSG4_3.01.5_E03.01	ARSG4_3.00.1_A03.00	When there is a task overload, CANrwtab() doesn't work anymore
400041484	Problem	ARSG4_3.01.4_D03.01	V3.00.80.25	INA routing via POWERLINK doesn't work
400028201	New function	ARSG4_3.01.4_D03.01	V3.0.71.31 SP05	Running a DEVLink() or DEVUnlink() from ARwin on a directory shared in Windows (CIFS) can take up to 30 seconds
400033999	Problem	ARSG4_3.01.4_D03.01	V2.7.0.0019 SP12	Memory leak due to cyclic DevLink() / DevUnlink()
400041569	Problem	ARSG4_3.01.4_D03.01	ARSG4_3.01.2_B03.01	Trace is stopped when the configuration is changed or if the AS connection is lost
400041545	Problem	ARSG4_3.01.4_D03.01	ARSG4_3.01.2_B03.01	On ARsim, calling DirCreate() a second time with the same directory name does not report status 20725, but rather 20709
400037131	Problem	ARSG4_3.01.4_D03.01	ARSG4_3.01.2_B03.01	Receiving a DHCP offer package with the option 81 causes page fault
400041193	Problem	ARSG4_3.01.4_D03.01	ARSG4_3.01.1_A03.01	As soon as a website is accessed that is either write-protected itself or that is inside a write-protected folder, the CPU crashes with a page fault.
400041999	Problem	ARSG4_3.01.4_D03.01	ARSG4_3.00.22_V03.00	Running a DEVLink() or DEVUnlink() from ARwin on a directory shared in Windows (CIFS) can take up to 30 seconds
400039603	Problem	ARSG4_3.01.4_D03.01	ARSG4_3.00.22_V03.00	INA routing via POWERLINK doesn't work
400041410	Problem	ARSG4_3.01.3_C03.01	V3.00.80.25	PDOs and SDOs get lost when using the AsCANopen library and when there is a heavy load on the CPU
400040238	Problem	ARSG4_3.01.3_C03.01	V3.00.80.25	AsIOAccWrite() doesn't work for ACOPOSinverter modules on the Modbus (call BUSY)
400038693	Problem	ARSG4_3.01.3_C03.01	V3.00.80.25	Parameter transfer for "webprint" function doesn't work with AR 3.00 and up. String cut off after "="
400040658	Problem	ARSG4_3.01.3_C03.01	ARSG4_3.01.2_B03.01	When connecting from the server to the client, the client freezes in the step "IMA_CONNECTING"
400039214	Problem	ARSG4_3.01.3_C03.01	ARSG4_3.01.1_A03.01	Because of an internal timing error, the system clock is executed too often, which causes the ARsim to run "too fast"
225099	Problem	ARSG4_3.01.3_C03.01	ARSG4_3.00.22_V03.00	Mapping PVs to I/O is not updated during task overload
400039303	Problem	ARSG4_3.01.3_C03.01	ARSG4_3.00.22_V03.00	POWERLINK: SDO communication interrupted
400038150, 400037974	Problem	ARSG4_3.01.3_C03.01	ARSG4_3.00.22_V03.00	AR OPC server doesn't work on ARwin
400036980	Problem	ARSG4_3.01.2_B03.01	V3.00.80.25	Due to an error calculating the offset, I/O channels are not applied with the

				setting "Mapping = Channels"
400036104	Problem	ARSG4_3.01.2_B03.01	V3.00.80.25	VC4 > Terminal Mode > Operating the visualization with AS3.00.80 considerably slower than in earlier versions
400036153	Problem	ARSG4_3.01.2_B03.01	ARSG4_3.00.22_V03.00	Using three 5LS182.6–1 in an APC results in the error 32173 "POWERLINK V2: Bind failed".
400037264	Problem	ARSG4_3.01.2_B03.01	ARSG4_3.00.22_V03.00	Task overload causes memory leak
400035047, 400036404	Problem	ARSG4_3.01.2_B03.01	ARSG4_3.00.22_V03.00	If a breakpoint is reached in the INIT SP, then it is no longer possible to leave the breakpoint. Execute (F5), Step Over (F10) or Step Into (F11) do not have an affect.
400033456	Problem	ARSG4_3.01.2_B03.01	ARSG4_3.00.22_V03.00	Value changes to enumerations are not displayed on the terminal
400032324	Problem	ARSG4_3.01.2_B03.01	ARSG4_3.00.22_V03.00	The AR OPC server can only be accessed via the first Ethernet interface on the target system.
400029923, 400037586	Problem	ARSG4_3.01.2_B03.01	ARSG4_3.00.14_N03.00	Web server doesn't work on User Partition (F:)
257435	Problem	ARSG4_3.01.12_L03.01	ARSG4_3.01.11_K03.01	PP065 in combination with a 4PP065.IF23–1 no longer booting due to a faulty flash access after a firmware update
400053447	Problem	ARSG4_3.01.11_K03.01	V3.00.81.20 SP01	In some circumstances, the watchdog may be triggered during debugging because a required system resource (Mutex) is not available
400051942	Problem	ARSG4_3.01.11_K03.01	–	ModbusTCP doesn't start all slaves
400059335	Problem	ARSG4_3.01.11_K03.01	–	Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly
400060899	Problem	ARSG4_3.01.11_K03.01	ARSG4_3.07.4_D03.07	Due to an error in the task queue of the Modbus driver, packages that are received may no longer be allocated to the sent queries, thereby causing a connection timeout.
400048959	Problem	ARSG4_3.01.11_K03.01	ARSG4_2.96.10_J02.96	ModbusTCP master doesn't work on AC141
400053325	Problem	ARSG4_3.01.10_J03.01	V3.00.80.25	The maximum length for the device name when calling DevLink() on ARsim targets has been increased from 128 characters to 256 characters.
400051561	Problem	ARSG4_3.01.10_J03.01	ARSG4_3.06.22_V03.06	Querying whether hyperthreading is active does not work reliably
400055463	Problem	ARSG4_3.01.10_J03.01	ARSG4_3.01.9_I03.01	CANopenSDOWrite8() only sends every second SDO
400052797, 400048509	Problem	ARSG4_3.01.10_J03.01	ARSG4_3.00.22_V03.00	After changing the ARwin IP address using the configurator, the online connection can no longer be established.
400051798	Problem	ARSG4_3.01.10_J03.01	ARSG4_3.00.22_V03.00	ModuleOk detections sometimes takes very long for S44
400044951	Problem	ARSG4_3.01.1_A03.01	ARSG4_3.01.1_A03.01	Page fault caused by AsIOAccWrite

				on local X2X bus
400030615	Problem	ARSG4_3.01.1_A03.01	ARSG4_3.00.22_V03.00	Client doesn't read all PVs, reads incorrect values or no values at all.
400045098	Problem	ARSG4_2.96.9_I02.96	ARSG4_2.96.9_I02.96	PP065: If a device is operated at low temperatures, the background lighting remains dark.
225792	Problem	ARSG4_2.96.9_I02.96	ARSG4_2.96.7_G02.96	Variables with data types other than SINT and USINT can now be connected to OCTET data points
400039483, 400040973	Problem	ARSG4_2.96.9_I02.96	ARSG4_2.96.6_F02.96	When connecting from the server to the client, the client freezes in the step "IMA_CONNECTING"
400033779, 400048786	Problem	ARSG4_2.96.9_I02.96	ARSG4_2.95.22_V02.95	ARwin Setup doesn't update the interface driver for APC820
400040510, 400040224 400040220	Problem	ARSG4_2.96.8_H02.96	ARSG4_3.00.22_V03.00	Some USB flash drives don't work in Automation Runtime
400033130	Problem	ARSG4_2.96.8_H02.96	ARSG4_2.96.3_C02.96	Using the debugger can cause cycle time violations
400038343, 400039888, 400040075	Problem	ARSG4_2.96.8_H02.96	ARSG4_2.96.1_A02.96	PP45 reports the wrong Module ID
206455	Problem	ARSG4_2.96.7_G02.96	ARSG4_3.00.11_K03.00	EX450 modules sporadically won't start – "No ReadyFlag from Interface"
400028102	Problem	ARSG4_2.96.6_F02.96	ARSG4_2.95.19_S02.95	Higher priority for AsUDP
400028038	Problem	ARSG4_2.96.5_E02.96	V2.7.0.0017 SP10	29-bit CAN ID when using the X20CS1070 causes an error when calling CANopen()
218739	Problem	ARSG4_2.96.5_E02.96	ARSG4_2.96.3_C02.96	High resource load for INA Client connection with no peer station (server)
400021425	Problem	ARSG4_2.96.5_E02.96	ARSG4_2.95.2_B02.95	Stack overflow on the DHCP server causes PageFault
400029507	Problem	ARSG4_2.96.4_D02.96	V3.00.80.20	NonVolatile option doesn't work with CfgSetEthConfigMode() function block
400022378, 400024266, 400024392, 400024391, 400024462, 400025270, 400026541, 400031748, 400032414, 400034127	Problem	ARSG4_2.96.4_D02.96	V3.0.71.28 SP05	ACOPOSinverter X64 frequency inverter is sometimes not started correctly when turned off and turned back on. The CANopen slave doesn't go into operational mode.
400032504, 400033988	Problem	ARSG4_2.96.4_D02.96	–	High resource load for CANopen system task
400031304	Problem	ARSG4_2.96.4_D02.96	–	Error during slave configuration
400034627, 400034661	New function	ARSG4_2.96.4_D02.96	–	Long boot time when many modules are configured that are not connected
400032367	Problem	ARSG4_2.96.4_D02.96	ARSG4_2.96.2_B02.96	Node guarding fails temporarily
216445	Problem	ARSG4_2.96.4_D02.96	ARSG4_2.96.1_A02.96	Not enough time between frames on the X2X Link bus
400020057	Problem	ARSG4_2.96.4_D02.96	ARSG4_2.95.12_L02.95	Activating "Module monitoring" when using an X20BC0063 causes the controller to go into Service mode when booting

400031906, 400022988, 400026463	Problem	ARSG4_2.96.3_C02.96	V3.0.71.31 SP05	AsArLogRead() provides incorrect time
400031340	Problem	ARSG4_2.96.3_C02.96	–	ARwin boot not complete
400021790	Problem	ARSG4_2.96.3_C02.96	–	Commands are lost due to faulty socket connection
400031454, 400030919	New function	ARSG4_2.96.3_C02.96	–	Changes to the ARwin installation procedure
400031784	Problem	ARSG4_2.96.3_C02.96	ARSG4_2.96.1_A02.96	Sometimes the ARwin takes a long time to boot
400030593	Problem	ARSG4_2.96.2_B02.96	ARSG4_2.95.22_V02.95	Cycle time violation caused by CANwrite()
400030026	Problem	ARSG4_2.96.2_B02.96	ARSG4_2.95.21_U02.95	Because of a system stack that is configured too small, error 9101 can occur on the ARsim
400029925	Problem	ARSG4_2.96.2_B02.96	ARSG4_2.95.21_U02.95	The exception routine is not called correctly if multiple cycle time violations occur
400027276	Problem	ARSG4_2.96.2_B02.96	ARSG4_2.95.19_S02.95	Profibus master sends the wrong ident in the config frame
400023079	Problem	ARSG4_2.96.2_B02.96	ARSG4_2.95.19_S02.95	Terminal mode: With a string length of 1024 or larger, the string is no longer transferred correctly
257680	Problem	ARSG4_2.96.14_N02.96	ARSG4_3.01.11_K03.01	PP065 in combination with a 4PP065.IF23–1 no longer booting due to a faulty flash access after a firmware update
400059335	Problem	ARSG4_2.96.13_M02.96	–	Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly
400060157	Problem	ARSG4_2.96.13_M02.96	ARSG4_2.96.12_L02.96	The status BUSY can remain set for up to 120 minutes if the connection is lost when using the function block DirInfo() over a network
400048959	Problem	ARSG4_2.96.13_M02.96	ARSG4_2.96.10_J02.96	ModbusTCP master doesn't work on AC141
400044001	New function	ARSG4_2.96.12_L02.96	–	Remote install causes Warning 27058 "NV memory block cannot be backed up"
400049163	Problem	ARSG4_2.96.12_L02.96	ARSG4_2.95.18_R02.95	PnP resources are sometimes not recognized during startup
400048831	Problem	ARSG4_2.96.11_K02.96	ARSG4_3.01.4_D03.01	System clock doubled when using the LS172 as a timer device
400028877, 400038632	Problem	ARSG4_2.96.11_K02.96	ARSG4_2.95.5_E02.95	ST_name() doesn't return task names in the EXIT
400045867, 400045710	Problem	ARSG4_2.96.10_J02.96	ARSG4_3.01.4_D03.01	CANopen master sporadically returns incorrect slave node status or incorrect ModuleOK status
400034964, 400034661	New function	ARSG4_2.96.10_J02.96	ARSG4_3.00.22_V03.00	Modules that are configured downstream from the POWERLINK X2X controller but not physically present make the controller take longer to boot.
400028109	Problem	ARSG4_2.96.1_A02.96	ARSG4_2.95.20_T02.95	CanQurw() sporadically delivers status 8810

1.3.2.2 1A4000.02 (2.1 Automation Runtime SGC)

ID	valuation	solved since	known since	Description
400063995	Problem	–	ARSGC_2.31.6.F02.31	If DM_Lib function blocks are used to write to the user flash of the SGC CPU, after some time a locking problem results in Error 6025 – "Checksum of system management table destroyed".
265150	Problem	–	ARSGC_2.31.5.E02.31	X20XC0292: new firmware V43
265145	Problem	–	ARSGC_2.31.5.E02.31	X20CP0292: new firmware V43
265140	Problem	–	ARSGC_2.31.5.E02.31	X20CP0291: new firmware V43
264890	Problem	–	ARSGC_2.31.5.E02.31	X20CP0291: new firmware V43
264885	Problem	–	ARSGC_2.31.5.E02.31	X20CP0292: new firmware V43
264880	Problem	–	ARSGC_2.31.5.E02.31	X20XC0292: new firmware V43
243130	Problem	–	ARSGC_2.31.4.D02.31	X20XC0292: new firmware
243125	Problem	–	ARSGC_2.31.4.D02.31	X20CP0292: new firmware
243120	Problem	–	ARSGC_2.31.4.D02.31	X20CP0291: new firmware
243115	Problem	–	ARSGC_2.31.4.D02.31	X20CP0201: new firmware
243105	Problem	–	ARSGC_2.31.4.D02.31	X20XC0201: new firmware
243100	Problem	–	ARSGC_2.31.4.D02.31	X20XC0202: new firmware
229850	Problem	–	ARSGC_2.00.5.E02.00	X20XC0202: new firmware
229845	Problem	–	ARSGC_2.00.5.E02.00	X20XC0201: new firmware
229840	Problem	–	ARSGC_2.00.5.E02.00	X20CP0201: new firmware
229795	Problem	–	ARSGC_2.00.5.E02.00	X20XC0292: new firmware
229790	Problem	–	ARSGC_2.00.5.E02.00	X20CP0292: new firmware
229775	Problem	–	ARSGC_2.00.5.E02.00	X20CP0291: new firmware
400068517	Problem	ARSGC_2.32.6.F02.32	ARSGC_2.31.6.F02.31	Changing the number of configured task classes can cause an error when booting the system (27352 – Error generating a task class)
400063995	Problem	ARSGC_2.32.5.E02.32	ARSGC_2.31.6.F02.31	If DM_Lib function blocks are used to write to the user flash of the SGC CPU, after some time a locking problem results in Error 6025 – "Checksum of system management table destroyed".
400039589	Problem	ARSGC_2.32.5.E02.32	ARSGC_2.01.7.G02.01	Sporadic error with TON_10ms
400060158	Problem	ARSGC_2.32.2.B02.32	ARSGC_2.31.5.E02.31	I/O outputs are set although the target is in service mode
400056097	Problem	ARSGC_2.32.2.B02.32	ARSGC_2.31.4.D02.31	When generating data objects in the target memories USRRROM and SYSROM using the function blocks DataObjCopy() and DataObjMove(), Error 20604 "Error installing data object" is returned.
400060158	Problem	ARSGC_2.31.6.F02.31	ARSGC_2.31.5.E02.31	I/O outputs are set although the target is in service mode
400059520	Problem	ARSGC_2.31.6.F02.31	ARSGC_2.31.4.D02.31	When generating data objects in the target memories USRRROM and SYSROM using the function blocks DataObjCopy() and DataObjMove(), Error 20604 "Error installing data object" is returned.
400017777	Problem	ARSGC_2.31.5.E02.31	V2.7.0.0017 SP10	

				With a modem connection, an insufficient receive timeout results in "invisible" entries being made in the logbook, which in turn causes visible entries to "disappear"
400046371	Problem	ARSGC_2.31.4.D02.31	ARSGC_2.31.3.C02.31	CAN COB can't be cleared by calling CANread.enable=0
400032237	Problem	ARSGC_2.31.4.D02.31	ARSGC_2.01.7.G02.01	The function block FRM_xopen() causes a memory leak of 64 bytes each time it's called
400030790, 400041335	Problem	ARSGC_2.31.3.C02.31	ARSGC_2.30.15.O02.30	HwGetTemperature() doesn't work for X20CP0292
400038869	Problem	ARSGC_2.31.2.B02.31	V3.00.80.25	The PLC can crash because of faulty handling when deleting tasks in Service Mode (different error types: address error, illegal instruction, etc.)
400037132	Problem	ARSGC_2.31.2.B02.31	ARSGC_2.00.5.E02.00	Starting with AR SGC V2.30, data modules in UserRam are deleted during a warm restart
400020558	Problem	ARSGC_2.30.10.J02.30	V3.0.71.24 SP03	SGC target doesn't send an event when the task status changes
400034088	Problem	ARSGC_2.01.9.I02.01	V2.7.0.0018 SP11	Operations on the Flash memory block RTC
400027397	Problem	ARSGC_2.01.8.H02.01	V3.0.71.31 SP05	Sometimes no data is shown in the variable trace
400020551, 400022857	Problem	ARSGC_2.01.8.H02.01	V3.0.71.27 SP04	RTC_gettime() takes a second before returning valid data
400030033	Problem	ARSGC_2.01.8.H02.01	ARSGC_2.01.7.G02.01	RTC_gettime() takes a second before returning valid data
400023939	Problem	ARSGC_2.01.8.H02.01	ARSG3_2.50.2_X08.07	Error initializing STRING variables
189076	Problem	ARSGC_2.01.6.F02.01	V2.7.0.0011 SP04	Jitter reduced (from 500 ms to 10 ms) when the RealTimeClock is set
400015010	Problem	ARSGC_2.01.5.E02.01	ARSGC_2.01.4.D02.01	SGC: "CanQueue full" although telegram has been sent
400011356, 400018001, 400018050	Problem	ARSGC_2.01.5.E02.01	ARSGC_2.01.2.B02.01	CANrwtab() doesn't reset event variable to 0
400011868	Problem	ARSGC_2.01.4.D02.01	V2.7.0.0011 SP04	X20CP0292 goes into service mode with error 9100 (bus error), when a line coverage is used in a C task
400006105	Problem	ARSGC_2.01.3.C02.01	V2.7.0.0008 SP01	When tasks are transferred to the USERRAM, memory is not freed up again
400006073, 400012639, 400013482, 400014253	Problem	ARSGC_2.01.3.C02.01	V2.7.0.0008 SP01	ModuleOK of X20PS9500 has "Physical Value = TRUE" and "PV Value = FALSE"
185255	Problem	ARSGC_2.01.3.C02.01	ARSGC_2.01.2.B02.01	Init SPs of tasks are also executed when downloaded in service mode
164165	Problem	ARSGC_2.01.2.B02.01	V2.5.3.0028.SP03 [R2.90]	DMxclear() only deletes the first 8K of a 64K block on SGC targets
167895	Problem	ARSGC_2.01.2.B02.01	ARSGC_2.00.5.E02.00	B127 not recognized when disconnected and reconnected
400049191	Problem	ARSGC_2.01.10.J02.01	ARSGC_2.01.9.I02.01	Parameter "/TEMTS=1" available in SGC like in SG4
400020761	Problem	ARSGC_2.01.10.J02.01	ARSGC_2.01.6.F02.01	DMxclear() doesn't clear individual blocks

1.3.2.3 1A4000.02 (2.2 Automation Runtime SG3)

ID	valuation	solved since	known since	Description
400056019 , 400059564	Problem	ARSG3_2.52.3_X08.13	V3.00.81.18	In AR version D2.31 and higher, DatObjCreate() sends the status 0xFFFE even though Enable = TRUE
400035331 , 400036518	Problem	ARSG3_2.51.3_X08.10	ARSG3_2.50.1_X08.06	PV_xgetadr() always returns Status 3092
400027625	Problem	ARSG3_2.51.2_X08.09	V3.0.71.31 SP05	Functions from PPDPR library not found
400029636	Problem	ARSG3_2.51.2_X08.09	V2.7.0.0017 SP10	IOC2003() delivers status 5556 if local variables are saved in user RAM
400023939	Problem	ARSG3_2.51.1_X08.08	ARSGC_2.01.7.G02.01	Error initializing STRING variables
400009610 , 400014796 , 400019936 , 400019723	Problem	ARSG3_2.50.22_V02.50	V3.0.71.16 SP01	ASima library doesn't work under AS3.0 on SG3
145955	Problem	ARSG3_2.50.1_X08.06	ARSG3_2.49.22_V02.49	IP address conflict
179231	Problem	ARSG3_2.50.1_X08.06	ARSG3_2.49.1_X08.04	Error using the GDB for tasks with a name longer than 10 characters
141145	New function	ARSG3_2.49.1_X08.04	–	Support of 4MB Flash components for the 4PP015.xxx-xx and 4PP035.xxx-xx CPU groups

1.3.2.4 1A4000.02 Automation Help

ID	valuation	solved since	known since	Description
400068552	Problem	V3.00.90.12	V3.00.81.28 SP0x	Motion Samples: All errors have been acknowledged at once.
400049392	Problem	V3.00.90.12	V3.00.80.31 SP01	Additional information 0x80004008 E_EXISTS is not described in error description 28700.
180720	New function	V3.00.80.25	V3.00.80.01	Help has been created for simulation modules

1.3.2.5 1A4000.02 Automation Net/PVI

ID	valuation	solved since	known since	Description
400044791	Problem	V3.00.90.08	V3.00.80.31 SP01	Error 4813 when transferring project after "Rebuild All"
400058543	Problem	V3.00.81.27 SP0x	V3.00.81.24 SP0x	AS crashes when monitor mode is activated
400054659	Problem	V3.00.81.24 SP02	V3.00.81.22 SP01	When editing structures with more than 10000 elements in the Ladder Diagram, switching to monitor mode is very slow.
400050940	Problem	V3.00.81.19 SP01	V3.00.81.18	Crash in monitor mode on an SFC task when data types with an empty structure definition are used.
400051340	Problem	–	V3.00.81.18	Memory lost when writing variables in Windows CE 6.0
400029100	New function	–	V2.6.0.3111	PviServices with automatic enabling of "Child" objects with "Dispose"
400022943	Problem	–	–	PVI events for displaying download/upload progress are not triggered correctly.
400061601	New function	–	PVI3.00.02.3001	Global setting for the index type of array variables from the INA2000 line.

400059678	Problem	–	PVI3.00.00.3121	The data pointer in the PVI callback is not ZERO for a Write–Response.
400060259	Problem	–	PVI3.00.00.3121	TC global variables from PG2000 programs are read incorrectly.
400060390	Problem	–	PVI3.00.00.3121	The online connection cannot be changed if there is no connection with the CPU.
400053882	Problem	–	PVI3.00.00.3119	PVI crash when deregistering variables in Windows CE
400045783, 400061055	Problem	–	PVI3.00.00.3119	OPC server DA 3.0 doesn't return DataChanged events in Windows Vista / 7
400053905, 400053092	Problem	–	PVI3.00.00.3119	Variables are not exchanged after the connection is lost
400051707	Problem	–	PVI3.00.00.3119	TCP connections with the same IP address and different source stations and different local ports are established via the same connection object.
400041443	Problem	–	PVI3.00.00.3119	In the Connected event of a structure variable, the members are not yet initialized.
400051329	Problem	–	PVI3.00.00.3118	PVI events are sometimes triggered twice
400045640	Problem	–	PVI3.00.00.3117	OPC server freezes when a client creates multiple subscriptions simultaneously
400039677	Problem	–	PVI3.00.00.3117	Behavior of limit alarms not completely correct on the B&R PVI OPC server DA 3.0
400040218	Projekt	–	PVI3.00.00.3117	PVI–internal PVs can't be accessed.
400046703	Problem	–	PVI3.00.00.3117	The class BR.AN.PviServices.Value throws an exception if the constructor for an array is used with values
400039702	Problem	–	PVI3.00.00.3117	Task collection can't be changed in a "Task Connected" event.
400057808	Problem	–	PVI3.00.00.3021	PVI crashes when writing a CPU status string with the length 0
400059234	Problem	–	PVI3.00.00.3021	Starting with Version 4.0.1.1, Error 12020 is triggered when connecting variables via the MODBUS line.
400071802	Problem	PVI3.00.02.3114	PVI3.00.02.3112	"Include" command doesn't work with relative paths
400069860	Problem	PVI3.00.02.3114	PVI3.00.02.3112	Problems restoring CF image on BIOS devices with CFs >= 2GB
400073009	Problem	PVI3.00.02.3114	PVI3.00.02.3013	"Compare" followed by IF command does not work
400070663	Problem	PVI3.00.02.3112	PVI3.00.02.3012	When a negative TIME variable is read, a " _ " character is inserted in the result
400063663	Problem	PVI3.00.02.3107	PVI3.00.02.3106	CD creation: Error message with command "CFRestore"
242102	Problem	PVI3.00.02.3107	PVI3.00.02.3101	PVI error when there are two process objects with the same name
400052878	Problem	PVI3.00.02.3107	PVI3.00.00.3121	Structure data with FBK elements and BOOLEAN variables is displayed incorrectly in the PVI
400048851	New function	PVI3.00.02.3107	PVI3.00.00.3118	PVI doesn't generate any logger files if the specified directory doesn't exist.
400042314	Problem	PVI3.00.02.3107	PVI3.00.00.3117	Error 4820 after multiple restarts of client and CPU
400063228	Problem	PVI3.00.02.3107	PVI3.00.00.3021	String variables cannot be used as default values for input dialog boxes.
400062699	Problem	PVI3.00.02.3106	V3.00.81.16	Input box for command "WriteVariableUser" appears in background
400063068	Problem	PVI3.00.02.3106	PVI3.00.00.3121	"CFService" command does not function
400062071, 400062540	Problem	PVI3.00.02.3106	PVI3.00.00.3121	CD creation: File "PviLog.dll" not copied
400057670	Problem	PVI3.00.02.3106	PVI3.00.00.3021	

				Not all modules added to the CF image if it is created right from the project
400026013	Problem	PVI3.00.02.3105	V3.00.00.3013	"VariableList" command doesn't terminate when connection to PLC is lost
400059159, 400059487	Problem	PVI3.00.02.3105	PVI3.00.00.3121	CF creation: Size of the SYSTEM partition calculated incorrectly for an ARNC0 project
400060431	Problem	PVI3.00.02.3105	PVI3.00.00.3120	In Windows 7, no USB devices are listed for performing a USB remote install
400054444	Problem	PVI3.00.02.3105	PVI3.00.00.3119	Created CD freezes when executed in service mode
400049628, 400052330, 400062112	Problem	PVI3.00.02.3105	PVI3.00.00.3119	CF images (.zp2) can no longer be opened with older versions of PVI Transfer
400044321, 400049176	Problem	PVI3.00.02.3105	PVI3.00.00.3117	When individual files are restored, not all files are copied to the CF card.
400059786, 400071010, 400071856	Problem	PVI3.00.02.3105	PVI3.00.00.3021	OPC server DA 3.0 doesn't return DataChanged events in Windows Vista / 7
400057533	Problem	PVI3.00.02.3105	PVI3.00.00.3019	In Windows 7 an error is generated when applying the PVI diagnostics settings.
400043745	New function	PVI3.00.02.3104	PVI3.00.00.3117	Support for 64-bit PVI Client applications
400064771	Problem	PVI3.00.02.3009	PVI3.00.00.3021	INACAN returns error 13076 for 5AC600.CANI-00
400047558, 400054453, 400061539	Problem	PVI3.00.02.3008	PVI3.00.00.3118	Windows OPC server handles BOOL arrays incorrectly
400061893	Problem	PVI3.00.02.3007	PVI3.00.00.3121	OPC server – continuous RAM consumption
400056765	Problem	PVI3.00.02.3007	PVI3.00.00.3121	Events are no longer triggered
400058083	Problem	PVI3.00.02.3007	PVI3.00.00.3119	CPU object causes Error event with the error number 0 instead of the Connected event.
400048361, 400068942, 400074073	Problem	PVI3.00.02.3007	PVI3.00.00.3117	If started in a 64-bit environment (e.g. Windows 7 x64), the OPC Monitor crashes with an error message and cannot be used.
400040592	Problem	PVI3.00.02.3007	PVI3.00.00.3116	OPC monitor stops responding on Windows 7 – 64 bit
400058555	Problem	PVI3.00.02.3007	PVI3.00.00.3021	BR.AN.PviServices.Value cannot be assigned directly to the System.DateTime.
400045215	Problem	PVI3.00.02.3005	PVI3.00.00.3117	Minimum subscription refresh rate for OPC server DA 3.0 is 200ms
400023802	Problem	PVI3.00.02.3001	V2.6.0.3012	PVI security dongle not detected by PVI when using Windows 2003 Server x64
400051824	New function	PVI3.00.00.3121	PVI3.00.00.3119	Support for PG2000 projects
400051755	Problem	PVI3.00.00.3120	PVI3.00.00.3109	CF creation terminates when directory with the SVN files is copied to the User partition
136355	New function	PVI3.00.00.3119	V2.5.1.4108 [V2.82]	New option for "DeleteMemory" command to delete non-volatile system settings
154042	New function	PVI3.00.00.3119	–	CF creation accelerated
400041925	Problem	PVI3.00.00.3119	PVI3.00.00.3117	"VariableListAll" command causes crash when lots of variables
400039954	Problem	PVI3.00.00.3119	PVI3.00.00.3017	It is not possible to set up two CPU connections with the same IP address and different port numbers
400033399	Problem	PVI3.00.00.3118	V2.5.3.3009	CAN driver freezes in the initialization phase.
400061893	Problem	PVI3.00.00.3022	PVI3.00.00.3121	OPC server – continuous RAM consumption
400048361,	Problem	PVI3.00.00.3022	PVI3.00.00.3117	If started in a 64-bit environment (e.g. Windows 7

400071881				x64), the OPC Monitor crashes with an error message and cannot be used.
400047822	Problem	PVI3.00.00.3020	PVI3.00.00.3017	After a synchronous read request to inactive tags, link objects are not released

1.3.2.6 1A4000.02 Automation Studio 2x

ID	valuation	solved since	known since	Description
400068078	Problem	V3.00.90.12	V2.7.0.0020 SP13	Unable to enter parameters for the Profibus master modules
400056581	Problem	V3.00.90.07	V2.7.0.0020 SP13	Recursion when using a field variable in CheckBounds
400068078	Problem	V3.00.81.29 SP0x	V3.00.81.26 SP0x	Unable to enter parameters for the Profibus master modules
400056581	Problem	V3.00.81.26 SP0x	V2.7.0.0020 SP13	Recursion when using a field variable in CheckBounds

1.3.2.7 1A4000.02 Automation Tools

ID	valuation	solved since	known since	Description
400030828	Problem	V3.00.81.19 SP01	V3.0.71.31 SP05	I/O switchboard project can't be opened again after it's closed

1.3.2.8 1A4000.02 Motion Components

ID	valuation	solved since	known since	Description
400063641	Problem	V3.00.90.11	V3.00.90.09	ACOPOS parameter tables are not completely converted from AS 2.x to AS 3.x

1.3.2.9 1A4000.02 Visual Components

ID	valuation	solved since	known since	Description
267408	Problem	VC 3.93.2	VC 3.92.8	If all of a project's languages aren't transferred to the target, an error occurs when loading the text resources.
400059292, 400065022, 400055401	Problem	VC 3.93.0	ARSG4_3.08.7_G03.08	SDM2: Can't access AR000 SDM via VC control
400049586	Problem	VC 3.92.8	VC 3.64.2	Rounding error in the function VCDP_Utf8Set(...)
400069356	Problem	VC 3.92.6	VC 3.73.0	PieChart control not refreshed when the sum of the values remains the same.
400061529, 400065695	Problem	VC 3.92.4	V3.00.81.24 SP03	Incorrect status for VA_wcGetActAlarmList on VC Windows terminals
400060084	Problem	VC 3.92.0	VC 3.73.0	Error in LED and key handling on VC Windows terminals.
400064836	Problem	VC 3.91.8	VC 3.73.0	Invalid layer reference on a page causes a crash
400054078	Problem	VC 3.91.8	VC 3.72.6	The visualization application stops responding after the function VA_SetVisualizationZOrder is called.
400054540	Problem	VC 3.91.6	VC 3.90.2	When all items are locked, pressing the down arrow in a DropDown control

				causes a page fault.
400043306	Problem	VC 3.91.6	VC 3.72.6	Pressing a key causes a page fault if the index in a drop-down control is outside the min/max range
400060097	Problem	VC 3.91.6	VC 3.64.4	VCDP_Utf8Set() – Parameter 'pv-userid' not present in event
400063188	Problem	VC 3.91.6	V3.00.90.01	Setting the property Format\PitchLines\MajorDevisions for the control element "Sale" to 0 pushes the CPU load to 100%
400044702	New function	VC 3.91.6	V3.00.81.11	In a user trend, the sample rate can be defined by a data point.
400058612	Problem	VC 3.91.4	VC 3.73.0	Trend time scale incorrect after changing the system time.
400057460, 400059634	Problem	VC 3.91.4	VC 3.72.6	Trend time drifts away from the system time
400041732	Problem	VC 3.91.4	VC 3.35.4	VNC clients with different encoding cause display errors
400056229	Problem	VC 3.91.4	V3.00.81.23 SP02	A TrendScaleContainer with a width of <= 16 pixels causes a page fault in VC
400058121	Problem	VC 3.91.4	V3.00.81.18	Defining a SampleCount of 2147483647 (approx 2GB) in the TrendControl causes a PageFault
400054669, 400055052	Problem	VC 3.91.0	VC 3.72.6	VC4 alarms are displayed with the wrong forecolor.
400054186, 400055491, 400059875, 400061184	Problem	VC 3.91.0	VC 3.72.6	Calibration data points don't work
248485	Problem	VC 3.91.0	V3.00.81.22 SP01	The internal data point "IP address" doesn't work for the X20CP1483-1.
400050107	Problem	VC 3.90.6	VC 3.64.2	PW35 with same node number not working on different X2X buses
400051271, 400050884, 400052430	Problem	VC 3.90.2	VC 3.72.6	Bitmaps can't be displayed on touchpads.
400045261	Problem	VC 3.90.2	VC 3.64.2	ARsim crashes if the True Type font "CIHLVB.TTF" is used.
400051722	Problem	VC 3.90.2	VC 3.64.2	Page fault when the focus is placed on a drop-down control that has no text group.
400051227	Problem	VC 3.90.2	VC 3.64.2	If the listbox receives a Lock event while scrolling, the visualization application freezes.
–, 400058133, 400065180	Problem	VC 3.90.2	VC 3.64.2	Page fault in the listbox control when the Options data point is used
400044645	Problem	VC 3.90.2	VC 3.64.0	Watchdog (9206) when the function ScreenShot() from the ScreenShot library is executed when no storage device is connected.
400049974	Problem	VC 3.90.2	V3.00.80.31 SP01	Entering a certain Zoom factor for the Zoom data point freezes the visualization application.
400049447	Problem	VC 3.90.2	V3.00.80.25	EDIT control can't load a 16 kB file.
400064836	Problem	VC 3.73.4	VC 3.73.0	Invalid layer reference on a page causes a crash

400063188	Problem	VC 3.73.4	V3.00.81.24 SP0x	Setting the property Format\PitchLines\MajorDevisions for the control element "Sale" to 0 pushes the CPU load to 100%
400052164, 400056905	Problem	VC 3.73.4	V3.00.81.18	Page fault when starting a Windows terminal
400052164, 400056905	Problem	VC 3.73.4	V3.00.81.18	Page fault when starting a Windows terminal
252053	New function	VC 3.73.4	–	New Visapi function: VA_GetAlarmCount
400058612	Problem	VC 3.73.2	VC 3.73.0	Trend time scale incorrect after changing the system time.
246165	Problem	VC 3.73.2	VC 3.73.0	Error starting terminal when AR J3.01 and VC3.73.0 are used.
400054540	Problem	VC 3.73.2	VC 3.72.6	When all items are locked, pressing the down arrow in a DropDown control causes a page fault.
400053535	Problem	VC 3.73.2	VC 3.72.6	The password characters are only shown in the open touchpad, but not in the control itself.
400056229	Problem	VC 3.73.2	V3.00.81.23 SP02	A TrendScaleContainer with a width of <= 16 pixels causes a page fault in VC
400058121	Problem	VC 3.73.2	V3.00.81.18	Defining a SampleCount of 2147483647 (approx 2GB) in the TrendControl causes a PageFault
400026501, 400028134, 400032681, 400060358	Problem	VC 3.73.2	V2.7.0.0017 SP10	Touchpad key stays pressed
400054303, 400054764	Problem	VC 3.73.0	VC 3.72.6	Crash of VC Windows Runtime, when a page change is executed during loading the html control.
400051252 400052285, 400052430, 400053060, 400056401	Problem	VC 3.72.8	VC 3.72.6	Error corrected that caused display errors on touchpads
400049123	Problem	VC 3.72.6	VC 3.64.2	VA_GetTouchAction doesn't function properly with VNC client
400045952, 400038410	Problem	VC 3.72.4	VC 3.35.4	Trend line disappears from trend control after some time.
400045700	Problem	VC 3.72.2	VC 3.64.2	The dropdown control doesn't update a text with an IndexText snippet.
400043546, 400045730, 400028969	Problem	VC 3.72.2	VC 3.35.4	Trend curves are not shown anymore after a longer period.
400012421, 400020746	Problem	VC 3.72.2	V3.0.71.9	Double-clicking on an entry in the cross-reference window in VC doesn't position the cursor correctly
400045199, 400073707	Problem	VC 3.72.0	VC 3.64.2	VCDP_Utf8Get on terminal targets causes cycle time violation.
400044898	Problem	VC 3.71.8	VC 3.64.2	If the property Value.Datapoint is not set (<none>) in a trend configuration, a page fault will occur in the Trend control
400042828	Problem	VC 3.71.8	V2.7.0.0019 SP12	ValueScale scroll data point is reset when the page is changed
400044564	Problem	VC 3.71.6	VC 3.64.2	Persistent alarm snippets are not saved

400038617	Problem	VC 3.71.6	VC 3.63.2	Key matrix data point remains set
400042921	Problem	VC 3.71.6	VC 3.35.4	Error behavior with EnableDatapoint with the control element "Trend"
400036573	Problem	VC 3.71.6	V2.7.0.0019 SP12	Key action locking doesn't work on a terminal if the locking variable isn't used on the page.
400043851	Problem	VC 3.71.4	VC 3.64.0	Incorrect behavior of vertical spacing in drop-down box
400041900	Problem	VC 3.71.4	VC 3.64.0	vcboot is started, even though the server CPU is in service mode.
400042457	Problem	VC 3.71.4	V3.00.80.25	Hiding the trend value scale containers causes a page fault in VC
400028089	New function	VC 3.71.4	V3.00.80.19	When the filter function is turned on (Type=BOOL[0..9]), variables of the type ARRAY [m..n] OF BOOL are not available, even though the data type is correct.
400039299	Problem	VC 3.71.2	VC 3.63.8	Page fault caused by memory leak during permanent change to alarm page in specific application.
400040466	Problem	VC 3.71.2	V3.00.80.25	Page fault when transferring visualization application after editing texts.
400040641	Problem	VC 3.71.2	V3.00.80.25	Trend control: Changing the zoom on the time axis shows and hides the curve.
400054569	Problem	VC 3.64.6	VC 3.64.2	VA_DelAlarmHistory returns Status 7180 if list is empty
400046352	Problem	VC 3.64.6	VC 3.64.2	VA_Line doesn't function properly on PW35
400046353	Problem	VC 3.64.6	VC 3.64.2	Trend causes a pagefault in some projects
400054540	Problem	VC 3.64.6	VC 3.64.2	When all items are locked, pressing the down arrow in a DropDown control causes a page fault.
400057953	Problem	VC 3.64.6	V3.00.80.31 SP01	Focus colors of the Alarm control displayed incorrectly
400039580	Problem	VC 3.64.2	VC 3.63.2	If a listbox contains more entries than can fit in the display window, the visualization application freezes sporadically.
400040233	Problem	VC 3.64.2	V3.00.80.25	Alarm sorting according to group in the configuration alarm control is incorrect.
400039048	Problem	VC 3.64.2	V3.00.80.25	StartTimeDatapoint for Trend control is overwritten by VC runtime.
213003	Problem	VC 3.64.2	V2.7.0.0017 SP10	Trend control: Data points Cursor(x) ValueDatapoint and Cursor(x) TimeDatapoint aren't triggered when the cursor is shown.
400037800	Problem	VC 3.64.0	V3.00.80.25	The function VCDP_Utf8Get returns incorrect scaling if the scaled value is outside the limit.
222955	Problem	VC 3.64.0	V3.00.80.25	Values of enumerations are not shown on the display.
400035530	Problem	VC 3.64.0	V3.00.80.25	The command line interface in the Edit control doesn't work.
400034681	Problem	VC 3.64.0	V3.00.80.25	

				Custom visualization doesn't start after upgrading from 3.0.71 to 3.0.80.
400036758	Problem	VC 3.64.0	V3.00.80.25	"Out of Memory" when loading a text file, although the target has sufficient memory.
400034837	Problem	VC 3.64.0	V3.00.80.25	Memory leak when using the Ultra VNC Viewer with a 32-bit visualization application.
400030493	Problem	VC 3.64.0	V3.00.80.22	LifeSignDatapoint stops incrementing
400032649	Problem	VC 3.64.0	V3.0.71.31 SP05	Screensaver page is not entered in the history.
400027965 , 400029109 , 400028111 , 400015407 , 400029650 , 400029849 , 400036331	Problem	VC 3.64.0	V2.7.0.0016 SP09	PageFault caused by incorrect VNC authentication – Remote maintenance via Internet.
400036104	Problem	VC 3.64.0	ARSG4_3.00.22_V03.00	The terminal visualization starts considerably slower after switching from AS2.7.0 to AS3.0.80
400000595	Problem	V3.00.90.16	V3.00.90.14	Crash when VC objects are opened in a specific project
400043304	Problem	V3.00.90.16	V3.00.81.19	Incorrect display of arrays with many elements (80000 or more)
400067118	Problem	V3.00.90.13	VC 3.73.0	When VC Windows terminal is restarted, a running ARwin is not closed
400037920 , 400041371 , 400045431	Problem	V3.00.90.13	V3.00.90.11	Display error in the bitmap 'zuneAlphaPadQvga'
400046081	Problem	V3.00.90.13	V3.00.80.31 SP01	Layer copied from a page to the common layers keeps the property "hidden"
400068118	Problem	V3.00.90.12	V3.00.81.24 SP0x	Compiler output improved for Error 7164.
400065760	Problem	V3.00.90.12	V3.00.81.24 SP0x	Using multiple VC data sources causes a page fault.
400062173	Problem	V3.00.90.12	V3.00.81.24 SP03	Switching from 8-bit to 32-bit isn't applied to all graphics.
400053770	Problem	V3.00.90.12	V3.00.80.31 SP01	Element of a structure can't be displayed during runtime
400063338	Problem	V3.00.90.11	VC 3.73.0	Display of import log file doesn't work. The file is created in the wrong folder.
400053165	Problem	V3.00.90.11	VC 3.72.6	If an incorrect administrator password is entered, the VC Windows terminal won't boot automatically anymore.
400064647	Problem	V3.00.90.11	V3.00.81.24 SP0x	Changes to the name of the visualization are not saved in the project file.
400064021	Problem	V3.00.90.11	V3.00.81.24 SP0x	Incorrect error message when the wrong directory is specified in the VC Import Wizard.
400060674	Problem	V3.00.90.11	V3.00.81.23 SP02	With more than 10 key levels, switching displayed level in VC editor doesn't work correctly
400057211 , 400060560 ,	Problem	V3.00.90.11	V3.00.81.18	It was no longer possible to create an internal data source.

400062831, 400070847				
400034476	Problem	V3.00.90.11	V3.00.80.25	Grid settings in VC editor disappear if window too small
400060889	Problem	V3.00.90.11	V3.00.71.32 SP06	VC3 visualization application always transferred
400052964, 400060332	Problem	V3.00.90.10	VC 3.72.6	When opened, the visualization application is always marked as having been changed
400054507	New function	V3.00.90.10	VC 3.64.0	For the Toggle and Momentary DP key actions, the default setting for "pressed" status has been changed to 1.
400062342, 400062713, 400062960	New function	V3.00.90.10	V3.00.90.06	Merging data sources when importing resources
400062424	Problem	V3.00.90.10	V3.00.90.05	Importing a 32-bit PNG inserts it as an 8-bit bitmap
400062105	Problem	V3.00.90.10	V3.00.81.26 SP0x	VC Editor crashes if a CPU name with more than 20 characters is used in a project.
400064754	Problem	V3.00.90.10	V3.00.81.24 SP0x	Variables are not deleted from the data source file when the last active reference is deleted.
400064577	Problem	V3.00.90.10	V3.00.81.24 SP0x	Limit for the expand function increased from 255 to 10000 elements.
400062865	Problem	V3.00.90.09	V3.00.81.24 SP03	The variable that is used exclusively for Fill Areas is decoupled from the property by VC
400060300	Problem	V3.00.90.09	V3.00.81.23 SP02	Layout of the listbox during runtime depends on the text size in Windows 7
400061451	Problem	V3.00.90.09	V3.00.81.23 SP02	Refactored variable not being saved
400059732	Problem	V3.00.90.09	V3.00.81.23 SP02	Refactored variable not being saved
400052336, 400061114	Problem	V3.00.90.09	V3.00.81.23 SP02	Array elements not being linked to the task during import
400057285	Problem	V3.00.90.09	V3.00.81.22 SP01	TextIndexOffset -1 not being saved
400059383, 400061465, 400063019, 400064576	Problem	V3.00.90.09	V3.00.81.22 SP01	Unit groups can no longer be connected to arrays
400058284	Problem	V3.00.90.09	V3.00.81.18	Absolute path in the *.mak file in VC3 visualization
400063838, 400062713, 400062960	Problem	V3.00.90.09	V3.00.81.18	Data points are decoupled during import
400056974, 400059791	Problem	V3.00.90.09	V3.00.81.18	Members of FUB arrays not displayed correctly in the VC data source
244258	Problem	V3.00.90.08	VC 3.72.8	ReplaceColor doesn't work correctly for 32-bit bitmaps.
400054482	Problem	V3.00.90.08	VC 3.64.2	ReplaceColor doesn't work correctly for 32-bit bitmaps.
400055896	Problem	V3.00.90.08	V3.00.81.24 SP0x	The structure of a reference is displayed incorrectly in the cross reference in VC.
400061454	New function	V3.00.90.08	–	Output number of acknowledged alarms.
400055909	Problem	V3.00.90.07	VC 3.72.6	Data points linked to vKeys are sometimes disconnected if the project

				contains more than one visualization
400055285	Problem	V3.00.90.07	V3.00.81.18	Incorrect handling of data source in source control
400026964, 400049218	Problem	V3.00.90.07	V3.0.71.31 SP05	ShowConnections function doesn't work on text groups when pages are closed
400050882, 400055585, 400060760	Problem	V3.00.90.06	VC 3.72.6	Variable and units overlap in the editor.
400049724, 400052262	Problem	V3.00.90.06	VC 3.64.2	When a visualization page is copied, the tab order of the controls is lost
400055896	Problem	V3.00.90.06	V3.00.81.18	After a "Build all", visualization objects ignored in "Build Cross Reference"
400055155	Problem	V3.00.90.06	V3.00.81.18	Build error when config name contains "Temp"
400052054	Problem	V3.00.90.06	V3.00.81.18	Incorrect error message when multiple KeyMapping files are mapped
400055336	Problem	V3.00.90.06	V3.00.81.18	GDI resources are lost when switching between two trend windows
400051047	Problem	V3.00.90.06	V3.00.81.18	Problem replacing data points in VC
400050913	Problem	V3.00.90.06	V3.00.81.18	Additional nodes in structures in the data source view
400008201, 400006669, 400009276, 400009917, 400013774, 400015386, 400015877, 400016146, 400018752, 400044279, 400053932, 400060613	New function	V3.00.90.06	V2.6.0.0012 SP02	The number of key levels has been increased to six
400061451, 400062661	Problem	V3.00.81.26 SP0x	V3.00.81.23 SP02	Refactored variable not being saved
400055285	Problem	V3.00.81.26 SP0x	V3.00.81.18	Incorrect handling of data source in source control
400058347	Problem	V3.00.81.25 SP04	V3.00.81.22 SP01	Changing the property "Apperance.ColorDatapoint" in the style sheet causes an error
400053896, 400057381, 400061062	Problem	V3.00.81.25 SP04	V3.00.81.18	Error: PLC variable not defined
400055909	Problem	V3.00.81.24 SP02	VC 3.72.6	Data points linked to vKeys are sometimes disconnected if the project contains more than one visualization
400055896	Problem	V3.00.81.24 SP02	V3.00.81.18	VC objects were sometimes ignored in "Build Cross Reference"
400055386	Problem	V3.00.81.23 SP02	V3.00.81.22 SP01	When a text group entry is selected in VC, it is sometimes displayed incorrectly.
400054708	Problem	V3.00.81.23 SP02	V3.00.81.18	Node numbers of VC Windows targets can't be changed after they are set
400055155	Problem	V3.00.81.22 SP01	V3.00.81.18	Compiler error when a configuration name contains "temp"
400050839	Problem	V3.00.81.20 SP01	V3.00.81.18	After converting from AS3.00.80 to AS3.00.81 the wrong value is used for

				ReplaceColor.
400052261 , 400056975	Problem	V3.00.81.20 SP01	V3.00.81.18	When opening a VC project, the tab order was read incorrectly.
400046570	Problem	V3.00.81.20 SP01	V3.00.80.31 SP01	Error that led to sporadic crashes when importing VC resources has been corrected.
400036265	Problem	V3.00.81.20 SP01	V3.00.80.25	Incorrect configuration of alarm system can now be corrected using the Edit function.
400073633	Problem	V3.00.81.20 SP01	V3.00.80.09	Problem compiling constants in VC3
400035848	Problem	V3.00.81.20 SP01	V3.0.71.31 SP05	Focus placed incorrectly when performing "Replace" in VC
400033965	Problem	V3.00.81.15	V2.7.0.0018 SP11	VC3 editor discards a variable only connected to one key
400017189	Problem	V3.00.81.13	V3.0.71.24 SP03	Key mapping retains reference to previously opened project, and therefore modifies the incorrect *.dis file
400043491	Problem	V3.00.81.12	VC 3.64.0	Copying doesn't apply style sheet settings
400038552	Problem	V3.00.81.12	V3.00.80.25	VC4 editor freezes when opening the visualization application
400025144	Problem	V3.00.81.12	V3.0.71.29 SP05	Style sheet property "Touchpad" not applied properly.
400034391	Problem	V3.00.81.12	V3.0.71.10	Build error when using Chinese fonts
400040465	Problem	V3.00.81.11	VC 3.35.4	The spacing between the value and the units in a Numeric control is too small.
400061514 , 400059292 , 400063539 , 400065022	Problem	V3.00.81.10	VC 3.62.2	SDM on HTML control on ARsim doesn't work
400025820	Problem	V3.00.81.10	V3.0.71.27 SP04	Visualization is not opened if key mapping is open, and no message appears
400029414	Problem	V3.00.81.09	V3.00.80.21	Setting data point to <NONE> for multiple Numeric controls does not take effect
400028825	Problem	V3.00.81.09	V3.0.71.31 SP05	Inline editing for text groups doesn't allow copying and pasting.
400026930	Problem	V3.00.81.09	V3.0.71.30 SP05	CommonLayer key actions don't work under some circumstances
400022167	Problem	V3.00.81.09	V3.0.71.27 SP04	With color maps, sometimes not all indexes are shown after a copy/paste operation
400021541	Problem	V3.00.81.09	V3.0.71.24 SP03	VC editor loses data points after DP update
193788	Problem	V3.00.81.09	V3.0.71.22 SP03	Renaming the visualization causes a build error
400014970 , 400029783	Problem	V3.00.81.09	V3.0.71.20 SP02	TextIndexOffset changes from 0 to 3 when text entry made in a text group.
400014273	Problem	V3.00.81.09	V3.0.71.20 SP02	Data types in VC are not shown if the declaration is split between multiple files
400007262 , 400033959 , 400033868	Problem	V3.00.81.09	V3.0.71.14 SP01	Arabic characters are not combined into words
400039405	Problem	V3.00.81.09	V2.7.0.0019 SP12	Data type changes are not detected if the visualization application is closed

400022633	Projekt	V3.00.81.09	V2.7.0.0014 SP07	Bitmap converter with command line interface
400015211, 400016915	Problem	V3.00.81.09	V2.7.0.0013 SP06	Alarms are not displayed right away in the editor
400012126, 400012124	New function	V3.00.81.09	V2.5.3.0028.SP04 [S2.90]	TouchpadMinMax: Multiline output
400029462	Problem	V3.00.81.08	VC 3.35.0	Touch events are forwarded to controls below a touchpad
400026159	Problem	V3.00.81.08	VC 3.35.0	Different display of Trend scale in the editor and in the visualization on the device.
400038779	Problem	V3.00.81.08	V3.00.80.25	Multidimensional arrays can not be used in VC
400033455, 400035400, 400036877, 400038287, 400040387	Problem	V3.00.81.08	V3.00.80.24	Instances of FB arrays can't be used in VC
400029645, 400030450	Problem	V3.00.81.08	V3.00.80.21	Opening certain visualizations – depending on their size and structure – may result in a memory exception or a disproportionately high memory usage by Automation Studio.
400028848	Problem	V3.00.81.08	V3.0.71.31 SP05	When cross referencing is enabled, VC3 visualizations are regenerated with every build
400026458, 400027870	Problem	V3.00.81.08	V3.0.71.31 SP05	Some PV information in the data sources is not refreshed
400027752	Problem	V3.00.81.08	V3.0.71.31 SP05	Input Confirm = LostFocus briefly shows the old value
400014062, 400033456	Problem	V3.00.81.08	V2.7.0.0015 SP08	ANSL reacts more slowly than INA to pressed keys
400031087	New function	V3.00.81.08	–	Optimization of VA_BlitzBitmap function
400033381, 400032830	Problem	V3.00.81.07	V3.00.80.24	Structure arrays with length 1 are displayed incorrectly
210850	Problem	V3.00.81.07	V3.00.80.19	Multidimensional arrays can not be used in visualizations
400028068	Problem	V3.00.81.07	V3.0.71.31 SP05	String with length of 1,000,000 displayed in the data sources as having a length of 16960.
400029530	Problem	V3.00.81.04	V3.0.71.31 SP05	Compressed 8-bit bitmaps cause a PageFault if the file has 1BPP color depth
400053127, 400054470, 400055288	Problem	V3.00.80.35 SP03	V3.00.81.18	Text from text groups with a start index <> 0 is not displayed correctly.
400051448	Problem	V3.00.80.34 SP02	V3.00.80.31 SP01	Variable is not found if a data type is defined twice.
400051758	Problem	V3.00.80.34 SP02	V3.00.80.31 SP01	Structures that are found in multiple programs with the same title are displayed as faulty in VC.
400045173, 400045985	Problem	V3.00.80.34 SP02	V3.00.80.25	Exporting text from VC3 editor in WIN7 causes an error
400048945	Problem	V3.00.80.33 SP02	V3.00.80.31 SP01	When fonts are imported from another project, the font settings in the controls are changed.

400048943	Problem	V3.00.80.33 SP02	V3.00.80.31 SP01	When virtual keys are imported from another project, keys are disconnected.
400046571	New function	V3.00.80.33 SP02	V3.00.80.25	Import from other projects -> Merge bitmap groups
400032081	Problem	V3.00.80.31 SP01	V3.0.71.31 SP05	FB instances can't be used as variable objects.
400043778	Problem	V3.00.80.30 SP01	V3.00.80.25	Page.ColorDatapoint is always overwritten with the value from the style class when the visualization application is opened
400041383	Problem	V3.00.80.29 SP01	V3.00.80.27 SP01	AS crashes when a text in a text group contains more than 256 characters
400037771	Problem	V3.00.80.29 SP01	V3.00.80.25	VC4 Compiler doesn't show error 7066.
400035702	Problem	V3.00.80.29 SP01	V3.00.80.25	Error 7164 occurs during compilation due to faulty hardware configuration.
400044512	Problem	V3.00.80.29 SP01	V3.00.80.25	"Import object from another project" doesn't list the visualization application
400037532	Problem	V3.00.80.29 SP01	V3.00.80.25	After downloading the program for a specific project, the panel crashes with a page fault.
400044630	Problem	V3.00.80.29 SP01	V3.00.71.26 SP04	Strings from UINT arrays can't be configured
400029808, 400037590	Problem	V3.00.80.29 SP01	V3.0.71.31 SP05	A VC3 visualization application cannot be created for the panel 5E9000.18
400037239	Problem	V3.00.80.29 SP01	V3.0.71.31 SP05	If a project is built on another computer, it must be rebuilt
400024059	Problem	V3.00.80.29 SP01	V2.7.0.0016 SP09	BidiMode only works when the index of the language is == 2.
400035081	Problem	V3.00.80.27 SP01	V3.00.80.25	UID property in the data source is disconnected after a quick reassign.
400030011	Problem	V3.00.80.27 SP01	V3.00.80.21	"Quick Reassign" reassigns the data point, but doesn't link it to the control.
400034625	Problem	V3.00.80.27 SP01	V3.0.71.31 SP05	Very slow page change to terminal targets.
263545	Problem	–	VC 3.92.0	The font "Small Font" is not displayed correctly
228710	Problem	–	V3.00.81.14	A build with GCC 2.95.3 doesn't work if the installation path contains parentheses ()
400056208	Problem	–	V3.00.81.14	Incorrect display of control element "Numeric" in the editor
400037741, 400038214, 400038396, 400038621, 400037585	Problem	–	V3.00.80.25	VA_SetupX returns 7030 in a VC3 application.
400039233	Problem	–	V3.00.80.25	Page fault caused by MultipleTexts <None> when TextIndexDP is connected to the button control.
400043532	Problem	ARSG4_3.06.5_E03.06	VC 3.64.0	On ARsim, after approx. 2000 calls, VA_GetAlarmList only returns BUSY 247

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ID	valuation	solved since	known since	Description
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400032355	New function	V3.00.90.10	V3.00.90.09	Setting for the maximum number of profiler archive modules
400028142	New function	V3.00.90.10	V3.00.80.20	Checklist for handling errors
229820	Problem	V3.00.81.11	V3.00.81.10	Executable samples for the DATAOBJ library
227275	New function	V3.00.81.11	V3.00.80.25	Executable samples for the DVFrame library
227260	New function	V3.00.81.11	V3.00.80.25	Executable samples for the DRV_mbus library
226355	New function	V3.00.81.11	ARSG4_3.00.22_V03.00	Executable samples for the AsSnpmp library
400010987	New function	V3.00.81.10	V2.7.0.0011 SP04	The Help for the IF361 library doesn't describe the conditions where a global instance is required.
400052222, 400053742, 400054269, 400054445, 400056806	Problem	–	V3.00.81.22 SP01	Calculation of Speed/Torque Characteristics failed
400054334	Problem	–	V3.00.81.18	X20DI2653 E-LED description incorrect
227270	New function	–	V3.00.80.25	Executable samples for the DRV_mn library

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ID	valuation	solved since	known since	Description
400072895	Problem	V3.00.90.17	V3.00.90.15	Festo Profinet device can not be inserted
400071495	Problem	V3.00.90.15	V3.00.81.27 SP0x	Build error "Required white space was missing" when using regional and language settings for China
400070573	Problem	V3.00.90.14	V3.00.90.12	CANopen Master DTM checks whether default values are defined in the EDS files for the COB-ID. If not, it tries to define default values that conform to the standards.
400071333	Problem	V3.00.90.14	V3.00.90.11	Autocomplete error with local function blocks
400069448	Problem	V3.00.90.14	V3.00.81.27 SP0x	Memory overwritten when two local function blocks with the same name are used
400069458	Problem	V3.00.90.14	V3.00.81.27 SP0x	Incorrect code generated when a block instance with EN/ENO is used multiple times
400070129	Problem	V3.00.90.14	V3.00.81.26 SP0x	"Undefined reference" when generating C++ task
400072054	Problem	V3.00.90.14	V3.00.81.24 SP0x	CNC Trace: Some NC object names in the NC Trace data points are incorrect
234606	Problem	V3.00.90.14	V3.00.81.09 (FR000488)	New reserved names
400042894	New function	V3.00.90.14	V3.00.80.25	With CPUs used as a POWERLINK V2 CN, it is now possible to configure a fixed InSize and OutSize for the POWERLINK data.
400068093	Problem	V3.00.90.12	V3.00.81.26 SP0x	Build terminates unexpectedly
400067925	Problem	V3.00.90.12	V3.00.81.26 SP0x	For transitions that contain special characters (\"/: * <>) it is then no

				longer possible to edit an action. The editor can't be opened.
400068185	Problem	V3.00.90.12	V3.00.81.26 SP0x	Go To Declaration is not offered for members of function blocks
400068898	Problem	V3.00.90.12	V3.00.81.26 SP0x	No compile error when using retain variables
400067673	Problem	V3.00.90.12	V3.00.81.26 SP0x	Contents of the dialog box "Tools / Options / Editor" not shown correctly in Korean Windows 7.
400069438	Problem	V3.00.90.12	V3.00.81.26 SP0x	Replace in "whole file"
400069234	Problem	V3.00.90.12	V3.00.81.26 SP0x	The Automation Runtime version can't be changed if safety hardware modules are frozen in the current configuration.
400062333	Problem	V3.00.90.12	V3.00.81.24 SP0x	Crash when inserting blocks with a parameter type labeled as "FUNCTION" or "FUNCTION_BLOCK".
400064521	Problem	V3.00.90.12	V3.00.81.24 SP0x	"Save Project As" doesn't work if the VC editor is open for one of the project's objects
400065517	Problem	V3.00.90.12	V3.00.81.23 SP0x	Saved logger records could not be opened if the backtrace contained special characters.
400054197	Problem	V3.00.90.12	V3.00.81.18	LineCoverage not working with high task class cycle times
400047764	Problem	V3.00.90.12	V3.00.80.31 SP01	Vertical scroll bar disappears after "append column"
400068446	Problem	V3.00.90.12	V3.00.80.31 SP01	Performance problem when using SVN
400006757	Problem	V3.00.90.12	ARSG4_2.94.22_V02.94	Problems displaying variable values in the PV Watch window after using the library function DatObjMove
261036	Problem	V3.00.90.11	V3.00.90.10	After the range limits of global array variables are changed, the new ranges aren't initialized
400066294	Problem	V3.00.90.11	V3.00.81.27 SP0x	Incorrect code generation when accessing dynamic VAR_Input variables in a block's actions.
400066847	Problem	V3.00.90.11	V3.00.81.26 SP0x	After axis mappings are converted from 2.x to 3.0, not all axis mappings are displayed.
400066009	New function	V3.00.90.11	V3.00.81.25 SP0x	After the upgrade dialog box is canceled no other configuration can be activated
400067530	Problem	V3.00.90.11	V3.00.81.24 SP0x	Endless loop when using advanced MOV blocks
400064208	Problem	V3.00.90.11	V3.00.81.24 SP0x	CheckDiv functions in the IEC Check library are called for MOD operators
400067024	Problem	V3.00.90.11	V3.00.81.24 SP0x	Initializing function block arrays causes build error 6024.
400063869	Problem	V3.00.90.11	V3.00.81.24 SP0x	"Window -> Close All" only closes NC Test window
400066151	Problem	V3.00.90.11	V3.00.81.24 SP0x	In the Variable Watch, the list of inserted variables is lost
400066230, 400068267	Problem	V3.00.90.11	V3.00.81.24 SP0x	Some values of enum variables don't show up in AS Watch.
400066226	Problem	V3.00.90.11	V3.00.81.24 SP0x	List Usage doesn't work for variables with the type ARRAY OF Structure

400066525	Problem	V3.00.90.11	V3.00.81.24 SP0x	Freezing 2003 backplane module causes build error.
400066205	Problem	V3.00.90.11	V3.00.81.24 SP0x	No build error when more local remanent memory is used than was configured.
400060397	Problem	V3.00.90.11	V3.00.81.24 SP0x	During a BUILD in AS the SafeDESIGNER must not be opened.
400065402	New function	V3.00.90.11	V3.00.81.24 SP0x	When a 2.x project is opened, the version info isn't set properly.
400067241, 400068754	Problem	V3.00.90.11	V3.00.80.34 SP02	With an existing online connection, fixed node numbers are detected incorrectly
400044280	Problem	V3.00.90.11	V3.00.80.25	Motor parameters are converted incorrectly
400060785	Problem	V3.00.90.11	–	Cross-communication on the SL's BOOL channels is not recognized as an error.
400065675	Problem	V3.00.90.10	V3.00.90.09	Using functions from <math.h> in a static C library causes build error with SG3/SGC
400064561	Problem	V3.00.90.10	V3.00.81.24 SP0x	The required size of the memory area zzInternalMemory sometimes calculated incorrectly.
400065147	Problem	V3.00.90.10	V3.00.81.24 SP0x	Warning 1289: Missing BOOL variable 'SFCInit' to initialize action
400065008	Problem	V3.00.90.10	V3.00.81.24 SP0x	For arrays with only one element, the software mismatch dialog box always detects a change.
400064590	Problem	V3.00.90.10	V3.00.81.24 SP0x	Invalid linefeed characters resulted in invalid import
400064495	Problem	V3.00.90.10	V3.00.81.24 SP0x	VAR_IN_OUT parameters added in the wrong order
400063292	Problem	V3.00.90.10	V3.00.81.24 SP0x	Input channels that are mapped multiple times are not saved in the order shown.
400064409	Problem	V3.00.90.10	V3.00.81.24 SP0x	Empty task inserted when an ACOPOSmicro is inserted on an SGC CPU
400064311	Problem	V3.00.90.10	V3.00.81.24 SP0x	Wrong Wizard opened for X20SM* and X67SM* modules with the function model "Ramp"
400065482	Problem	V3.00.90.10	V3.00.81.23 SP0x	Casting REAL or LREAL to whole number data type doesn't shorten to specified data width
400057519	Problem	V3.00.90.10	V3.00.81.23 SP0x	Variables can no longer be dragged into the Watch window.
400060315	Problem	V3.00.90.10	V3.00.81.23 SP0x	Linking identical OPC configurations
400062774	Problem	V3.00.90.10	V3.00.81.18	Didn't stop at breakpoints when CPU had insufficient RAM
400052334	Problem	V3.00.90.10	V3.00.81.18	Variables can no longer be dragged into the Watch window.
400053413	Problem	V3.00.90.10	V3.00.81.18	Error 1144 during build due to changed transfer parameters in the *.fun file
400052839	Problem	V3.00.90.10	V3.00.81.18	Dragging and dropping a selected line sometimes removes a line too many
224820	Projekt	V3.00.90.10	V3.00.81.06 (FR000553)	In the source files of static C/C++

				libraries, breakpoint positions are not shown.
400049975	New function	V3.00.90.10	V3.00.80.31 SP01	Automation Studio doesn't show a message when two controllers use the same IP address
400044413	Problem	V3.00.90.10	V3.00.80.28 SP01	When inserting OPC tags into the mapping using the Select Variable dialog box, other tag files are inserted
400036316	Problem	V3.00.90.10	V3.00.80.25	The DiagGetStrInfo function from the AsIODiag library only shows "PLKany" for ACOPOSmulti
400032355	New function	V3.00.90.10	V3.00.80.22	Setting for the maximum number of profiler archive modules
210295	Problem	V3.00.90.10	V3.00.80.19	Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor
400027683	Problem	V3.00.90.10	V3.0.71.31 SP05	Debugger doesn't work via routed POWERLINK connection
400061171	New function	V3.00.90.10	nicht relevant	Syntax highlighting in the CNC program editor not fully available
400061893	Problem	V3.00.90.09	V3.00.90.05	OPC server – continuous RAM consumption
400060886	Problem	V3.00.90.09	V3.00.81.26 SP0x	VAR CONSTANT of function blocks overwritten by initialization of instance variable
400062823	Problem	V3.00.90.09	V3.00.81.24 SP0x	Error(s) occurred while generating cross-reference data
400060330	Problem	V3.00.90.09	V3.00.81.24 SP0x	Variable values only shown in monitor mode after scrolling.
400063244	Problem	V3.00.90.09	V3.00.81.24 SP0x	Open Cyclic/Init/Exit in the software configuration opens the wrong instance
400063410	Problem	V3.00.90.09	V3.00.81.24 SP0x	Double-clicking on error message sends cursor to wrong line
400063251	New function	V3.00.90.09	V3.00.81.24 SP0x	Declaration files added to a library after it has been created cannot be renamed.
400063350	Problem	V3.00.90.09	V3.00.81.24 SP0x	Incorrect dialog box shown during hardware export in Windows 7.
400063546 400065518	Problem	V3.00.90.09	V3.00.81.23 SP0x	Password protected data objects or tasks cannot be compiled on computers running Win7 64-bit
400063594	Problem	V3.00.90.09	V3.00.81.23 SP0x	Import could not handle tabulator characters
400063018	Problem	V3.00.90.09	V3.00.81.22 SP01	MN cannot register data points on the iCN
400057426	Problem	V3.00.90.09	V3.00.81.22 SP01	Go to corresponding delimiter doesn't work if the instruction block contains ";" comments
400061752	Problem	V3.00.90.09	V3.00.81.22 SP01	ACOPOS parameter table: The motor wizard is started when trying to load data from a file
400059997	Problem	V3.00.90.09	V3.00.81.22 SP01	Not able to add a resolver motor to ACOPOSmulti
400058060	Problem	V3.00.90.09	V3.00.81.22 SP01	The I/O mapping from the AS project is not applied to the safety project.
400058790	Problem	V3.00.90.09	V3.00.81.22 SP01	Find text or replace text displayed in

				the output window for FindInFiles/ReplaceInFiles
400056878	Problem	V3.00.90.09	V3.00.81.18	Wrong title when tracing multiple axes
400050693	Problem	V3.00.90.09	V3.00.81.18	Online connection incorrectly established after local interruption
400054923	Problem	V3.00.90.09	V3.00.81.18	Replace Block sometimes causes display error
400042618	Problem	V3.00.90.09	V3.00.80.28 SP01	"Comment out" button stays grayed out
400040762	Problem	V3.00.90.09	V3.00.80.25	Forced values are not specifically identified.
400048396	Problem	V3.00.90.09	V3.00.80.25	Interface names can't be corrected in the NC configuration.
400042829, 400045254, 400045023	Problem	V3.00.90.09	V3.00.80.25	Undocked watch window remains out of view.
400056533	Problem	V3.00.90.09	V3.00.80.20	Parameters from function blocks and functions not offered in the Select Variable dialog box.
400062212	Problem	V3.00.90.09	–	Not able to select insert cards correctly from the wizard in 8AC14xxx projects
400060073	Problem	V3.00.90.09	nicht relevant	The contents of the variable declaration file for the SDC controller task deleted
400062521	Problem	V3.00.90.08	V3.00.81.24 SP0x	Error message when double-clicking on cross references from the SFC program
400062128	Problem	V3.00.90.08	V3.00.81.24 SP0x	SmartEdit does not work properly if the editor is opened by double-clicking on the cross reference list.
400060362	Problem	V3.00.90.08	V3.00.81.23 SP0x	Trace recording can't be opened in Windows7 64-bit
400058710	Problem	V3.00.90.08	V3.00.81.22 SP01	The I/O mapping does not support strings
400056018	Problem	V3.00.90.08	V3.00.81.19 SP01	Error message when an OPC tag isn't assigned to a variable
400054966	Problem	V3.00.90.08	V3.00.81.18	"Singularize" generates incorrect array indexes when used in IEC
400056310	Problem	V3.00.90.08	V3.00.81.18	Incorrect channel address calculation for imported Powerlink devices with static mapping and user defined datatypes
400057826	Problem	V3.00.90.08	V3.00.80.31 SP01	OPC tag editor: Incorrect length calculation for structures of a function block instance
400051430	Problem	V3.00.90.08	V3.00.80.31 SP01	Exception in the OPC tag editor when the Singularize function is called
400045196, 400045567	Problem	V3.00.90.08	V3.00.80.29 SP01	In the Watch window, sometimes only the numeric values of enumeration data types were shown.
400042819	Problem	V3.00.90.08	V3.00.80.25	Correction in Watch: Structure elements not inserted correctly with certain selections
400056817	New function	V3.00.90.08	V3.0.71.27 SP04	SafeDESIGNER cannot be opened after uploading hardware that contains safe modules.
400059441	Problem	V3.00.90.07	V3.00.81.25 SP0x	The entire project will not be retrieved during project update if one of the files

				is blocked.
252644	Problem	V3.00.90.07	V3.00.81.24 SP0x	Incorrect code generation for "stretched" MOV blocks
400055434	Problem	V3.00.90.07	V3.00.81.24 SP0x	For ACOPOSmicro, not all hardware module description files are updated during an upgrade.
400059910	Problem	V3.00.90.07	V3.00.81.23 SP0x	The "Modules" window in the logger was not hidden automatically
400060636	Problem	V3.00.90.07	V3.00.81.23 SP0x	Incorrect code is sometimes generated for complex networks.
400059518	Problem	V3.00.90.07	V3.00.81.23 SP0x	When importing/exporting hardware modules, the I/O mapping descriptions are lost.
400058791	New function	V3.00.90.07	V3.00.81.22 SP01	The measurement cursor is displayed by default.
400058178	Problem	V3.00.90.07	V3.00.81.22 SP01	Arrays with a start index <> 0 cause problems in the variable selection window for the variable trace.
400061731	Problem	V3.00.90.07	V3.00.81.22 SP01	Poor system response times depending on the quality of the connection to the file server or VCS server
400056776 400057107, 400059697	New function	V3.00.90.07	V3.00.81.22 SP01	The IP address of the ARsim can't be set to 0.0.0.0
400061566	Problem	V3.00.90.07	V3.00.81.22 SP01	Interface settings are set to defaults after hardware import.
400058790	New function	V3.00.90.07	V3.00.81.22 SP01	Find text or replace text displayed in the output window for FindInFiles/ReplaceInFiles
400058413, 400059749	Problem	V3.00.90.07	V3.00.81.19 SP01	Network Command Trace shortcut menu displayed incorrectly
400057278	Problem	V3.00.90.07	V3.00.81.18	Slow system response when opening the connection dialog box between Safety CPUs
400051153	Problem	V3.00.90.07	V3.00.80.31 SP01	Error generating the header file for REAL constants < 1.0e-5
400048512	Problem	V3.00.90.07	V3.00.80.31 SP01	It is not possible to use C variables larger than 16 MB.
400046363	Problem	V3.00.90.07	V3.00.80.29 SP01	Declaration of arrays with sizeof incorrect
400046834, 400050679, 400055914, 400053351	Problem	V3.00.90.07	V3.00.80.28 SP01	Additional information isn't displayed in Windows 7 and Windows Vista
400034601, 400042798, 400048781, 400052626	Problem	V3.00.90.07	V3.00.80.25	ENUM data types in trace
400039342	Problem	V3.00.90.07	V3.00.80.25	The option "Store Nc Operating system on target" doesn't work for SG3 and SGC targets
153671	Problem	V3.00.90.07	V3.00.80.10	Forced variables not shown as forced after connection is interrupted
400025794	New function	V3.00.90.07	V3.0.71.30 SP05	When Automation Studio starts, it always tries to open the last opened project
250531	Problem	V3.00.90.06	V3.00.90.05	

				Error generating the header file for REAL constants $\geq 4e+15$
400055637	Problem	V3.00.90.06	V3.00.90.05	Variable displayed with the wrong type.
400056381	Problem	V3.00.90.06	V3.00.90.04	Priority of CANopen master can be configured
400053732	Problem	V3.00.90.06	V3.00.90.04	Priority of Profibus master can be configured
400054118	Problem	V3.00.90.06	V3.00.90.03	With an existing online connection, fixed node numbers are detected incorrectly
400059705 , 400060245	Problem	V3.00.90.06	V3.00.81.23 SP0x	Incorrect offsets sometimes generated for global variables
400060503	Problem	V3.00.90.06	V3.00.81.23 SP0x	Incorrect code generation for "stretched" MOV blocks
400056569	Problem	V3.00.90.06	V3.00.81.22 SP01	Bit 30 of a COB-ID was not properly handled by the CAN configuration editor
400056892	Problem	V3.00.90.06	V3.00.81.22 SP01	C++: Failed allocation of bur_heap_size memory gives no Warning/Error
400059327	Problem	V3.00.90.06	V3.00.81.22 SP01	For ARwin, the setting "Preserve permanent PV memory ..." is not preserved.
400058276	Problem	V3.00.90.06	V3.00.81.22 SP01	Special characters replaced by question marks during import
400051241	New function	V3.00.90.06	V3.00.81.18	No positive feedback for Check Offsets
400055024	Problem	V3.00.90.06	V3.00.80.31 SP01	Changing the node number of I/O modules results in incorrect mapping.
400058543	Problem	V3.00.90.05	V3.00.81.22 SP01	AS crashes when monitor mode is activated
400057419	Problem	V3.00.90.05	V3.00.81.22 SP01	If the configuration and the PLC have the same name, then modules can't be inserted.
400051553	Problem	V3.00.90.05	V3.00.81.19 SP01	Changing constants in ANSI C libraries results in the respective program not being generated
400057092	Problem	V3.00.90.05	V3.00.81.18	Crash when parameters are entered in extra device settings without separator
400055476	Problem	V3.00.90.05	V3.00.81.18	Object names that contain a comma are not displayed in the software configuration monitor
400056949	Problem	V3.00.90.05	V3.00.81.18	*.hpp files are not exported with "Export Source Library"
400054960	Problem	V3.00.90.05	V3.00.81.18	Project containing frozen fieldbus devices can't be built.
400056399	Problem	V3.00.90.05	V3.00.81.18	Slow system response when opening the connection dialog box between Safety CPUs
400054338	Problem	V3.00.90.05	V3.00.80.31 SP01	NC Test can't be opened
400047860	Problem	V3.00.90.05	V3.00.80.31 SP01	Cam profile editor remains locked after turning off monitor mode.
400042992 , 400043877 , 400048435	Problem	V3.00.90.05	V3.00.80.25	USB device can't be deleted
400022586 ,	Problem	V3.00.90.05	V3.0.71.27 UP04	Inserting an SI4100 changes arnc0cfg

400030657				
244595	Problem	V3.00.90.04	V3.00.90.03	Static hybrid libraries can't be generated in projects that have a space in the path.
400054562	Problem	V3.00.90.04	V3.00.90.03	Malfunction of CheckBounds
244671	Problem	V3.00.90.04	V3.00.90.03	Build doesn't detect changed constant
244250	Problem	V3.00.90.04	V3.00.90.03	After performing "Clear Data", the logger data is deleted, but not refreshed
400055263	Problem	V3.00.90.04	V3.00.90.03	Sample files that are linked to on Help pages can't be saved.
400055860	Problem	V3.00.90.04	V3.00.81.22 SP01	Error "illegal option -- O" when generating static C/C++ library
400056134	New function	V3.00.90.04	V3.00.81.22 SP01	Errors should also be acknowledged with SFCQuitError when SFCPause = TRUE
400056231	Problem	V3.00.90.04	V3.00.81.20 SP01	Cyclic program won't open
400056008	Problem	V3.00.90.04	V3.00.81.18	Modem description string with single quote doesn't work
245404	Problem	V3.00.90.04	V3.00.81.18	Relaying contacts and coils to a MOVE output causes incorrect functionality.
400055093	Problem	V3.00.90.04	V3.00.80.33 SP02	Undeclared structure element is not detected as an error.
400055457	Problem	V3.00.90.04	V3.00.80.33 SP02	Changing the prototyping of the function block doesn't cause the task to be recompiled
243470	Problem	V3.00.90.04	V3.00.80.33 SP02	Malfunction in Select Variable window for making I/O assignments
243455	Problem	V3.00.90.04	V3.00.80.33 SP02	Array elements are shown multiple times
400040120	Problem	V3.00.90.03	V3.00.80.25	When adding existing objects, the object description is not added
400037337	Problem	V3.00.90.02	V3.0.71.34 SP06	Error "error 9234: Error creating make" if the active configuration contains invalid .br modules
400009868	Problem	V3.00.90.02	V3.0.71.16 SP01	Sorting order cleared when a new entry appears in the logger or when the logger is reopened.
400069448	Problem	V3.00.81.30 SP0x	V3.00.81.27 SP0x	Memory overwritten when two local function blocks with the same name are used
400071811	Problem	V3.00.81.30 SP0x	V3.00.81.27 SP0x	Incorrect handling of empty block connections in monitor mode
400069458	Problem	V3.00.81.30 SP0x	V3.00.81.27 SP0x	Incorrect code generated when a block instance with EN/ENO is used multiple times
262205	Problem	V3.00.81.29 SP0x	V3.00.90.11	Using MOV block with correct syntax causes build error.
400068843	Problem	V3.00.81.29 SP0x	V3.00.81.28 SP0x	Error with COB-ID calculation
400068093	Problem	V3.00.81.29 SP0x	V3.00.81.26 SP0x	Build terminates unexpectedly
400067398	Problem	V3.00.81.29 SP0x	V3.00.81.26 SP0x	Different values displayed in the Ladder Diagram monitor and in the PV watch
400068898	Problem	V3.00.81.29 SP0x	V3.00.81.26 SP0x	No compile error when using retain variables
400068444	Problem	V3.00.81.29 SP0x	V3.00.81.26 SP0x	With AS 3.00.81.26.SP0x, offsets are assigned incorrectly under some

				circumstances
400069234	Problem	V3.00.81.29 SP0x	V3.00.81.26 SP0x	The Automation Runtime version can't be changed if safety hardware modules are frozen in the current configuration.
400066267	Problem	V3.00.81.29 SP0x	V3.00.81.24 SP0x	MOV block generates output even though EN = FALSE
400067241, 400068754	Problem	V3.00.81.29 SP0x	V3.00.80.34 SP02	With an existing online connection, fixed node numbers are detected incorrectly
400066294	Problem	V3.00.81.28 SP0x	V3.00.81.27 SP0x	Incorrect code generation when accessing dynamic VAR_Input variables in a block's actions.
261315	Problem	V3.00.81.28 SP0x	V3.00.81.27 SP0x	After the range limits of global array variables are changed, the new ranges aren't initialized
400066787	Problem	V3.00.81.28 SP0x	V3.00.81.26 SP0x	EDGE, EDGENEG, EDGEPOS cause Error 1179
400064208	Problem	V3.00.81.28 SP0x	V3.00.81.24 SP0x	CheckDiv functions in the IEC Check library are called for MOD operators
400067530, 400067286	Problem	V3.00.81.28 SP0x	V3.00.81.24 SP0x	Endless loop when using advanced MOV blocks
400067024	Problem	V3.00.81.28 SP0x	V3.00.81.24 SP0x	Initializing function block arrays causes build error 6024.
400066230	Problem	V3.00.81.28 SP0x	V3.00.81.24 SP0x	Some values of enum variables don't show up in AS Watch.
258775	Problem	V3.00.81.27 SP0x	V3.00.81.27 SP0x	Projects with function blocks implemented in SFC can't be built.
400064561	Problem	V3.00.81.27 SP0x	V3.00.81.24 SP0x	The required size of the memory area zzInternalMemory sometimes calculated incorrectly.
400065147	Problem	V3.00.81.27 SP0x	V3.00.81.24 SP0x	Warning 1289: Missing BOOL variable 'SFCInit' to initialize action
400064590	Problem	V3.00.81.27 SP0x	V3.00.81.24 SP0x	Invalid linefeed characters resulted in invalid import
400064495	Problem	V3.00.81.27 SP0x	V3.00.81.24 SP0x	VAR_IN_OUT parameters added in the wrong order
400063244	Problem	V3.00.81.27 SP0x	V3.00.81.24 SP0x	Open Cyclic/Init/Exit in the software configuration opens the wrong instance
400063594	Problem	V3.00.81.27 SP0x	V3.00.81.23 SP0x	Import could not handle tabulator characters
400063018	Problem	V3.00.81.27 SP0x	V3.00.81.22 SP01	Managed Node cannot register data points on the iCN
400053822	Problem	V3.00.81.27 SP0x	V3.00.80.25	It is possible to create tasks that have a comma in their name
400061893	Problem	V3.00.81.26 SP0x	V3.00.90.05	OPC server – continuous RAM consumption
252645	Problem	V3.00.81.26 SP0x	V3.00.81.24 SP0x	Incorrect code generation for "stretched" MOV blocks
400062128	Problem	V3.00.81.26 SP0x	V3.00.81.24 SP0x	SmartEdit does not work properly if the editor is opened by double-clicking on the cross reference list.
400061524	Problem	V3.00.81.26 SP0x	V3.00.81.24 SP02	80VD100PD.C000–01 cannot be operated via NC Mapping Table
400060207	Problem	V3.00.81.26 SP0x	V3.00.81.23 SP0x	Export device description is not supported
400058178	Problem	V3.00.81.26 SP0x	V3.00.81.22 SP01	

				Arrays with a start index <> 0 cause problems in the variable selection window for the variable trace.
400058060	Problem	V3.00.81.26 SP0x	V3.00.81.22 SP01	The I/O mapping from the AS project is not applied to the safety project.
400056381	Problem	V3.00.81.25 SP0x	V3.00.81.25 SP0x	Priority of CANopen master can be configured
400059705, 400060245	Problem	V3.00.81.25 SP0x	V3.00.81.23 SP0x	Incorrect offsets sometimes generated for global variables
400060636	Problem	V3.00.81.25 SP0x	V3.00.81.23 SP0x	Incorrect code is sometimes generated for complex networks.
400060503	Problem	V3.00.81.25 SP0x	V3.00.81.23 SP0x	Error message: Error 1352 : LD expected.
400058095	Problem	V3.00.81.25 SP0x	V3.00.81.22 SP01	Changing a header file doesn't cause library to be generated
400056569	Problem	V3.00.81.25 SP0x	V3.00.81.22 SP01	Bit 30 of a COB-ID was not properly handled by the CAN configuration editor
400056776 400057107, 400059697	New function	V3.00.81.25 SP0x	V3.00.81.22 SP01	The IP address of the ARsim can't be set to 0.0.0.0
400054966	Problem	V3.00.81.25 SP0x	V3.00.81.18	"Singularize" generates incorrect array indexes when used in IEC
400055024	Problem	V3.00.81.25 SP0x	V3.00.80.31 SP01	Changing the node number of I/O modules results in incorrect mapping.
400057826	Problem	V3.00.81.25 SP0x	V3.00.80.31 SP01	OPC tag editor: Incorrect length calculation for structures of a function block instance
400021642, 400022422, 400036543	Problem	V3.00.81.25 SP0x	V3.0.71.27 SP04	Modbus TCP configuration has errors after upgrading AS
400058543	Problem	V3.00.81.24 SP0x	V3.00.81.22 SP01	AS crashes when monitor mode is activated
400058271	Problem	V3.00.81.24 SP0x	V3.00.81.22 SP01	No values are displayed in Ladder Diagram steps when in monitor mode
400059327	Problem	V3.00.81.24 SP0x	V3.00.81.22 SP01	For ARwin, the setting "Preserve permanent PV memory ..." is not preserved.
400055860	Problem	V3.00.81.24 SP0x	V3.00.81.18	Error "illegal option -- O" when generating static C/C++ library
400056878	Problem	V3.00.81.24 SP0x	V3.00.81.18	Wrong title when tracing multiple axes
400057278	Problem	V3.00.81.24 SP0x	V3.00.81.18	Slow system response when opening the connection dialog box between Safety CPUs
244585	Problem	V3.00.81.23 SP0x	V3.00.81.22 SP01	Static hybrid libraries can't be generated in projects that have a space in the path.
245320	Problem	V3.00.81.23 SP0x	V3.00.81.22 SP01	Build doesn't detect changed constant
400054836	Problem	V3.00.81.23 SP0x	V3.00.81.21 SP01	Crash in monitor mode if no more memory available
400057092	Problem	V3.00.81.23 SP0x	V3.00.81.18	Crash when parameters are entered in extra device settings without separator
400056008	Problem	V3.00.81.23 SP0x	V3.00.81.18	Modem description string with single quote doesn't work
245425	Problem	V3.00.81.23 SP0x	V3.00.81.18	Relaying contacts and coils to a MOVE output causes incorrect functionality.

400056949	Problem	V3.00.81.23 SP0x	V3.00.81.18	*.hpp files are not exported with "Export Source Library"
400054960	Problem	V3.00.81.23 SP0x	V3.00.81.18	Project containing frozen fieldbus devices can't be built.
400055434	Problem	V3.00.81.23 SP0x	V3.00.81.18	4PP035.E300 displayed incorrectly in the physical view in AS 3.0.81.18
400055457	Problem	V3.00.81.23 SP0x	V3.00.80.33 SP02	Changing the prototyping of the function block doesn't cause the task to be recompiled
243065	Problem	V3.00.81.23 SP0x	V3.00.80.33 SP02	After performing "Clear Data", the logger data is deleted, but not refreshed
400051725	Problem	V3.00.81.23 SP0x	V3.00.80.31 SP01	I/O Mapping editor does not show any channels for imported CANopen device
400054562	Problem	V3.00.81.22 SP01	V3.00.81.20 SP01	Malfunction of CheckBounds
400055263	Problem	V3.00.81.22 SP01	V3.00.81.18	Sample files that are linked to on Help pages can't be saved.
400053842	Problem	V3.00.81.21 SP01	V3.00.81.18	BR.AS.TaskBuilder.exe crashes when function blocks call each other recursively
400051162	Problem	V3.00.81.20 SP01	V3.00.81.18	Error 6009: Internal: Writing/calculating init entry, variable RootPV
400052527	Problem	V3.00.81.20 SP01	V3.00.81.18	When the name of the library is changed, referenced files with the same name are also renamed.
400050529, 400058357	Problem	V3.00.81.19 SP01	V3.00.81.18	Identical B&R Automation Basic code returns different results
400051044	Problem	V3.00.81.19 SP01	V3.00.81.18	In the Profiler, tasks are suddenly shown as "UnknownCyclicTask" after being downloaded
400050701	Problem	V3.00.81.19 SP01	V3.00.81.18	Setting of 3 seconds for ConnectionTimeout too small
400050541	Problem	V3.00.81.19 SP01	V3.00.81.18	"Next Bookmark" deletes selected text
400051093	Problem	V3.00.81.19 SP01	V3.00.81.18	Crash after inserting a new network in front of an empty network
400050702	Problem	V3.00.81.19 SP01	V3.00.81.15	Setting breakpoints by double-clicking in the editor gutter
239225	Problem	V3.00.81.19 SP01	V3.00.80.31 SP01	Target system modules are not shown for the software configuration when in monitor mode.
400051211	Problem	V3.00.81.19 SP01	V3.00.71.34 SP06	Networks with multiple ENO outputs linked by OR operators to an EN input can't be compiled in some cases
–, 400032582, 400040673	Problem	V3.00.81.17	V3.00.81.15	Debugging an X20 CPU via remote PVI doesn't work
220870	Problem	V3.00.81.15	V3.00.80.25	Suggested installation path is not accepted by setup
139732	Problem	V3.00.81.15	V3.00.80.18	The Limitation of node numbers to 32 on CNC virtual interface (ARNC0) was abolish
228861	Problem	V3.00.81.14	V3.00.81.09	Choosing "Window/Close" all in the menu only closes the NC test if it is open
400024602	Problem	V3.00.81.13	V3.0.71.27 UP04	Timeout error when test window is closed

400041448	Problem	V3.00.81.12	V3.00.80.25	Memory lost when using the "List Usage" function
400043626	New function	V3.00.81.12	–	Comments should only be colored to the end of the line
400037077	New function	V3.00.81.12	–	Size of the safety log book can't be set
400041151	Problem	V3.00.81.10	V3.00.80.28 SP01	Go To Bookmark changes the caret position if a text is selected.
223045	Problem	V3.00.81.10	V3.00.80.27 SP01	GSD: SlotDefinition not applied completely
214531	Problem	V3.00.81.10	V3.00.80.21	SFCErrrorPOU is not set for task names.
204660	Problem	V3.00.81.10	V3.00.80.14	"Save INIT–Parameters" message appears twice
177430	Problem	V3.00.81.10	V3.0.71.5	Malfunction in Select Variable dialog box
400013860	Problem	V3.00.81.10	V3.0.71.26 SP04	Saving the INIT parameter when closing the NC test
210305	Problem	V3.00.81.09	V3.00.80.19	System resources are not released
400030547	New function	V3.00.81.09	V3.0.71.32 SP06	Default configuration of the CANOpen master causes problems with CAN I/O
400036275	Problem	V3.00.81.08	V3.00.80.25	If arrays with enumerators are indexed, an incorrect array index is used in monitor mode.
400036315, 400039387	New function	V3.00.81.08	V3.00.80.25	When a window is closed, the previously opened window is activated
400022081, 400038267	Problem	V3.00.81.08	V3.0.71.27 UP04	"Type of CPU could not be determined yet" message after warm restart in NC–Test
400033662	New function	V3.00.81.07	V3.00.80.23	Improvement of error messages concerning simultaneous operations of drives types
209105	Problem	V3.00.81.07	V3.00.80.18	ACOPOS doesn't work if certain file names are used for NC mapping files
400012098	New function	V3.00.81.07	V3.0.71.20 SP02	New Menu "Save Project As ..."
211410	Problem	V3.00.81.06	V3.00.80.19	Variable values not displayed correctly when the option "Activate Glowing" is changed
207900	Problem	V3.00.81.06	V3.00.80.17	Initialization of a TIME variable with a numeric literal and MOVE block causes a compiler error
205266	Problem	V3.00.81.06	V3.00.80.15	"List Unused Actions" doesn't work
400022860	Problem	V3.00.81.06	V3.0.71.28 SP05	Misleading error message when an IL keyword is used in ST
400027127	Problem	V3.00.81.06	V3.0.71.27 SP04	When the Find/Replace window is opened multiple times, umlauts are not detected in the find and replace string
160560	Problem	V3.00.81.06	–	Some TIME literals can't be entered in the table editor.
208206	Problem	V3.00.81.05	V3.00.80.17	Undo doesn't include input in the Value column
205256	Problem	V3.00.81.05	V3.00.80.15	Cross–reference list is incorrectly shown as valid, although the global declaration files have been changed.
204136	Problem	V3.00.81.05	V3.00.80.14	Description of incompatibility

400025028	Problem	V3.00.81.05	V3.0.71.30 SP05	Cross-reference list incorrectly displayed as valid.
212130	Problem	V3.00.81.04	V3.00.80.20	Transitions implemented in Ladder Diagram are labeled as having syntax errors
209010	Problem	V3.00.81.04	V3.00.80.18	Empty networks aren't normalized correctly.
208141	Problem	V3.00.81.04	V3.00.80.17	Constant VARs from program-local blocks can be mapped to I/O channels.
208136	Problem	V3.00.81.04	V3.00.80.17	Compiler error when VAR parameter of a program-local block is initialized with a constant
208116	Problem	V3.00.81.04	V3.00.80.17	Compiler error when VAR parameter of a program-local block is initialized with a constant
205661	Problem	V3.00.81.04	V3.00.80.15	Incorrect use of an ADR contact is not detected.
193190	Problem	V3.00.81.04	V3.00.80.07	When debugging ANSI C programs, function block instances are not displayed in AutoWatch
400025764	Problem	V3.00.81.03	–	Incorrect memory limit displayed for 5PC6000.SE00–00
400067241, 400068754	Problem	V3.00.80.37 SP05	V3.00.80.34 SP02	With an existing online connection, fixed node numbers are detected incorrectly
–, 400068655	Problem	V3.00.80.37 SP05	V3.00.80.32 SP02	Setting breakpoints by double-clicking in the editor gutter
400061893	Problem	V3.00.80.36 SP04	V3.00.90.05	OPC server – continuous RAM consumption
400060503	Problem	V3.00.80.35 SP03	V3.00.81.23 SP0x	Error message: Error 1352 : LD expected.
400060636	Problem	V3.00.80.35 SP03	V3.00.81.23 SP0x	Incorrect code is sometimes generated for complex networks.
400021642, 400022422, 400036543	Problem	V3.00.80.35 SP03	V3.0.71.27 SP04	Modbus TCP configuration has errors after upgrading AS
400055457	Problem	V3.00.80.34 SP02	V3.00.80.33 SP02	Changing the prototyping of the function block doesn't cause the task to be recompiled
245325	Problem	V3.00.80.34 SP02	V3.00.80.32 SP02	Build doesn't detect changed constant
400047089	Problem	V3.00.80.34 SP02	V3.00.80.29 SP01	Wrong parameter configuration with "Use Motor Encoder = No"
239640	Problem	V3.00.80.34 SP02	V3.00.71.34 SP06	Networks with multiple ENO outputs linked by OR operators to an EN input can't be compiled in some cases
400050557, 400050603	Problem	V3.00.80.33 SP02	V3.00.80.32 SP02	AccessType "rwr" incorrectly interpreted
400048726	Problem	V3.00.80.33 SP02	V3.00.80.31 SP01	AS crashes when headstation bytes are changed
400048645	Problem	V3.00.80.33 SP02	V3.00.80.31 SP01	Target system modules are not shown for the software configuration when in monitor mode.
400072324	Problem	–	V3.00.81.27 SP0x	NodeSwitch channel of CAN interfaces with disabled CAN I/O
400072324	Problem	–	V3.00.81.27 SP0x	NodeSwitch channel of CAN interfaces with disabled CAN I/O

400073915	Problem	–	V3.00.81.27 SP0x	Incorrect code generation when mapping an expression to a bit
400073915	Problem	–	V3.00.81.27 SP0x	Incorrect code generation when mapping an expression to a bit
400071811	Problem	–	V3.00.81.27 SP0x	Incorrect handling of empty block connections in monitor mode
400072054	Problem	–	V3.00.81.24 SP0x	CNC Trace: Some NC object names in the NC Trace data points are incorrect
400056193	Problem	–	V3.00.81.18	Projects with hardware modules that contain μ in their channel descriptions can not be build in the Chinese version of Windows.
400056310	Problem	–	V3.00.81.18	Incorrect channel address calculation for imported Powerlink devices with static mapping and user defined datatypes
400054385	Problem	–	V3.00.80.30 SP01	FW1.1.14.2 of the LS 182.6–1 tends to invalid Datapoints
400054385	Problem	–	V3.00.80.30 SP01	FW1.1.14.2 of the LS 182.6–1 tends to invalid Datapoints
225956	Problem	–	V3.00.80.28 (FR000531)	Changing a PV or structure type member from value type to reference is not detected reliably in CopyMode.
255560	Problem	–	V3.00.80.19	Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor
255565	Problem	–	V3.00.80.19	Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor
255575	Problem	–	V3.00.80.19	Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor
255570	Problem	–	V3.00.80.19	Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor
209060	Problem	–	V3.00.80.18	Sometimes not all variable values are displayed in monitor mode.
400062152	Problem	ARSG4_3.07.3_C03.07	V3.00.81.24 SP0x	Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem

1.3.2.12 1A4600.00 Automation Runtime ARsim

ID	valuation	solved since	known since	Description
400011094	New function	–	1.0.0.1	Serial interfaces can be deactivated
189670	New function	–	1.0.0.0	ARNC0 support

1.3.2.13 1A4600.10 Automation Runtime ARwin

ID	valuation	solved since	known since	Description
180515	Problem	–	1.0.0.0	New I/O channel "SystemTime"

1.3.2.14 1A4600.10–2 Automation Runtime ARwin, ARNC0

ID	valuation	solved since	known since	Description
180535	Problem	–	1.0.0.0	New I/O channel "SystemTime"

1.3.2.15 1A4603.00–2

ID	valuation	solved since	known since	Description
193360	Problem	–	1.0.0.1	Support X20CP1483
190240	Problem	–	1.0.0.0	Warning 30972 "No HWD information available" is written into the logbook during bootup of ARNC0

1.3.2.16 3AI350.6

ID	valuation	solved since	known since	Description
400031958	Problem	1.0.1.0	V3.0.71.29 SP05	Problem on fourth 2005 expansion corrected

1.3.2.17 3AI780.6

ID	valuation	solved since	known since	Description
216115	New function	1.0.1.0	1.0.1.0	Delay time during boot–up implemented

1.3.2.18 3EX282.6

ID	valuation	solved since	known since	Description
400012096	Problem	1.0.1.0	1.0.0.0	New Firmware V33

1.3.2.19 3IF722.9

ID	valuation	solved since	known since	Description
229005	Problem	1.0.1.0	1.0.1.0	CAN transmitter blockade after cable un–/plugged corrected

1.3.2.20 3IF762.9

ID	valuation	solved since	known since	Description

1.3.2.21 3IF771.9

ID	valuation	solved since	known since	Description
229030	Problem	1.0.1.0	1.0.1.0	CAN transmitter blockade after cable un–/plugged corrected

1.3.2.22 3IF779.9

ID	valuation	solved since	known since	Description
245365	Problem	1.0.2.0	1.0.2.0	Error correction in the FPGA UART implementation
229040	Problem	1.0.1.0	1.0.1.0	CAN transmitter blockade after cable un–/plugged corrected

1.3.2.23 3IF782.9

ID	valuation	solved since	known since	Description
400035809	Problem	1.0.4.0	1.0.2.0	Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.
400040011	Problem	1.0.2.0	1.0.2.0	Correction of HWD description of RS485 for AS 3.0.80
213695	Problem	1.0.2.0	1.0.1.0	Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.
400018793	Problem	1.0.0.1	1.0.0.1	HWC corrected, only RS485 selectable

1.3.2.24 3IF782.9-1

ID	valuation	solved since	known since	Description
265775	Problem	–	1.1.13.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
262397	Problem	–	1.1.13.0	POWERLINK V2: If the the Ready-Flag was canceled on the network, the ModuleOK was not cleared.
256970	New function	–	1.1.12.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256820	New function	–	1.1.12.0	POWERLINK: LinkOK data point added.
400057319	Problem	–	1.1.12.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
243507	Problem	–	1.1.12.0	POWERLINK: The net time is not always transferred correctly to the application.
265665	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
163840	Problem	–	1.0.1.0	New Base Firmware V5
220415	Problem	1.1.9.0	1.1.8.0	POWERLINK V2: Boot behavior improved
208465	Problem	1.1.8.0	1.1.7.0	CN mode: Various error corrections made.
206460	Problem	1.1.7.0	1.1.6.0	New POWERLINK firmware V45 and basis firmware V10
199505	Problem	1.1.6.0	1.1.5.1	New POWERLINK V1/V2 firmware V44
191720	Problem	1.1.5.1	1.1.4.0	New POWERLINK V1/V2 Firmware V42
185565	Problem	1.1.4.0	1.1.3.0	New POWERLINK V1/V2 firmware V39 and basis firmware V9
183645	Problem	1.1.3.0	1.1.2.0	New POWERLINK V1/V2 firmware V38 and basis firmware V8
177980	Problem	1.1.2.0	1.1.1.0	New POWERLINK V1/V2 firmware V37 and base firmware V7
230815	Problem	1.1.12.0	1.1.9.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
245370	Problem	1.1.12.0	1.1.12.0	Error correction in the FPGA UART implementation
171865	Problem	1.1.1.0	1.1.0.0	New POWERLINK firmware V36
171110	Problem	1.1.0.0	1.0.5.0	Performance improvement – POWERLINK manager
165785	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165430	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164745	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
160730	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.25 3IF786.9

ID	valuation	solved since	known since	Description
229010	Problem	1.0.4.0	1.0.2.0	Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

213700	Problem	1.0.2.0	1.0.0.0	Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.
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1.3.2.26 3IF786.9-1

ID	valuation	solved since	known since	Description
265875	Problem	–	1.1.13.0	POWERLINK V2: If the the Ready-Flag was canceled on the network, the ModuleOK was not cleared.
256975	New function	–	1.1.12.1	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256825	New function	–	1.1.12.1	POWERLINK: LinkOK data point added.
256920	Problem	–	1.1.12.1	POWERLINK: The net time is not always transferred correctly to the application.
400057319	Problem	–	1.1.12.1	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
265670	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
163845	Problem	–	1.0.1.0	New Base Firmware V5
220420	Problem	1.1.9.0	1.1.8.0	POWERLINK V2: Boot behavior improved
213005	Problem	1.1.8.0	1.1.7.0	CN mode: Various error corrections made.
206840	Problem	1.1.7.0	1.1.6.1	New POWERLINK firmware V45 and basis firmware V10
400017474	Problem	1.1.6.1	1.1.5.1	New POWERLINK V1/V2 firmware V44
191725	Problem	1.1.5.1	1.1.4.0	New POWERLINK V1/V2 Firmware V42
185590	Problem	1.1.4.0	1.1.3.0	New POWERLINK V1/V2 firmware V39 and basis firmware V9
183625	Problem	1.1.3.0	1.1.2.0	New POWERLINK V1/V2 firmware V38 and basis firmware V8
178005	Problem	1.1.2.0	1.1.1.0	New POWERLINK V1/V2 firmware V37 and base firmware V7
230820	Problem	1.1.12.0	1.1.9.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
245265	Problem	1.1.12.0	1.1.12.0	Error correction in the FPGA UART implementation
173315	Problem	1.1.1.0	1.1.0.0	New POWERLINK firmware V36
170595	Problem	1.1.0.0	1.0.5.0	Performance improvement – POWERLINK manager
165795	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165790	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165435	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164750	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
160735	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.27 3IF787.9

ID	valuation	solved since	known since	Description
229160	Problem	1.0.4.0	1.0.2.0	Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.
229045	Problem	1.0.3.0	1.0.3.0	CAN transmitter blockade after cable un-/plugged corrected
224510	Problem	1.0.2.0	1.0.2.0	CAN TransmitQueue Reset command corrected
213705	Problem	1.0.2.0	1.0.0.0	Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

1.3.2.28 3IF787.9-1

ID	valuation	solved since	known since	Description
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256980	New function	–	1.1.12.1	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256830	New function	–	1.1.12.1	POWERLINK: LinkOK data point added.
265880	Problem	–	1.1.12.1	POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.
265780	Problem	–	1.1.12.1	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
256925	Problem	–	1.1.12.1	POWERLINK: The net time is not always transferred correctly to the application.
400057319	Problem	–	1.1.12.1	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
265675	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
163850	Problem	–	1.0.1.0	New Base Firmware V5
224480	Problem	1.1.9.0	1.1.9.0	CAN TransmitQueue Reset command corrected
220425	Problem	1.1.9.0	1.1.8.0	POWERLINK V2: Boot behavior improved
213015	Problem	1.1.8.0	1.1.7.0	CN mode: Various error corrections made.
206845	Problem	1.1.7.0	1.1.6.0	New POWERLINK firmware V45 and basis firmware V11
199510	Problem	1.1.6.0	1.1.5.1	New POWERLINK V1/V2 firmware V44
191730	Problem	1.1.5.1	1.1.4.0	New POWERLINK V1/V2 Firmware V42
184925	Problem	1.1.4.0	1.1.3.0	New POWERLINK V1/V2 firmware V39 and basis firmware V10
183650	Problem	1.1.3.0	1.1.2.0	New POWERLINK V1/V2 firmware V38 and basis firmware V9
178010	Problem	1.1.2.0	1.1.1.0	New POWERLINK V1/V2 firmware V37 and base firmware V7
230825	Problem	1.1.12.0	1.1.9.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
229050	Problem	1.1.10.0	1.1.10.0	CAN transmitter blockade after cable un-/plugged corrected
173320	Problem	1.1.1.0	1.1.0.0	New POWERLINK firmware V36
171120	Problem	1.1.0.0	1.0.5.0	Performance improvement – POWERLINK manager
165800	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165440	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164755	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
160740	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.29 3IF789.9

ID	valuation	solved since	known since	Description
229015	Problem	1.0.4.0	1.0.2.0	Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.
213710	Problem	1.0.2.0	1.0.0.0	Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

1.3.2.30 3IF789.9–1

ID	valuation	solved since	known since	Description
256985	New function	–	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256835	New function	–	1.0.15.0	POWERLINK: LinkOK data point added.
265785	Problem	–	1.0.15.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265680	Problem	–	1.0.15.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU

				going into Service mode.
400057319	Problem	–	1.0.15.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
163855	Problem	–	1.0.1.0	New Base Firmware V5
183670	Problem	1.0.9.0	1.0.8.0	New POWERLINK V1/V2 firmware V38
178020	Problem	1.0.8.0	1.0.7.0	New POWERLINK V1/V2 firmware V37
173325	Problem	1.0.7.0	1.0.6.0	New POWERLINK firmware V36 and Base-Firmware V7
171380	Problem	1.0.6.0	1.0.5.0	Stabilized and optimized.
165805	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165445	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164760	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
230770	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220455	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
206850	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V9
199535	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191765	Problem	1.0.10.1	1.0.9.0	New POWERLINK V1/V2 Firmware V42 and base firmware V8
160745	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.31 3IF789.9–11

ID	valuation	solved since	known since	Description
265890	Problem	–	1.1.5.1	POWERLINK V2: If the the Ready-Flag was canceled on the network, the ModuleOK was not cleared.
265790	Problem	–	1.1.5.1	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
256990	New function	–	1.1.12.1	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256840	New function	–	1.1.12.1	POWERLINK: LinkOK data point added.
256930	Problem	–	1.1.12.1	POWERLINK: The net time is not always transferred correctly to the application.
400057319	Problem	–	1.1.12.1	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
265685	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220430	Problem	1.1.9.0	1.1.8.0	POWERLINK V2: Boot behavior improved
213020	Problem	1.1.8.0	1.1.7.0	CN mode: Various error corrections made.
206855	Problem	1.1.7.0	1.1.6.0	New POWERLINK firmware V45 and basis firmware V5
199515	Problem	1.1.6.0	1.1.5.1	New POWERLINK V1/V2 firmware V44
191735	Problem	1.1.5.1	1.0.3.0	New POWERLINK V1/V2 Firmware V42
230830	Problem	1.1.12.0	1.1.9.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
185595	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 firmware V39 and basis firmware V4
183655	Problem	1.0.2.0	1.0.1.0	New POWERLINK V1/V2 firmware V38 and basis firmware V3
178015	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 firmware V37 and base firmware V2

1.3.2.32 3IF797.9–1

ID	valuation	solved since	known since	Description
245210	Problem	1.0.2.0	1.0.2.0	Error correction in the FPGA UART implementation
229055	Problem	1.0.1.0	1.0.1.0	CAN transmitter blockade after cable un-/plugged corrected

1.3.2.33 3IF7E3.9

ID	valuation	solved since	known since	Description
257470	New function	1.0.2.0	1.0.2.0	Vendor ID changed
240745	New function	1.0.1.0	1.0.0.1	Interface module PROFINET RT Slave, Configuration of netX cycle time

1.3.2.34 4D1164.00–590

ID	valuation	solved since	known since	Description
245890	Projekt	–	–	Driver added to HWC

1.3.2.35 4D1166.00–490

ID	valuation	solved since	known since	Description
245900	Projekt	–	–	Driver added to HWC

1.3.2.36 4PP045.0571–042

ID	valuation	solved since	known since	Description
400045012	New function	–	V2.7.0.0019 SP12	Standard devices can be replaced by customised devices
163655	New function	–	–	Datapoint SystemTime added
232525	Problem	–	–	With this upgrade the standard–PP45 can be replaced by an customised PP45

1.3.2.37 4PP045.0571–062

ID	valuation	solved since	known since	Description
170385	Problem	–	V2.6.0.0009 SP01	CPU data points on PP45 faulty
164445	New function	–	–	Datapoint SystemTime added
400043067	Problem	–	–	With this upgrade the standard–PP45 can be replaced by an customised PP45
400004870	Problem	–	1.0.3.2	Use of ModbusTCP leads to a configuration error

1.3.2.38 4PP045.0571–L42

ID	valuation	solved since	known since	Description
400040875	New function	–	–	Support for terminal mode

1.3.2.39 4PP065.0351–P74

ID	valuation	solved since	known since	Description
261790	New function	–	–	POWERLINK: LinkOK data point added.

236170	New function	–	–	Installation of the upgrade only possible from AS 3.0.80.25
233500	New function	–	–	With this upgrade the device can be replaced by an customised panel
400057947	Problem	–	–	Keys work in terminal mode

1.3.2.40 4PP065.0351–X74

ID	valuation	solved since	known since	Description
236250	Problem	–	V3.00.80.31 SP01	Error at terminal mode corrected
233510	New function	–	–	With this upgrade the device can be replaced by an customised panel
400057947	Problem	–	–	Keys work in terminal mode

1.3.2.41 4PP065.0571–K01

ID	valuation	solved since	known since	Description
240150	Problem	–	–	4PP065.0571–K01 cannot be longer inserted in AS as standard panel

1.3.2.42 4PP065.0571–K05

ID	valuation	solved since	known since	Description
236880	Problem	–	V3.00.80.31 SP01	Error at terminal mode corrected
240145	Problem	–	–	4PP065.0571–K05 cannot be longer inserted in AS as standard panel

1.3.2.43 4PP065.0571–K07

ID	valuation	solved since	known since	Description
240155	Problem	–	–	4PP065.0571–K07 cannot be longer inserted in AS as standard panel

1.3.2.44 4PP065.0571–P74

ID	valuation	solved since	known since	Description
262385	New function	–	–	POWERLINK: LinkOK data point added.
236165	New function	–	–	Installation of the upgrade only possible from AS 3.0.80.25
233520	New function	–	–	With this upgrade the device can be replaced by an customised panel

1.3.2.45 4PP065.0571–P74F

ID	valuation	solved since	known since	Description
262405	New function	–	–	POWERLINK: LinkOK data point added.

1.3.2.46 4PP065.0571–X74

ID	valuation	solved since	known since	Description
233515	New function	–	–	With this upgrade the device can be replaced by an customised panel

1.3.2.47 4PP065.IF23–1

ID	valuation	solved since	known since	Description
223390	Problem	–	V3.00.80.25	ModbusRTU doesn't work with 4PP065.0351–X74 and 4PP065.IF23–1

1.3.2.48 4PP065.IF33–1

ID	valuation	solved since	known since	Description
240760	New function	–	–	Documentation added

1.3.2.49 4PP351.0571–01

ID	valuation	solved since	known since	Description
178875	New function	–	–	hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime
179345	Problem	–	–	HWD "Metafunc" for new AR added

1.3.2.50 4PP351.0571–35

ID	valuation	solved since	known since	Description
178830	New function	–	–	hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime
179330	Problem	–	–	HWD "Metafunc" for new AR added
178250	Problem	–	–	modul number changed

1.3.2.51 4PP352.0571–35

ID	valuation	solved since	known since	Description
178845	New function	–	–	hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime
179335	Problem	–	–	HWD "Metafunc" for new AR added

1.3.2.52 4PP381.1043–31

ID	valuation	solved since	known since	Description
178890	New function	–	–	hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime
178265	Information	–	–	modul number changed
184655	Problem	–	–	Hardwaredescription corrected
179350	Problem	–	–	HWD "Metafunc" for new AR added

1.3.2.53 4PP420.0571–85

ID	valuation	solved since	known since	Description
178855	New function	–	–	hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added
178285	Information	–	–	modul number changed

1.3.2.54 4PP451.0571–45

ID	valuation	solved since	known since	Description
178870	New function	–	–	hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added
178290	Information	–	–	modul number changed
400008306	Problem	–	–	VNC Viewer BugFix
179730	Problem	–	–	ETH5 address NodeNumber changed

1.3.2.55 4PP451.0571–65

ID	valuation	solved since	known since	Description
187685	Problem	–	–	VNC Viewer BugFix

1.3.2.56 4PP451.0571–85

ID	valuation	solved since	known since	Description
178300	Information	–	–	modul number changed
179760	Problem	–	–	ETH5 address NodeNumber changed

1.3.2.57 4PP451.0571–B5

ID	valuation	solved since	known since	Description
178885	New function	–	–	hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added
187795	Problem	–	–	VNC Viewer BugFix
179735	Problem	–	–	ETH5 address NodeNumber changed
178305	Problem	–	–	modul number changed

1.3.2.58 4PP451.1043–75

ID	valuation	solved since	known since	Description
178865	New function	–	–	hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added
178310	Information	–	–	modul number changed
179725	Problem	–	–	ETH5 address NodeNumber changed

1.3.2.59 4PP451.1043-B5

ID	valuation	solved since	known since	Description
178940	New function	–	–	hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime -- HWD "Metafunc" for new AR added
178350	Information	–	–	modul number changed
191825	Problem	–	–	Only QVGA visualisation available
187755	Problem	–	–	VNC Viewer BugFix
179755	Problem	–	–	ETH5 address NodeNumber changed

1.3.2.60 4PP452.0571-45

ID	valuation	solved since	known since	Description
178925	New function	–	–	hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime -- HWD "Metafunc" for new AR added
178355	Information	–	–	modul number changed
179750	Problem	–	–	ETH5 address NodeNumber changed

1.3.2.61 4PP452.0571-B5

ID	valuation	solved since	known since	Description
178905	New function	–	–	hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime -- HWD "Metafunc" for new AR added
178360	Information	–	–	modul number changed
179740	Problem	–	–	ETH5 address NodeNumber changed

1.3.2.62 4PP452.1043-75

ID	valuation	solved since	known since	Description
178920	New function	–	–	hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime -- HWD "Metafunc" for new AR added
178365	Information	–	–	modul number changed
179745	Problem	–	–	ETH5 address NodeNumber changed

1.3.2.63 4PP480.1043-75

ID	valuation	solved since	known since	Description
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1.3.2.64 4PP480.1505-B5

ID	valuation	solved since	known since	Description
178820	New function	–	–	hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime -- HWD "Metafunc" for new AR added
178370	Information	–	–	modul number changed
179715	Problem	–	–	ETH5 address NodeNumber changed

1.3.2.65 4PP480.1505–K04

ID	valuation	solved since	known since	Description
213985	Projekt	–	–	HWCs were added to AS

1.3.2.66 4PW035.E300–01

ID	valuation	solved since	known since	Description
198185	Projekt	–	–	Failure correction:

1.3.2.67 4PW035.E300–02

ID	valuation	solved since	known since	Description
198175	Projekt	–	–	Failure correction:
196440	Projekt	–	–	Failure correction
190285	Projekt	–	–	new FW V0009
168860	Projekt	–	–	new FW V0008
180015	Problem	1.0.1.0	1.0.1.0	Firmware not available with AS setup

1.3.2.68 4XP0000.00–K11

ID	valuation	solved since	known since	Description
400007820	Projekt	–	–	Failure correction:

1.3.2.69 4XP0000.00–K38

ID	valuation	solved since	known since	Description
213975	Projekt	–	–	HWCs were added to AS

1.3.2.70 4XP0000.00–K40

ID	valuation	solved since	known since	Description
400044485	Projekt	–	1.0.0.0	SGC section was added to HWC

1.3.2.71 4XP0000.00–K41

ID	valuation	solved since	known since	Description
254370	Projekt	–	1.0.0.0	Support of SGC 4XP0000.00–K41

1.3.2.72 5AC600.CANI–00

ID	valuation	solved since	known since	Description
151335	Problem	–	–	solved problem

1.3.2.73 5AC800.EXT1–00

ID	valuation	solved since	known since	Description
162950	Problem	1.0.0.1	–	Error correction 5AC800.EXT1–00

1.3.2.74 5AC800.EXT3-00

ID	valuation	solved since	known since	Description
178435	Problem	–	–	correction of reset behaviour on X2X interface + entry for firmware
162960	Problem	–	–	Failure correction

1.3.2.75 5AC800.EXT3-01

ID	valuation	solved since	known since	Description
178440	Problem	–	–	correction of reset behaviour on X2X interface + entry for firmware
162965	Problem	–	–	Failure correction

1.3.2.76 5AC800.EXT3-02

ID	valuation	solved since	known since	Description
178445	Problem	–	–	correction of reset behaviour on X2X interface + entry for firmware
162970	Problem	–	–	Failure correction

1.3.2.77 5AC800.EXT3-03

ID	valuation	solved since	known since	Description
178450	Problem	–	–	correction of reset behaviour on X2X interface + entry for firmware
163130	Problem	–	–	Failure correction

1.3.2.78 5AC800.EXT3-04

ID	valuation	solved since	known since	Description
178460	Problem	–	–	correction of reset behaviour on X2X interface + entry for firmware
162975	Problem	–	–	Failure correction

1.3.2.79 5AC800.EXT3-05

ID	valuation	solved since	known since	Description
178465	Problem	–	–	correction of reset behaviour on X2X interface + entry for firmware
162980	Problem	–	–	Failure correction

1.3.2.80 5ACPCC.MPL0-00

ID	valuation	solved since	known since	Description
253700	Problem	–	–	Add-on "Modul-OK"
250445	Problem	–	–	Add-on "Modul-OK"

1.3.2.81 5ACPCI.XCOM-00

ID	valuation	solved since	known since	Description
270080	Problem	–	–	CANopen master doesn't write output data to all slaves
240495	Problem	–	–	Configuration of netX cycle time

1.3.2.82 5ACPCI.XCOS-00

ID	valuation	solved since	known since	Description
240505	Problem	–	–	Configuration of netX cycle time

1.3.2.83 5ACPCI.XDNM-00

ID	valuation	solved since	known since	Description
240510	Problem	–	–	Configuration of netX cycle time

1.3.2.84 5ACPCI.XDNS-00

ID	valuation	solved since	known since	Description
240515	Problem	–	–	Configuration of netX cycle time

1.3.2.85 5ACPCI.XDPM-00

ID	valuation	solved since	known since	Description
240460	Problem	–	–	Configuration of netX cycle time

1.3.2.86 5ACPCI.XDPS-00

ID	valuation	solved since	known since	Description
240465	Problem	–	–	Configuration of netX cycle time

1.3.2.87 5ACPCI.XPNM-00

ID	valuation	solved since	known since	Description
240475	Problem	–	–	Configuration of netX cycle time

1.3.2.88 5ACPCI.XPNS-00

ID	valuation	solved since	known since	Description
240485	Problem	–	–	Configuration of netX cycle time

1.3.2.89 5AP951.1505-01

ID	valuation	solved since	known since	Description
228520	Problem	–	V3.00.80.25	AS requests a touch interface to be specified for an AP with no touch screen

1.3.2.90 5LS166.6

ID	valuation	solved since	known since	Description
248345	Problem	1.0.2.0	1.0.2.0	Error correction in the FPGA UART implementation
208625	New function	1.0.1.0	1.0.1.0	New hardware variant
173260	Problem	1.0.1.0	1.0.0.0	On modules delivered between August 1, 2007 and January 24,

				2008, this can result in read errors from the battery buffered SRAM.
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1.3.2.91 5LS172.6

ID	valuation	solved since	known since	Description
159330	Problem	1.0.1.0	1.0.0.0	New version V19

1.3.2.92 5LS172.61

ID	valuation	solved since	known since	Description
165290	Problem	–	–	New Firmware V19

1.3.2.93 5LS182.6–1

ID	valuation	solved since	known since	Description
256910	New function	–	1.1.16.0	POWERLINK: LinkOK data point added.
265885	Problem	–	1.1.16.0	POWERLINK V2: If the the Ready–Flag was canceled on the network, the ModuleOK was not cleared.
265360	Problem	–	1.1.16.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
256950	Problem	–	1.1.16.0	POWERLINK: The net time is not always transferred correctly to the application.
400057319	Problem	–	1.1.16.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
174655	Problem	–	1.1.1.0	New POWERLINK V1/V2 firmware V37 and base firmware V15
265690	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400035362	Problem	1.1.9.0	1.1.8.0	POWERLINK V2: Boot behavior improved
213025	Problem	1.1.8.0	1.1.7.0	CN mode: Various error corrections made.
206905	Problem	1.1.7.0	1.1.6.0	New POWERLINK firmware V45 and basis firmware V19
199520	Problem	1.1.6.0	1.1.5.1	New POWERLINK V1/V2 firmware V44
191740	Problem	1.1.5.1	1.1.4.1	New POWERLINK V1/V2 Firmware V42
185045	Problem	1.1.4.1	1.1.3.0	New POWERLINK V1/V2 firmware V39 and basis firmware V18
183600	Problem	1.1.3.0	1.1.2.0	New POWERLINK V1/V2 firmware V38 and basis firmware V16
400054385	Problem	1.1.16.0	V3.00.80.30 SP01	FW1.1.14.2 of the LS 182.6–1 tends to invalid Datapoints
243767	New function	1.1.16.0	nicht relevant	Parameter "OutputDMAMargin" activated for B3.07
241602	New function	1.1.14.2	ARSG4_2.95.22_V02.95	PCI diagnosis and new data points added; + Synchronization problem in TK#1 fixed
400046653	Problem	1.1.13.1	1.1.12.0	Reset behavior improved and new data points created
230835	Problem	1.1.12.0	1.1.9.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

173330	Problem	1.1.1.0	1.1.0.0	New POWERLINK firmware V36
170735	Problem	1.1.0.0	1.0.6.0	Performance improvement – POWERLINK manager
167140	Problem	1.0.6.0	1.0.5.0	New base firmware V11
165810	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165450	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164765	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
160750	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.94 5LS182.6–2

ID	valuation	solved since	known since	Description
265365	Problem	–	1.1.0.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network
265895	Problem	–	1.0.4.0	POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.
256955	Problem	–	1.0.4.0	POWERLINK: The net time is not always transferred correctly to the application.
400057319	Problem	–	1.0.4.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
265650	Problem	1.1.0.2	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400054829	Problem	1.0.4.0	1.0.3.0	PCI diagnosis and new data points added; + Synchronization problem in TK#1 fixed
237685	Problem	1.0.3.0	1.0.2.0	Reset behavior improved and new data points created
234925	Problem	1.0.2.0	1.0.1.0	New POWERLINK firmware V106
229420	Problem	1.0.1.0	1.0.0.0	POWERLINK V2 chained stations: When stations that have failed are added back into the POWERLINK cycle, active chained stations fail.

1.3.2.95 5LS187.6

ID	valuation	solved since	known since	Description
229165	Problem	1.0.4.0	1.0.2.0	Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.
229060	Problem	1.0.3.0	1.0.3.0	CAN transmitter blockade after cable un-/plugged corrected
228015	Problem	1.0.2.0	1.0.2.0	CAN TransmitQueue Reset command corrected
400028607	Problem	1.0.2.0	1.0.1.1	Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.
173235	Problem	1.0.1.1	1.0.0.0	On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

1.3.2.96 5LS187.61

ID	valuation	solved since	known since	Description
229170	Problem	1.0.4.0	1.0.2.0	Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.
229070	Problem	1.0.3.0	1.0.3.0	CAN transmitter blockade after cable un-/plugged corrected
224455	Problem	1.0.2.0	1.0.2.0	CAN TransmitQueue Reset command corrected
213715	Problem	1.0.2.0	1.0.1.0	Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.
173240	Problem	1.0.1.0	1.0.0.0	On modules delivered between August 1, 2007 and January 24,

				2008, this can result in read errors from the battery buffered SRAM.
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1.3.2.97 5LS187.6-1

ID	valuation	solved since	known since	Description
257050	New function	–	1.1.13.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256915	New function	–	1.1.13.0	POWERLINK: LinkOK data point added.
265900	Problem	–	1.1.13.0	POWERLINK V2: If the the Ready-Flag was canceled on the network, the ModuleOK was not cleared.
265795	Problem	–	1.1.13.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
256960	Problem	–	1.1.13.0	POWERLINK: The net time is not always transferred correctly to the application.
400057319	Problem	–	1.1.13.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
265695	Problem	–	1.1.10.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
224445	Problem	1.1.9.0	1.1.9.0	CAN TransmitQueue Reset command corrected
220435	Problem	1.1.9.0	1.1.8.0	POWERLINK V2: Boot behavior improved
213030	Problem	1.1.8.0	1.1.7.0	CN mode: Various error corrections made.
206910	Problem	1.1.7.0	1.1.6.0	New POWERLINK firmware V45 and basis firmware V11
199525	Problem	1.1.6.0	1.1.5.1	New POWERLINK V1/V2 firmware V44
191750	Problem	1.1.5.1	1.1.4.0	New POWERLINK V1/V2 Firmware V42 and basis firmware V10
185600	Problem	1.1.4.0	1.1.3.0	New POWERLINK V1/V2 firmware V39 and basis firmware V9
183640	Problem	1.1.3.0	1.1.2.0	New POWERLINK V1/V2 firmware V38 and basis firmware V8
178025	Problem	1.1.2.0	1.1.1.0	New POWERLINK V1/V2 firmware V37 and base firmware V6
230840	Problem	1.1.12.0	1.1.9.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400041497	Problem	1.1.12.0	1.1.12.0	Problems starting CAN-FW corrected
229065	Problem	1.1.10.0	1.1.10.0	CAN transmitter blockade after cable un-/plugged corrected
173335	Problem	1.1.1.0	1.1.0.0	New POWERLINK firmware V36
171125	Problem	1.1.0.0	1.0.6.0	Performance improvement – POWERLINK manager
167200	Problem	1.0.6.0	1.0.5.0	New base firmware V3
167027	Problem	1.0.6.0	1.0.5.0	5LS187.6-1 doesn't works with Automation Runtime >= 2.92
165815	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165455	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164770	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
160755	Problem	1.0.1.0	1.0.0.0	New Firmware V30

1.3.2.98 5LS189.6

ID	valuation	solved since	known since	Description
229020	Problem	1.0.4.0	1.0.2.0	Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.
213720	Problem	1.0.2.0	1.0.1.0	Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.
173245	Problem	1.0.1.0	1.0.0.0	On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

1.3.2.99 5LS189.61

ID	valuation	solved since	known since	Description
229025	Problem	1.0.4.0	1.0.2.0	Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.
213725	Problem	1.0.2.0	1.0.1.0	Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.
173250	Problem	1.0.1.0	1.0.0.0	On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

1.3.2.100 5LS189.6-1

ID	valuation	solved since	known since	Description
257055	New function	–	1.1.13.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
265905	Problem	–	1.1.13.0	POWERLINK V2: If the the Ready-Flag was canceled on the network, the ModuleOK was not cleared.
265800	Problem	–	1.1.13.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
256965	Problem	–	1.1.13.0	POWERLINK: The net time is not always transferred correctly to the application.
265700	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220440	Problem	1.1.9.0	1.1.8.0	POWERLINK V2: Boot behavior improved
213035	Problem	1.1.8.0	1.1.7.0	CN mode: Various error corrections made.
206915	Problem	1.1.7.0	1.1.6.0	New POWERLINK firmware V45 and basis firmware V9
199530	Problem	1.1.6.0	1.1.5.1	New POWERLINK V1/V2 firmware V44
191755	Problem	1.1.5.1	1.1.4.0	New POWERLINK V1/V2 Firmware V42
400007329	Problem	1.1.4.0	1.1.3.0	New POWERLINK V1/V2 firmware V39 and basis firmware V8
183660	Problem	1.1.3.0	1.1.2.0	New POWERLINK V1/V2 firmware V38 and basis firmware V7
178030	Problem	1.1.2.0	1.1.1.0	New POWERLINK V1/V2 firmware V37 and base firmware V6
240320	Problem	1.1.13.0	1.1.12.1	Reset behavior improved and new data points created
235120	New function	1.1.12.1	1.1.12.0	LinkOK Datapoint available.
230845	Problem	1.1.12.0	1.1.9.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400057319	Problem	1.1.12.0	1.1.13.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
173340	Problem	1.1.1.0	1.1.0.0	New POWERLINK firmware V36
171265	Problem	1.1.0.0	1.0.6.0	Performance improvement – POWERLINK manager
167195	Problem	1.0.6.0	1.0.5.0	New base firmware V3
165820	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165460	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164775	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
160760	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.101 5LS197.6

ID	valuation	solved since	known since	Description
229075	Problem	1.0.2.0	1.0.2.0	CAN transmitter blockade after cable un-/plugged corrected
224450	Problem	1.0.1.0	1.0.1.0	CAN TransmitQueue Reset command corrected

173255	Problem	1.0.1.0	1.0.0.0	On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.
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1.3.2.102 5MP040.0381-01

ID	valuation	solved since	known since	Description
174760	Problem	–	–	solved problem
166110	Problem	–	–	solved problem

1.3.2.103 5MP040.0381-02

ID	valuation	solved since	known since	Description
174765	Problem	–	–	solved problem

1.3.2.104 5MP050.0653-01

ID	valuation	solved since	known since	Description
174745	Problem	–	–	solved problem
164890	Problem	–	–	solved problem

1.3.2.105 5MP050.0653-02

ID	valuation	solved since	known since	Description
174750	Problem	–	–	solved problem
164920	Problem	–	–	solved problem

1.3.2.106 5MP050.0653-03

ID	valuation	solved since	known since	Description
174755	Problem	–	–	solved problem
165225	Problem	–	–	solved problem

1.3.2.107 5MP050.0653-04

ID	valuation	solved since	known since	Description
171580	Problem	–	–	solved Problem
165280	Problem	–	–	solved problem

1.3.2.108 5PC600.E855-01

ID	valuation	solved since	known since	Description
246005	New function	–	–	Support 5PC600.E855-01

1.3.2.109 5PC600.E855-02

ID	valuation	solved since	known since	Description
246050		–	–	Support 5PC600.E855-02

	New function			
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1.3.2.110 5PC600.E855-03

ID	valuation	solved since	known since	Description
246010	New function	–	–	Support 5PC600.E855-03

1.3.2.111 5PC600.E855-04

ID	valuation	solved since	known since	Description
246015	New function	–	–	Support 5PC600.E855-04

1.3.2.112 5PC600.E855-05

ID	valuation	solved since	known since	Description
246055	New function	–	–	Support 5PC600.E855-05

1.3.2.113 5PC600.SE00-00

ID	valuation	solved since	known since	Description
267150	New function	–	–	Support for USB keyboards
242900	Problem	–	–	POWERLINK Firmware and I/O Datapoint
223850	Problem	–	–	New PLK and new CAN firmware
213100	Problem	–	–	CN mode: Various error corrections made.
185730	Problem	–	–	APC620e project cannot be compiled if the hardware was loaded from the target system

1.3.2.114 5PC600.SE00-01

ID	valuation	solved since	known since	Description
188550	Problem	–	V2.7.0.0010 SP03	APC620e project cannot be compiled if the hardware was loaded from the target system
267155	New function	–	–	Support for USB keyboards
242920	Problem	–	–	POWERLINK Firmware and I/O Datapoint
224155	Problem	–	–	New PLK and new CAN firmware
213105	Problem	–	–	CN mode: Various error corrections made.

1.3.2.115 5PC600.SE00-02

ID	valuation	solved since	known since	Description
188555	Problem	–	V2.7.0.0010 SP03	APC620e project cannot be compiled if the hardware was loaded from the target system
267160	New function	–	–	Support for USB keyboards
242925	Problem	–	–	POWERLINK Firmware and I/O Datapoint

224315	Problem	–	–	New PLK and new CAN firmware
213110	Problem	–	–	CN mode: Various error corrections made.

1.3.2.116 5PC600.SF03–00

ID	valuation	solved since	known since	Description
267555	New function	–	–	Support for USB keyboards
168895	Problem	–	–	solved problem
168650	Problem	–	–	Enlargement

1.3.2.117 5PC600.SX01–00

ID	valuation	solved since	known since	Description
267180	New function	–	–	Support for USB keyboards
226385	Problem	–	–	One additional PCI slot inserted
168900	Problem	–	–	solved problem
168655	Problem	–	–	Enlargement

1.3.2.118 5PC600.SX02–00

ID	valuation	solved since	known since	Description
267535	New function	–	–	Support for USB keyboards
225950	Problem	–	–	One additional PCI slot inserted
168905	Problem	–	–	solved problem
168665	Problem	–	–	Enlargement

1.3.2.119 5PC600.SX02–01

ID	valuation	solved since	known since	Description
267540	New function	–	–	Support for USB keyboards
225955	Problem	–	–	One additional PCI slot inserted
168910	Problem	–	–	solved problem
168670	Problem	–	–	Enlargement

1.3.2.120 5PC600.SX05–00

ID	valuation	solved since	known since	Description
267545	New function	–	–	Support for USB keyboards
226405	Problem	–	–	One additional PCI slot inserted
168915	Problem	–	–	solved problem
168675	Problem	–	–	Enlargement

1.3.2.121 5PC600.SX05–01

ID	valuation	solved since	known since	Description
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267550	New function	–	–	Support for USB keyboards
226420	Problem	–	–	One additonal PCI slot inserted
168925	Problem	–	–	solved problem
168680	Problem	–	–	Enlargement

1.3.2.122 5PC720.1043–00

ID	valuation	solved since	known since	Description
267630	New function	–	–	Support for USB keyboards
168685	Problem	–	–	Enlargement

1.3.2.123 5PC720.1043–01

ID	valuation	solved since	known since	Description
267635	New function	–	–	Support for USB keyboards
168710	Problem	–	–	Enlargement

1.3.2.124 5PC720.1214–00

ID	valuation	solved since	known since	Description
267640	New function	–	–	Support for USB keyboards
168720	Problem	–	–	Enlargement

1.3.2.125 5PC720.1214–01

ID	valuation	solved since	known since	Description
267645	New function	–	–	Support for USB keyboards
168725	Problem	–	–	Enlargement

1.3.2.126 5PC720.1505–00

ID	valuation	solved since	known since	Description
267650	New function	–	–	Support for USB keyboards
168840	Problem	–	–	Enlargement

1.3.2.127 5PC720.1505–01

ID	valuation	solved since	known since	Description
267655	New function	–	–	Support for USB keyboards
168845	Problem	–	–	Enlargement

1.3.2.128 5PC720.1505-02

ID	valuation	solved since	known since	Description
267660	New function	–	–	Support for USB keyboards
168850	Problem	–	–	Enlargement

1.3.2.129 5PC720.1706-00

ID	valuation	solved since	known since	Description
267665	New function	–	–	Support for USB keyboards
168855	Problem	–	–	Enlargement

1.3.2.130 5PC720.1906-00

ID	valuation	solved since	known since	Description
267670	New function	–	–	Support for USB keyboards
168865	Problem	–	–	Enlargement

1.3.2.131 5PC781.1043-00

ID	valuation	solved since	known since	Description
267675	New function	–	–	Support for USB keyboards
168870	Problem	–	–	Enlargement

1.3.2.132 5PC781.1505-00

ID	valuation	solved since	known since	Description
267680	New function	–	–	Support for USB keyboards
168875	Problem	–	–	Enlargement

1.3.2.133 5PC782.1043-00

ID	valuation	solved since	known since	Description
267685	New function	–	–	Support for USB keyboards
168885	Problem	–	–	Enlargement

1.3.2.134 5PC800.B945-01

ID	valuation	solved since	known since	Description
400054707	Problem	–	V3.00.81.19 SP01	Windows Terminal Funktion
246060	New function	–	–	Support 5PC800.B945-01

1.3.2.135 5PC800.B945-02

ID	valuation	solved since	known since	Description
246065	New function	–	–	Support 5PC800.B945-02

1.3.2.136 5PC800.B945-03

ID	valuation	solved since	known since	Description
246130	New function	–	–	Support 5PC800.B945-03

1.3.2.137 5PC800.B945-04

ID	valuation	solved since	known since	Description
246170	New function	–	–	Support 5PC800.B945-04

1.3.2.138 5PC800.B945-10

ID	valuation	solved since	known since	Description
251740	New function	–	–	Support 5PC800.B945-10

1.3.2.139 5PC800.B945-11

ID	valuation	solved since	known since	Description
251745	New function	–	–	Support 5PC800.B945-11

1.3.2.140 5PC800.B945-13

ID	valuation	solved since	known since	Description
251755	New function	–	–	Support 5PC800.B945-13

1.3.2.141 5PC800.B945-14

ID	valuation	solved since	known since	Description
251765	New function	–	–	Support 5PC800.B945-14

1.3.2.142 5PC810.SX01-00

ID	valuation	solved since	known since	Description
267060	New function	–	–	Support for USB keyboards
187945	Information	–	–	first official release (no changes)
202840	Problem	1.0.0.3	1.0.0.3	Support of 200µs cycle time with ARwin (from AR R2.95)

1.3.2.143 5PC810.SX02-00

ID	valuation	solved since	known since	Description
267115	New function	–	–	Support for USB keyboards
187950	Information	–	–	first official release (no changes)

1.3.2.144 5PC810.SX03-00

ID	valuation	solved since	known since	Description
267140	New function	–	–	Support for USB keyboards

1.3.2.145 5PC810.SX05-00

ID	valuation	solved since	known since	Description
267145	New function	–	–	Support for USB keyboards
187955	Information	–	–	first official release (no changes)
202850	Problem	1.0.0.3	1.0.0.3	Support of 200µs cycle time with ARwin (from AR R2.95)

1.3.2.146 5PC820.1505-00

ID	valuation	solved since	known since	Description
267025	New function	–	–	Support for USB keyboards
234390	Problem	–	–	Standard PCI slots and PCI express compact slot seperated
225210	Problem	–	–	HWC Bugfix

1.3.2.147 5PC820.1906-00

ID	valuation	solved since	known since	Description
267020	New function	–	–	Support for USB keyboards
264920	New function	–	–	Problems with I/O mapping with AR < A3.08
262225	New function	–	–	Support for Windows terminal mode

1.3.2.148 5PC820.SX01-00

ID	valuation	solved since	known since	Description
267005	New function	–	–	Support for USB keyboards
242935	Problem	–	–	POWERLINK Firmware and I/O Datapoint
220380	Problem	–	–	HWC BugFix and new PLK firmware
198525	Problem	–	–	Now this system is hidden under AR106

1.3.2.149 5PC820.SX01–01

ID	valuation	solved since	known since	Description
267010	New function	–	–	Support for USB keyboards
242940	Problem	–	–	POWERLINK Firmware and I/O Datapoint
224525	Problem	–	–	HWC BugFix and new PLK firmware
220385	Problem	–	–	HWC BugFix
219945	Problem	–	–	Support 5PC820.SX01–01

1.3.2.150 5PP520.0573–00

ID	valuation	solved since	known since	Description
266825	New function	–	–	Error in the addressing
266720	New function	–	–	Support for USB keyboards
259035	New function	–	–	Problems with terminal modes

1.3.2.151 5PP520.0702–00

ID	valuation	solved since	known since	Description
266845	New function	–	–	Error in the addressing
266761	New function	–	–	Support for USB keyboards
259170	New function	–	–	Problems with terminal modes
260550	Problem	–	–	Problem with windows terminal mode

1.3.2.152 5PP520.1043–00

ID	valuation	solved since	known since	Description
266865	New function	–	–	Error in the addressing
266781	New function	–	–	Support for USB keyboards
266595	New function	–	–	Support for customized devices
260610	New function	–	–	Problems with terminal modes

1.3.2.153 5PP520.1214–00

ID	valuation	solved since	known since	Description
266930	New function	–	–	Support for USB keyboards
260495	New function	–	–	Problems with terminal modes

1.3.2.154 5PP520.1505-00

ID	valuation	solved since	known since	Description
266935	New function	–	–	Support for USB keyboards
260665	Problem	–	–	Problems with terminal modes

1.3.2.155 5PP551.0573-00

ID	valuation	solved since	known since	Description
266940	New function	–	–	Support for USB keyboards
262255	New function	–	–	Correction of LED layout
261635	New function	–	–	Correction of incorrect key assignment
261390	New function	–	–	Problems with terminal modes

1.3.2.156 5PP552.0573-00

ID	valuation	solved since	known since	Description
266945	New function	–	–	Support for USB keyboards
262220	New function	–	–	Problem with ARwin & embedded terminal client
261645	New function	–	–	Correction of incorrect key assignment
261240	New function	–	–	Problems with terminal modes

1.3.2.157 5PP580.1043-00

ID	valuation	solved since	known since	Description
266950	New function	–	–	Support for USB keyboards
263101	New function	–	–	Preview bitmaps corrected

1.3.2.158 5PP580.1505-00

ID	valuation	solved since	known since	Description
266990	New function	–	–	Support for USB keyboards
263096	New function	–	–	Preview bitmaps corrected
262905	New function	–	–	Wrong bitmap is displayed
261400	New function	–	–	Problems with terminal modes

1.3.2.159 5PP581.1043-00

ID	valuation	solved since	known since	Description
266955	New function	–	–	Support for USB keyboards
261245	New function	–	–	Problems with terminal modes

1.3.2.160 5PP581.1505-00

ID	valuation	solved since	known since	Description
266995	New function	–	–	Support for USB keyboards
260440	New function	–	–	Problem with embedded terminal mode
260330	New function	–	–	Problem with windows terminal mode
258955	New function	–	–	Problems with terminal modes

1.3.2.161 5PP582.1043-00

ID	valuation	solved since	known since	Description
266985	New function	–	–	Support for USB keyboards
261255	New function	–	–	Problems with terminal modes

1.3.2.162 5PP5CP.US15-00

ID	valuation	solved since	known since	Description
267420	New function	–	–	Changed hardware description file and new firmware
258490	New function	–	–	Problems with LEDs of PP500 devices with keys

1.3.2.163 5PP5CP.US15-01

ID	valuation	solved since	known since	Description
267425	New function	–	–	Changed hardware description file and new firmware
258485	New function	–	–	Problems with LEDs of PP500 devices with keys

1.3.2.164 5PP5CP.US15-02

ID	valuation	solved since	known since	Description
267430	New function	–	–	Changed hardware description file and new firmware
258480	New function	–	–	Problems with LEDs of PP500 devices with keys

1.3.2.165 5PP5IF.FPLM-00

ID	valuation	solved since	known since	Description
268145	New function	–	–	New FPGA firmware V05 and new POWERLINK firmware V112

1.3.2.166 5PP5IF.FX2X-00

ID	valuation	solved since	known since	Description
266260	Problem	–	–	Problem with the SRAM

1.3.2.167 7EC020.60-2

ID	valuation	solved since	known since	Description
400052453	Problem	–	V3.00.81.18	7EC020.60-2 can be changed against other CPU's
400009563 , 400018914	Problem	–	–	VNC works without problems

1.3.2.168 7EC020.61-2

ID	valuation	solved since	known since	Description
400052453	Problem	–	V3.00.81.18	7EC020.61-2 can be changed against other CPU's

1.3.2.169 7EC021.60-1

ID	valuation	solved since	known since	Description
400052453	Problem	–	V3.00.81.18	7EC021.60-1 can be changed against other CPU's
400066092	Problem	–	–	ModbusTCP Master works now with this module

1.3.2.170 7EC021.61-2

ID	valuation	solved since	known since	Description
400052453	Problem	–	V3.00.81.18	7EC021.61-2 can be changed against other CPU's

1.3.2.171 7EX481.50-1

ID	valuation	solved since	known since	Description
182125	Problem	1.0.1.0	1.0.0.0	Configurable tolerance for network disturbances.

1.3.2.172 7EX484.50-1

ID	valuation	solved since	known since	Description
182130	Problem	1.0.1.0	1.0.0.0	Configurable tolerance for network disturbances.

1.3.2.173 7XV124.50-61

ID	valuation	solved since	known since	Description
400031268	Problem	–	–	The module can be inserted on SGC targets in 3.71

1.3.2.174 7XV124.50–62

ID	valuation	solved since	known since	Description
400065007	New function	–	V3.00.81.24 SP0x	Outputs can be transfered in "packed" mode

1.3.2.175 7XX419L.50–1

ID	valuation	solved since	known since	Description
233320	New function	–	–	Support for the module 7XX419L.50–1

1.3.2.176 80PS080X3.10–01

ID	valuation	solved since	known since	Description
400060553	Problem	–	–	80PS080X3 – Additional 24 VDC output problems

1.3.2.177 80SD100XD.C044–01

ID	valuation	solved since	known since	Description
243225	Problem	–	–	Customer–specific expansion of hardware description file
204430	New function	–	–	Support for buscontroller 80SD100XD.C044–01
400046062	Problem	–	–	Reference pulse on channel two doesn't work

1.3.2.178 80SD100XD.C04X–13

ID	valuation	solved since	known since	Description
400056193	Problem	–	V3.00.81.18	Special character were deleted in channel description
243230	Problem	–	–	Customer–specific expansion of hardware description file
205515	New function	–	–	Buscontroller support for the module 80SD100XD.C04X–13

1.3.2.179 80SD100XD.C0XX–01

ID	valuation	solved since	known since	Description
243235	Problem	–	–	Customer–specific expansion of hardware description file
227695	New function	–	–	Fully support for SDC
400033889	Problem	–	–	Error when inserting the module on SGC CPU
400015253	Problem	–	–	From the version 1.1.1.0 the Ramp–functionmodell works on SGC CPU's
182205	Problem	–	–	Error resetting works now without problems
400013752	Problem	–	1.0.0.0	Overcuerror doesn't appear at very low current settings
400019148	Problem	–	–	Brake output will be reset when X2X bus is not present

1.3.2.180 80SD100XD.C0XX–21

ID	valuation	solved since	known since	Description
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243310	Problem	–	–	Customer-specific expansion of hardware description file
245865	Problem	–	–	Customer-specific expansion of hardware description file
400049657	Problem	–	–	Current peaks at switch on of the controller at channel 2
210950	Problem	–	–	SDC support implemented
400022021	Problem	–	–	The upload of the buffer has now the same behaviour as the X20AI4632

1.3.2.181 80SD100XS.C04X-01

ID	valuation	solved since	known since	Description
243370	Problem	–	–	Customer-specific expansion of hardware description file
245875	Problem	–	–	Customer-specific expansion of hardware description file

1.3.2.182 80SD100XS.C04X-13

ID	valuation	solved since	known since	Description
243380	Problem	–	–	Customer-specific expansion of hardware description file
230710	New function	–	–	SDC support for the module 80SD100XS.C04X-01
245880	Problem	–	–	Customer-specific expansion of hardware description file

1.3.2.183 80SD100XS.C0XX-01

ID	valuation	solved since	known since	Description
243385	Problem	–	–	Customer-specific expansion of hardware description file
205090	New function	–	–	Support for the module 80SD100XS.C0XX-01 behind a buscontroller
245885	Problem	–	–	Customer-specific expansion of hardware description file

1.3.2.184 80VD100PD.C000-01

ID	valuation	solved since	known since	Description
259090	New function	–	–	Extensions for AS 3.0.90 for the module 80VD100PD.C000-01

1.3.2.185 80VD100PD.C022-01

ID	valuation	solved since	known since	Description
259085	New function	–	–	Extensions for AS 3.0.90 for the module 80VD100PD.C022-01

1.3.2.186 80VD100PS.C02X-01

ID	valuation	solved since	known since	Description
260260	Problem	–	–	Support for the module 80VD100PS.C02X-01

1.3.2.187 8AC112.60-1

ID	valuation	solved since	known since	Description
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400016061	Problem	–	1.0.0.1	The AsIODiag library detects a discrepancy (plugged/configured), although the configured module is physically connected. (AR 02.95 or higher required!)
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1.3.2.188 8AC114.60–1

ID	valuation	solved since	known since	Description
196270	Problem	–	1.0.0.0	The AsIODiag library detects a discrepancy (plugged/configured), although the configured module is physically connected. (AR 02.95 or higher required!)

1.3.2.189 8AC114.60–2

ID	valuation	solved since	known since	Description
400048080, 400048192, 400048184	Problem	–	ARSG4_3.01.6_F03.01	IOSuffix in HWC file added
229330	New function	–	1.0.0.2	Extension of powerlink channels for frame reduction and poll response chaining
196275	Problem	–	1.0.0.1	The AsIODiag library detects a discrepancy (plugged/configured), although the configured module is physically connected. (AR 02.95 or higher required!)

1.3.2.190 8AC140.61–2

ID	valuation	solved since	known since	Description
400048932	Problem	–	–	INA node number can be set in Automation Studio

1.3.2.191 8AC140.61–3

ID	valuation	solved since	known since	Description
400041325	Problem	–	V3.00.80.25	INA number can be set in the ethernet dialog
400041328	Problem	–	–	8AC140.61–3: After changing the CF card the CAN–Interface didn't work

1.3.2.192 8AC141.60–2

ID	valuation	solved since	known since	Description
400054584, 400054504	Problem	–	–	INA node number can be set in automation studio

1.3.2.193 8AC141.61–3

ID	valuation	solved since	known since	Description
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1.3.2.194 8BAC0124.000–1

ID	valuation	solved since	known since	Description
262910	New function	–	1.0.0.1	Extansion for ACOPOSmulti65

1.3.2.195 8BVS2SAFE1-1

ID	valuation	solved since	known since	Description
237625	New function	–	–	Shutdown delay in case of PLK network error
226485	New function	–	–	Changes/ Features in Motion Safety Release 1.4

1.3.2.196 8CVE28000HC00.00-1

ID	valuation	solved since	known since	Description
264685	New function	–	–	8CVE28000HC00.00-1, new POWERLINK Stack
246072	New function	–	–	8CVE28000HC00.00-1, new POWERLINK Stack
268875	Problem	–	–	Display the modul information under I/O Mapping in the AS 3.0.90

1.3.2.197 8I64XXXXXXX.00X-1

ID	valuation	solved since	known since	Description
263585	Problem	V3.00.90.12	–	Extensions for AS 3.0.9.0
256660	New function	–	–	To save data on the X2X bus the I/O mapping can be configured
263205	Problem	–	–	"Relay 02" instead of "Relay 02 state" in IO Description
400065557 , 400069029	Problem	–	–	On 8I0IF109.200-1 with rev. B5 the relay does not work in standalone mode
400057134	Problem	–	–	The boottime of X64 takes 8-45 seconds
245955	Problem	–	–	Customer-specific expansion of hardware description file
400067044	Problem	–	1.0.0.0	X64 Inverter does sometimes not work after a powerlink BC

1.3.2.198 8V1010.00-2

ID	valuation	solved since	known since	Description
239085	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.199 8V1010.50-2

ID	valuation	solved since	known since	Description
239090	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.200 8V1016.00-2

ID	valuation	solved since	known since	Description
239095	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.201 8V1016.50-2

ID	valuation	solved since	known since	Description
239100	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.202 8V1022.00-2

ID	valuation	solved since	known since	Description
239105	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.203 8V1045.00-2

ID	valuation	solved since	known since	Description
239110	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.204 8V1090.00-2

ID	valuation	solved since	known since	Description
239115	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.205 8V1180.00-2

ID	valuation	solved since	known since	Description
239120	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.206 8V128M.00-2

ID	valuation	solved since	known since	Description
239125	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.207 8V1320.00-2

ID	valuation	solved since	known since	Description
239130	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.208 8V1640.00-2

ID	valuation	solved since	known since	Description
239135	Problem	–	–	Correction of the german translation for "NC Mapping"

1.3.2.209 FBE.EMF2191IB

ID	valuation	solved since	known since	Description
161200	Problem	–	1.0.0.0	Error correction in HWC for AS 3.0
179035	New function	1.0.1.1	1.0.1.0	Change of parameter C0017 for the POWERLINK Object Dictionary entry

1.3.2.210 FBE.KEB.COMBIVERT

ID	valuation	solved since	known since	Description
161050	New function	–	–	Error correction in HWC for AS 3.0
400037610	Problem	–	–	Neue Firmwar

174505	Problem	–	1.0.0.1	New HWC File
253660	Problem	1.0.6.2	1.0.6.0	Changes for firmware update
220515	New function	1.0.6.0	1.0.5.0	Different OD–Entries are directly overtaken from the Host (DeviceType, VendorId, RevisionNumber and Serial Number)
212950	Problem	1.0.5.0	1.0.5.0	New Powerlink Firmware for KEB Combivert
181730	Problem	1.0.1.0	1.0.0.2	Firmware changes
175290	Problem	1.0.0.2	1.0.0.1	New HWC File

1.3.2.211 X20AI1744

ID	valuation	solved since	known since	Description
256635	New function	–	–	Extension of the gain–range: 2mV/V bis 256mV/V
256630	New function	–	–	New function model (multisample)
261660	Problem	–	–	Changes for AS3.0.90
256670	Problem	–	–	Extensions for AS 3.0.90
400055356	Problem	–	–	High EMC influences could be the reason for module fail, EMC immunity increased
400032817	Problem	–	–	It last up to 40sec until the ADC is in synchronous mode
400054723	Problem	–	nicht relevant	Value of the X20AI1744 is oscillating if several X20AI1744 are plugged side by side

1.3.2.212 X20AI1744–3

ID	valuation	solved since	known since	Description
400055356	Problem	–	–	High EMC influences could be the reason for module fail, EMC immunity increased
235630	Problem	–	–	Improvement of the internal communication between ADC and I/O processor
400054723	Problem	–	nicht relevant	Value of the X20AI1744–3 is oscillating if several X20AI1744–3 are plugged side by side

1.3.2.213 X20AI2622

ID	valuation	solved since	known since	Description
165120	Problem	–	–	New Firmware V560

1.3.2.214 X20AI2632

ID	valuation	solved since	known since	Description
166030	New function	–	–	New FW V5 and HWC V1.1.0.0.
211510	Problem	1.1.2.0	1.1.2.0	Adjustment SGC section
193685	New function	1.1.1.0	1.1.1.0	Enhancement comparator for Tracetriggercondition
184305	Problem	1.1.0.0	1.1.0.0	Optimizations for runtime and memory compatible Firmware

1.3.2.215 X20AI2632–1

ID	valuation	solved since	known since	Description
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211610	Problem	1.0.3.0	1.0.3.0	Adjustment SGC section
193690	New function	1.0.2.0	1.0.2.0	Enhancement comparator for Tracetriggercondition
184290	Problem	1.0.1.0	1.0.1.0	Optimizations for runtime and memory compatible Firmware

1.3.2.216 X20AI2636

ID	valuation	solved since	known since	Description
229405	New function	–	–	Support X20AI2636
262520	New function	1.0.0.1	1.0.0.1	Enhancement english online help

1.3.2.217 X20AI4622

ID	valuation	solved since	known since	Description
164635	Problem	–	–	New FW V560

1.3.2.218 X20AI4632

ID	valuation	solved since	known since	Description
166035	New function	–	–	New FW V5 and HWC V1.1.0.0.
211515	Problem	1.1.2.0	1.1.2.0	Adjustment SGC section
193700	New function	1.1.1.0	1.1.1.0	Enhancement comparator for Tracetriggercondition
184300	Problem	1.1.0.0	1.1.0.0	Optimizations for runtime and memory compatible Firmware
172225	Problem	1.1.0.0	1.1.0.0	X20AI4632 no longer works when max. number of samples is set.

1.3.2.219 X20AI4632–1

ID	valuation	solved since	known since	Description
211605	Problem	1.0.3.0	1.0.3.0	Adjustment SGC section
193695	New function	1.0.2.0	1.0.2.0	Enhancement comparator for Tracetriggercondition
184295	Problem	1.0.1.0	1.0.1.0	Optimizations for runtime and memory compatible Firmware

1.3.2.220 X20AI4636

ID	valuation	solved since	known since	Description
229410	New function	–	–	Support X20AI4636
262525	New function	1.0.0.1	1.0.0.1	Enhancement english online help

1.3.2.221 X20AO2622

ID	valuation	solved since	known since	Description
231390	New function	1.0.1.0	1.0.1.0	Enhancement 4 to 20 mA output mode

1.3.2.222 X20AO2632

ID	valuation	solved since	known since	Description
208740	New function	1.0.0.1	1.0.0.1	Enhancement data points SDC support, modified channel LEDs

1.3.2.223 X20AO4622

ID	valuation	solved since	known since	Description
231395	New function	1.0.1.0	1.0.1.0	Enhancement 4 to 20 mA output mode

1.3.2.224 X20AO4632

ID	valuation	solved since	known since	Description
195930	Problem	1.0.0.1	1.0.0.1	Correction version limitation SGC

1.3.2.225 X20AO4635

ID	valuation	solved since	known since	Description
225400	Problem	1.0.0.1	1.0.0.0	Support for Fieldbusdesigner

1.3.2.226 X20AT2222

ID	valuation	solved since	known since	Description
400063839	Problem	1.0.2.0	1.0.2.0	Missing IO mapping using SG3 CANIO corrected
218870	Problem	1.0.1.0	1.0.1.0	Wrong value after bootup without sensor corrected

1.3.2.227 X20AT2311

ID	valuation	solved since	known since	Description
225405	Problem	1.0.0.2	1.0.0.1	Support for Fieldbusdesigner

1.3.2.228 X20AT2402

ID	valuation	solved since	known since	Description
400067109	New function	1.0.2.0	1.0.2.0	Enhancement data point description

1.3.2.229 X20AT4222

ID	valuation	solved since	known since	Description
400032494	Problem	1.0.1.0	1.0.1.0	Wrong value after bootup without sensor corrected
400027742	Problem	1.0.1.0	1.0.1.0	Wrong value after bootup without sensor corrected

1.3.2.230 X20BB27

ID	valuation	solved since	known since	Description
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184755	Problem	1.0.1.0	1.0.1.0	Correction Upgrade only from AS 2.7
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1.3.2.231 X20BB32

ID	valuation	solved since	known since	Description
183490	New function	1.0.1.0	1.0.1.0	Text correction from "Compact" to "Fieldbus"

1.3.2.232 X20BB37

ID	valuation	solved since	known since	Description
184760	Problem	1.0.1.1	1.0.1.1	Correction Upgrade only from AS 2.7
183500	New function	1.0.1.0	1.0.1.0	Text correction from "Compact" to "Fieldbus"

1.3.2.233 X20BB42

ID	valuation	solved since	known since	Description
183505	New function	1.0.1.0	1.0.1.0	Text correction from "Compact" to "Fieldbus"

1.3.2.234 X20BB47

ID	valuation	solved since	known since	Description
184765	Problem	1.0.1.1	1.0.1.1	Correction Upgrade only from AS 2.7
183510	New function	1.0.1.0	1.0.1.0	Text correction from "Compact" to "Fieldbus"

1.3.2.235 X20BC0073

ID	valuation	solved since	known since	Description
209385	Problem	1.0.3.0	1.0.3.0	Correct bitmap
215945	New function	1.0.3.0	1.0.3.0	AS help with F1
400011541	Problem	1.0.1.0	V2.7.0.0009 SP02	Correction – firmware update X2X modules
400012524	Problem	1.0.1.0	1.0.1.0	Correction – Emergency Handling

1.3.2.236 X20BC0083

ID	valuation	solved since	known since	Description
164640	New function	–	1.0.0.0	Extensions
247260	Problem	1.2.1.0	–	DNA runup upgraded
245095	Problem	1.2.0.0	–	DNA support; Update behavior on X2X bus of the BC improved
216365	Problem	1.0.7.0	1.0.7.0	Correct bitmap
210215	New function	1.0.4.1	–	Extensions and Bugfixes
173310	New function	1.0.3.0	–	Extensions and Bugfixes

183285	Problem	1.0.3.0	1.0.3.0	New info-/diagnostic data points, new FW 1.39 for signal filter and corrections
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1.3.2.237 X20BC1083

ID	valuation	solved since	known since	Description
268450	Problem	–	1.2.0.0	Netx and Powerlink error correction
400072488	Problem	–	1.2.0.0	Profibus I/O data not transmitted when only output data is configured
234115	Problem	–	1.0.6.0	X20 Bus Controller POWERLINK. 1xIF
164655	New function	–	1.0.1.0	Extensions
160935	New function	–	1.0.0.0	Error correction
246445	Problem	1.2.0.0	–	DNA support; Update behavior on X2X bus of the BC improved
210965	New function	1.0.4.1	–	Extensions and Bugfixes
160980	New function	1.0.4.0	1.0.3.0	Additional diagnostic data points
173360	New function	1.0.3.0	–	Extensions and Bugfixes
183380	Problem	1.0.3.0	1.0.3.0	New info-/diagnostic data points, new FW 1.39 for signal filter and corrections

1.3.2.238 X20BC8083

ID	valuation	solved since	known since	Description
164665	New function	–	1.0.0.0	Extensions
246550	Problem	1.2.0.0	–	DNA support; Update behavior on X2X bus of the BC improved
210975	New function	1.0.4.1	–	Extensions and Bugfixes
160985	New function	1.0.4.0	1.0.3.0	Additional diagnostic data points
173305	New function	1.0.3.0	–	Extensions and Bugfixes
183385	Problem	1.0.3.0	1.0.3.0	New info-/diagnostic data points, new FW 1.39 for signal filter and corrections

1.3.2.239 X20BC8084

ID	valuation	solved since	known since	Description
265540	Problem	1.2.0.0	nicht relevant	Optimisation of Kabelredundancy (Link Selector) ; Update behavior on X2X bus improved
173290	New function	1.0.3.0	–	First version of the buscontroller with cable redundancy
183390	Problem	1.0.3.0	1.0.3.0	New info-/diagnostic data points, new FW 1.39 for signal filter and corrections

1.3.2.240 X20BR9300

ID	valuation	solved since	known since	Description
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261385	Problem	1.0.2.0	1.0.2.0	Spacer in I/O map display corrected
260505	Problem	1.0.1.0	1.0.1.0	Error correction in Channel description
228115	New function	1.0.0.1	1.0.0.1	Extension in IO-Mapping for SG3 CanIO

1.3.2.241 X20BT9100

ID	valuation	solved since	known since	Description
260670	New function	1.0.2.0	1.0.2.0	Spacer in I/O map display corrected
400061307	Problem	1.0.1.0	1.0.1.0	Error correction in channel description
203105	Problem	1.0.0.1	1.0.0.1	Correction HWC display of data point "SupplyVoltage" on Powerlink-BC

1.3.2.242 X20CM0985

ID	valuation	solved since	known since	Description
197065	New function	–	–	Buscontroller support for X20CM0985

1.3.2.243 X20CM1941

ID	valuation	solved since	known since	Description
257105	Problem	–	–	Serial number will be displayed correctly
400052686	Problem	–	–	Duty Cycle of AB signal sporadically not correct

1.3.2.244 X20CM8281

ID	valuation	solved since	known since	Description
400016246	Problem	1.0.1.0	1.0.1.0	Erroneous text of data point description corrected

1.3.2.245 X20CM8323

ID	valuation	solved since	known since	Description
400015080	Problem	–	–	The Energizing Time is now always correct

1.3.2.246 X20CP0201

ID	valuation	solved since	known since	Description
163770	Problem	–	1.0.0.0	New Firmware V21

1.3.2.247 X20CP0291

ID	valuation	solved since	known since	Description
163775	Problem	–	1.0.0.0	New Firmware V21

1.3.2.248 X20CP0292

ID	valuation	solved since	known since	Description
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163780	Problem	–	1.0.0.0	New Firmware V21
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1.3.2.249 X20CP1483

ID	valuation	solved since	known since	Description
266100	New function	–	1.0.16.0	Enhancement status datapoint for I/O supply
256995	New function	–	1.0.16.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256850	New function	–	1.0.16.0	POWERLINK: LinkOK data point added.
265805	Problem	–	1.0.16.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265705	Problem	–	1.0.16.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400057319	Problem	–	1.0.16.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
240370	Problem	–	1.0.15.0	FPGA Fitter upgrade
230775	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220465	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
213075	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
400018078	Problem	1.0.13.0	1.0.11.0	HW Revision B5 or higher necessary
199580	Problem	1.0.11.0	1.0.1.0	New POWERLINK V1/V2 firmware V44

1.3.2.250 X20CP1483–1

ID	valuation	solved since	known since	Description
257000	New function	–	1.0.16.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256855	New function	–	1.0.16.0	POWERLINK: LinkOK data point added.
227235	New function	–	1.0.16.0	Enhancement status datapoint for I/O supply
265810	Problem	–	1.0.16.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265710	Problem	–	1.0.16.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400057319	Problem	–	1.0.16.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
240375	Problem	–	1.0.15.0	FPGA Fitter upgrade
230780	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220470	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved

1.3.2.251 X20CP1484

ID	valuation	solved since	known since	Description
257005	New function	–	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256860	New function	–	1.0.15.0	POWERLINK: LinkOK data point added.
265815	Problem	–	1.0.15.0	

				Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265715	Problem	–	1.0.15.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
260870	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity → corrected.
400057319	Problem	–	1.0.15.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
163810	Problem	–	1.0.1.0	New Base Firmware V13
182090	Problem	1.0.8.0	1.0.7.0	New POWERLINK V1/V2 firmware V38
178040	Problem	1.0.7.0	1.0.6.0	New POWERLINK V1/V2 firmware V37
171785	Problem	1.0.6.0	1.0.5.0	New Base Firmware V14 and POWERLINK Firmware V36
165825	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165465	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164780	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
230785	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220480	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
400026084	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
400019320	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V16
199540	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191775	Problem	1.0.10.1	1.0.8.0	New POWERLINK V1/V2 Firmware V42 and base firmware V15
160770	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.252 X20CP1484–1

ID	valuation	solved since	known since	Description
256865	New function	–	1.0.15.1	POWERLINK: LinkOK data point added.
265820	Problem	–	1.0.15.1	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265720	Problem	–	1.0.15.1	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400057319	Problem	–	1.0.15.1	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
257010	New function	–	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
260875	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity → corrected.
230790	Problem	1.0.15.1	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400038795	Problem	1.0.14.0	1.0.14.0	Version entry in HWC corrected from V2.94 to R2.95
220485	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved

1.3.2.253 X20CP1485

ID	valuation	solved since	known since	Description
400057319	Problem	–	1.1.13.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
257015	New function	–	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256870	New function	–	1.0.15.0	POWERLINK: LinkOK data point added.

265825	Problem	–	1.0.15.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265725	Problem	–	1.0.15.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
163805	Problem	–	1.0.1.0	New Base Firmware V13
229360	Problem	1.1.0.2	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity -> corrected.
182095	Problem	1.0.8.0	1.0.7.0	New POWERLINK V1/V2 firmware V38
178045	Problem	1.0.7.0	1.0.6.0	New POWERLINK V1/V2 firmware V37
171820	Problem	1.0.6.0	1.0.5.0	New Base Firmware V14 and POWERLINK Firmware V36
165830	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165470	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164785	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
228100	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220490	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
400027530	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
400020473, 400022125	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V16
199550	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191780	Problem	1.0.10.1	1.0.8.0	New POWERLINK V1/V2 Firmware V42 and base firmware V15
160775	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.254 X20CP1485–1

ID	valuation	solved since	known since	Description
257020	New function	–	1.0.15.1	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
265830	Problem	–	1.0.15.1	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265730	Problem	–	1.0.15.1	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
400057319	Problem	–	1.0.15.1	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
260880	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity -> corrected.
183740	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 firmware V38
178070	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 firmware V37
171825	Problem	1.0.2.0	1.0.5.0	New Base Firmware V14 and POWERLINK Firmware V36
171315	Problem	1.0.2.0	1.0.1.0	X20CP148x cannot be replaced by X20CP1485–1.
234725	Problem	1.0.15.1	1.0.15.0	LinkOK Datapoint available.
228105	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220495	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
213040	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
206925	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V16
199555	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191785	Problem	1.0.10.1	1.0.4.0	New POWERLINK V1/V2 Firmware V42 and base firmware V15
168325	New function	1.0.1.0	V2.6.0.0007	VC support

1.3.2.255 X20CP1486

ID	valuation	solved since	known since	Description
257025	New function	–	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256875	New function	–	1.0.15.0	POWERLINK: LinkOK data point added.
265835	Problem	–	1.0.15.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265735	Problem	–	1.0.15.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
260885	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity –> corrected.
400057319	Problem	–	1.0.15.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
163815	Problem	–	1.0.1.0	New Base Firmware V13
183750	Problem	1.0.8.0	1.0.7.0	New POWERLINK V1/V2 firmware V38
178050	Problem	1.0.7.0	1.0.6.0	New POWERLINK V1/V2 firmware V37
171830	Problem	1.0.6.0	1.0.5.0	New Base Firmware V14 and POWERLINK Firmware V36
165835	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165475	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164790	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
230795	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220500	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
213045	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
400020316	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V16
199560	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191790	Problem	1.0.10.1	1.0.8.0	New POWERLINK V1/V2 Firmware V42 and base firmware V15
160780	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.256 X20CP3484

ID	valuation	solved since	known since	Description
257030	New function	–	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256880	New function	–	1.0.15.0	POWERLINK: LinkOK data point added.
265840	Problem	–	1.0.15.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265740	Problem	–	1.0.15.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
260890	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity –> corrected.
400057319	Problem	–	1.0.15.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
163820	Problem	–	1.0.1.0	New Base Firmware V13
182100	Problem	1.0.8.0	1.0.7.0	New POWERLINK V1/V2 firmware V38
178055	Problem	1.0.7.0	1.0.6.0	New POWERLINK V1/V2 firmware V37
171835	Problem	1.0.6.0	1.0.5.0	New Base Firmware V14 and POWERLINK Firmware V36
165840	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165480	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33

164795	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
230800	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220510	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
213055	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
400020310	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V16
199565	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191795	Problem	1.0.10.1	1.0.8.0	New POWERLINK V1/V2 Firmware V42 and base firmware V15
160785	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.257 X20CP3484-1

ID	valuation	solved since	known since	Description
265745	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
257035	New function	–	1.0.15.1	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256885	New function	–	1.0.15.1	POWERLINK: LinkOK data point added.
265845	Problem	–	1.0.15.1	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
400057319	Problem	–	1.0.15.1	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
260895	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity → corrected.
230805	Problem	1.0.15.1	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
223950	Problem	1.0.14.0	1.0.14.0	Version entry in HWC corrected from V2.94 to R2.95
220520	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved

1.3.2.258 X20CP3485

ID	valuation	solved since	known since	Description
265750	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
257040	New function	–	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256890	New function	–	1.0.15.0	POWERLINK: LinkOK data point added.
265850	Problem	–	1.0.15.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
260900	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity → corrected.
400057319	Problem	–	1.0.15.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
163825	Problem	–	1.0.1.0	New Base Firmware V13
182105	Problem	1.0.8.0	1.0.7.0	New POWERLINK V1/V2 firmware V38
178060	Problem	1.0.7.0	1.0.6.0	New POWERLINK V1/V2 firmware V37
171840	Problem	1.0.6.0	1.0.5.0	New Base Firmware V14 and POWERLINK Firmware V36
165845	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165485	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164800	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31

228110	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220530	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
213060	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
206945	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V16
199570	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191800	Problem	1.0.10.1	1.0.8.0	New POWERLINK V1/V2 Firmware V42 and base firmware V15
160790	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.259 X20CP3485–1

ID	valuation	solved since	known since	Description
257045	New function	–	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.
256895	New function	–	1.0.15.0	POWERLINK: LinkOK data point added.
265855	Problem	–	1.0.15.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265755	Problem	–	1.0.15.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
260905	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity –> corrected.
400057319	Problem	–	1.0.15.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
183745	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 firmware V38
178075	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 firmware V37
171845	Problem	1.0.2.0	1.0.5.0	New Base Firmware V14 and POWERLINK Firmware V36
228530	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220540	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
213065	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
206950	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V16
199575	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191805	Problem	1.0.10.1	1.0.4.0	New POWERLINK V1/V2 Firmware V42 and base firmware V15
170125	New function	1.0.1.0	V2.6.0.0007	VC support

1.3.2.260 X20CP3486

ID	valuation	solved since	known since	Description
256900	New function	–	1.0.15.0	POWERLINK: LinkOK data point added.
265860	Problem	–	1.0.15.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265760	Problem	–	1.0.15.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
260910	Problem	–	1.0.15.0	POWERLINK: L/A LED only shows Link and not Activity –> corrected.
400057319	Problem	–	1.0.15.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
163830	Problem	–	1.0.1.0	New Base Firmware V13
240275	New function	1.1.0.2	1.0.15.0	POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

183755	Problem	1.0.8.0	1.0.7.0	New POWERLINK V1/V2 firmware V38
178065	Problem	1.0.7.0	1.0.6.0	New POWERLINK V1/V2 firmware V37
171850	Problem	1.0.6.0	1.0.5.0	New Base Firmware V14 and POWERLINK Firmware V36
165850	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165490	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164805	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
230810	Problem	1.0.15.0	1.0.14.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
220545	Problem	1.0.14.0	1.0.13.0	POWERLINK V2: Boot behavior improved
213070	Problem	1.0.13.0	1.0.12.0	CN mode: Various error corrections made.
206955	Problem	1.0.12.0	1.0.11.0	New POWERLINK firmware V45 and basis firmware V16
400015777	Problem	1.0.11.0	1.0.10.1	New POWERLINK V1/V2 firmware V44
191810	Problem	1.0.10.1	1.0.8.0	New POWERLINK V1/V2 Firmware V42 and base firmware V15
160795	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.261 X20CS1020

ID	valuation	solved since	known since	Description
165300	Problem	–	V2.6.0.0006	New Firmware V6 and HWC V1.1.0.0
221140	New function	1.2.3.0	1.2.3.0	New configuration data point : BlockForwardDelay
188120	Problem	1.2.2.1	1.2.2.1	Error in Message FIFO and BC mode corrected
182935	Problem	1.2.2.0	1.2.2.0	Text corrections in HWC
175075	New function	1.2.1.0	1.2.1.0	Enhancement mode SGC and correction of internal communication
165880	Problem	1.1.1.0	–	New HWC File V1.1.1.0
169815	New function	1.1.1.0	1.1.1.0	Enhancement flat stream function model and Buscontroller mode

1.3.2.262 X20CS1030

ID	valuation	solved since	known since	Description
165390	Problem	–	V2.6.0.0006	New Firmware V6 and HWC V1.1.0.0
165980	Problem	–	–	New HWC File V1.1.1.0
222735	Problem	–	1.2.4.0	Support of ACOPOSinverter (Modbus) from AR version B3.01
221085	New function	1.2.3.0	1.2.3.0	New configuration data point : BlockForwardDelay
188125	Problem	1.2.2.1	1.2.2.1	Error in Message FIFO and BC mode corrected
182940	Problem	1.2.2.0	1.2.2.0	Text corrections in HWC
175080	New function	1.2.1.0	1.2.1.0	Enhancement mode SGC and correction of internal communication
169820	New function	1.1.1.0	1.1.1.0	Enhancement flat stream function model and Buscontroller mode

1.3.2.263 X20CS1070

ID	valuation	solved since	known since	Description
169825	New function	–	V2.6.0.0006	Enhancement flat stream function model and Buscontroller mode
165535	New function	–	V2.6.0.0006	New Firmware V3 and HWC V1.1.0.0

221145	New function	1.2.2.0	1.2.2.0	New configuration data point : BlockForwardDelay
188130	Problem	1.2.1.2	1.2.1.2	Error in Message FIFO and BC mode corrected
182945	Problem	1.2.1.1	1.2.1.1	Text corrections in HWC
182550	New function	1.2.1.0	1.2.1.0	Enhancement mode SGC and correction of internal communication
175085	New function	1.2.1.0	1.2.0.0	Enhancement mode SGC and correction of internal communication

1.3.2.264 X20CS2770

ID	valuation	solved since	known since	Description
169830	New function	–	V2.6.0.0006	Enhancement flat stream function model and Buscontroller mode
165540	New function	–	V2.6.0.0006	New Firmware V3 and HWC V1.1.0.0
400055350	Problem	1.2.3.0	1.2.3.0	Enhancement length check of I/O block size during Build
221150	New function	1.2.2.0	1.2.2.0	New configuration data point : BlockForwardDelay
188145	Problem	1.2.1.2	1.2.1.2	Error in Message FIFO and BC mode corrected
182955	Problem	1.2.1.1	1.2.1.1	Text corrections in HWC
182555	New function	1.2.1.0	1.2.1.0	Enhancement mode SGC and correction of internal communication
175095	New function	1.2.1.0	1.2.0.0	Enhancement mode SGC and correction of internal communication

1.3.2.265 X20DC1196

ID	valuation	solved since	known since	Description
251590	Problem	1.0.1.0	1.0.1.0	Enhancement Online Help

1.3.2.266 X20DC2395

ID	valuation	solved since	known since	Description
400055350	Problem	1.0.2.0	1.0.2.0	Enhancement length check of I/O block size during Build
400004703	Problem	1.0.1.0	1.0.1.0	Comparator problem corrected. ATTENTION :: incompatibility at window margin

1.3.2.267 X20DC4395

ID	valuation	solved since	known since	Description
400055350	Problem	1.0.2.0	1.0.2.0	Enhancement length check of I/O block size during Build
197305	Problem	1.0.1.0	1.0.1.0	Comparator problem corrected. ATTENTION :: incompatibility at window margin

1.3.2.268 X20DI2377

ID	valuation	solved since	known since	Description
171425	New function	–	1.0.0.0	Enhancement SW counter function
188540	New	1.1.0.0	1.1.0.0	Enhancement configuration of SW counter Reset data points

	function			
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1.3.2.269 X20DI2653

ID	valuation	solved since	known since	Description
160640	Problem	–	1.0.0.0	New Firmware V771

1.3.2.270 X20DI4375

ID	valuation	solved since	known since	Description
246260	Problem	–	–	Customer-specific expansion of hardware description file

1.3.2.271 X20DI4653

ID	valuation	solved since	known since	Description
160645	Problem	–	1.0.0.0	New Firmware V771

1.3.2.272 X20DI6373

ID	valuation	solved since	known since	Description
243180	Problem	–	–	Customer-specific expansion of hardware description file
225410	Problem	1.0.0.1	1.0.0.0	Support for Fieldbusdesigner

1.3.2.273 X20DI6553

ID	valuation	solved since	known since	Description
160650	Problem	–	1.0.0.0	New Firmware V771

1.3.2.274 X20DI9371

ID	valuation	solved since	known since	Description
400054614	New function	1.0.1.0	1.0.1.0	Enhancement packed data point for inputs

1.3.2.275 X20DI9372

ID	valuation	solved since	known since	Description
400054614	New function	1.0.1.0	1.0.1.0	Enhancement packed data point for inputs

1.3.2.276 X20DO2633

ID	valuation	solved since	known since	Description
220755	New function	–	–	Support X20DO2633

1.3.2.277 X20DO4322

ID	valuation	solved since	known since	Description
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217455	New function	1.0.0.1	1.0.0.1	Adaptation UART Re-Init
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1.3.2.278 X20DO4332

ID	valuation	solved since	known since	Description
217465	New function	1.0.0.1	1.0.0.1	Adaptation UART Re-Init

1.3.2.279 X20DO4613

ID	valuation	solved since	known since	Description
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1.3.2.280 X20DO4633

ID	valuation	solved since	known since	Description
220750	New function	–	–	Support X20DO4633

1.3.2.281 X20DO6321

ID	valuation	solved since	known since	Description
217365	New function	1.0.0.1	1.0.0.1	Adaptation UART Re-Init

1.3.2.282 X20DO6322

ID	valuation	solved since	known since	Description
217470	New function	1.0.0.1	1.0.0.1	Adaptation UART Re-Init

1.3.2.283 X20DO6529

ID	valuation	solved since	known since	Description
400040788	Problem	1.0.1.0	1.0.1.0	Possibility to set X2X station number in combination with X20BMx5 activated

1.3.2.284 X20DO8232

ID	valuation	solved since	known since	Description
256450	Problem	1.0.1.1	1.0.1.1	Increase interference immunity of output status feedbacks
215990	New function	1.0.1.0	1.0.1.0	Support of asynchronous module status data points

1.3.2.285 X20DO8331

ID	valuation	solved since	known since	Description
216000	New function	1.0.1.1	1.0.1.1	Support of asynchronous module status data points, UART Re-Init
211575	Problem	1.0.1.0	1.0.1.0	Display correction in IO-Map on SGC Targets

1.3.2.286 X20DO8332

ID	valuation	solved since	known since	Description
216005	New function	1.0.1.0	1.0.1.0	Support of asynchronous module status data points, UART Re-Init

1.3.2.287 X20DO9321

ID	valuation	solved since	known since	Description
217370	New function	1.0.0.1	1.0.0.1	Adaptation UART Re-Init

1.3.2.288 X20DO9322

ID	valuation	solved since	known since	Description
221375	Problem	1.0.1.0	1.0.1.0	Increase interference immunity of output status feedbacks

1.3.2.289 X20DS1119

ID	valuation	solved since	known since	Description
160535	New function	–	1.0.0.0	Addition of counter functions and speed control
400055350	Problem	1.1.2.2	1.1.2.2	Enhancement length check of I/O block size during Build
251595	Problem	1.1.2.1	1.1.2.1	Enhancement Online Help
400027501	New function	1.1.2.0	1.1.2.0	Enhancement 255 Leading Edges possible
206030	New function	1.1.1.0	1.1.1.0	Enhancement: new data point SDC LifeCount
198415	New function	1.1.0.0	1.1.0.0	Enhancement: new data points for internal power supplies diagnostic
177460	Problem	1.0.0.1	–	Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication X2X Uart
169835	New function	1.0.0.1	1.0.0.1	Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication X2X Uart

1.3.2.290 X20DS1319

ID	valuation	solved since	known since	Description
160540	New function	–	1.0.0.0	Addition of counter functions and speed control
400055350	Problem	1.1.2.2	1.1.2.2	Enhancement length check of I/O block size during Build
251605	Problem	1.1.2.1	1.1.2.1	Enhancement Online Help
400028405	New function	1.1.2.0	1.1.2.0	Enhancement 255 Leading Edges possible
206035	New function	1.1.1.0	1.1.1.0	Enhancement: new data point SDC LifeCount
198420	New function	1.1.0.0	1.1.0.0	Enhancement: new data point for internal power supply diagnostic
169840	New function	1.0.0.1	1.0.0.1	Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication

				X2X Uart
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1.3.2.291 X20DS4387

ID	valuation	solved since	known since	Description
238970	New function	–	–	Customer-specific expansion of hardware description file
203655	Projekt	–	–	4x IO-Link Interface, First version
269070	Problem	1.0.3.0	1.0.3.0	Extensions and Bugfixes
254320	New function	1.0.2.2	1.0.2.2	Optimizations and extensions
217795	Problem	1.0.2.1	1.0.1.1	4x IO-Link Interface, Optimisation master cycle time calculation and correction in register ParameterCtrlIn

1.3.2.292 X20DS4389

ID	valuation	solved since	known since	Description
400055350	Problem	1.0.0.1	1.0.0.1	Enhancement length check of I/O block size during Build

1.3.2.293 X20HB8815

ID	valuation	solved since	known since	Description
231465	New function	1.0.0.2	–	First version.

1.3.2.294 X20IF1020

ID	valuation	solved since	known since	Description
247755	Problem	1.1.3.0	1.1.3.0	Error correction in the FPGA UART implementation
191300	New function	1.1.1.0	1.1.1.0	Enhancement internal function reboot behaviour after FW update
183675	New function	1.1.0.0	1.1.0.0	New diagnostic data points

1.3.2.295 X20IF1030

ID	valuation	solved since	known since	Description
247765	Problem	1.1.3.0	1.1.3.0	Error correction in the FPGA UART implementation
191305	New function	1.1.1.0	1.1.1.0	Enhancement internal function reboot behaviour after FW update
183680	New function	1.1.0.0	1.1.0.0	New diagnostic data points

1.3.2.296 X20IF1041–1

ID	valuation	solved since	known since	Description
400069675	Problem	–	1.1.0.1	CANopen master doesn't write output data to all slaves
240405	New function	1.0.3.0	1.0.2.0	X20 Interface CANopen Master, Configuration of netX cycle time
259320	New function	1.0.2.0	1.0.2.0	Vendor ID changed

1.3.2.297 X20IF1043–1

ID	valuation	solved since	known since	Description
257350	New function	1.0.2.0	1.0.2.0	Vendor ID changed
240710	New function	1.0.2.0	1.0.1.0	X20 Interface CANopen Slave, Configuration of netX cycle time

1.3.2.298 X20IF1051–1

ID	valuation	solved since	known since	Description
257360	New function	1.0.2.0	1.0.2.0	Vendor ID changed
240715	New function	1.0.2.0	1.0.1.0	X20 Interface Device Net Master, Configuration of netX cycle time

1.3.2.299 X20IF1053–1

ID	valuation	solved since	known since	Description
228290	New function	1.0.2.0	–	Vendor ID changed

1.3.2.300 X20IF1061

ID	valuation	solved since	known since	Description
166085	New function	–	1.0.0.0	New HWC File V1.0.0.1
400028140	Problem	1.1.2.0	1.1.2.0	Correct FW for HW variant 0 in upgrade
191310	New function	1.1.1.0	1.1.1.0	Enhancement internal function reboot behaviour after FW update
180485	Problem	1.1.1.0	1.0.0.0	Slave addresses are only allowed up to 32 and not to 126
183685	New function	1.1.0.0	1.1.0.0	New diagnostic data points
175530	New function	1.0.0.1	1.0.0.1	Two IF1061 modules supported on SGC targets

1.3.2.301 X20IF1061–1

ID	valuation	solved since	known since	Description
257410	New function	1.0.2.0	1.0.2.0	Vendor ID changed
240725	New function	1.0.2.0	1.0.1.1	X20 Interface PROFIBUS DP Master, Configuration of netX cycle time

1.3.2.302 X20IF1063

ID	valuation	solved since	known since	Description
400044244	Problem	1.1.3.0	1.1.3.0	Wrong data caused by Long-access if odd address pointer
191320	New function	1.1.2.0	1.1.2.0	Enhancement internal function reboot behaviour after FW update
183690		1.1.1.0	1.1.1.0	New diagnostic data points

	New function			
175900	New function	1.1.0.0	1.1.0.0	Two IF1063 modules supported on SGC targets, corrected FW V3
175535	New function	1.0.0.1	1.0.0.0	Two IF1063 modules supported on SGC targets

1.3.2.303 X20IF1063–1

ID	valuation	solved since	known since	Description
257425	New function	1.0.2.0	1.0.2.0	Vendor ID changed
240730	New function	1.0.2.0	1.0.1.1	X20 Interface PROFIBUS DP Slave, Configuration of netX cycle time

1.3.2.304 X20IF1065

ID	valuation	solved since	known since	Description
191315	New function	1.1.1.0	1.1.1.0	Enhancement internal function reboot behaviour after FW update
183695	New function	1.1.0.0	1.1.0.0	New diagnostic data points
175540	New function	1.0.0.1	1.0.0.0	Two IF1065 modules supported on SGC targets

1.3.2.305 X20IF1072

ID	valuation	solved since	known since	Description
229080	Problem	1.0.3.0	1.0.3.0	CAN transmitter blockade after cable un-/plugged corrected
224475	Problem	1.0.2.0	1.0.2.0	CAN TransmitQueue Reset command corrected
183700	New function	1.0.1.0	1.0.1.0	New diagnostic data points

1.3.2.306 X20IF1082

ID	valuation	solved since	known since	Description
400046576	Problem	–	1.1.9.0	Correction of interchanged LinkOK data points in AS IO mapping
256905	New function	–	1.1.12.1	POWERLINK: LinkOK data point added.
265910	Problem	–	1.1.12.1	POWERLINK V2: If the the Ready-Flag was canceled on the network, the ModuleOK was not cleared.
265865	Problem	–	1.1.12.1	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
256935	Problem	–	1.1.12.1	POWERLINK: The net time is not always transferred correctly to the application.
400057319	Problem	–	1.1.12.1	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
265765	Problem	–	1.1.0.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
163835	Problem	–	1.0.1.0	New Base Firmware V10
205545	New function	1.2.0.2	1.1.12.0	POWERLINK: LinkOK data point added.

220445	Problem	1.1.9.0	1.1.8.0	POWERLINK V2: Boot behavior improved
209995	New function	1.1.8.0	1.1.7.0	CN mode: Various error corrections made.
206920	Problem	1.1.7.0	1.1.6.0	New POWERLINK firmware V45 and basis firmware V15
196605	Problem	1.1.6.0	1.1.5.1	New POWERLINK V1/V2 firmware V44
191760	Problem	1.1.5.1	1.1.4.0	New POWERLINK V1/V2 Firmware V42
185605	Problem	1.1.4.0	1.1.3.0	New POWERLINK V1/V2 firmware V39 and basis firmware V14
182080	Problem	1.1.3.0	1.1.2.0	New POWERLINK V1/V2 firmware V38 and basis firmware V13
182077	New function	1.1.2.0	1.1.2.0	New diagnostic data points
178035	Problem	1.1.2.0	1.1.1.0	New POWERLINK V1/V2 firmware V37 and base firmware V12
230850	Problem	1.1.12.0	1.1.9.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
173345	Problem	1.1.1.0	1.1.0.0	New POWERLINK firmware V36
170740	Problem	1.1.0.0	1.0.5.0	Performance improvement – POWERLINK manager
165855	Problem	1.0.5.0	1.0.4.0	New POWERLINK V1/V2 Firmware V34
165495	Problem	1.0.4.0	1.0.3.0	New POWERLINK V1/V2 Firmware V33
164810	Problem	1.0.3.0	1.0.2.0	New POWERLINK V1/V2 Firmware V31
160765	Problem	1.0.1.0	1.0.0.0	New POWERLINK V1/V2 Firmware V30

1.3.2.307 X20IF1082–2

ID	valuation	solved since	known since	Description
265915	Problem	–	1.0.2.0	POWERLINK V2: If the the Ready–Flag was canceled on the network, the ModuleOK was not cleared.
265870	Problem	–	1.0.2.0	Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network
265770	Problem	–	1.0.2.0	POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.
256945	Problem	–	1.0.2.0	POWERLINK: The net time is not always transferred correctly to the application.
400057319	Problem	–	1.0.2.0	POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.
234660	Problem	1.0.2.0	1.0.1.0	New POWERLINK firmware V106
233570	Problem	1.0.2.0	1.0.1.0	Correction of interchanged LinkOK data points in AS IO mapping
229290	Problem	1.0.1.0	1.0.0.0	POWERLINK V2 chained stations: When stations that have failed are added back into the POWERLINK cycle, active chained stations fail.

1.3.2.308 X20IF1091

ID	valuation	solved since	known since	Description
163860	Problem	–	1.0.0.0	New Firmware V4
240765	New function	1.0.4.0	1.0.4.0	Enhancement Nettime data point
191250	New function	1.0.3.0	1.0.3.0	Operational in X20CP1483, new FW 7; error correction FW update
188500	New function	1.0.2.0	1.0.2.0	Operational in X20CP1483, new FW V6
183705	New function	1.0.1.0	1.0.1.0	New diagnostic data points

1.3.2.309 X20IF1091–1

ID	valuation	solved since	known since	Description
160900	Problem	–	1.0.0.0	New Firmware V32
268025	Problem	1.0.1.0	1.0.1.0	Module not selectable as system timer
240925	New function	1.0.1.0	1.0.1.0	Enhancement Nettime data point

1.3.2.310 X20IF10A1–1

ID	valuation	solved since	known since	Description
250250	New function	1.0.1.0	1.0.1.0	Enhancement english online help for AS

1.3.2.311 X20IF10D1–1

ID	valuation	solved since	known since	Description
268245	Problem	–	1.1.0.0	Input data of Ethernet/IP slaves is no longer being transferred
257440	New function	1.0.2.0	1.0.2.0	Vendor ID changed

1.3.2.312 X20IF10D3–1

ID	valuation	solved since	known since	Description
400059600	Problem	–	–	Ethernet IP communication doesn't work via explicit messaging
257455	New function	1.0.2.0	1.0.2.0	Vendor ID changed

1.3.2.313 X20IF10E1–1

ID	valuation	solved since	known since	Description
257460	New function	1.0.2.0	1.0.2.0	Vendor ID changed
240735	New function	1.0.2.0	1.0.1.1	X20 Interface PROFINET RT Master, Configuration of netX cycle time

1.3.2.314 X20IF10E3–1

ID	valuation	solved since	known since	Description
257465	New function	1.0.2.0	1.0.2.0	Vendor ID changed
240740	New function	1.0.2.0	1.0.1.1	X20 Interface PROFINET RT Slave, Configuration of netX cycle time

1.3.2.315 X20IF2772

ID	valuation	solved since	known since	Description
164925	Problem	–	1.0.1.0	New CAN Firmware V3
163790	Problem	–	1.0.0.0	New Firmware V3
219740	Problem	1.0.4.0	1.0.4.0	TransmitQueue Reset command corrected

191330	New function	1.0.3.0	1.0.3.0	Enhancement internal function reboot behaviour after FW update / correction CP1483
400011120 , 400011629 , 400017023	Projekt	1.0.3.0	1.0.3.0	Correction of the LED assignment
183710	New function	1.0.2.0	1.0.2.0	New diagnostic data points

1.3.2.316 X20IF2792

ID	valuation	solved since	known since	Description
164885	Problem	–	1.0.0.0	New Firmware V6
229090	Problem	1.0.3.0	1.0.3.0	CAN transmitter blockade after cable un-/plugged corrected
224465	Problem	1.0.2.0	1.0.2.0	CAN TransmitQueue Reset command corrected
183715	New function	1.0.1.0	1.0.1.0	New diagnostic data points

1.3.2.317 X20MM2436

ID	valuation	solved since	known since	Description
182305	Problem	–	V2.7.0.0007	Module can be inserted on SGC CPU's
400062572	Problem	–	–	MM2436 Slow Decay mode switch off the outputs

1.3.2.318 X20MM3332

ID	valuation	solved since	known since	Description
243190	Problem	–	–	Customer-specific expansion of hardware description file

1.3.2.319 X20MM4331

ID	valuation	solved since	known since	Description
243195	Problem	–	–	Customer-specific expansion of hardware description file

1.3.2.320 X20MM4456

ID	valuation	solved since	known since	Description
243200	Problem	–	–	Customer-specific expansion of hardware description file
400064834	Problem	–	–	The incremental counters of X20MM4456 can be reset
400057091	Problem	–	–	Support for operation with bus coupler
245845	Problem	–	–	Customer-specific expansion of hardware description file
400049478	Problem	–	–	The module doesn't report an overtemperature error at low ambient temperatures (7–10°C)
233790	Problem	–	–	Dither function works now also at lower frequencys and lower PWM duration without problems
204675	Problem	–	–	At modules with revision <=A6 the offset from the current measurement was corrected

1.3.2.321 X20PS2100

ID	valuation	solved since	known since	Description
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227885	New function	–	1.0.1.0	Extension in IO–Mapping for SG3 CanIO
400061307	Problem	1.0.2.0	1.0.2.0	Error correction in Channel description

1.3.2.322 X20PS2110

ID	valuation	solved since	known since	Description
227890	New function	–	1.0.1.1	Extension in IO–Mapping for SG3 CanIO
400061307	Problem	1.0.2.0	1.0.2.0	Error correction in channel description
176385	Problem	1.0.0.1	1.0.0.1	Correction HWC display of data point "SupplyVoltage" on Powerlink–BC

1.3.2.323 X20PS3300

ID	valuation	solved since	known since	Description
400061307	Problem	1.0.1.0	1.0.1.0	Error correction in channel description

1.3.2.324 X20PS4951

ID	valuation	solved since	known since	Description
220565	New function	1.0.1.0	1.0.1.0	New HW–variant to inhibit downgrades

1.3.2.325 X20PS9400

ID	valuation	solved since	known since	Description
400061307	Problem	1.0.1.0	1.0.1.0	Error correction in channel description

1.3.2.326 X20SC2432

ID	valuation	solved since	known since	Description
225435	New function	1.3.0.96	1.2.1.0	Safety Release 1.4
221540	Problem	1.2.0.90	1.2.0.0	Pulse_Mode "external": automatic increment of "Filter_off_us"
219630	Problem	1.2.0.90	1.2.0.0	erroneous discrepancy time error message
213430	Problem	1.2.0.3	1.2.0.0	changes in HWC

1.3.2.327 X20SI2100

ID	valuation	solved since	known since	Description
180810	New function	–	1.1.1.0	see history of module X20SI4100
163785	New function	–	1.0.0.0	First official Release

1.3.2.328 X20SI4100

ID	valuation	solved since	known since	Description
163865		–	1.0.0.0	first official release

	New function			
225420	New function	1.3.0.96	–	Safety Release 1.4
400034966	Problem	1.2.0.90	1.2.0.0	erroneous discrepancy time error message
210370	Problem	1.2.0.90	1.1.96.0	Pulse_Mode "external": automatic increment of "Filter_off_us"
217720	Problem	1.2.0.3	1.2.0.0	changes in HWC
168365	Problem	1.1.4.0	–	solved sporadic firmware update problems
180045	New function	1.1.3.0	1.1.1.0	enhancements HWC

1.3.2.329 X20SI9100

ID	valuation	solved since	known since	Description
400056193	Problem	1.4.0.0	V3.00.81.18	Projects with hardware modules that contain µ in their channel descriptions can not be build in the Chinese version of Windows.

1.3.2.330 X20SL8000

ID	valuation	solved since	known since	Description
180900	New function	–	1.0.0.0	first official release

1.3.2.331 X20SL8001

ID	valuation	solved since	known since	Description
400017890	Problem	–	–	operation in cold environment
400008746	Problem	–	–	synchronous module startup
226755	New function	–	1.3.0.0	Download application from functional CPU
400034396	Problem	–	1.2.0.3	reset after SafeKEY format
186245	New function	–	1.1.3.0	extended diagnostics
198515	Problem	–	1.1.3.0	provide temperature
400008745	Problem	–	1.1.2.0	startup synchronisation SL / AR
180905	New function	–	1.0.0.0	first official release
251380	Problem	1.4.1.1	–	SL-to-SL connection
245315	Problem	1.4.0.1	1.3.0.97	sporadic reset problems
400041388	New function	1.3.0.108	1.3.0.0	format SafeKEY via operating elements
226760	New function	1.3.0.106	–	operate SL via EPL and additional logger entries.
225445	New function	1.3.0.106	–	improvements logger entries
219960	New function	1.3.0.106	–	external machine options
400043442, 400041050	Problem	1.3.0.106	1.3.0.0	Error "Unexpected FSM event (00) occurred."
176990	New function	1.3.0.105	–	SafeKEY-LED was not activated for LED test.
248160	Problem	1.3.0.105	1.3.0.102	Problems when using new AR version in application with a

				lot of powerlink nodes.
223460	Problem	1.3.0.105	1.2.0.3	online communication through B&R-CPU
240700	Problem	1.3.0.105	–	Failsafe after reset
217100	Problem	1.3.0.0	1.2.0.0	SafeKEY acknowledge after firmware update
212694	Problem	1.2.0.3	V02.70.2.4.250	changes in HWC
177345	Problem	1.2.0.3	–	'Authorisation' did not work
400030666	Information	1.2.0.1	1.1.1.0	problems with SO modules in projects with a large amount of safety modules
400011831	Problem	1.1.98.0	–	error "number of erroneous modules becomes negative"
400019724	Problem	1.1.98.0	1.1.3.0	no connection to SafeLOGIC
176055	Problem	1.1.98.0	1.1.3.0	no logger entry if SafeKEY missing
207515	New function	1.1.98.0	1.1.3.0	flashing of FAIL-LEDs in case of debug mode
207505	New function	1.1.98.0	1.1.3.0	increased number of machine options
207500	New function	1.1.98.0	1.1.3.0	SL is not resetted anymore
400013470	New function	1.1.98.0	1.1.3.0	additional channels to/from CPU
185125	New function	1.1.98.0	1.1.3.0	faster starting of safety modules
400012016	Problem	1.1.98.0	1.1.2.0	enhanced boot behaviour of safety application
181250	Problem	1.1.98.0	1.1.2.0	logger entries 122896 and 122895
176350	Problem	1.1.98.0	1.0.1.0	improved diagnostics for connection problems
182530	New function	1.1.3.0	1.1.2.0	firmware supports hardware Rev. B0

1.3.2.332 X20SL8010

ID	valuation	solved since	known since	Description
212880	New function	–	1.0.0.0	first official release

1.3.2.333 X20SL8011

ID	valuation	solved since	known since	Description
212885	New function	–	1.0.0.0	first official release
223130	New function	1.3.0.0	1.2.0.0	Support SafeMC

1.3.2.334 X20SM1426

ID	valuation	solved since	known since	Description
243210	Problem	–	–	Customer-specific expansion of hardware description file
201710	New function	–	–	ABR-Counter can be displayed parallel to step-counter in I/O mapping
160485	New function	–	–	Current limit was changed at module X20SM1426
245855	Problem	–	–	Customer-specific expansion of hardware description file

1.3.2.335 X20SM1436

ID	valuation	solved since	known since	Description
267990	Problem	–	–	The X20SM1436 doesn't switch in switched on with a customer motor at ramp mode.
400014309	Problem	–	–	Threshold value for module overtemperature corrected
267135	Problem	–	–	Problem with the endswitch–reset at ramp mode.

1.3.2.336 X20SO2110

ID	valuation	solved since	known since	Description
180850	New function	–	1.1.2.0	see history of module X20SO4120
179300	New function	–	1.0.0.0	first official release

1.3.2.337 X20SO2120

ID	valuation	solved since	known since	Description
180845	New function	–	1.1.2.0	see history of module X20SO4120
179305	New function	–	1.0.0.0	first official release

1.3.2.338 X20SO4110

ID	valuation	solved since	known since	Description
180835	New function	–	1.1.2.0	see history of module X20SO4120
179315	New function	–	1.0.0.0	first official release

1.3.2.339 X20SO4120

ID	valuation	solved since	known since	Description
179325	New function	–	1.0.0.0	first official release
225425	New function	1.3.0.94	1.2.0.3	Safety Release 1.4
213410	Problem	1.2.0.3	1.2.0.0	changes in HWC
191000	Problem	1.1.5.0	1.1.3.0	Problems with PhysicalStateChannel
183545	Problem	1.1.4.0	–	solved sporadic firmware update problems
182430	New function	1.1.3.0	1.1.1.0	enhancements HWC

1.3.2.340 X20XC0201

ID	valuation	solved since	known since	Description
163760	Problem	–	1.0.0.0	New Firmware V21

1.3.2.341 X20XC0202

ID	valuation	solved since	known since	Description
163750	Problem	–	1.0.0.0	New Firmware V21

1.3.2.342 X67AI1323

ID	valuation	solved since	known since	Description
216035	New function	1.0.1.0	1.0.1.0	Support of asynchronous module status data points

1.3.2.343 X67AI2744

ID	valuation	solved since	known since	Description
164430	New function	–	–	Support of bus coupler implemented

1.3.2.344 X67AI4850

ID	valuation	solved since	known since	Description
169935	New function	–	–	DC–OK datapoint added
400022853	Problem	–	–	Possible jumps at the analog inputs couldn't appear again

1.3.2.345 X67AT1322

ID	valuation	solved since	known since	Description
400060234	Problem	1.0.0.1	1.0.0.1	Status input channel description corrected for SGC targets

1.3.2.346 X67AT1402

ID	valuation	solved since	known since	Description
213860	Problem	1.0.1.0	1.0.1.0	Support of sensor type R
216075	New function	1.0.1.0	1.0.0.0	Support of asynchronous module status data points

1.3.2.347 X67BC8321.L12

ID	valuation	solved since	known since	Description
246365	Problem	1.2.1.0	–	DNA support; Update behavior on X2X bus of the BC improved
400052241	Problem	1.0.1.0	1.0.1.0	Correction of X67BCOnboard Compatible Code
238900	New function	1.0.1.0	1.0.1.0	Extensions

1.3.2.348 X67BC8321–1

ID	valuation	solved since	known since	Description
164670	New function	–	1.0.0.0	Extensions

400031208 , 400032412 , 400032783	Problem	1.2.0.0	V2.7.0.0017 SP10	Correct display of local I/O module in HW-tree
246660	Problem	1.2.0.0	–	DNA support; Update behavior on X2X bus of the BC improved
209590	New function	1.0.3.0	–	Extensions and Bugfixes
173300	New function	1.0.3.0	–	Extensions and Bugfixes
183395	Problem	1.0.3.0	1.0.3.0	New info-/diagnostic data points, new FW 1.41 for signal filter and corrections
160527	New function	1.0.3.0	1.0.3.0	New info-/diagnostic data points, new FW 1.41 for signal filter and corrections

1.3.2.349 X67BC8331

ID	valuation	solved since	known since	Description
246690	Problem	1.2.0.0	–	DNA support; Update behavior on X2X bus of the BC improved
209765	New function	1.0.3.0	–	Extensions and Bugfixes

1.3.2.350 X67BC8513.L12

ID	valuation	solved since	known since	Description
228415	New function	–	–	Support X67BC8513.L12

1.3.2.351 X67BCJ321

ID	valuation	solved since	known since	Description
233020	New function	1.0.0.2	1.0.1.0	Support for latch function added

1.3.2.352 X67DC1198

ID	valuation	solved since	known since	Description
237195	New function	–	–	Customer-specific expansion of hardware description file
400055350	Problem	1.0.3.1	1.0.3.1	Enhancement length check of I/O block size during Build
197310	Problem	1.0.2.0	1.0.2.0	Comparator problem corrected. ATTENTION :: incompatibility at window margin
177490	New function	1.0.1.0	1.0.1.0	Enhancement SSI encoder configuration and position latch, correction internal communication
163715	Problem	1.0.1.0	1.0.0.0	New Firmware V9

1.3.2.353 X67DC2322

ID	valuation	solved since	known since	Description
400050103	Problem	–	–	Under certain conditions the resolver channel 2 doesn't work after restart

1.3.2.354 X67DI1371.L08

ID	valuation	solved since	known since	Description
220580	New function	1.0.0.1	1.0.0.1	New HW-variant to inhibit downgrades

1.3.2.355 X67DI1371.L12

ID	valuation	solved since	known since	Description
220570	New function	1.0.0.1	1.0.0.1	New HW-variant to inhibit downgrades

1.3.2.356 X67DM1321

ID	valuation	solved since	known since	Description
232835	New function	1.0.1.0	1.0.1.1	Support for latch function added
216150	New function	1.0.1.0	1.0.1.0	Support of asynchronous module status data points

1.3.2.357 X67DM1321.L08

ID	valuation	solved since	known since	Description
400048373	Problem	1.1.0.0	1.1.0.0	Correction of X67BCOnboard Compatible Codes to X67BCOnboardL08
232855	New function	1.0.2.1	1.0.2.1	Support for latch function added
216155	New function	1.0.2.0	1.0.2.0	Support of asynchronous module status data points

1.3.2.358 X67DM1321.L12

ID	valuation	solved since	known since	Description
242860	Problem	1.1.1.0	1.1.1.0	Correction of X67BCOnboard Compatible Code
239470	Problem	1.1.0.0	1.1.0.0	Correction of X67BCOnboard Compatible Codes to X67BCOnboardL12
232865	New function	1.0.3.2	1.0.3.2	Support for latch function added
231235	Problem	1.0.3.1	1.0.3.1	Problem with CanIO CPU in FieldbusDESIGNER corrected
216160	New function	1.0.2.0	1.0.3.0	Support of asynchronous module status data points
209550	Problem	1.0.2.0	1.0.2.0	CompatibleCode added

1.3.2.359 X67DM9321

ID	valuation	solved since	known since	Description
232880	New function	1.0.1.2	1.0.1.2	Support for latch function added
231255	Problem	1.0.1.1	1.0.1.1	Problem with CanIO CPU in FieldbusDESIGNER corrected
216165	New function	1.0.1.0	1.0.1.0	Support of asynchronous module status data points

1.3.2.360 X67DM9321.L12

ID	valuation	solved since	known since	Description
232885	New function	1.0.0.2	1.0.0.2	Support for latch function added
231250	Problem	1.0.0.1	1.0.0.1	Problem with CanIO CPU in FieldbusDESIGNER corrected

1.3.2.361 X67DM9331.L12

ID	valuation	solved since	known since	Description
231230	Problem	1.0.0.1	1.0.0.1	Problem with CanIO CPU in FieldbusDESIGNER corrected

1.3.2.362 X67DV1311.L08

ID	valuation	solved since	known since	Description
216190	New function	1.0.1.0	1.0.1.0	Support of asynchronous module status data points

1.3.2.363 X67MM2436

ID	valuation	solved since	known since	Description
177375	Problem	–	V2.6.0.0012 SP02	HWC file has to be better documented
400069673	Problem	–	–	X67MM2436 on CANIO Controller leads to malfunction of subsequent modules → Repair by means of correction of erroneous HWC–entry

1.3.2.364 X67SC4122.L12

ID	valuation	solved since	known since	Description
261780	Problem – sicherheitskritisch	–	1.40	Increase of minimum load to 12mA
235610	Problem	1.3.1.95	1.3.1.0	Safety Release 1.4
213650	New function	1.3.1.0	–	first official release

1.3.2.365 X67SM2436

ID	valuation	solved since	known since	Description
256440	Problem	–	–	Modul informations were not longer shown
255900	Problem	–	–	Customer–specific expansion of hardware description file
400043902	Problem	–	–	X67SM2436 changes without problems in the "Switched On" state
400013731	Problem	–	–	From the revision 1.0.0.2 the Functionmodel Ramp works on SGC

1.3.2.366 X67SM4320

ID	valuation	solved since	known since	Description
164490	New function	–	–	Firmware for the module added
400057799	Problem	–	–	X67SM4320 works on SGC–CPU
194030	Problem	–	–	

				Correction: Reference on stall works also with HW Rev >= B5 of X67SM4320
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1.3.2.367 X67UM4389

ID	valuation	solved since	known since	Description
400015012	Problem	–	–	Correction of the Power-Up procedure

1.3.2.368 X67UM6342

ID	valuation	solved since	known since	Description
263095	Problem	–	nicht relevant	implementation of do readback

1.3.3 Requests and problems by product/component

1.3.3.1 1A4600.00 Automation Runtime ARsim

1.3.3.1.1 Hardware

ID#400011094 : new function planned for 1.0.0.2

Serial interfaces can be deactivated

ID#189670 : new function planned for 1.0.0.1

ARNC0 support

1.3.3.2 1A4000.02 Automation Studio 2x

1.3.3.2.1 Languages

ID#400056581 : solved problem, known since V2.7.0.0020 SP13, solved since V3.00.81.26 SP0x

Recursion when using a field variable in CheckBounds

Using a local field variable in the CheckBounds function causes an unintended recursion and subsequently a cold restart.

ID#400056581 : solved problem, known since V2.7.0.0020 SP13, solved since V3.00.90.07

Recursion when using a field variable in CheckBounds

Using a local field variable in the CheckBounds function causes an unintended recursion and subsequently a cold restart.

1.3.3.2.2 Workspace – Hardware Configuration

ID#400068078 : solved problem, known since V2.7.0.0020 SP13, solved since V3.00.90.12

Unable to enter parameters for the Profibus master modules

The hardware configuration no longer offers access to the settings of the Profibus master modules (3NW150.60–1, 2NW100.50–1) for SG3. The corresponding tab is not visible.

ID#400068078 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.81.29 SP0x

Unable to enter parameters for the Profibus master modules

The hardware configuration no longer offers access to the settings of the Profibus master modules (3NW150.60–1, 2NW100.50–1) for SG3. The corresponding tab is not visible.

1.3.3.3 1A4000.02 Motion Components

1.3.3.3.1 Motion Components

ID#400063641 : solved problem, known since V3.00.90.09, solved since V3.00.90.11

ACOPOS parameter tables are not completely converted from AS 2.x to AS 3.x

If an ACOPOS parameter table contains characters such as "Ä", "Ö" or "Ü", then the is only converted to AS 3.x up until these characters. The remaining characters are not converted from AS 2.x to AS 3.x.

1.3.3.3.2 NC Software – ACP10 Wichtige Information

ID#264882 : Important Information

ACOPOSMulti 8BVx0xx0HxSx.000–1: Increased thermal load on components in the power supply for IGBT driver circuits (only in V2.250, V2.260, V2.261, V2.262, V2.263, V2.270, V2.271 and V2.280)

In ACOPOSMulti modules 8BVI0220HxSx.000–1, 8BVI0330HxSx.000–1, 8BVI0440HxSx.000–1, 8BVI0880HxSx.000–1, 8BVI0220HWS0.001–1, 8BVI0440HCS0.001–1, 8BVI0880HCS0.001–1, 8BVP0220Hx00.000–1, 8BVP0440Hx00.000–1, 8BVP0880Hx00.000–1 using the versions listed above increases the thermal load on components in the power supply for IGBT driver circuits. This can cause an error message or even a defect in the module hardware. The modules also display a significant increase in 24V power consumption.

The defect of an ACOPOSMulti module caused by the problem described above can lead to the following errors:

- 6045: Power stage: X5 connection: No power flow
- 6052: Power stage: High-side: Overcurrent
- 6053: Power stage: Low-side: Overcurrent

When using inverter modules, this can cause the motor to spin out. When using power supply modules, this can cause the fuses connected upstream to be triggered.

Note:

If there is no defect of an ACOPOSMulti module, then it is only necessary to upgrade to an ACP10 software version in which the problem has been corrected. No other measures are necessary.

ID#262092 : Important Information

SG4 target system, POWERLINK: Task class as output cycle trigger is possible with ACP10 software from V2.280 on

In Automation Studio V3.0.90 with AR versions from V3.08 on, in the POWERLINK configuration a task class can be selected as output cycle trigger (by default the output cycle trigger is carried out by the system tick). This selection is supported in ACP10 software starting with V2.280. In versions before V2.280, selecting a task class as output cycle trigger will cause the ACOPOS startup to be aborted with the following error:

- 32223: Error calling pIGetNodeInfo(), Status of pIGetNodeInfo(): 20935

ID#256222 : Important Information

SG4 target system, POWERLINK: SDM Motion is supported from ACP10 Software V2.270 on

With Automation Studio V3.0.90 and AR versions from V3.08 on, Motion functions are available in the SDM (System Diagnostics Manager).

These functions are supported from ACP10 Software V2.270 on.

ID#235337 : Important Information

SG4 target system, POWERLINK: PDO errors with certain AR versions

The following error can occur if ACP10 software for POWERLINK is used for ACOPOS with 8AC114.60-2 with AR version F3.01:

- 32244: No PDO defined in the cyclic frame for this channel: NC object is disabled

If this error occurs with AR version F3.01, then another AR version must be used.

The following errors can occur if V2.090 or later of ACP10 software for Powerlink is used with AR versions H2.95 – K2.95 for SG4:

Error calling naccess() or nalloc():

- 10712: This NC object is not enabled (channel number too high or no PDO data defined)

Error in NC structure of the NC objects:

- 32244: No PDO defined in the cyclic frame for this channel: NC object is disabled

If the errors listed above occur, then an AR version earlier than H2.95 or later than K2.95 must be used.

ID#233467 : Important Information

SG4 target system: ACP10 software versions for different AR versions

For AR versions A3.08 or higher only the ACP10 versions V2.220 or higher can be used.

ACP10 software versions V2.210 or higher can be used only with AR versions V2.82 or higher. If an ACP10 software version V2.210 or higher is used with AR versions before V2.82, then "ACP10MAN: SG4 AR <V2.82" will be entered in the AR logger and the initialization of ACP10 software will be aborted.

For AR versions before V2.82 only the ACP10 software versions before V2.210 can be used.

ID#173492 : Important Information

SGC target system: ACP10 software versions for different AR versions

ACP10 software versions V2.190 or higher must be used for AR versions V2.30 and higher (otherwise global PVs cannot be used as NC object).

If an ACP10 software version V2.190 or higher is used with AR versions before V2.30, then "ACP10MAN: SGC AR <V2.30" will be entered in the AR logger and the initialization of ACP10 software will be aborted.

ACP10 software versions V2.050 or higher must be used for AR versions E2.00 and higher.

If an ACP10 software version V2.050 or higher is used with AR versions before E2.00, then "ACP10MAN: SGC AR < E2.00" will be entered in the AR logger and the initialization of ACP10 software will be aborted.

ACP10 software versions V2.000 – V2.033 must be used for AR versions before A2.00.

If an ACP10 software version V2.034 or higher is used for AR versions before A2.00, then "ACP10MAN: SGC AR < A2.00" will be entered in the AR logger.

IMPORTANT:

ACP10 software versions V2.034 – V2.043 with AR versions A2.00 – D2.00 must not longer be

used for SGC target systems.

1.3.3.3.3 NC Software – ACP10 V2.282

ID# 400069466, 400071137, 400071148 : solved problem, solved since V2.282

Induction motor: Error 4007 when turning on the controller (only in V2.270 – V2.281)

An increased lag error can occur briefly on induction motors when turning on the controller if, after the motor parameters have been set, the value of the parameter UDC_NOMINAL or UDC_BLEEDER_ON has changed or UDC_NOMINAL has been newly detected (e.g.: after a power failure or after boosting the DC bus voltage). This can result in the following error:

- 4007: Lag error stop limit exceeded

1.3.3.3.4 NC Software – ACP10 V2.281

ID#264765 : solved problem, solved since V2.281

ACOPOSMulti 8BVx0xx0HxSx.000–1: Increased thermal load on components in the power supply for IGBT driver circuits (only in V2.250, V2.260, V2.261, V2.262, V2.263, V2.270, V2.271 and V2.280)

In ACOPOSMulti modules 8BVI0220HxSx.000–1, 8BVI0330HxSx.000–1, 8BVI0440HxSx.000–1, 8BVI0880HxSx.000–1, 8BVI0220HWS0.001–1, 8BVI0440HCS0.001–1, 8BVI0880HCS0.001–1, 8BVP0220Hx00.000–1, 8BVP0440Hx00.000–1, 8BVP0880Hx00.000–1 using the versions listed above increases the thermal load on components in the power supply for IGBT driver circuits. This can cause an error message or even a defect in the module hardware. The modules also display a significant increase in 24V power consumption.

The defect of an ACOPOSMulti module caused by the problem described above can lead to the following errors:

- 6045: Power stage: X5 connection: No power flow
- 6052: Power stage: High-side: Overcurrent
- 6053: Power stage: Low-side: Overcurrent

When using inverter modules, this can cause the motor to spin out. When using power supply modules, this can cause the fuses connected upstream to be triggered.

Note:

If there is no defect of an ACOPOSMulti module, then it is only necessary to upgrade to an ACP10 software version in which the problem has been corrected. No other measures are necessary.

ID#264640 : solved problem, solved since V2.281

8BVIxxxxxSx.xxx–x: IGBT temperature sensor inputs were not monitored (only in V2.250 – V2.263, V2.270, V2.271 and V2.280)

Only one temperature sensor was monitored on ACOPOSMulti inverter modules with three temperature sensors (e.g.: 8BVIxx0660Sx.xxx–x, 8BVIxx0880Sx.xxx–x, 8BVIxx1650Sx.xxx–x). This can damage the IGBT if strong currents occur during standstill.

ID#400070266 : solved problem, solved since V2.281

CAN network error 6002 when using cyclic user data or master/slave network coupling

With CAN networks the use of cyclic user data or master/slave network coupling could lead to errors in the drive synchronization.

The following error was displayed:

- 6002: Sync controller: Error tolerance of system time difference exceeded

1.3.3.3.5 NC Software – ACP10 V2.280

ID#262707 : solved problem, solved since V2.280

Warnings 39003 and 39006 when using Heidenhain EBI encoders

When using Heidenhain EBI encoders, in operation sometimes the following warnings were indicated:

- 39003: EnDat encoder: Alarm bit is set
- 39006: EnDat encoder: Alarm bit – Position value contains an error

It is rarely possible even now that this warnings were indicated after ACOPOS startup . In this case the encoder error has to be cleared by setting "ENCOD_CMD = 1".

ID#400066732 : solved problem, solved since V2.280

ACOPOSMulti with SafeMC: The errors 33002, 6058 and 6059 were falsely indicated

Using large values for the load scale (SCALE_LOAD_UNITS, SCALE_LOAD_MOTOR_REV) could cause incorrect set position values to be transferred the to SafeMC module. This error activated the STO safety function if safety related monitoring of the position lag error was switched on. This then caused the following errors to be indicated:

- 33002: Floating-Point exception
- 6058: Enable1: Voltage sag
- 6059: Enable2: Voltage sag

ID#258967 : solved problem, solved since V2.280

ACOPOS 8V1xxxx.xx-2: Start-up error, if multiple 8AC122.60-3 cards are plugged

Starting with version V2.240, the following occurred when using two or more AC122.60-3 cards in an ACOPOS:

- 6032: Interface: FPGA configuration error

With versions before V2.271 in this case not the error 6032 was indicated, but the ACOPOS startup was aborted with one of the following errors, because after start of the operating system with "CMD_BOOT_STATE = 24" no response on read request for "BOOT_STATE" could be received:

POWERLINK:

- 32204: Timeout while reading par. via acyclic channel (is the drive in the network ?)

CAN:

- 32010: Drive not responding to Read Request (is the drive in the network ?)

ID#400063297 : new function since V2.280

SG4 target system, POWERLINK, Coupling of axes on different networks: Unequal cycle times are now possible

Until now, coupling of axes on different networks was only possible if the following cycle times were equal:

- Cycle time of the NC Manager task class
- POWERLINK cycle time (if master or slave are operated via POWERLINK network)

From now on, coupling of axes on different networks is also possible with unequal cycle times if the following conditions are fulfilled:

- The cycle time of the slave network interface is equal to the cycle time of the NC Manager task class
- The cycle time of the slave network interface is greater or equal to the cycle time of the master network interface
- The ratio of the cycle times of slave and master network interface is integral

If one of the conditions specified above is not fulfilled, the following error is indicated:

- 32282: Network coupling: Incompatible cycle times (network interfaces, NC task class)

1.3.3.3.6 NC Software – ACP10 V2.272

ID#264872 : solved problem, solved since V2.272

ACOPOSMulti 8BVx0xx0HxSx.000–1: Increased thermal load on components in the power supply for IGBT driver circuits (only in V2.250, V2.260, V2.261, V2.262, V2.263, V2.270, V2.271 and V2.280)

In ACOPOSMulti modules 8BVI0220HxSx.000–1, 8BVI0330HxSx.000–1, 8BVI0440HxSx.000–1, 8BVI0880HxSx.000–1, 8BVI0220HWS0.001–1, 8BVI0440HCS0.001–1, 8BVI0880HCS0.001–1, 8BVP0220Hx00.000–1, 8BVP0440Hx00.000–1, 8BVP0880Hx00.000–1 using the versions listed above increases the thermal load on components in the power supply for IGBT driver circuits. This can cause an error message or even a defect in the module hardware. The modules also display a significant increase in 24V power consumption.

The defect of an ACOPOSMulti module caused by the problem described above can lead to the following errors:

- 6045: Power stage: X5 connection: No power flow
- 6052: Power stage: High–side: Overcurrent
- 6053: Power stage: Low–side: Overcurrent

When using inverter modules, this can cause the motor to spin out. When using power supply modules, this can cause the fuses connected upstream to be triggered.

Note:

If there is no defect of an ACOPOSMulti module, then it is only necessary to upgrade to an ACP10 software version in which the problem has been corrected. No other measures are necessary.

ID#264842 : solved problem, solved since V2.272

8BVIxxxxxxSx.xxx–x: IGBT temperature sensor inputs were not monitored (only in V2.250 – V2.263, V2.270, V2.271 and V2.280)

Only one temperature sensor was monitored on ACOPOSMulti inverter modules with three temperature sensors (e.g.: 8BVIxx0660Sx.xxx–x, 8BVIxx0880Sx.xxx–x, 8BVIxx1650Sx.xxx–x). This can damage the IGBT if strong currents occur during standstill.

1.3.3.3.7 NC Software – ACP10 V2.271

ID#259480 : solved problem, solved since V2.271

ACOPOSMulti: Temperature sensor inputs supplied invalid values (only in V2.250 – V2.263, V2.270)

8BVPxxxxxxxxx.xxx–x:

The temperature sensor inputs on encoder plug–in module 2 and on the X1 plug supplied invalid values.

8BVIxxxxxxSx.xxx–x:

The temperature sensor input on encoder plug–in module 2 supplied invalid values.

ID#400065447 : solved problem, solved since V2.271

POWERLINK, ACOPOS 8V1xxxx.xx-2, ACOPOS startup: Error 32204 after start of operating system (only in V2.230 – V2.270)

During the ACOPOS startup function, communication to ACOPOS modules 8V1xxxx.xx-2 must be re-established after the operating system has been started with "CMD_BOOT_STATE = 24". If the ACOPOS contains plug-in modules, which cause a longer boot procedure (e.g. 8AC122.60-3), then the ACOPOS startup was sometimes falsely aborted in this phase with the following error:

- 32204: Timeout while reading par. via acyclic channel (is the drive in the network ?)

1.3.3.3.8 NC Software – ACP10 V2.270

ID#248555 : solved problem, solved since V2.270

8B0Pxxxxxxxx.xxx-x: Braking resistor temperature model: The calculated temperature TEMP_BLEEDER was too low

If braking resistors (e.g.: 8B0Wxxxxxxxx.xxx-x) were operated on 8B0Pxxxxxxxx.xxx-x modules, then the braking resistor temperature model indicated a TEMP_BLEEDER temperature that was up to 2x too low. This made it possible to put a load on the braking resistors that was beyond the specification.

If the braking resistor used was not dimensioned correctly, then one of the following messages could be displayed due to error correction:

- 41041: Bleeder temperature model: Over-temperature
- 9040: Bleeder temperature model: Over-temperature – Movement stop

If the braking resistors with the product ID 8B0Wxxxxxxxx.xxx-x are used and the warning or error mentioned above occurs, then the messages can be avoided in V2.270 and higher by using pre-initialized parameter groups. This can be done by adding the parameter groups "8B0Wxxxxxxxx.xxx-x" to an ACOPOS parameter table in Automation Studio in V2.270 and higher.

IMPORTANT:

Using these parameter groups in a version older than V2.270 can result in loads being placed on the braking resistors that are beyond the specification.

ID#256172 : new function since V2.270

SG4 target system, POWERLINK: Determination of ACOPOS hardware information

For determination of ACOPOS hardware information the new NC action "ncSERVICE,ncACOPOS_INFO" is offered for NC objects with type "ncAXIS" and "ncV_AXIS". Before calling this NC action the address of a variable with data type "ACP10HWINFO_typ" must be entered in "network.service.data_adr". After call of this NC action the ACOPOS hardware information is copied into this variable.

The following information is offered for ACOPOS module, plug-in cards and motors:

- Model number
- Serial number
- Revision

ID#253492 : new function since V2.270

Deceleration ramp after occurrence of a drive error: New mode "ncCTRL_OFF"

With "move.stop.drive_error.decel_ramp = ncCTRL_OFF" after occurrence of a drive error the power section will be switched off immediately (the drive has no electrical torque).

ID# 400048696, 400063943 : new function since V2.270

New NC actions for the Basic Network Initialization

For the NC object with type "ncNET_GLOBAL" the new NC actions mentioned below are offered to trigger the for Basic Network Initialization (function for collective startup of all ACOPOS modules which are configured).

ncNETWORK, ncINIT: Collective network initialization without reset

The ACOPOS startup is carried out only for those ACOPOS modules, for which the cyclic network communication is not active.

ncNETWORK, ncINIT+ncRESET: Collective network initialization with reset

The ACOPOS startup is carried out for all ACOPOS modules. For those ACOPOS modules, for which the cyclic network communication is active, a reset is applied.

ID#258772 : solved problem, solved since V2.270

Field weakening characteristic curve for permanent magnet synchronous motors can be incorrectly configured

The field weakening characteristic curve for permanently excited synchronous motors will be incorrectly initialized
if the DC bus voltage is changed after the motor parameters have been set.

ID#254925 : solved problem, solved since V2.270

8B0Pxxxxxxx.xxx-x: Error number 7217 was mistakenly reported. (only in V2.230 – V2.269)

The following error could be mistakenly reported if a braking resistor with a resistance value greater than 150 ohms was connected to a passive power supply module.

– 7227: Bleeder: Overcurrent

ID#400062284 : solved problem, solved since V2.270

80Vxxxxxx.xxx-xx: Error number 7217 was mistakenly reported.

The following error was mistakenly reported if the parameter PHASE_MON_IGNORE was set to the value 1 and the DC bus voltage UDC_FILTER was higher than 80V:

– 7217: DC bus: Nominal voltage detection: Voltage too high

1.3.3.3.9 NC Software – ACP10 V2.264

ID#264877 : solved problem, solved since V2.264

ACOPOSMulti 8BVx0xx0HxSx.000–1: Increased thermal load on components in the power supply for IGBT driver circuits (only in V2.250, V2.260, V2.261, V2.262, V2.263, V2.270, V2.271 and V2.280)

In ACOPOSMulti modules 8BVI0220HxSx.000–1, 8BVI0330HxSx.000–1, 8BVI0440HxSx.000–1, 8BVI0880HxSx.000–1, 8BVI0220HWS0.001–1, 8BVI0440HCS0.001–1, 8BVI0880HCS0.001–1, 8BVP0220Hx00.000–1, 8BVP0440Hx00.000–1, 8BVP0880Hx00.000–1 using the versions listed above increases the thermal load on components in the power supply for IGBT driver circuits. This can cause an error message or even a defect in the module hardware. The modules also display a significant increase in 24V power consumption.

The defect of an ACOPOSmulti module caused by the problem described above can lead to the following errors:

- 6045: Power stage: X5 connection: No power flow
- 6052: Power stage: High-side: Overcurrent
- 6053: Power stage: Low-side: Overcurrent

When using inverter modules, this can cause the motor to spin out. When using power supply modules, this can cause the fuses connected upstream to be triggered.

Note:

If there is no defect of an ACOPOSmulti module, then it is only necessary to upgrade to an ACP10 software version in which the problem has been corrected. No other measures are necessary.

ID#264847 : solved problem, solved since V2.264

8BVIxxxxxxSx.xxx-x: IGBT temperature sensor inputs were not monitored (only in V2.250 – V2.263, V2.270, V2.271 and V2.280)

Only one temperature sensor was monitored on ACOPOSmulti inverter modules with three temperature sensors (e.g.: 8BVIxx0660Sx.xxx-x, 8BVIxx0880Sx.xxx-x, 8BVIxx1650Sx.xxx-x). This can damage the IGBT if strong currents occur during standstill.

ID#264837 : solved problem, solved since V2.264

ACOPOSmulti: Temperature sensor inputs supplied invalid values (only in V2.250 – V2.263, V2.270)

8BVPxxxxxxxx.xxx-x:

The temperature sensor inputs on encoder plug-in module 2 and on the X1 plug supplied invalid values.

8BVIxxxxxxSx.xxx-x:

The temperature sensor input on encoder plug-in module 2 supplied invalid values.

1.3.3.3.10 NC Software – ACP10 V2.263

ID#255007 : solved problem, solved since V2.263

8AC125.60-1: Error 7100 during startup (only in V2.260 – 2.262)

From V2.260 on, during the ACOPOS startup it is tried to access the encoder data memory by writing "EPROM_ID+slot = 1" (slot: Slot of the plug-in card). When using the ACOPOS plug-in card 8AC125.60-1 writing of "EPROM_ID+slot = 1" falsely caused the following error:

- 7100: Parameter function not supported. (Module ?)

1.3.3.3.11 NC Software – ACP10 V2.262

ID#253677 : solved problem, solved since V2.262

8B0Pxxxxxxxx.xxx-x: ERR LED or RDY LED blinking and auxiliary supply modules were not switched on (only in V2.230 – V2.261)

After connecting the power mains, 8B0Pxxxxxxxx.xxx-x modules sometimes failed to enter the "Ready" state. This was indicated by the red ERR-LED or the green RDY-LED blinking and the auxiliary supply modules not being switched on. As a result, all of the modules connected to the auxiliary supply modules also remained off (PLC CPU, inverter modules, etc.).

If the PLC CPU was not supplied with the auxiliary supply module but with an external 24V voltage, then the 8B0Pxxxxxxxx.xxx-x module reported the following error:

– 7210: DC bus: Charging: Voltage unstable

This problem occurred primarily under high, unbalanced and distorted mains voltage (e.g.: 3x480VAC 60Hz).

1.3.3.3.12 NC Software – ACP10 V2.261

ID#400062286 : solved problem, solved since V2.261

ACOPOSmicro Servo 80VD100xx.C0xx-01: Error 7222 was reported to early

Due to an error in the DC bus current monitoring, the following error was reported already at 15A instead of 30A:

– 7222: Power stage: Connection X5: Ground fault

ID#252920 : solved problem, solved since V2.261

8Vxxxx.xx-x: No movement stop procedure if power failure occurs (only in V2.250 – V2.260)

A movement stop procedure was sometimes not executed if the power failed on ACOPOS modules (8Vxxxx.xx-x) and the DC bus voltage dropped rapidly or phase failure monitoring was disabled (PHASE_MON_IGNORE = 1).

1.3.3.3.13 NC Software – ACP10 V2.260

ID#400060980 : solved problem, solved since V2.260

Warning 39001 when using Hiperface encoders (only in V2.231 – V2.250)

When using Hiperface encoders, the encoder position was sometimes initialized incorretly by 1/4 of the signal period. This position error was recognized and corrected after moving one signal period. Additionally the following warning was displayed:

– 39001: Encoder: Position correction active

The problem could arise only if the absolute positions of the Hiperface encoders were changed not conform to the analog signals.

ID#250405 : solved problem, solved since V2.260

8AC130: In mode "ncINC" reference pulse detection was deactivated wrongly by setting "ENCOD_OUT_PARID = 0".

ID#400058883 : solved problem, solved since V2.260

No error message, although drive in error state, when switching controller on

In certain error states, when switching on the controller, the cyclic status bit16 (error record not read) was not set. As a result sometimes no error message was registered.

ID#400055646 : solved problem, solved since V2.260

SDC axes, Cam Profile download: The error info was sometimes not displayed

For SDC SDC axes a Cam Profile download is processed in the cyclic NC manager task, if the Cam Profile data are handed over via "data_adr" and "data_len". If during such a Cam Profile download in the cyclic NC manager task a response error occurred, then the error info was not copied into "message.record.info" of the corresponding NC object.

In the Network Command Trace the error info was displayed correctly.

ID#249602 : new function since V2.260

Setup for controller: New parameter "orientation"

From now on, the setup procedure also supports axes which are subject to any external torque (hanging load, etc.), if "orientation = ncVERTICAL" is set.

ID#400045220 : new function since V2.260

Motor Holding Brake Control: Automatic functional test of the holding brake torque when switching on the drive controller is supported

1.3.3.3.14 NC Software – ACP10 V2.250

ID#400056880 : solved problem, solved since V2.250

AC114 POWERLINK, network coupling to POWERLINK participant

When linking to another POWERLINK station, which is not an ACOPOS device, sometimes only every second value will be applied.

ID#245942 : new function since V2.250

ACOPOSMulti with SafeMC: Safety Release V1.4 is supported.

ID#400053666 : new function since V2.250

Setup for controller: New value for "mode"

In mode "ncSPEED+ncUSE_FILTER_PAR" the determination of the controller parameters is accomplished with the preset filter parameters (ISQ filter, speed filter).

ID#245270 : solved problem, solved since V2.250

The Motor sometimes accelerated during a movement stop.

If the position controller was not enabled, for reasons such as
– the position controller was disabled using the parameter PCTRL_ENABLE_PARID or
– only the speed controller was enabled with CONTROLLER_MODE = 4
and an additive speed was enabled during the movement stop with the parameter SCTRL_ADD_SET_PARID, then the motor would be accelerated to twice its speed during the movement stop.

ID# 400038187, 400055918 : solved problem, solved since V2.250

Ref pulse check with the 8BAC0123

1.3.3.3.15 NC Software – ACP10 V2.242

ID#247800 : solved problem, solved since V2.242

8BAC0124.000–1, 8AC120.60–1, sine–cosine encoder: Incorrect absolut positon within a signal period (only in V2.240 and V2.241)

When using a sine–cosine encoder without reference pulse as absolute encoder, it may come to an incorrect position within one signal period.

1.3.3.3.16 NC Software – ACP10 V2.241

ID#245512 : solved problem, solved since V2.241

POWERLINK communication problems during startup

In rare cases, some ACOPOS devices may not be added to the POWERLINK communication cycle during startup.

ID#400054555 : solved problem, solved since V2.241

ACOPOSMulti with SMC (Safe Motion Control) and frame reduction to single axis, coupling with cyclically coupled objects is not possible

A cyclic coupling is rejected with error 1013.

ID#400056175 : solved problem, solved since V2.241

8BxPxxxxxxxx.xxx-x: Thermal overload possible (only in V2.240)

The following temperature and load monitoring functions were mistakenly disabled:

- Continuous current load LOAD_CONT_CURR
- Peak current load LOAD_PEAK_CURR
- Motor temperature model and temperature model for mains components TEMP_MOTOR_MODELL

Modules could be damaged if rated current was applied to ACOPOSMulti power supply modules.

1.3.3.3.17 NC Software – ACP10 V2.240

ID#400053626 : solved problem, solved since V2.240

ISQ-Ripple identification: The data were calculated wrong for "ENCOD_COUNT_DIR = ncINVERSE".

ID#400053501 : solved problem, solved since V2.240

Powerlink Network Coupling, ACOPOSMulti, Error 33002: Floating-Point exception

Receiving a cyclic network position with very small fractional part ($<1.175e-38$) the error 33002 occurred.

ID#400050040 : solved problem, solved since V2.240

Multiturn absolute encoder, homing with ncHOME_OFFSET, wrong unit position

With certain settings of the load scaling (load.units/load.rev_motor) and a large number of encoder revolutions, the unit position was calculated incorrectly during initialization and after a homing procedure with ncHOME_OFFSET

ID#242947 : new function since V2.240

Handling of MTC data (Motion Trace Configuration)

For handling of trace configurations with MTC format the following actions are offered for the NC object with type "ncMULTI_AX_TRACE":

- "ncMTC, ncLOAD"
- "ncMTC, ncSAVE"

ID#400039751 : new function since V2.240

8BAC0120.000–1, 8BAC0121.000–1, 8BAC0124.000–1: The ADC calibration values are supported

ID#400052353 : new function since V2.240

8AC0121.60–1, 8BAC0121.000.1: Hiperface encoder with extended type label are supported.

ID#400041065 : new function since V2.240

8AC125.60–1, BiSS Encoder:

Support for register read/write access. Support for alarm and warning bits

ID#400047158 : new function since V2.240

8AC125.60–1, BiSS Encoder: Support for register read/write access

ID#243530 : solved problem, solved since V2.240

Motor temperature model: Warning 41070 or error 9070 was mistakenly reported

If the value of the parameter MOTOR_CURR_RATED was greater than the value of the parameter MOTOR_CURR_STALL, then the following warning or error was mistakenly registered under minimal load:

- 41070: Motor temperature model: Overtemperature
- 9070: Motor temperature model: Overload – Movement stopped

ID#243525 : solved problem, solved since V2.240

8Bxxxxxxxxxxx.xxx–x, 8Cxxxxxxxxxxx.xxx–x, 80Vxxxxxx.xxxx–x: Change in the DC bus nominal voltage detection UDC_NOMINAL

From now on, the nominal DC bus voltage UDC_NOMINAL will not be detected until after the main relay has been closed.

This causes a slightly larger nominal DC bus voltage UDC_NOMINAL to be detected (approx. 5%).

As a result, if a power failure occurs, the main relay will open up at a larger DC bus voltage UDC_ACT (approx. 5%), which means that the auxiliary supply module and all inverter modules will be shut off sooner.

ID#243520 : solved problem, solved since V2.240

8Vxxxx.xx–x: External braking resistor: Connection RB+ and RB–: Open circuit test: Warning 38008 was not reported

If the braking resistor circuit failed, it could happen that the following warning wrongly was not reported:

- 38008: Bleeder: No current flow

The filtered DC bus voltage UDC_FILTER will now be used for testing instead of the DC bus voltage UDC_ACT.

ID#243185 : solved problem, solved since V2.240

NO automatic activation of the short-circuit stop when switching off only one ENABLE input (STO1)

If
the parameter ENABLE_CONFIG was set 1 or a SAFETY module was used (ENABLE_CONFIG automatically set to 1) and
the parameter F_SWITCH or ICTRL_MODE was set after setting the parameter ENABLE_CONFIG,
then
a short-circuit stop would NOT be started when switching off only one ENABLE input.

ID#400050570 : solved problem, solved since V2.240

8BVlxxxxxxx.xxx-x: Error 4005 was mistakenly reported. (only in V2.180 – V2.239)

The following error was mistakenly reported if the parameter MAINS_SWITCH_PARID was set to CONST_I4_ZERO on an inverter module:
– 4005: Controller cannot be switched on: Drive in error state

ID#241040 : solved problem, solved since V2.240

Setup for controller: Improvements for mode "ncFF..."

If the setup function in "ncFF..." mode was aborted, then the movement was stopped with the current deceleration if the stop configuration ncA_LIMIT (+ncT_JOLT) was set. In some cases, this could take a long time. The stop movement is shortened by using the maximum for the current deceleration and the respective acceleration limit values.

Previously, the acceleration would be increased in "ncFF" mode after every forward and backward movement until the maximum determined current was reached. To shorten the identification procedure, this is now done after every movement. Furthermore, the acceleration for which the specified current has not yet been reached will be used for identification.

Under certain circumstances, the wrong result parameters were determined in "ncFF..." mode. This was caused by an incorrectly calculated sample time (multiple of 200us). The sample time will now be calculated as a multiple of 400us.

ID#240100 : solved problem, solved since V2.240

8AC120.60–1,8BAC124.000–1,8BAC120.000–1 : Position step during initialization of encoder (only in V2.170 – V2.23x)

Due to this problem one of the following errors could be registered:
– 6048: Motor holding brake movement monitor: Position error too large
– 7033: Encoder: Incremental position step too large

1.3.3.3.18 NC Software – ACP10 V2.232

ID#400051518 : new function since V2.232

8AC120.60–1, 8BAC120.000–1: EnDat01 encoder: Monitoring of the multiturn position

ID#241907 : solved problem, solved since V2.232

Active SW limits, movement with cyclic position set values: Stop bit was incorrectly set (only in V2.230 – V2.231)

In certain cases with cyclic position set values, the status bit12 (Stop after drive event active) was set without reaching the SW limits. Thus in these cases the wrong movement status was indicated:

- move.mode = ncSTOP
- move.detail = ncEVENT

ID#400053134 : solved problem, solved since V2.232

8B0Pxxxxxxxx.xxx-x: The error 7212 and 7211 were incorrectly reported (only in V2.220 – V2.231)

The following error was sometimes incorrectly reported when switching on the mains:

- 7212: DC bus: High voltage drop

The following error was incorrectly reported only then, if the DC bus voltage fell below the threshold voltage 20VDC:

- 7211: DC bus: Voltage drop

Now this error is again reported correctly already then, if UDC_ACT falls below POWERFAIL_DETECT_RATIO*UDC_NOMINAL.

1.3.3.3.19 NC Software – ACP10 V2.231

ID#400052413 : solved problem, solved since V2.231

ACOPOSMulti with SafeMC: The errors 33002, 6058 and 6059 were falsely indicated

With longer movements (e.g. for a periodic axis) a wrong position set value was transferred to the SafeMC module. This error activated the STO safety function, if the safety related monitoring of the position lag error was switched on. This led then to the fact that the following errors were indicated:

- 33002: Floating-Point exception
- 6058: Enable1: Voltage sag
- 6059: Enable2: Voltage sag

ID#400051934 : solved problem, solved since V2.231

8AC121.60-1, 8BAC0121.000-1: Incorrectly determined encoder position

The encoder position was sometimes calculated incorrectly. It could happen a constant position error (half signal period).

1.3.3.3.20 NC Software – ACP10 V2.230

ID#257767 : new function since V2.230

New NC actions for NC object with type "ncMULTI_AX_TRACE"

- "ncTRACE, ncSTART+ncSAVE"
- "ncTRACE, ncSAVE"

ID#400051977 : new function since V2.230

8AC122.60-3, 8BAC0122.000-1: Resolver transformation ratio ENCOD_TRANS_RATIO

The allowed range of the resolver transformation ratio ENCOD_TRANS_RATIO was extended from [0.3..0.5] to [0.2..0.5].

Caution: The position accuracy is reduced with decreasing resolver transformation ratio.

ID#239970 : new function since V2.230

8B0Pxxxxxxx.xxx-x: Thermal monitoring of the rectifier and the chopper has been activated .

Using a passive power supply module with the following model number can cause the following errors or warning to occur:

8B0P0220Hx00.00x-1 from Rev.: H0
 8B0P0220HW00.000-E from Rev.: E0
 8B0P0440Hx00.00x-1 from Rev.: F0

9030: Junction temperature model: Overtemperature – Movement stopped
 9031: Junction temperature model: Overtemperature – Limiter active
 41031: Junction temperature model: Overtemperature

If an over-temperature error (e.g.: 9030 and 9031) occurs, then the chopper output and the CR_OK output will be switched off, the main relay opened and the RDY-, RUN- and ERR LEDs will blink synchronously in 3 second cycles. The error can only be corrected by turning the mains power off and back on.

ID#239965 : new function since V2.230

8B0Pxxxxxxx.xxx-x: External bleeder: Connection RB+ and RB-: Modification wire break test

Wire break test from V2.230:

While the controller is starting up, a test checks to see if the chopper current UDC_CHOP_CURR exceeds the limit value $0.8 * UDC_ACT / R_BLEEDER_EXT$ when the braking resistor chopper is activated briefly (20ms). If the chopper current does not exceed the limit the following warning will be registered: 38008: Bleeder: No current flow

Additional Cause/Remedy for 8B0Pxxxxxxx.xxx-x:

Braking resistor error configuration: The parameter for the resistance value of the braking resistor R_BLEEDER_EXT was set too low.

Chopper current measurement defective: Replace the ACOPOS-modul

DC bus voltage measurement defective: The real DC bus voltage value is lower than the measured DC bus voltage value UDC_ACT: Replace the ACOPOS-modul

The warning can be deactivated by setting Bit6 (0x40) in MOTOR_TEST_MODE.

Wire break test before V2.230:

While the controller is starting up, a test checks to see if the DC bus voltage drops by at least 2% when the braking resistor chopper is activated briefly (50ms).

If the DC bus voltage drop less than 2% during the test procedure the following warning will be registered: 38008: Bleeder: No current flow

ID#239955 : new function since V2.230

8B0Pxxxxxxx.xxx-x: External bleeder: Connection RB+ and RB-: Overcurrent monitoring was activated.

If the measured chopper current value UDC_CHOP_CURR exceeds the limit $1.2 * UDC_ACT / R_BLEEDER_EXT$, then the following error will be registered:

7227: Bleeder: Overcurrent

Cause/Remedy:

Braking resistor error configuration: The parameter for the resistance value of the braking resistor R_BLEEDER_EXT was set too high.

Braking resistor defective or connections RB+ and RB-: Short-circuit

Braking resistor defective or connection RB-: Ground fault RB-

Braking resistor defective: The real resistance value of the braking resistor has decreased.

DC bus voltage measurement defective: The real DC bus voltage value is higher than the

measured DC bus voltage value UDC_ACT.

Chopper current measurement defective: The measured chopper current value UDC_CHOP_CURR is too high.

The overcurrent check can be disabled by setting Bit8 (0x100) in the parameter MOTOR_TEST_MODE.

Caution: Ignoring the braking resistor overcurrent can result in damage to the ACOPOS module or the braking resistor.

ID#400052075 : solved problem, solved since V2.230

Target system ARwin (AR010), POWERLINK, processor blocked for the Windows operating system during ACOPOS startup (only in V2.200 – V2.229)

During the ACOPOS startup function, after reset commands (CMD_SW_RESET, CMD_BOOT_STATE) the communication to all configured ACOPOS modules is re-established. During this procedure, in V2.200 – V2.229 the processor for the Windows operating system was blocked from the low-priority NC-IDLE task on the PLC. This could last up to 45 seconds.

From V2.230 on, the processor for the Windows operating system is no longer blocked by the NC-IDLE task during communication establishment.

ID#400051954 : solved problem, solved since V2.230

U/f Control: CONTROLLER_MODE = ncUF: Speed-jump and current-jump (only in V2.210 – V2.229)

In control mode U / f control (CONTROLLER_MODE = ncUF) could mistakenly occur a speed-jump and current-jump.

ID#239290 : solved problem, solved since V2.230

Setup: Motor phasing: The setup process sometimes failed to complete.

If one of the following error numbers was reported during the setup process, then the setup sometimes failed to complete.

4005: Controller cannot be switched on: Drive in error state

6036: Motor parameters missing or invalid

ID#400050244 : solved problem, solved since V2.230

Parameter identification induction motor:

The internal voltage calculation was sometimes insufficient for identification due to very low stator resistances.

ID#400050297 : solved problem, solved since V2.230

CURVE-FB Mode 3 with predefined 0xFFFF curve: Wrong limitation

With negative input values, the outputs CURVE_VALUE_REL_I4 and CURVE_VALUE_REL_R4 were limited wrongly at 0, instead of at the negative curve interval.

1.3.3.3.21 NC Software – ACP10 V2.220

ID#236162 : new function since V2.220

Setup ISQ-Ripple for automatically determining the parameters for the ISQ-Ripple compensation

New NC structure component "setup.isq_ripple".

New NC actions "ncSETUP+ncISQ_RIPPLE, ncSTART" und "ncSETUP+ncISQ_RIPPLE, ncSAVE".

ID#400053009 : solved problem, solved since V2.220

8BAC120.000-1 : EnDat 2.2: Floating-Point-exception while initializing a LC415 linear encoder

Due to this problem one of the following error numbers could be registered: 33002

ID#400058774 : known problem since V3.00.90.01, correction planned for V3.00.90.02

SG4 target system with AR A3.08 or higher: Error 9650 when using ACP10 before V2.220

After optimizations some system functions are no longer contained in AR versions A3.08 or higher, which are needed by ACP10 versions before V2.220. If a ACP10 version before V2.220 is used with AR versions A3.08 or higher, then the following error is indicated during the project transfer or registered in the Logger during the PLC startup:

- 9650: Library function not available (System GOT)

For AR versions A3.08 or higher only the ACP10 versions V2.220 or higher can be used.

ID#400048567 : solved problem, solved since V2.220

Cam profile automat: Speed jump with trigger event

Under the following conditions, a speed jump could occur: Change of state into compensation gears, trigger event with attribute ncAT_ONCE, activating the trigger with CMD_DIG_IN_FORCE

ID#400034848 : solved problem, solved since V2.220

8B0Pxxxxxxxx.xxx-x: The error 7200 or 7225 was wrongly registered.

Passive power supply unit (8B0P): After opening of the main relay, the chopper output for brake resistor was wrongly disabled. Thus it could happen that one of the following error was registered:

- 7200: DC bus: Overvoltage
- 7225: DC bus: Overvoltage

1.3.3.3.22 NC Software – ACP10 V2.211

ID#236275 : solved problem, solved since V2.211

8BVPxxxxxxxx.xxx-x: The phase fail monitoring was falsely disabled (only in V2.210)

ID#400049068 : solved problem, solved since V2.211

ACOPOS 8Vxxx.xx-x und ACOPOSmulti 8B0Pxxxxxxxx.xxx-x: External bleeder: The warning 38008 was wrongly registered. (only in V2.210 and V2.219)

When switching on the controller the following warning was wrongly registered:

- 38008: Bleeder: No current flow

ID#235820 : solved problem, solved since V2.211

ACOPOSMulti with SafeMC: The errors 6058 and 6059 were falsely indicated

With longer movements (e.g. for a periodic axis) a wrong position set value was transferred to the SafeMC module. This error activated the STO safety function, if the safety related monitoring of the position lag error was switched on. This led then to the fact that the following errors were indicated:

- 6058: Enable1: Voltage sag
- 6059: Enable2: Voltage sag

ID#400046005 : solved problem, solved since V2.211

Setup for controller: Error message because of too high speed limit values in relation to motor rated speed

If AXLIM_V_POS/AXLIM_V_NEG exceeds MOTOR_SPEED_RATED (converted into [Units/s]) the following error was wrongly reported:

- 70: Value of a necessary parameter too high

1.3.3.3.23 NC Software – ACP10 V2.210

ID#400045077 : new function since V2.210

Encoder Emulation: With ENCOD_OUT_OFFSET, it is possible to offset the reference to a revolution.

Encoder Emulation: With ENCOD_OUT_OFFSET, it is possible to offset the reference to a revolution.

ID#233472 : new function since V2.210

SG4 target system: ACP10 software versions V2.210 or higher can be used only with AR versions V2.82 or higher

If an ACP10 software version V2.210 or higher is used with AR versions before V2.82, then "ACP10MAN: SG4 AR <V2.82" will be entered in the AR logger and the initialization of ACP10 software will be aborted.

For AR versions before V2.82 only the ACP10 software versions before V2.210 can be used.

ID#400020142 : new function since V2.210

ERRESP_UDC_POWERFAIL

The parameter ERRESP_UDC_POWERFAIL was not able to be read and reset to the default value 1.

ID#400047934 : solved problem, solved since V2.210

Using SDC axes with task class cycle time lower than 1ms caused error 32200/32201 with info 20919

If SDC axes were used with a task class cycle time lower than 1ms, then one of the following errors with info 20919 was falsely indicated:

- 32200: Error calling plAcycWrite() (read parameter)
- 32201: Error calling plAcycWrite() (write parameter)

ID#234155 : solved problem, solved since V2.210

Encoder interface BAC124/AC120: Error 7033 when setting the encoder unit system (only in V2.190 – V2.201)

When setting the unit system of an encoder, the error 7033 "Encoder: Incremental position step too large" was sometimes reported incorrectly.

ID#234090 : solved problem, solved since V2.210

8BVx1650xxxx.xxx-x: The error 6054 was mistakenly not reported.

If the absolute value of the phase currents VCTRL_Ix has exceeded the limit $1.62 * ACOPOS_CURR_MAX$, then the error 6054: "Power stage: Overcurrent" was mistakenly not reported.

ID#400046980 : solved problem, solved since V2.210

SG4, POWERLINK V1: ACOPOS reset led in rare cases to network failure for other POWERLINK stations (only in V2.160 – 2.201)

Transfer of the reset commands CMD_SW_RESET or CMD_BOOT_STATE to all connected ACOPOS modules during the basis initialization (function for startup of all ACOPOS modules connected to the network), in rare cases could lead to network failures (loss of cyclic communication) for other POWERLINK stations.

ID#400046961 : solved problem, solved since V2.210

ACOPOSMulti with SMC (Safe Motion Control), coupling with cyclically coupled objects is not possible

A cyclic coupling is rejected with error 1013.

ID#400046421 : solved problem, solved since V2.210

8BVP and 8B0P: Error 7221 and 7211 (only in V2.180 – V2.209)

The error 7221 or 7211 was sometimes registered if simulation was enabled on channel 2 of a power supply module (8BVP or 8B0P).

ID#400046731 : solved problem, solved since V2.210

Wrong target position using movement with period CMD_MODULO_MOVE (MC_MoveAbsolute)

Under the following conditions CMD_MODULO_MOVE reached a wrong target position:
Call of CMD_HOMING (MC_Home) before MODULO_PERIOD (MC_BR_InitModPos) and a homing position greater than 1073741824 or negative.

ID#400045522 : solved problem, solved since V2.210

ACOPOSMulti, Multi Axes Trace with multiplexed stations, misalignment of recorded trace data

When using multiplexed stations, different system times were applied from the individual

stations. This could cause an offset in the trace data recorded during Multi Axes Trace functions.

ID#400041098 : solved problem, solved since V2.210

8BAC0123.00x-1: Reference Pulse which where not synchronized to A=B=high, weren't detected.

With ENCOD_INC_MODE Bit 9 =1 a edge sensitive Detection of the Reference can be activated. At a Reference Pulse width higher than 90° there direction-dependent Reference positions can occur.

1.3.3.3.24 NC Software – ACP10 V2.201

ID#400045336 : solved problem, solved since V2.201

Position jump with basis movement and mode "stop after trigger"

Under the following conditions a position jump could occur at the end of an absolute movement with trigger stop: The trigger occurred just before the target position, a short remaining distance and a high value of jolt time.

ID#231827 : solved problem, solved since V2.201

8BAC120.001: EnDat 2.2: Encoder Error 6057 while reading diagnostic values (only in V2.170 – V2.200)

A data transfer error occurs while sending EnDat2.2 additional information if diagnostic values are supported by the encoder and no diagnostic values are activated. Due to this problem the following error number could be registered:
– 6057: Position loop controller: Load encoder error

ID#400045205 : solved problem, solved since V2.201

Motor holding brake control with movement monitor: Error 6048 when setting the encoder unit system (only in V2.190 – V2.200)

When setting the unit system of the motor encoder, the error 6048 "Motor holding brake movement monitor: Position error too large" was sometimes reported incorrectly. This error occurred only in the use of motors with holding brake.

ID#400042675 : solved problem, solved since V2.201

Induction motor: Uncontrolled movement if MOTOR_CURR_ROT_DIR = ncINVERSE

An uncontrolled movement occurred when turning on the controller if the rotational direction of the encoder on an induction motor was not the same as the rotational direction of the current and if the rotational direction of the current was inverted with the configuration MOTOR_CURR_ROT_DIR = ncINVERSE.

ID#134315 : solved problem, solved since V2.201

The parameter MOTOR_BRAKE_CURR_RATED was falsely set to the value 1 during the boot procedure of the ACOPOS operating system.

1.3.3.3.25 NC Software – ACP10 V2.200

ID#227145 : new function since V2.200

Multi Axes Trace: Trigger data point without test data point

Now the configuration of a trigger data point for an axis is possible, even if for this axis of test data point is defined.

So far in this case the following error was indicated:

– 2004: Trace start not allowed: No trace test data defined

ID#230192 : solved problem, solved since V2.200

8BAC120.001: EnDat 2.2: Increased dead time while determining position (only in V2.170 – V2.19x)

In V2.170 – V2.19x, 150µs too much dead time were falsely used for determining the position. Due to this problem one of the following error numbers could be registered: 6054, 9030, 9300, 41031.

ID#400043093 : solved problem, solved since V2.200

Multi Axes Trace: Misalignment of the recorded trace data

Now the trace is started synchronously on all configured axes. Thus a misalignment for the trace recording of the different axes is avoided.

So far a misalignment for the recorded trace data could arise, if the network cycle time and the sampling time were greater than 400µs.

1.3.3.3.26 NC Software – ACP10 V2.191

ID#230417 : solved problem, solved since V2.191

Movement start after movement stop (only in V2.130 – V2.190)

If NC actions were called in a higher task class than defined in the NC configuration as "Task class for NC manager task", then the problem described below could arise.

If the NC action for movement stop was called in the same task class cycle after the NC action for the movement start, then first the movement stop parameters were transferred to the drive and afterwards all movement start parameters.

This was not correct, because the NC control for the movement stop was called after the NC action for the movement start. Now in this case the movement start parameters are not transferred to the drive after processing of the movement stop.

1.3.3.3.27 NC Software – ACP10 V2.190

ID#226562 : new function since V2.190

Setup phasing for automatically determining the commutation offset

New NC structure component "setup.motor_phasing".

New NC actions "ncSETUP+ncMOTOR_PHASING,ncSTART" und "ncSETUP+ncMOTOR_PHASING,ncSAVE".

ID#226505 : new function since V2.190

Motor holding brake: Movement monitoring with engaged holding brake

Initial activation of movement monitoring no longer occurs after the first time the holding brake is engaged, but rather after the holding brake is configured, when the encoder is ready. The error 6048 is registered if a movement takes place in this state.

ID#226400 : new function since V2.190

Motor holding brake: if an external voltage over 24V is applied during closed condition, error 6063 is reported from now on.

The voltage monitoring at closed holding brake can be deactivated by setting BRAKE_MODE Bit6 = 1.

ID#400039030 : new function since V2.190

8B0P: Passiv power supply: The error 7215 will be reported if at least one phase of the power line fails.

ID#400037391 : new function since V2.190

Positon jump detection for BAC120, AC120, BAC123 and BAC124

ID#400042277 : solved problem, solved since V2.190

Encoder Interfaces 8AC120.60–1, incremental encoder: The absolut positon is set to 0 after writing PARID_SCALE_ENCOD_INCR (V2.160 – V2.180)

ID#227167 : solved problem, solved since V2.190

Conversion from REAL into text now with 8 significant digits

Until now, REAL numbers were converted into a text with 6 significant digits. If REAL parameters were read from the ACOPOS into a data text and afterwards were transferred again from the data text to the ACOPOS, so far therefore the value could change.

The following NC actions were affected by this problem:

- ncSERVICE, ncREAD+ncDATA_TEXT
- ncSERVICE+ncACP_PAR, ncUPLOAD
- ncSETUP+ncMOTOR_INDUCATION, ncSAVE

ID#400041362 : solved problem, solved since V2.190

SGC target system: With AR versions V2.30 or higher global PVs could not be used as NC object

With ACP10 software versions V2.190 or higher it is possible, to use global PVs as NC object with AR versions V2.30 or higher.

For this AR system libraries had to be linked, which are not compatible with AR versions before V2.30. Therefore ACP10 software versions V2.190 or higher cannot be used with AR versions before V2.30.

If an ACP10 software version V2.190 or higher is used with AR versions before V2.30, then "ACP10MAN: SGC AR < V2.30" will be entered in the AR logger and the initialization of ACP10 software will be aborted.

ID#400040037 : solved problem, solved since V2.190

An active movement stop could be interrupted by CMD_MOVE_STOP_A2.

1.3.3.3.28 NC Software – ACP10 V2.180

ID#222865 : solved problem, solved since V2.180

Encoder – Emulation 8BAC0130.00x-1: The outputs of the Encoder – Emulation weren't deactivated after a network error

The outputs of the Encoder – Emulation are deactivated after a network error. This can be parameterized with PARID_ENCOD_ERROR_MODE = 1, so that the outputs stay active.

ID#400036166 : solved problem, solved since V2.180

ACOPOS, POWERLINK with AC114: Reduced send time for cyclic data from the drive

The cyclic send data from the ACOPOS was mistakenly sent with a delay of one POWERLINK cycle.

The data is now available one cycle earlier, which corresponds to the delay on the AC112.

1.3.3.3.29 NC Software – ACP10 V2.172

ID#400036879 : solved problem, solved since V2.172

8B0P: Error 9002

The error 9002 was mistakenly reported if the heat sink temperature on the following modules was below 14°C.

– 8B0P0440Hx00.00x-1 Rev.: C0 and

– 8B0P0220Hx00.00x-1 Rev.: E0

ID#400037963 : solved problem, solved since V2.172

NC object "ncMULTI_AX_TRACE": The data object ident was not returned after saving the trace data

After completion of the NC action "ncTRACE,ncUPLOAD+ncSAVE" with data object type "ncDATOBJ_BRMOD" the determined data object ident was not stored into the component "status.ident".

ID#400037378 : solved problem, solved since V2.172

Homing: Error 5017 was mistakenly reported.

When performing the homing procedure right after switching on the controller, the following error was sometimes reported even though the controller status was already set to ON. "Homing procedure mode not possible: Position controller inactive." The error only occurred with the homing methods ncSWITCH_GATE, ncABS_SWITCH and ncEND_SWITCH.

ID#400036766 : solved problem, solved since V2.172

EnDat2.2 BAC0120.001-x: ENCOD_DIAG_ID could not be set during controller active.

1.3.3.3.30 NC Software – ACP10 V2.171

ID#221257 : solved problem, solved since V2.171

After a network failure after a multi axes trace the communication sometimes could not be re-established (only in V2.170)

If a cyclic network communication failure occurred after a multi axes trace for an ACOPOS which was contained in the multi axes trace configuration, then the cyclic network communication to this ACOPOS sometimes could not be re-established.

ID#400036203 : solved problem, solved since V2.171

ACOPOS 8V and ACOPOSMulti 8B0P: External bleeder: The warning 38008 was wrongly registered (only in V2.170)

When switching on the controller sometimes the following warning was wrongly registered: "38008: Bleeder: No current flow"

ID#220377 : solved problem, solved since V2.171

Setup for controller: The Controller mode was not stored into the NC structure

After completion of the NC action "ncSETUP+ncCONTROLLER,ncSTART" the determined controller mode was not stored into the component "controller.mode".

ID#400034794 : solved problem, solved since V2.171

Cam profile automat: Incorrect parameters in one state after online change and direct start.

In certain cases, the new parameters were rejected after a consistent online change was made to parameters with AUT_ONL_PAR_LOCK and a subsequent direct start in one state.

1.3.3.3.31 NC Software – ACP10 V2.170

ID#218427 : new function since V2.170

Current controller: Change to automatic configuration of current controller (ICTRL_KV and ICTRL_TN)

The current controller gain is increased. The changed automatic configuration can cause the current controller to become unstable under the following conditions:

- If the configured electrical time constant $MOTOR_STATOR_INDUCTANCE/MOTOR_STATOR_RESISTANCE$ is greater than the real electrical time constant.
- If the motor inductance $MOTOR_STATOR_INDUCTANCE$ is considerably reduced at high currents (saturation).

An indication of high saturation is if $MOTOR_TORQ_MAX * MOTOR_CURR_STALL / (MOTOR_TORQ_STALL * MOTOR_CURR_MAX) < 0.8$.

An unstable current controller could cause over-current or over-temperature in the components being supplied with current.

In this case, one of the following error or warning numbers would be registered: 9300, 6054, 41031, 41051, 41061, 41070, 41011, 9010, 9030, 9050, 9060, 9070

If the parameter ICTRL_AUTO_CONF is set to the value 1, then automatic configuration of the current controller is reset to the original values (the same as in previous versions).

ID#218242 : new function since V2.170

ACOPOS 8V and ACOPOSmulti 8B0P: External bleeder: Connection RB+ and RB–: Wire break test

While the controller is starting up, a test checks to see if the DC bus voltage drops when the braking resistor chopper is activated briefly. If the DC bus voltage drop during the test procedure was too low, then the following warning is registered: "38008: Bleeder: No current flow"

The warning can be deactivated by setting Bit6 in MOTOR_TEST_MODE.

ID#400032009 : new function since V2.170

8BVP and 8B0P: CR_OK status stored on parameter STAT_LOAD_RELAY

Bit 2 is set in the parameter STAT_LOAD_RELAY when the power supply module's CR_OK output signal is switched on.

ID#216662 : new function since V2.170

POWERLINK (and SDC), new NC actions for ACOPOS coupling

For the network types POWERLINK and SDC the following NC actions are offered for ACOPOS coupling:

- ncNETWORK+ncSERVICE, ncACP_PAR_SEND: Send ACOPOS Parameter data on the network
- ncNETWORK+ncSERVICE, ncACP_PAR_RECEIVE: Receive ACOPOS Parameter data from the network

ID#400033737 : solved problem, solved since V2.170

Encoder interface 8AC123.60–1: Error when using an SSI encoder (only in V2.150 – V2.161)

The error 7051 "Acceleration too high (disturbance)" was falsely registered if there was an overflow of an SSI encoder's absolute position.

ID#218447 : solved problem, solved since V2.170

After a network failure during a multi axes trace the communication could not be re-established

If a cyclic network communication failure occurred during a multi axes trace for an ACOPOS which was contained in the multi axes trace configuration, then the cyclic network communication to this ACOPOS could not be re-established.

ID#218442 : solved problem, solved since V2.170

ACOPOSmulti: High CPU-load TimerInterrupt

The following error could be mistakenly reported: "6061: CTRL Speed controller: Limit speed exceeded"

ID#218272 : solved problem, solved since V2.170

The startup function for all ACOPOS modules was sometimes aborted with error 32020

If a parameter read or write error occurred for one ACOPOS during the basic network

initialization (startup function for all ACOPOS modules), after the parameter BOOT_STATE was read from the ACOPOS and before the function for operating system download was started, then the startup function was falsely aborted for all ACOPOS modules with the following errors:

- 32196: Error downloading operating system to ACOPOS
- 32020: System module data could not be read from the drive during NC manager INIT

Now the startup function is only aborted for that ACOPOS, for which the error occurred.

ID#218220 : solved problem, solved since V2.170

8BAC0132.000–1: input values not limited to valid values

The wanted limit couldn't be read from PARID_INx at voltages over +10V or under –10V.

ID#400028497 : solved problem, solved since V2.170

ACOPOS with AC114, POWERLINK V2: The network coupling to the axis 2 of an ACOPOSMulti was rejected with error 1013.

ID#400033241 : solved problem, solved since V2.170

Warning 39002: "Resolver: Speed limit for 14 bit resolution exceeded" after writing parameter ID ENCOD_POLEPAIRS

In version V2.160 or higher, the warning 39002: "Resolver: Speed limit for 14–bit resolution exceeded" could be triggered after writing the parameter ID ENCOD_POLEPAIRS.

ID#400032082 : solved problem, solved since V2.170

ACOPOS with 8AC114.60–2 POWERLINK coupling

Incorrect values were copied if the connection was made using CYCLIC_DP_DATA_OFFSET on a POWERLINK frame with an uneven amount of Payload data.

ID#400029963 : solved problem, solved since V2.170

ACOPOSMulti POWERLINK coupling

An POWERLINK error could have the result that a package was received too late. This remaining offset could cause jumps in the set values, particularly when linking networking data.

1.3.3.3.32 NC Software – ACP10 V2.161

ID#400029561 : solved problem, solved since V2.161

Cam profile automat: Incorrect cam profile change when master axis is moving in reverse.

When "at once" events occurred within a state at master speeds less than 2500 units/s in the negative direction, the next cam profile was connected to the right instead of to the left.

1.3.3.3.33 NC Software – ACP10 V2.160

ID#400028483 : new function since V2.160

New NC structure component "nc_obj_inf.hardware" with information to identify the connected ACOPOS hardware module.

ID#210912 : new function since V2.160

New NC structure components "limit.parameter.dv_stop" and "dv_stop_mode" to configure speed error monitoring.

ID#210907 : new function since V2.160

New NC structure component "move.stop.drive_error" to define the deceleration ramp after occurrence of a drive error.

ID#400019617 : solved problem, solved since V2.160

POWERLINK, error 32010 after disconnecting and reconnecting the network cable

If the POWERLINK cable was disconnected and then reconnected and communication was re-established, then the NC Manager immediately tried to read an error record from the ACOPOS with a Read Request in the cyclic POWERLINK frame. If the ACOPOS after the network failure was not yet ready to respond to a Read Request in the cyclic POWERLINK frame, then the following error was displayed one or more times by the NC manager:

- 32010: Drive not responding to Read Request (is the drive in the network?)

Now, when communication is re-established after a network failure, the NC Manager waits until the ACOPOS is ready to respond to a Read Request in the cyclic POWERLINK frame.

ID#400027019 : solved problem, solved since V2.160

Invalid movement status after cyclic network communication failure (only in V2.000 – V2.159)

The following error is displayed if a cyclic network communication failure is detected by the NC Manager:

- 32189: Timeout for cyclic data from drive – Indications invalid (network error ?)

An invalid movement status was caused if error 32189 was output after sending the write request for a command to start or stop a movement and the respective write response was not yet received (this is visible in the Network Trace).

This problem prevented the completion of a movement or of a movement stop from being indicated in the NC structure, even though the respective operation on the drive was completed and indicated with the respective cyclic status bit. The following status indicators sometimes were no longer being set because of this problem:

- move.homing.status.ok = ncTRUE
- move.basis.status.in_pos = ncTRUE
- move.mode/detail = ncOFF

ID#400013187 : solved problem, solved since V2.160

Warning 33002: Floating point exception, after setting the parameter SCALE_ENCODx_INCR

Setting the parameter SCALE_ENCODx_INCR did not cause the incremental position to be refreshed.

With certain values, this could result in an invalid unit position, and therefore cause a floating-point exception to be entered.

ID#400005616 : solved problem, solved since V2.160

Encoder Interface AC120, EnDat encoder: Positions with max. 48 serial bits are supported.

1.3.3.3.34 NC Software – ACP10 V2.153

ID#212952 : solved problem, solved since V2.153

Single axis trace: Processing of NC action "ncTRACE,ncSTART" for the NC object "ncMODULE" (only in V2.151 – V2.152)

For gaps with "test_dat [i].par_id = ncOFF" falsely TRACE_TEST_INDEX was increased, so that these gaps were also contained in the configuration which was transferred to the ACOPOS. This problem can only occur, if the single axis trace is operated by an application program. When operating the single axis trace with automation studio such gaps cannot occur.

The end code "TRACE_TEST_PARID=0" was not transferred to the drive.
Due to this problem, the number of trace parameters can only be increased, but not decreased.

1.3.3.3.35 NC Software – ACP10 V2.152

ID#400024816 : solved problem, solved since V2.152

8Vxxx.xx-x: Error 6023 when switching on the controller (only in V1.070 – V1.071 and V1.242 – V1.248 and V1.990 – V2.151)

When switching on the controller in rare cases the following error was falsely registered:
– 6023: Voltage sag at controller enable input

ID#211307 : solved problem, solved since V2.152

ACOPOSMulti, Network coupling via POWERLINK: Incorrect position when receiving data points with bit offset.

Incorrect position values were received if a bit offset in the frame's data range (CYCLIC_DP_DATA_OFFSET) was larger than 2040.

1.3.3.3.36 NC Software – ACP10 V2.151

ID#400025873 : solved problem, solved since V2.151

ACOPOSMulti: Parameter ENCOD_TRANS_RATIO

The parameter ENCOD_TRANS_RATIO could be written and the transferred value was used in the firmware. However, when the parameter was read, 0.0 was always displayed.

1.3.3.3.37 NC Software – ACP10 V2.150

ID#208395 : new function since V2.150

Setup for controller: New values for "mode"

- nclSQ_F1_NOTCH+ncISQ_F2_NOTCH
- nclSQ_F1_NOTCH+ncISQ_F2_NOTCH+ncISQ_F3_NOTCH

ID#400027189 : solved problem, solved since V2.150

Encoder interface 8BAC0123: Faulty reference position (only in V2.031 – V2.140)

With the ACOPOSMulti insert modules 8BAC0123.00x–1, sometimes a faulty reference position is determined when operating at high speeds.
The position error is +/- 1 increment.

This could lead to the following error when referencing with distance coded reference marks (ncDCM):

- 7047: Invalid distance of reference marks

ID#400016749 : solved problem, solved since V2.150

Holding brake test: Testing torque was too high (only in V2.054 – V2.140)

The testing torque was too high. This could have caused the following error or the following warning to occur:

38003: Motor holding brake: Test torque was limited

6048: Motor holding brake movement monitor: Position error too large

1.3.3.3.38 NC Software – ACP10 V2.140

ID#210927 : new function since V2.140

ACOPOSMulti: LED control: Modification of the ERROR-LED signals

The red ERROR-LED flickers if the ACOPOS operating system is transferred to the ACOPOSMulti (during transfer and burn).

ID#205207 : new function since V2.140

SG4 target system, recreate existing NC data modules in the same memory area

For SG4 target systems from now on, with the following NC actions existing NC data modules are newly created in the same memory area, in which they were before (until now, the newly created data modules were always stored in the RAM):

- "ncGLOBAL,ncSAVE"
- "ncACP_PAR+ncSERVICE,ncUPLOAD"
- "ncSETUP+ncMOTOR_ASYNCHRON,ncSAVE"

ID#205127 : new function since V2.140

Network trace, Save INIT data records

If the selection "Network command trace, Save start index of ring buffer after network initialization (ACOPOS startup)" is set to "Yes" in the NC configuration, then after completion of the basic initialization the INIT data records in the network trace will be saved by the fact, that the "index after overflow" is set with the current index value if the following conditions are valid:

- Still no overflow in the network trace ring buffer
- The network trace ring buffer is filled less than up to the half

When the index mentioned above is set, a data record with parameter ID "NET_TRACE_RING_STARTIDX" is entered into the network trace.

Note:

In Automation Studio versions before V 3.0.80.15 the save procedure mentioned above can lead to indication problems in the network trace.

These problems in most cases can be eliminated by setting the option "Show All Data Records".

ID#205122 : new function since V2.140

Network trace, new NC Manager Infos during basic network initialization

During the basic network initialization (startup function for all ACOPOS modules), now the following new NC Manager Infos are entered into the network trace:

- Version, dateTime and size of "acp10man.br"
- Task class information for the cyclic NC Manager task
- AR version
- POWERLINK version, firmware version and cycle time for POWERLINK interface
- Detailed information to "acp10sys.br" on the PLC
- Detailed information to operating system on ACOPOS modules

Note:

Some of the new informations are "NC manager global" and are therefore entered into the network trace with a new type.

In Automation Studio versions, in which this new type is implemented, these global informations are indicated with "NCMAN" in the column "Interface".

In older Automation Studio versions these informations are indicated with "NET_ID=254[0]" in the column "Interface".

ID#205117 : new function since V2.140

Parameter list with Movement Command

If for a parameter list "par_list.parameter.mode=ncPAR_LIST_MOVE" is set, then the NC action "ncPAR_LIST+ncSERVICE,ncINIT" will be handled like the NC action "ncINIT+ncSTART" for basis movements:

- With acceptance of the NC action "move.mode=ncPAR_LIST_MOVE" will be set.
- After calling the NC action "ncMOVE,ncSTOP" the parameter list transfer will be aborted.
- The last parameter of the parameter list (the start command for the movement) will be transferred only then, if the responses to all preceeding parameters have been received without error.

ID#204522 : new function since V2.140

New NC action "ncSETUP+ncCONTROLLER,ncSAVE" to save controller parameters into an INIT Parameter module.

ID#204517 : new function since V2.140

Setup for controller now also available for SG3 and SGC, Modifications for SG4

After calling the NC action "ncSETUP+ncCONTROLLER,ncSTART" the setup function is now executed on its own on the ACOPOS (previously the setup function sequence was controlled by the "acp10tun" library). This has following effects:

For SG3 and SGC:

This functionality is now available also for SG3 and SGC targets (previously only for SG4).

For SG4:

The "acp10tun" library is no longer necessary and therefore, starting with this version, it will no longer be offered. If used in the project, the "acp10tun" library must be deleted when using this or a newer version.

The trace can now be freely configured and therefore will no longer be automatically recorded on the ACOPOS.

Once the setup function has completed, the trace can only be loaded from the target system if it was explicitly started before the NC action "ncSETUP+ncCONTROLLER,ncSTART" was called.

ID#205807 : solved problem, solved since V2.140

Invalid network status caused by operating system download during startup for individual ACOPOS (only in V2.131)

The network initialization (ACOPOS startup) is only performed for an individual ACOPOS in the following cases:

- After calling the NC action "ncNETWORK, ncINIT {+ncRESET} "
- After ACOPOS reset, if "Execute startup automatically after ACOPOS reset" is configured

If an operating system download was performed during the startup of an individual ACOPOS, then the following network status components became invalid:

- "network.phase = 40" was mistakenly set for the NC object with the type "ncNET_GLOBAL"
- "network.phase = 41" and "network.int = 0" were mistakenly set for the NC objects of the other ACOPOS modules

The operating system download is only performed during the first ACOPOS startup after the ACP10 software version has changed.

The problem no longer occurs after restarting the CPU.

ID# 400019235, 400021532 : solved problem, solved since V2.140

DC bus voltage measurement: Error 7200 was mistakenly reported in case of EMC disturbance (only in V2.091 – 2.131)

The following error was sometimes mistakenly reported if the motor cable shields on the 8BVI00xxHxDx.xxx-x servo drives were not correctly attached to the drives (see User's Manual):

- 7200: DC bus: Overvoltage

ID#205202 : solved problem, solved since V2.140

NC action "ncSETUP+ncMOTOR_INDUCATION,ncSAVE": Error 32154 was reported instead of error 32173 (only V2.130 – V2.131)

If temporary memory for creation of a new NC data module could not be allocated, then the NC action was aborted with the following error:

- 32154: The ACOPOS Parameter Table does not contain any ACOPOS parameters

Now the following correct error is reported:

- 32173: Memory for data module creation cannot be allocated

ID#205197 : solved problem, solved since V2.140

NC action "ncACP_PAR,ncSERVICE+ncUPLOAD": Error 32173 was not reported (only V2.130 – V2.131)

If temporary memory for creation of a new NC data module could not be allocated, then the NC action was aborted with the following state:

- acp_par.status.data_len = 0
- acp_par.status.ok = ncTRUE

Now the correct state "acp_par.status.error = ncTRUE" is set and the following error is reported:

- 32173: Memory for data module creation cannot be allocated

ID# 400012464, 400016142 : solved problem, solved since V2.140

Mains voltage: The errors 7217 or 7220 were mistakenly reported.

ID# 400021753 : solved problem, solved since V2.140

After simulation mode was turned off, the parameters UDC_NOMINAL, UDC_DETECTION and UDC_BLEEDER_ON were mistakenly reset to the values that were preset after the ACOPOS

startup procedure.

1.3.3.3.39 NC Software – ACP10 V2.131

ID#203612 : solved problem, solved since V2.131

Target system SG4, POWERLINK: Acceleration of parameter transfer when using "ACP10_MC" sometimes was not activated (only in V2.130)

When using the PLCopen–MC–Library "ACP10_MC", a function for accelerating the parameter transfer is to be activated, if an AR version from V2.80 on is used and an integer ratio is set between the SystemTick and the POWERLINK cycle time. The following information is entered in the Logger after this function has been successfully activated:

- Acp10NetCyc_SIOS: Install OK
- NetCyc: PL_Cycle/SysTick OK

With ACP10MAN V2.130 this function in rare cases was not activated, although all conditions were fulfilled. This could be recognized by the fact, that the information mentioned above was not entered in the Logger.

ID#400021846 : solved problem, solved since V2.131

NC object with type "ncNET_GLOBAL": The network phase 40 was falsely indicated (only in V2.120 – V2.130)

If "acp10sys.br" existed on the target system, then "network.phase = 40" (download of operating system to all connected ACOPOS modules) in the data structure of the NC object with type "ncNET_GLOBAL" was indicated for approx. 600ms, although no operating system download was executed to any ACOPOS module.

1.3.3.3.40 NC Software – ACP10 V2.130

ID#199447 : new function since V2.130

Automatic determination of motor parameters for induction motors

New NC structure components "setup.motor_induction" and "setup.dat_obj".

New NC actions "ncSETUP+ncMOTOR_INDUCTION,ncSTART" und "ncSETUP+ncMOTOR_INDUCTION,ncSAVE".

ID#199442 : new function since V2.130

New NC structure component "move.stop.quickstop" to define the Quickstop deceleration ramp.

ID#199240 : new function since V2.130

Encoder interface 8AC0130: Reverse block for encoder emulation

Parameter ENCOD_INC_MODE can now be used to deactivate encoder emulation output if position changes into negative direction.

ID#400018159 : new function since V2.130

LED control: The meaning of the LED signals has changed.

The green READY–LED blinks if the axis is not ready.

The red ERROR–LED is lit continuously if there is a module error.

ID#211352 : solved problem, solved since V2.130

ACOPOSMulti: Faulty data transfer with POWERLINK network communication.

In rare cases, incorrect data was received from the network.

This could cause different errors depending on the application, e.g.:

4007: Lag error stop limit exceeded

33002: Floating point exception

Incorrect cyclic data to and from the drive

ID#400019796 : solved problem, solved since V2.130

ACOPOSMulti: The parameters TEMP_HEATSINK_MAX and TEMP_JUNCTION_MAX was initialized on a too large value. (only in V2.090 – V2.129)

ID#199947 : solved problem, solved since V2.130

8BVP and 8BVI: Nominal DC bus voltage is being reduced from 800VDC to 750VDC

Active power supply module 8BVPxxxxxxxx.xxx-x:

The preset value for the step-up voltage UCTRL_UDC_REF is being reduced from 800VDC to 750VDC.

The preset value for the integral action time of the DC bus controller UCTRL_TN is being changed from 0 to 0.01s (Integrator is activated).

Inverter module 8BVIxxxxxxxx.xxx-x:

The preset value for the rated voltage detection lower limit UDC_DETECTION is being reduced from 800VDC to 750VDC.

The preset value for the voltage threshold to activate the braking resistor UDC_BLEEDER_ON is being reduced from 840VDC to 800VDC.

ID#400017968 : solved problem, solved since V2.130

Write parameter VCTRL_ENCOD_COUNT_DIR (only in V2.110 – V2.120)

The parameter VCTRL_ENCOD_COUNT_DIR could be written and the transferred value was used in the firmware. However, when the parameter was read, ncSTANDARD was always displayed.

ID#400016567 : solved problem, solved since V2.130

Encoder interface 8AC130 and 8BAC0130: Error message for ENCODx_OUT_PARID

If the plug-in card is not inserted or the wrong card is inserted, then the following error is now generated when setting the parameter ENCODx_OUT_PARID:

– 7100: Parameter function not supported. (Module ?)

ID#400014979 : solved problem, solved since V2.130

Inverter – Parameter identification produces negative values but quality is not zero.

Now the quality (parameter PIDENT_FIT) will be set to 0.0 if the identified parameters are negative.

1.3.3.3.41 NC Software – ACP10 V2.120

ID#400015349 : new function since V2.120

Encoder interface BAC0123: Encoder power check can now be deactivated with Parameter ENCOD_LINE_CHK_IGNORE.

ID#196747 : solved problem, solved since V2.120

Motor: Open circuit test: Error 6045 was mistakenly reported.

An electrical time constant less than 2ms for the motor winding = (MOTOR_STATOR_INDUCTANCE / MOTOR_STATOR_RESISTANCE) could cause the following error to be mistakenly reported:
6045: Power stage: Connection X5: No current flow

ID#196167 : solved problem, solved since V2.120

Speed-dependent torque limitation (LIM_T_SPEED_MAX, LIM_T_SPEED_K)

The parameters LIM_T_SPEED_MAX and LIM_T_SPEED_K were removed.
The same function can be configured using a set current filter.

Example:

ISQ_FILTER1_TYPE = ncISQF_LIM2 (7)

ISQ_FILTER1_A0 = Value of LIM_T_SPEED_MAX

ISQ_FILTER1_A1 = Value of LIM_T_SPEED_K

ISQ_FILTER1_C0_PARID = SCTRL_SPEED_ACT (251)

These parameters can also be found in the axis structure under controller.speed.isq_filter1

Filter2 or Filter3 can also be used in place of Filter1.

ID# 400020895 : solved problem, solved since V2.120

Simulation mode: Error 6021

If there was no voltage applied on the ENABLE input, then error 6021 was mistakenly registered when turning on the controller in simulation mode.

1.3.3.3.42 NC Software – ACP10 V2.111

ID# 400016564, 400017618, 400022357 : solved problem, solved since V2.111

ACOPOS with AC114: Error when linking with different link-data senders

If a recipient of ACOPOS link data with AC114 has receipt from different senders configured, then the recipient may experience gaps in the received data. This does not affect the recipient's first link object.

1.3.3.3.43 NC Software – ACP10 V2.110

ID#400011456 : new function since V2.110

Encoder interface BAC0130: Reverse block for encoder emulation

Parameter ENCOD_INC_MODE can now be used to deactivate encoder emulation output if position changes into negative direction.

ID#400012953 : solved problem, solved since V2.110

External braking resistor; errors 7200 and 7219: (only in V1.994 – V2.100)

If the parameter BLEEDER_SELECTOR_EXT was set to the value 1 while the state of the loading relay STAT_LOAD_RELAY was equal to one, then the external braking resistor was not activated. However, the parameters of the external braking resistor temperature model were used mistakenly.

The following errors could occur:

- 7200: DC bus: Overvoltage
- 7219: DC bus: Voltage too low – Check power supply

This could cause damage to the following hardware components:

- Internal braking resistor
- Chopper

ID#195367 : solved problem, solved since V2.110

8BVlxxxxxxxx.xxx-x ACOPOSmulti: (only in V1.202 – V2.100)

Position oscillation occurred with the frequency SCTRL_SPEED_ACT * MOTOR_POLEPAIRS during slow speed.

Incorrect values delivered by automatic detection of the current offset while turning on the controller.

ID#194630 : solved problem, solved since V2.110

NC action "ncMESSAGE,ncTEXT": "message.text.status.error" was not reset with call of NC action (only in V2.100)

ID#400014494 : solved problem, solved since V2.110

NC action "ncCONTROLLER,ncINIT": "c0_par_id" and "c1_par_id" were not correctly transferred to the ACOPOS

After call of the NC action "ncCONTROLLER, ncINIT" or " ncGLOBAL,ncINIT" the parameters "c0_par_id" and "c1_par_id" of the structure components "controller.speed.isq_filter1/2/3" were not correctly transferred to the ACOPOS.

This problem could be avoided by transferring the corresponding parameters to the ACOPOS via the Service Interface.

1.3.3.3.44 NC Software – ACP10 V2.100

ID#192527 : solved problem, solved since V2.100

U/f–Control: Current oszillation (only in V2.031 – V2.093)

Current may oscillate if $\min(\text{MOTOR_CURR_MAX}, \text{ACOPOS_CURR_MAX}) < 2.3\text{A}$ and UFCTRL_CURR_LIM was not written.

ID#400011889 : solved problem, solved since V2.100

Cam profile automat: Incorrect slave position in the compensation mode ncSL_LACHPOS

The position during a ncSL_LACHPOS compensation was incorrect if a shift to the additive slave axis was caused before the automat was started.

1.3.3.3.45 NC Software – ACP10 V2.093

ID#191110 : solved problem, solved since V2.093

Encoder interface 8AC121.60–1 und 8BAC0121.000–1: Digital filtering of the data line increased the immunity of the serial Hiperface parameter channel to interference.

1.3.3.3.46 NC Software – ACP10 V2.090

ID#189122 : new function since V2.090

The BsLoader "acp10bsl.br" is no longer transferred in each case to ACOPOS modules

If a basis BsLoader with a higher version than "acp10bsl.br" is active on an ACOPOS module, then the BsLoader contained in "acp10bsl.br" is no longer transferred to this ACOPOS.

In addition in this case the following warnings are registered in the logbook:

- ACOPOS NodeNr (see Bin.Data)
- Acp10bsl version is too low
- Transfer will not be executed

ID#400009410 : new function since V2.090

ACOPOS plug-in module 8AC122.60–3: Warning 39002 is no longer reported

The following warning is no longer reported

- 39002: Resolver: Speed limit for 14 bit resolution exceeded

ID#187607 : solved problem, solved since V2.090

8BVxxxxxxxx.xxx–x: IGBT modules were operated outside of the specifications.

In some cases, the junction of the IGBT modules on the following servo drives was operated outside of the thermal specifications:

- 8BVI0014xxxx.xxx–x
- 8BVI0028xxxx.xxx–x
- 8BVI0055xxxx.xxx–x
- 8BVI0110xxxx.xxx–x

The error correction could cause movement to be interrupted while operating existing applications.

The following error / warning is registered:

9030: Junction temperature model: Over-temperature – Movement stop

41031: Junction temperature model: Over-temperature

1.3.3.3.47 NC Software – ACP10 V2.071

ID# 400007496, 400007670 : solved problem, solved since V2.071

Setup for controller with library ACP10TUN: NC actions were rejected with error 32300 (only in V2.070)

The NC actions "ncSETUP+ncCONTROLLER,ncSTART" and "ncSETUP,ncSTOP" falsely always were rejected with following error, even if the library acp10tun was existing on the target:

- 32300: For controller setup the library acp10tun must be transferred to the target

Furthermore this Problem in ACP10TUN V2.070 could cause a Pagefault of the library ACP10_MC.

1.3.3.3.48 NC Software – ACP10 V2.070

ID#400006444 : new function since V2.070

Encoder interfaces – 8AC120.60–1 and 8BAC124.000–1 with incremental encoder: Improved precision when homing with reference pulse

When homing with reference pulse, the repeat precision was improved from ± 45 degrees to ± 0 degrees of a signal period.

ID#185307 : solved problem, solved since V2.070

Error 32020 after NC action "ncNETWORK,ncINIT+ncSTOP"

If the NC action "ncNETWORK,ncINIT+ncSTOP" was called during the basic network initialization (startup function for all ACOPOS modules), after the parameter BOOT_STATE was read from the ACOPOS and before the function for operating system download was started, then the startup function could falsely be aborted. In this case the following errors were indicated:

- 32196: Error downloading operating system to ACOPOS
- 32020: System module data could not be read from the drive during NC manager INIT

For versions before V2.070 the problem can be avoided by the following steps:

Select "Wait for Enable" in "Network Initialization (ACOPOS startup), Execute at NC software initialization" in the NC configuration.

Call the NC action "ncNETWORK,ncINIT+ncENABLE" after the NC action "ncNETWORK,ncINIT+ncSTOP".

ID#185207 : solved problem, solved since V2.070

The NC action "ncNET_TRACE,ncRESET" could cause a cycle time violation

Before V2.070 the entire network trace data area was deleted in that task class, in which the NC action "ncNET_TRACE,ncRESET" was called. For short task class cycle times with small tolerance time this could lead to a cycle time violation.

Starting with V2.070 the network trace data area will be deleted in the the NC Manager idle time task and the completion of this operation is indicated with "net_trace.reset=ncFALSE".

ID#184995 : known problem since ARSGC_2.01.2.B02.01

SGC target system: AR versions A2.xx – D2.xx were not accepted (only in V2.050 – V2.060)

Due to an error in the version evaluation, AR versions A2.xx – D2.xx were not accepted.

In this case falsely "ACP10MAN: SGC AR < E2.00" was entered in the AR logger and the initialization of ACP10 software was aborted.

ID#184265 : solved problem, solved since V2.070

Target system SG4, Saving trace data into a file caused the FileDelete error 20718

If trace data were saved with "datobj.parameter.type=ncDATOBJ_FILE" into the same data object again and again, then the following error could occur:

- 32409: The specified file cannot be deleted
- Info: Status of FileDelete(): 20718

The following NC actions were affected by this problem:

- ncNET_TRACE,ncSAVE
- ncTRACE,ncUPLOAD+ncSAVE

The problem can be avoided by deleting the data object with FileDelete() in the application program before calling one of these NC actions.

1.3.3.3.49 NC Software – ACP10 V2.060

ID#183327 : new function since V2.060

Status for simulation mode new in cyclic status bits

From now on, the status of the simulation mode will be contained in Bit25 of the cyclic status bits (STATUS_CYCLIC_BITS parameter). The value of this bit will be copied cyclically into the "simulation.status" component in the NC structure of the axis NC object. Therefore, "simulation.status" in the NC structure will always correspond to the status of the simulation mode in the ACOPOS operating system.

In the past, "simulation.status" in the NC structure only corresponded to the status of the simulation mode in the ACOPOS operating system if the NC action "ncSIMULATION,ncON/OFF" or the FB MC_BR_SIMULATION was used to switch the simulation mode on/off.

ID#183092 : new function since V2.060

New NC structure components in "controller.speed.isq_filter1/2/3"

c0_par_id
c1_par_id

ID#400006002 : solved problem, solved since V2.060

Encoder Interface AC121: Error when using Hiperface encoders (only in V2.001 – V2.054)

When using Hiperface encoders for some encoder types the following error was wrongly registered:

– 7038: Encoder: Position value not synchronous with absolute value

ID#183097 : solved problem, solved since V2.060

Target system SG4, POWERLINK, "ncSERVICE+ncPAR_LIST,ncINIT" could cause a deadlock (only in V2.042 – V2.054)

When using the PLCopen-MC-Library "ACP10_MC", the settings for processing of "ncSERVICE+ncPAR_LIST,ncINIT" were wrongly initialized, if no integral ratio was set between the SystemTick and the POWERLINK cycle time (=> POWERLINK asynchronous to CPU cycle). This caused a deadlock after each call of NC action "ncSERVICE+ncPAR_LIST,ncINIT".

This problem can be avoided by setting an integer ratio between the SystemTick and the POWERLINK cycle time (=> POWERLINK synchronous to CPU cycle).

1.3.3.3.50 NC Software – ACP10 V2.054

ID#181917 : new function since V2.054

Speed monitoring:

Movement is stopped and the following error is reported if the electrical output speed of the servo drive (SCTRL_SPEED_ACT*MOTOR_POLEPAIRS) exceeds the 600Hz limit value for 0.5s without interruption:

– 6060: Power stage: Speed limit exceeded

ID#400005468 : solved problem, solved since V2.054

Incorrect movement mode for virtual axis (only in V2.030 – V2.053)

After an ACOPOS startup, the movement mode of the virtual axis might have been entered incorrectly (move.mode=ncSTOP, move.detail=ncEVENT)

ID#400006670 : solved problem, solved since V2.054

POWERLINK AC112, no communication established with ACOPOS when cycle time is 400us

Communication to the ACOPOS unit cannot be established if an ACOPOS with AC112 is connected to a Powerlink network via bus coupler with a cycle time of 400us. This also applies when the ACOPOS with AC112 is connected to the POWERLINK network via the internal hub of an ACOPOSmulti unit. Only the first connected ACOPOS with AC112 is affected. ACOPOS or ACOPOSmulti units connected further down the line are added to the POWERLINK cycle.

ID#181722 : solved problem, solved since V2.054

After "ncSAVE" or "ncRESET" the Network Trace was switched on in each case

With the following NC actions so far the Network Trace was switched on internally in the NC Manager in each case:

- ncNET_TRACE, ncRESET
- ncNET_TRACE, ncSAVE

If the Network Trace was switched off before, after these NC actions furthermore "net_trace.status=ncOFF" was indicated, although the Network Trace was switched on internally in the NC manager .

Now the internal status of the Network Trace is no more changed by these NC actions.

ID#179897 : solved problem, solved since V2.054

Torque limiter: Warning when setting the limits to motor peak torque

When setting the limits to motor peak torque the following warning was sometimes wrongly registered:

- 38001: Torque limiter: Limit value too high.

1.3.3.3.51 NC Software – ACP10 V2.053

ID#180412 : new function since V2.053

8BVPxxxxxxx.xxx-x: Integrator was installed for DC bus controller (UCTRL_TN)

The predefined value of the integration time constant UCTRL_TN is 0. The integrator is turned off

ID#180407 : new function since V2.053

8BVPxxxxxxx.xxx-x: Limiting current of the DC bus controller was raised

8BVP0440Hxxx.xxx-x: Limiting current was raised from 72Arms to 90Arms

8BVP0880Hxxx.xxx-x: Limiting current was raised from 144Arms to 180Arms

This required the following measures to be taken:

- 8BVP0880xxxx.xxx-x: Automatic configuration of the current controller was changed
- 8BVPxxxxxxxx.xxx-x: Dead-time in the DC bus controller was removed
- 8BVPxxxxxxxx.xxx-x: Current limitation occurs during switching on the controller

ID#181397 : solved problem, solved since V2.053

Lost communication with ACOPOSMulti

The error pattern after a communication failure varies depending on whether the power output stage is enabled on the module or not.

When power output stage is disabled:

- The POWERLINK LED on the module is no longer operated (LED either dark or continuous, even if the POWERLINK cable is removed).
- Communication to the module is disrupted.
- The device cannot be reset by software command, it can only be operated again after Power OFF/ON.
- The error 32189 (Timeout for cyclic data from drive), or 32204/32205 (Timeout for acyclic read/write) is registered.

When power output stage is enabled:

- The module is in boot state.
- The error 32189 (Timeout for cyclic data from drive) is registered.

ID#180422 : solved problem, solved since V2.053

8BVPxxxxxxxx.xxx-x: Error 7221 when switching on the controller

When switching on the controller sometimes the following error was wrongly registered:

- 7221: Line: Frequency not allowed

ID#180417 : solved problem, solved since V2.053

8BVPxxxxxxxx.xxx-x: When a power line failed, a phase failure was sometimes not registered while switching on the controller.

ID#180277 : solved problem, solved since V2.053

SG3 and SGC target systems : Address error in CPU Service Mode when using ACP10_MC

On SG3 and SGC target systems in CPU Service Mode the ACP10_MC Library caused one of the following errors:

- 9100 EXCEPTION: Bus error
- 9101 EXCEPTION: Address error
- 9102 EXCEPTION: Illegal instruction

With ACP10MAN from V2.053 on this problem does no longer occur.

1.3.3.3.52 NC Software – ACP10 V2.050

ID#178162 : new function since V2.050

LED-Control:

Green blinking READY-LED:

The green READY-LED blinks when the ENABLE signal is not active and there are no pending errors.

Red blinking ERROR-LED:

The red ERROR-LED blinks when the value of the PARID_BOOT_STATE parameter is not equal to 32.

ID#177717 : new function since V2.050

Setup for controller with library ACP10TUN: Modifications for mode "ncFF..."

The first movement is accomplished now with a factor 100 smaller acceleration value.

The increase of acceleration for the further movements now is computed with the results of measurement of the previous movement (up to now, the acceleration was always doubled).

The maximum number of relative motions was increased of 10 to 15.

ID#177357 : new function since V2.050

New NC action "ncTRACE,ncUPLOAD+ncSAVE" for NC object "ncMULTI_AX_TRACE"

ID#177352 : new function since V2.050

New NC action "ncDAT_MOD+ncSERVICE,ncSICHERN"

ID#177347 : new function since V2.050

New NC actions for NC object "ncNET_GLOBAL"

- ncNET_TRACE, ncSWITCH_OFF
- ncNET_TRACE, ncSWITCH_ON
- ncNET_TRACE, ncRESET
- ncNET_TRACE, ncSAVE

ID#179000 : solved problem, solved since V2.050

Missing status "Parameter sequence initialized"

When a parameter sequence was simultaneously initialized on real and virtual axes, the status "initialized" was set on only one axis

ID#178837 : solved problem, solved since V2.050

Encoder Interface AC121: Warning when using Hiperface encoders (only ACOPOSmulti in V2.041 – V2.043)

When using Hiperface encoders sometimes at high speed the following warning was wrongly registered:

- 39001: Encoder: Position correction active

ID#178167 : solved problem, solved since V2.050

Target system SGC with version A2.00 or higher : NETWORK_LIVE_CTRL was falsely initialized with 1966070000

For AR versions A2.00 the parameter NETWORK_LIVE_CTRL was falsely initialized with 1966070000 microseconds. Due to this reason e.g. a movement would not be aborted by the ACOPOS operating system for the duration 1996 seconds, if a fatal error would occur on the

PLC CPU or the CAN network.

Starting with ACP10 software V2.050 new AR functions are used for the calculation of NETWORK_LIVE_CTRL, which are only available with AR versions from E2.00 on.

Due to that reason the parameter NETWORK_LIVE_CTRL can be initialized correctly as follows only with AR versions E2.00 and higher:

$\text{NETWORK_LIVE_CTRL} = (2 * \text{taskclass_cycle}) + \text{taskclass_tolerance}$

If an ACP10 software version V2.050 or higher is used with AR versions before E2.00, then "ACP10MAN: SGC AR < E2.00" will be entered in the AR logger and the initialization of ACP10 software will be aborted.

ID#400002886 : solved problem, solved since V2.050

Function block MPGEN: Under certain conditions, the parameter MPGEN_V_MAX was falsely rejected with the following error 40: "Value of parameter higher than maximum value"

1.3.3.3.53 NC Software – ACP10 V2.043

ID#176507 : solved problem, solved since V2.043

Encoder Interface AC120: CRC–Error with EnDat 2.2 encoders and long encoder cables

When using EnDat 2.2 encoders with a long encoder cable the following error could occur:

– 7014: Encoder: CRC error during parameter transfer

1.3.3.3.54 NC Software – ACP10 V2.042

ID#175890 : solved problem, solved since V2.042

Controller setup: The default values were only initialized for the first ACOPOS module

The following default values were initialized so far only for the first ACOPOS module:

– setup.controller.parameter.i_max_percent = 25.0

– setup.controller.parameter.v_max_percent = 50.0

– setup.controller.parameter.ds_max = 2000

For all other modules these parameters so far were falsely initialized with zero.

Now these parameters are initialized for all ACOPOS modules with the default values specified above.

1.3.3.3.55 NC Software – ACP10 V2.041

ID#175517 : solved problem, solved since V2.041

Encoder Interface AC121: Warning when using Hiperface encoders (only in V1.221 – V2.040)

When read or write the Hiperface encoder memory the following errors were wrongly registered:

– 7044: Encoder: Parity

– 39019: Serial encoder interface: Stop bit error

– 39017: Encoder: CRC error while reading position

ID#175117 : solved problem, solved since V2.041

ACOPOSmulti: 8BVP0880xxx.xxx–x and 8BVx0440xxx.xxx–x: Reduction of the current limits

8BVI0440Hxxx.xxx–x: Peak current reduced from 110Arms to 88Arms

8BVP0440Hxxx.xxx–x: Peak current reduced from 110Arms to 90Arms

8BVP0880Hxxx.xxx–x: Limit for the over current monitoring reduced from 350Apeak to 340Apeak

1.3.3.3.56 NC Software – ACP10 V2.040

ID#174887 : new function since V2.040

New NC object with type "ncNET_GLOBAL"

With this NC object the status of the basic network initialization is global (for all network interfaces) indicated.

ID#174712 : new function since V2.040

"Wait for Enable" for basic network initialization

If "Wait for Enable" is selected in "Network Initialization (ACOPOS startup), Execute at NC software initialization" in the NC configuration, then the basic network initialization for all ACOPOS devices within the NC software initialization is started as soon as the NC action "ncNETWORK,ncINIT+ncENABLE" is called.

ID#174687 : new function since V2.040

Abortion of startup function for certain ACOPOS modules during the basic network initialization

If an ACOPOS were contained in the NC configuration (nodes in ACP10CFG plus all nodes from NC Deployment tables), then so far in the basic network initialization in each case was tried, to set up the communication to this ACOPOS. If one of these ACOPOS modules was not connected to the network, then this process lasted the entire timeout time (30 sec.).

For the POWERLINK network, now (for SG4 with AR versions starting with V2.80) the startup function is aborted immediately for each ACOPOS, which is not contained in the AR configuration, with the following error message:

– 32225: This ACOPOS POWERLINK node does not exist in the AR Configuration

Additionally, during the basic network initialization the startup function for an ACOPOS module now also can be aborted by calling the NC action "ncNETWORK,ncINIT+ncSTOP".

ID#174927 : solved problem, solved since V2.040

Target system SG4, POWERLINK, "Acp10NetCyc_SIOS" was sometimes falsely installed (only in V2.031 – V2.034)

"Acp10NetCyc_SIOS" (SysTick task of the ACP10 software) was sometimes installed, although neither "acp10_mc" did exist on the PLC, nor the installation was activated via "NcManCtrl".

1.3.3.3.57 NC Software – ACP10 V2.034

ID#173487 : new function since V2.034

SGC target system: ACP10 software for AR versions A2.00 and higher

ACP10 software versions V2.034 or higher can be used for AR versions A2.00 and higher.

ACP10 software versions V2.000 – V2.033 must be used for AR versions before A2.00.

If an ACP10 software version V2.034 or higher is used for AR versions before A2.00, then "ACP10MAN: SGC AR < A2.00" will be entered in the AR logger.

ID#162160 : solved problem, solved since V2.034

Autotuning: Error 32319 when using ACOPOSMulti with switching frequency 5kHz (only in V1.994 – V2.033)

When using ACOPOSMulti with switching frequency 5kHz the following error was registered during the autotuning:

- 32319: Setup for controller: Calculation of result parameters was not possible

1.3.3.3.58 NC Software – ACP10 V2.033

ID#171937 : solved problem, solved since V2.033

Encoder Interface AC121: Warning when using Hiperface encoders (only in V1.221 – V2.032)

When using Hiperface encoders at high speed the following warning was wrongly registered:

- 39001: Encoder: Position correction active

1.3.3.3.59 NC Software – ACP10 V2.031

ID#171707 : solved problem, solved since V2.031

Encoder Interface AC121: Error when using Hiperface encoders (only in V1.221 – V2.030)

When using Hiperface encoders sometimes the following error was wrongly registered:

- 7014: Encoder: CRC error during parameter transfer

ID#171430 : solved problem, solved since V2.031

Under certain circumstances, the configurable deceleration for basis movements with a target position was exceeded by 20%

The deceleration value was exceeded during reduced speed, via override or when a movement was restarted after the basis movement parameter was initialized

ID#170935 : solved problem, solved since V2.031

POWERLINK V2, timeout error when using an ACOPOS with property "multiplexed"

If an ACOPOS or ACOPOSMulti with property "multiplexed" is used on a POWERLINK network with mode "POWERLINK V2", then after reset commands (CMD_SW_RESET, CMD_BOOT_STATE) the parameter response sometimes is not transferred. In this case so far the ACOPOS startup was aborted with one of the following errors:

32205: Timeout while writing par. via acyclic channel (is the drive in the network ?)

32196: Error downloading operating system to ACOPOS

32020: System module data could not be read from the drive during NC manager INIT

Now in this case the ACOPOS startup is continued.

ID#170590 : solved problem, solved since V2.031

Cam profile automat: The ncS_START event was calculated incorrectly if a selective master axis AUT_MA_ID was used in an state

The reference point for the event interval was shifted due to the use of different axes. Now, calculation of the ncS_START events is based only on the relevant axis of the basis state.

1.3.3.3.60 NC Software – ACP10 V2.030

ID#170215 : solved problem, solved since V2.030

ACOPOSMulti, data block transfer for channel2 sometimes used the NC object of channel1

If a data block transfer was started for an NC object ("ncAXIS" or "ncV_AXIS") with channel number 2 during a data block transfer was active for the other NC object ("ncV_AXIS" or "ncAXIS") with channel number 2, then the NC object with channel number 1 and so the wrong data structure was falsely used.

This problem concerned the following functionalities:

- Download of a Cam Profile
- Download of an ACOPOS Parameter table
- Upload of an ACOPOS Parameter table
- Download of a Parameter Sequence

ID#168485 : solved problem, solved since V2.030

Previously, the movement of the virtual axis was not aborted due to a network error

1.3.3.3.61 NC Software – ACP10 V2.022

ID#167727 : solved problem, solved since V2.022

Encoder interface 8BAC0120.000–1: Error when using EnDat encoders (only in V2.021)

When using EnDat encoders (Type E0 or E1) the following error was registered:

- 7048: Error during the reading of encoder memory

ID#166425 : solved problem, solved since V2.022

U/f control: The controller was falsely switched off after each movement stop. (only in V2.001–2.021)

1.3.3.3.62 NC Software – ACP10 V2.021

ID#167152 : solved problem, solved since V2.021

Setup for controller with library ACP10TUN: Error with ACOPOSMulti (only in V2.020)

When using ACOPOSMulti, each setup function was aborted with the following error when reading the parameter ENCOD2_TYPE:

- 4: Read access for a write-only parameter

1.3.3.3.63 NC Software – ACP10 V2.020

ID#189137 : new function since V2.020

ACOPOS: The POWERLINK plug-in module 8AC114.60–2 is supported.

ID#165897 : new function since V2.020

Setup for controller with library ACP10TUN: Override now remains on 100% for mode "ncFF..."

For the setup function with mode "ncFF..." it is now guaranteed that the speed and the acceleration override value remain on 100% for all movements.

During the entire setup function, transfer of the override value contained in the NC structure is deactivated.

Before starting the first movement, the value 100% is transferred to the drive for the speed and

acceleration override.

After ending the setup function, the override value contained in the NC structure is once again transferred to the drive.

Previously, incorrect result parameters could have been determined in "ncFF..." mode if the speed or the acceleration override value did not stand on 100% during the entire setup function.

ID#166472 : solved problem, solved since V2.020

Setup for controller with library ACP10TUN

Until now, if a resolver on slot3 or slot4 was used as motor encoder, then an incorrect "t_filter" was determined in the mode "ncSPEED + ncT_FILTER + ...".

Before a setup function is started, the encoder interface parameters are now read from the ACOPOS and used instead of the parameters from the NC structure:

- VCTRL_ENCODE_COUNT_DIR (instead of "encoder_if.parameter.count_dir")
- VCTRL_SCALE_LOAD_UNITS (instead of "encoder_if.parameter.scaling.load.units")
- VCTRL_SCALE_LOAD_MOTREV (instead of "encoder_if.parameter.scaling.load.rev_motor")

Until now, problems could have occurred if values for these parameters, other than those contained in the NC structure, were transferred to the ACOPOS before a setup function was started (e.g. by initialization of encoder parameters with an ACOPOS Parameter table).

As described in the documentation for the setup function with the mode "ncFF...", the following parameters will be read by the ACOPOS before the setup function is started and used instead of the corresponding parameters from the NC structure:

- AXLIM_V_POS (instead of "limit.parameter.v_pos")
- AXLIM_V_NEG (instead of "limit.parameter.v_pos")

ID#166362 : solved problem, solved since V2.020

8BVPxxxxxxxx.xxx-x: The time between power failure and switch off of the power stage was shortened.

Thus the components between the mains filters and the mains disconnection are less stressed.

1.3.3.3.64 NC Software – ACP10 V2.011

ID#165887 : solved problem, solved since V2.011

Target systems SG3 and SGC, error 32016 after frequent call of data block operations

Until now, in rare cases the following error could occur after frequent call of data block operations:

- 32016: Error sending an idle time command to the NC Manager Task (Info 52: Queue full)

The following NC actions (data block operations) were affected by this problem:

- ncCAM_PROF+ncSERVICE, ncDOWNLOAD
- ncPAR_SEQU+ncSERVICE, ncDOWNLOAD {+ncINIT}
- ncACP_PAR+ncSERVICE, ncDOWNLOAD
- ncACP_PAR+ncSERVICE, ncUPLOAD

ID#163445 : solved problem, solved since V2.011

8BVPxxxxxxxx.xxx-x: Depending on the wiring of the power mains at connector X5a it could occur that the reactive current at the filter connector X1 was not compensated.

ID#160192 : solved problem, solved since V2.011

Target system SG4, error 32508 after frequent call of data block operations

Until now, in rare cases the following error could occur after frequent call of data block operations:

- 32508: Error sending an idle time command to the NC Manager Task (Info 25032: FIFO full)

The following NC actions (data block operations) were affected by this problem:

- ncCAM_PROF+ncSERVICE, ncDOWNLOAD
- ncPAR_SEQU+ncSERVICE, ncDOWNLOAD {+ncINIT}
- ncACP_PAR+ncSERVICE, ncDOWNLOAD
- ncACP_PAR+ncSERVICE, ncUPLOAD

1.3.3.3.65 NC Software – ACP10 V2.010

ID#160492 : new function since V2.010

U/f Control

New selection constant "ncLINEAR2" for "controller.uf.type".

New NC structure component "controller.uf.k_f_slip" for parameter UFCTRL_SLIP_COMP_K.

ID#163125 : solved problem, solved since V2.010

Cyclic user data from drive were not updated(only in V1.995 – 2.001)

If a cyclic parameter was sent to the drive which caused an error, data from drive were not updated any more.

ID#162957 : solved problem, solved since V2.010

Page fault caused by NC object PV with INIT value

If a global PV is used instead of a data structure pointer for NC objects with the type "ncAXIS" or "ncV_AXIS" (this is possible starting with V1.210), then an INIT value should not be defined in the variable declaration for this PV.

In the past, a page fault could have occurred if an INIT value was defined for this PV in the variable declaration despite the issue mentioned above.

Now, in this case a page fault no longer occurs, but the following error is displayed:

- 32240: NC object data invalid (PV with INIT value in variable declaration ?)

ID#160197 : solved problem, solved since V2.010

Target system SG4, request error after calling a command in the NC Test

In rare cases, one of the following errors could have occurred after calling a command in the NC Test if an SG4 project only contained tasks in the task class, which were defined as "Task class for NC Manager Task" in the NC configuration.

CAN:

- 32008: Error sending Read Request (network error ?) with "info=1"
- 32009: Error sending Write Request (network error ?) with "info=1"

POWERLINK:

- 32206: Cyclic channel: Read Request in spite of Wait for Response
- 32207: Cyclic channel: Write Request in spite of Wait for Response

If this problem occurred, the ACP10 software for POWERLINK could only be operated again after restarting the CPU.

This problem can be avoided in older versions of the ACP10 software by adding an additional "empty" task to another task class as "Task class for NC Manager Task".

1.3.3.3.66 NC Software – ACP10 V2.001

ID#151070 : new function since V2.001

Two encoder control: Position monitor can now be enabled with just AXLIM_DS_STOP2

From now on, the position monitor for the two–encoder control will always be enabled when AXLIM_DS_STOP2 is set to a value greater than zero.

In the past, this position monitor was only enabled if one of the following ParIDs was also set for PCTRL_S_ACT_PARID:

- ENCOD_S_ACT
- ENCOD2_S_ACT
- ENCOD3_S_ACT
- ENCOD_S_ACT_FILTER
- ENCOD2_S_ACT_FILTER
- ENCOD3_S_ACT_FILTER

ID#163450 : solved problem, solved since V2.001

8BVPxxxxxxxx.xxx–x ab Rev D0 (only in V1.994–2.001): The auxiliary supply module was falsely switched off after the reset.

After the reset of the power supply module falsely the auxiliary supply module and/or all consumers connected to it (e.g.: control, all inverter modules) was switched off.

ID#161732 : solved problem, solved since V2.001

NC action "ncGLOBAL,ncSAVE": The hardware assignment was not applied if an existing module was newly created

If an existing INIT parameter module is newly created with "ncGLOBAL,ncSAVE" and this module was assigned to an NC object via hardware configuration, then this hardware assignment should also be applied to the newly created module.

In previous versions this hardware assignment was not applied to the newly created module.

ID#161312 : solved problem, solved since V2.001

AC120 encoder interface, only EnDat multi–turn encoder: The absolute position was not determined identically for the plug–in cards 8BAC0120.000 and 8AC120.60–1.

The absolute position range is processed as an unsigned value (0..max) with the 8AC120.60–1 ACOPOS plug–in card.

The absolute position range with the 8BAC0120.000 ACOPOSmulti plug–in card was processed as a signed value (–max/2..max/2).

ID#160382 : solved problem, solved since V2.001

Encoder Interface AC121, Hiperface encoder: Unjustified errors during ACOPOS startup

During ACOPOS startup some of the following errors could wrongly be registered:

7012 "Encoder: Hiperface error bit"

7013 "Encoder: Status message", "Status code": 5

7013 "Encoder: Status message", "Status code": 6
 7013 "Encoder: Status message", "Status code": 3
 7013 "Encoder: Status message", "Status code": 1

ID#157245 : solved problem, solved since V2.001

AS V3.0: Page fault when using NC INIT parameter objects with the type "ACP10: Virtual Axis"

If an NC INIT parameter object with the type "ACP10: Virtual Axis" was used in an AS V3.0 project, then a page fault could occur with the following versions of the ACP10 software:

- V1.240 – V1.245
- V1.990 – V1.995
- V2.000

The error occurred immediately after the basis initialization (function for starting up all ACOPOS connected to the network) was complete.

The problem only occurs if an NC INIT parameter object with the type "ACP10: Virtual Axis" is contained in the module table on the target system before all NC INIT parameter objects with the type "ACP10: Axis".

This problem can be avoided by sorting all NC INIT parameter objects with the type "ACP10: Virtual Axis" behind the NC INIT parameter objects with the type "ACP10: Axis" in the Software Configuration under "Nc Data Objects".

1.3.3.3.67 NC Software – ACP10 V2.000

ID#159472 : new function since V2.000

ACP10 software from V2.000 on also for SGC target system

From V2.000 on, ACP10 software is also available for the SGC target system. With SGC target system it is possible to operate ACOPOS servo drives via CAN bus.

For performance reasons, it is recommended to only use the ACP10 software on SGC CPUs with a clock rate of 25 MHz (not on those with 16 MHz). With SGC CPUs with a clock rate of 25 MHz it is possible to operate up to 6 ACOPOS servo drives with a cycle time of 10 ms.

ID#159322 : solved problem, solved since V2.000

Motor holding brake: When movement monitoring is active for the motor encoder position, the following error could be mistakenly entered due to the referencing command ncREF_OFFSET.

6048 "Motor holding brake movement monitor: Position error too large"

ID#157727 : solved problem, solved since V2.000

Setup for controller with library ACP10TUN

The minimum of "limit.parameter.v_pos" and "...v_neg" is now used as the basis (100%) for "v_max_percent" (until now, the motor rated speed was used as basis).

The trace configuration will now be completely re-initialized each time before the trace is started.

In the past, before a trace function was started, only the number of test data points required for the setup function was initialized in the trace configuration and the next test data point was deleted. No other test data points were deleted. This caused errors in the setup function if more than 5 test data points were contained in the trace configuration before the setup function was started.

This problem can be avoided if test data points are explicitly deleted from the trace configuration

before the setup function is started (via application program or Automation Studio).

Before starting the setup function with the mode "ncSPEED {+ ... }", the ISQ Filter2 and the ISQ Filter3 are now switched off by transferring the following parameters:

- ISQ_FILTER2_TYPE = 0
- ISQ_FILTER3_TYPE = 0

Until now, problems could occur during the setup function, if ISQ Filter2 or ISQ Filter3 were switched on.

After successful completion of the setup function with mode "ncPOSITION", the following parameter is now set and transferred to the drive:

- controller.position.p_max = 1.0e30

Until now, the value which was saved before the setup function was restored and transferred to the drive.

After successful completion of the setup function with the mode "ncSPEED {+ ... }", all parameters of ISQ Filter2 and ISQ Filter3 are now set to zero and transferred to the drive.

After successful completion of the setup function with the mode "ncISQ_F1_NOTCH" all parameters of ISQ Filter2 and ISQ Filter3 are now restored and transferred to the drive.

ID#157672 : solved problem, solved since V2.000

Initialization of a parameter list now will be aborted if a response error with a warning occurs

To be compatible with all other parameter transfers with "ncSERVICE", executing the parameter transfer for NC action "ncSERVICE+ncPAR_LIST,ncINIT" will now be aborted if a response error for a parameter occurs with a warning (error number > 0x7FFF).

When this situation occurred in the past, the remaining parameters contained in the parameter list were transferred regardless and both status components were set to "ncTRUE" which did not correspond with the description in the user documentation:

- status.init = ncTRUE
- status.error = ncTRUE

ID#152262 : solved problem, solved since V2.000

"ncMOVE,ncSTOP" did not immediately abort movements, which were started with "ncSTART+ncINIT"

All of the INIT parameters, and then the parameter for starting the movement, are transferred to the ACOPOS after calling one of the following NC actions:

- ncHOMING,ncINIT+ncSTART
- ncPOS_MOVE,ncINIT+ncSTART
- ncPOS_MOVE+ncTRG_STOP,ncINIT+ncSTART
- ncNEG_MOVE,ncINIT+ncSTART
- ncNEG_MOVE+ncTRG_STOP,ncINIT+ncSTART
- ncREL_MOVE,ncINIT+ncSTART
- ncREL_MOVE+ncTRG_STOP,ncINIT+ncSTART
- ncREL_MOVE+ncTRG_STOP+ncS_REST,ncINIT+ncSTART
- ncABS_MOVE,ncINIT+ncSTART
- ncABS_MOVE+ncTRG_STOP,ncINIT+ncSTART
- ncABS_MOVE+ncTRG_STOP+ncS_REST,ncINIT+ncSTART

If the NC action "ncMOVE,ncSTOP" was called before all of these parameters were transferred, then the movement–stop parameter was not transferred until the transfer of all these parameters was completed.

Now , in this case the movement–stop parameter is transferred immediately and also the transfer of the remaining parameters is cancelled.

1.3.3.3.68 NC Software – ACP10 V1.997

ID#197232 : solved problem, solved since V1.997

ACOPOS with AC114: Error when linking with different link-data senders

If a recipient of ACOPOS link data with AC114 has receipt from different senders configured, then the recipient may experience gaps in the received data. This does not affect the recipient's first link object.

1.3.3.3.69 NC Software – ACP10 V1.996

ID#189132 : new function since V1.996

ACOPOS: The POWERLINK plug-in module 8AC114.60-2 is supported.

ID#189117 : new function since V1.996

The BsLoader "acp10bsl.br" is no longer transferred in each case to ACOPOS modules

If a basis BsLoader with a higher version than "acp10bsl.br" is active on an ACOPOS module, then the BsLoader contained in "acp10bsl.br" is no longer transferred to this ACOPOS.

In addition in this case the following warnings are registered in the logbook:

- ACOPOS NodeNr (see Bin.Data)
- Acp10bsl version is too low
- Transfer will not be executed

1.3.3.3.70 NC Software – ACP10 V1.995

ID#158942 : new function since V1.995

8BPVxxxxxxxx.xxx-1: The reactive current at the filter connector X1 is compensated.

ID#158927 : new function since V1.995

8BVxxxxxxxx.xxx-1: The error number 6019 is replaced by the error numbers 6052, 6053 and 6054.

ID#158922 : new function since V1.995

The power modules 8BVx0440Hxx0.000-1, 8BVx0440Hxx0.004-1 and 8BVx0220Hxx0.000-1 are supported

ID#157732 : solved problem, solved since V1.995

Encoder Interface AC120: The homing procedure with distance coded reference marks (ncDCM) did not work

The following error was registered:

5019 "Homing parameter outside the valid range", "Parameter ID": 739

The problem occurs with the following versions:

- From V1.213 to V1.245
- From V1.990 to V1.994

ID#157645 : solved problem, solved since V1.995

Homing procedure with reference pulse and negative trigger direction: The status value tr_s_rel (reference pulse distance) was wrong.

1.3.3.3.71 NC Software – ACP10 V1.994

ID#153487 : new function since V1.994

8BVP0880xxxx.xxx-x: X5 connection (choke): Wire break test:

When switching on the controller, a test is made to determine whether or not current can be applied in all phases (L1, L2 and L3) on the X5 connection (choke).
The wire break test can be deactivated using MOTOR_TEST_MODE.

ID#152867 : solved problem, solved since V1.994

The standstill monitoring of the motor holding brake did not work, if the count direction of the load scaling of the motor encoder were inverted.

The problem occurs with the following versions:

- Before V1.244
- From V1.990 to V1.992

ID#151617 : solved problem, solved since V1.994

8BVP0880HC00.000-1: After a software reset (e.g. controller warm/cold restart), all consumers on the control supply units (e.g. controller) are switched off.

The error correction only works on 8BVP0880HC00.000-1 power supply modules starting with revision D0 and if the firmware for the power supply modules wasn't updated before the software reset.

1.3.3.3.72 NC Software – ACP10 V1.992

ID#153727 : solved problem, solved since V1.992

Induction stop: The controller could not be switched off after the occurrence of the error 9300: "Current controller: Over current". (only in V1.990-1.991)

ID#153422 : solved problem, solved since V1.992

ACOPOS (8Vxxxx.xx-x): Faulty junction temperature model (in V1.205-1.209, V1.220-V1.224 and V1.990-V1.991)

The power stage may be thermally overloaded if a standing current vector is output (e.g.: constant load in standstill, presses, etc.). Current in phase 3 was not calculated.

ID#153152 : solved problem, solved since V1.992

8BVIxxxxDxx.xxx-x: The power stage of the second axis on servo drives with 2 axes was not turned on. Error 6045 is returned. (only in V1.991)

1.3.3.3.73 NC Software – ACP10 V1.991

ID#152022 : solved problem, solved since V1.991

Download of a cam profile aborted if a warning occurred

Previously, if a warning occurred during the transfer of a cam profile's data segment, then the download was falsely aborted with "status.error=ncTRUE". From now on, the download is completed with "status.ok=ncTRUE".

ID#151747 : solved problem, solved since V1.991

When setting the parameter, ACP10PAR_SCALE_ENCOD3_INCR, the error "1002: Parameter outside the valid range" could occur. (only in V1.221–V1.990)

ID#151597 : solved problem, solved since V1.991

Setup for controller with library ACP10TUN

Now the following default values are initialized:

- setup.controller.parameter.i_max_percent = 25.0
- setup.controller.parameter.v_max_percent = 50.0
- setup.controller.parameter.ds_max = 2000

Starting the setup function with mode "ncFF_POS_MOVE" and "ncFF_NEG_MOVE" was falsely rejected with the following error:

- 32314: Setup for controller: Mode invalid

After successful completion of the setup function with mode "ncPOSITION" now the following parameter is set and transferred to the drive:

- controller.mode = ncPOSITION

Until now, the value which was saved before the setup function was restored and transferred to the drive. Controller problems could occur, if this value was not equal to "ncPOSITION".

After successful completion of the setup function with mode "ncFF..." now the following parameters are set:

- controller.position.t_predict = 0.0004;
- controller.position.t_total = 0.0004;

Until now, the values which were saved before the setup function were restored and transferred to the drive. Controller problems could occur after the next call of "ncCONTROLLER,ncINIT" (or "ncGLOBAL,ncINIT"), if these values were not equal to "0.0004".

After successful completion or after abortion of the setup function with mode "ncFF..." now the following parameter are transferred to the drive:

- controller.position.tn
- controller.position.t_predict
- controller.position.t_total
- controller.position.p_max
- controller.position.i_max
- controller.speed.tn

Until now, after the setup function the values of the corresponding parameters on the drive were not equal to the values in the NC structure.

ID#151162 : solved problem, solved since V1.991

Disturbances on the motor holding brake caused the motor holding brake to close without the controller being deactivated. Only the error "6048: Motor holding brake monitor: Position error too large" was registered.

ID#150952 : solved problem, solved since V1.991

Induction motor: Motor holding could not be opened

After an induction stop, the motor holding brake could not be opened via command (CMD_BRAKE = ncOFF) when the controller is turned off.

ID#150475 : solved problem, solved since V1.991

Cam profile automat: In stand-by mode of the automat error messages could be displayed,

even though they were deactivated with AUT_MSG_MODE_BITS=0x0.

1.3.3.3.74 NC Software – ACP10 V1.990

ID#150627 : new function since V1.990

The operation of ACOPOSMulti from now on is supported.

ID#149910 : solved problem, solved since V1.990

Network errors were processed too soon, before the operating system was started.

This could cause the following errors:

1012 "Breakdown of cyclic network communication"

6002 "Sync controller: Error tolerance of system time difference exceeded"

ID#149757 : solved problem, solved since V1.990

ACOPOSMulti: During the short-circuit stop, no current limitation resulted.

ID#149752 : solved problem, solved since V1.990

During the induction stop, the junction temperature TEMP_JUNCTION is limited.

1.3.3.3.75 NC Software – ACP10 V1.249

ID#235552 : new function since V1.249

Encoder Interface AC120, EnDat encoder: Positions with max. 32 serial bits are supported (up to now max. 30 bits)

1.3.3.3.76 NC Software – ACP10 V1.247

ID#197227 : solved problem, solved since V1.247

ACOPOS with AC114: Error when linking with different link-data senders

If a recipient of ACOPOS link data with AC114 has receipt from different senders configured, then the recipient may experience gaps in the received data. This does not affect the recipient's first link object.

1.3.3.3.77 NC Software – ACP10 V1.246

ID#189127 : new function since V1.246

ACOPOS: The POWERLINK plug-in module 8AC114.60-2 is supported.

ID#189112 : new function since V1.246

The BsLoader "acp10bsl.br" is no longer transferred in each case to ACOPOS modules

If a basis BsLoader with a higher version than "acp10bsl.br" is active on an ACOPOS module, then the BsLoader contained in "acp10bsl.br" is no longer transferred to this ACOPOS.

In addition in this case the following warnings are registered in the logbook:

- ACOPOS NodeNr (see Bin.Data)
- Acp10bsl version is too low
- Transfer will not be executed

ID#157737 : solved problem, solved since V1.246

Encoder Interface AC120: The homing procedure with distance coded reference marks (ncDCM) did not work

The following error was registered:

5019 "Homing parameter outside the valid range", "Parameter ID": 739

The problem occurs with the following versions:

- From V1.213 to V1.245
- From V1.990 to V1.994

ID#157650 : solved problem, solved since V1.246

Homing procedure with reference pulse and negative trigger direction: The status value tr_s_rel (reference pulse distance) was wrong.

ID#157627 : solved problem, solved since V1.246

8Vxxx.00–2: The error 6045 , 6021 or 6023 was falsely displayed. (only in V1.245)

With the following drives the failure could arise:

8V1022.00–2 Rev. smaller than L0;
 8V1045.00–2 Rev. smaller than L0;
 8V1090.00–2 Rev. smaller than L0;
 8V1180.00–2 Rev. smaller than J0;
 8V1320.00–2 Rev. smaller than J0
 8V1640.00–2 Rev. smaller than I0;
 8V128M.00–2 Rev. smaller than D0

1.3.3.3.78 NC Software – ACP10 V1.244

ID#152862 : solved problem, solved since V1.244

The standstill monitoring of the motor holding brake did not work, if the count direction of the load scaling of the motor encoder were inverted.

The problem occurs with the following versions:

- Before V1.244
- From V1.990 to V1.992

1.3.3.3.79 NC Software – ACP10 V1.243

ID#152010 : solved problem, solved since V1.243

Download of a cam profile aborted if a warning occurred

Previously, if a warning occurred during the transfer of a cam profile's data segment, then the download was falsely aborted with "status.error=ncTRUE". From now on, the download is completed with "status.ok=ncTRUE".

ID#151995 : solved problem, solved since V1.243

Cam profile automat: In stand-by mode of the automat error messages could be displayed, even though they were deactivated with AUT_MSG_MODE_BITS=0x0.

ID#151607 : solved problem, solved since V1.243

Setup for controller with library ACP10TUN

Now the following default values are initialized:

- setup.controller.parameter.i_max_percent = 25.0
- setup.controller.parameter.v_max_percent = 50.0
- setup.controller.parameter.ds_max = 2000

Starting the setup function with mode "ncFF_POS_MOVE" and "ncFF_NEG_MOVE" was falsely rejected with the following error:

- 32314: Setup for controller: Mode invalid

After successful completion of the setup function with mode "ncPOSITION" now the following parameter is set and transferred to the drive:

- controller.mode = ncPOSITION

Until now, the value which was saved before the setup function was restored and transferred to the drive. Controller problems could occur, if this value was not equal to "ncPOSITION".

After successful completion of the setup function with mode "ncFF..." now the following parameters are set:

- controller.position.t_predict = 0.0004;
- controller.position.t_total = 0.0004;

Until now, the values which were saved before the setup function were restored and transferred to the drive. Controller problems could occur after the next call of "ncCONTROLLER,ncINIT" (or "ncGLOBAL,ncINIT"), if these values were not equal to "0.0004".

After successful completion or after abortion of the setup function with mode "ncFF..." now the following parameter are transferred to the drive:

- controller.position.tn
- controller.position.t_predict
- controller.position.t_total
- controller.position.p_max
- controller.position.i_max
- controller.speed.tn

Until now, after the setup function the values of the corresponding parameters on the drive were not equal to the values in the NC structure.

ID#151437 : solved problem, solved since V1.243

Disturbances on the motor holding brake caused the motor holding brake to close without the controller being deactivated. Only the error "6048: Motor holding brake monitor: Position error too large" was registered.

ID#151022 : solved problem, solved since V1.243

Induction motor: Motor holding brake could not be opened

After an induction stop, the motor holding brake could not be opened via command (CMD_BRAKE = ncOFF) when the controller is turned off.

1.3.3.3.80 NC Software – ACP10 V1.242

ID#88766 : new function since V1.242

Power stage: X5 connection (motor/choke): Wire break test:

When switching on the controller, a test is made to determine whether or not current can be applied in all phases (U, V and W) on the X5 connection (motor/inductor).

The wire break test can be deactivated using MOTOR_TEST_MODE.

ID#150747 : solved problem, solved since V1.242

The versions 1.240 and 1.241 of ACP10MAN would lead to a Pagefault with ACP10_MC.

Therefore these versions in ACP10_MC V1.24x are not accepted in the SW Dependency.

1.3.3.3.81 NC Software – ACP10 V1.241

ID#150377 : new function since V1.241

Library ACP10TUN for controller setup, data restoration after error

If an error occurs during a setup operation, then the original data will now be restored in the NC structure and the respective parameters transferred to the ACOPOS.

ID#150372 : solved problem, solved since V1.241

Incorrect trace status after re-establishing network communication

If cyclic network communication with the ACOPOS failed during an active cyclic parameter trace on the ACOPOS, then an incorrect trace status was displayed after re-establishing network communication. Furthermore, the following error also occurred the next time "ncTRACE,ncSTART" was called:

- 32049: Trace is already active at trace start

These problems could be avoided by setting "trace.status=ncOFF"

1.3.3.3.82 NC Software – ACP10 V1.240

ID#150367 : new function since V1.240

Target system SG4, automatic determination of controller parameters

- New NC structure component "setup.controller"
- New NC actions "ncSETUP+ncCONTROLLER,ncSTART" and "ncSETUP,ncSTOP"

ID#150362 : new function since V1.240

New NC structure components "controller.speed.isq_filter1/2/3"

1.3.3.3.83 NC Software – ACP10 V1.230

ID#150357 : new function since V1.230

New format "ncFORMAT_T14"

New format "ncFORMAT_T14" (Text, 14 Bytes) with data type "ACP10PRT14_typ" for following NC actions:

- "ncSERVICE+ncPAR_LIST,ncREAD"
- "ncSERVICE+ncPAR_LIST,ncINIT"
- "ncSERVICE+ncPAR_SEQU,ncDOWNLOAD"

ID#150352 : new function since V1.230

New NC action "ncSERVICE+ncACP_PAR,ncUPLOAD"

ID#150347 : new function since V1.230

New NC action "ncSERVICE+ncPAR_LIST,ncREAD"

ID#150342 : new function since V1.230

New NC object with type "ncMULTI_AX_TRACE"

ID#149532 : new function since V1.230

New NC structure component "nc_test" for "ncAXIS" and "ncV_AXIS"

With this component it is possible, to switch on and off the following functions for an NC object also during run-time (without CPU restart):

- Open the NC Test with the same NC object as the application and do not block NC actions of the application
- No move abortion when closing the NC Test

ID#146847 : new function since V1.230

New NC structure component "message.record.parameter.record_adr"

Now it is possible to determine the text for another message record as that in "message.record" by writing its address into "message.record.parameter.record_adr".

1.3.3.3.84 NC Software – ACP10 V1.215

ID#148572 : new function since V1.215

The speed controller set value current filter ISQ_FILTER is supported.

1.3.3.3.85 NC Software – ACP10 V1.214

ID#149002 : solved problem, solved since V1.214

CAN, Number of HPRIOWRITECOBs for ACP10USCOB for the library "ACP10_MC"

If the library "ACP10_MC" exists on the PLC, then now for each CAN interface the number of HPRIOWRITECOBs for ACP10USCOB is calculated by addition of the following two values:

- 1) 1HPRIOWRITECOB per 8 ACOPOS modules, which are configured for this CAN interface
- 2) That value, which is defined in the NC Configuration for this CAN interface in "Number of HPRIOWRITECOBs for ACP10USCOB"

Until now, for this number only the first value was used.

Note:

This change is necessary, so that the FB "MC_BR_InitCyclicWrite" of the LIBRARY "ACP10_MC" can be used also for CAN (see ACP10_MC: # 148245).

1.3.3.3.86 NC Software – ACP10 V1.213

ID#147852 : new function since V1.213

Encoder Interface AC130: The deactivation of inverted signals is supported in the incremental encoder emulation mode.

ID#147500 : solved problem, solved since V1.213

Function ncda_cr: The length of the data section was not correctly aligned

Before V0.480 of NCGLOBAL the length of the data section falsely was aligned to a value "(n*4)+2". From V0.480 on, the length is correctly aligned to a value "n*4" (LONG alignment).

If e.g. before V0.480 with ncda_cr() an ACOPOS cam profile with 64 polynomials was created,

the data section had a length of 2318 instead of 2316 bytes. The Download of this cam profile to the ACOPOS caused then the following error:

- 5304: Format error in cam profile data, Info: 8

1.3.3.3.87 NC Software – ACP10 V1.211

ID#146172 : solved problem, solved since V1.211

POWERLINK, initial ACOPOS parameters, unjustified timeout error (only in V1.181 – V1.210)

Initial ACOPOS parameters are parameters that are defined for an ACOPOS module in the hardware configuration or for an NC object of that ACOPOS module in an NC deployment table. These ACOPOS parameters are automatically transferred to the ACOPOS in the function for ACOPOS startup. This transfer was sometimes incorrectly aborted with the following error if the CPU load was too high:

- 32011: Drive not responding to Write Request (is the drive in the network?)

For SG3, this problem can only occur with V1.210.

For SG4, this problem can only occur with V1.181 – V1.210.

ID#145877 : solved problem, solved since V1.211

Control of the Motor Holding Brake: During the functional test of the holding brake torque the test torque was incorrect monitored

The actual test torque was monitored absolutely to the set test torque (limit 0.05Nm).
Now the actual test torque is monitored relatively to the set test torque (limit 5%).

1.3.3.3.88 NC Software – ACP10 V1.210

ID#142502 : new function since V1.210

New NC action "ncGLOBAL,ncSAVE" for saving data into an INIT Parameter module

ID#142497 : new function since V1.210

Global PVs can be used as NC object

If the selection "Use global PV as NC object" is set to "Yes" in the NC configuration, then a global PV is used for an NC object under the following circumstances:

- The PV has exactly the same name, which is defined for this NC object in the "NC Object Name" column of the NC Deployment table
- The PV has the corresponding data type ("ACP10AXIS_typ" or "ACP10VAXIS_typ")

After transferring a task, in which such a global PV is defined, an additional CPU restart is absolutely necessary, so that the global PV will be used by the NC manager.

ID#142492 : new function since V1.210

Entering NC actions in the Network Command Trace can be activated

If the selection "Network command trace, Enter naction() calls" is set to "Yes" in the NC configuration, then the following parameters are entered in the network command trace when the function naction() is called:

- NC_ACTION, if naction() was called by an application programm or the NC test
- NC_ACTION_PLCOpen_MC, if naction() was called by the PLCOpen MC Library
- NC_ACTION_STATUS_NOT_OK, if the status of naction() was not equal to "ncOK"

ID#148880 : solved problem, solved since V1.210

Cam profile automat: Defined state index for inactive automats.

The index of the current state (AUT_ACT_ST_INDEX) is set to 255 for an inactive automat.

1.3.3.3.89 NC Software – ACP10 V1.198

ID#142110 : solved problem, solved since V1.198

Target system SG4, POWERLINK, with AR B2.85 or higher, ACOPOS modules were not recognized on the network after a reset

With AR version B2.85 or higher, after ACOPOS reset (SW reset, Power OFF/ON) the following problems occurred:

- The status "network.init_allowed" was not set to "ncTRUE"
- The automatic startup ACOPOS reset was not performed

The automatic startup after ACOPOS reset is only performed if the value "Yes" is set for the "Execute automatically after ACOPOS reset" option in the NC configuration under "Network initialization".

ID#141870 : solved problem, solved since V1.198

Error 9070, if MOTOR_CURR_STALL = MOTOR_CURR_RATED and TEMP_MOTOR_MODEL_MODE = 2

With the following configuration the error 9070 was falsely indicated:

MOTOR_CURR_STABLE = MOTOR_CURR_RATED and
TEMP_MOTOR_MODEL_MODE = 2

1.3.3.3.90 NC Software – ACP10 V1.197

ID#139772 : solved problem, solved since V1.197

Incorrect conversion of ACOPOS parameters from input texts

In ACOPOS parameter tables and with the "service.data_text" component, values for ACOPOS parameters can be defined in hexadecimal as input text. For ACOPOS parameters of data type "DINT", input texts in the range "0x80000000" to "0xFFFFFFFF" were converted so far all to the value "0x7FFFFFFF" by mistake.

ID#139345 : solved problem, solved since V1.197

Target system SG3, CAN, unjustified timeout errors (only in V1.100 – V1.196)

During very high CPU load, the data transmission to/from ACOPOS was sometimes falsely aborted with one of the following errors:

- 32061: Timeout sending a Read Request telegram (network error ?)
- 32062: Timeout sending a Write Request Telegram (network error ?)

This problem concerned the following data transmissions:

- Download of a cam profile
- Download of an ACOPOS parameter table
- Download of a parameter sequence
- Upload of trace data

1.3.3.3.91 NC Software – ACP10 V1.196

ID#138847 : solved problem, solved since V1.196

Target system SG4, POWERLINK, Use of additional IP frames for Ethernet communication

IP frames for Ethernet communication are sent as "unicast" in the following AR versions:

- AR for SG4 A2.85 – C2.85
- AR for SG4 starting with I2.85

For this reason, ACOPOS synchronisation errors could occur with the AR versions listed above, if additional IP frames for Ethernet communication were sent on a POWERLINK network.

1.3.3.3.92 NC Software – ACP10 V1.195

ID#138642 : solved problem, solved since V1.195

The "two encoder control" can now only be activated with the parameters PCTRL_S_ACT_PARID and VCTRL_S_ACT_PARID.

Activation via "CONTROLLER_MODE=3" is now rejected with the following error:

- 1002: Parameter outside the valid range

ID#138065 : solved problem, solved since V1.195

For EnDat encoders whose serial resolution is smaller than or equal to four times the signal period resolution, the actual position could be incorrectly placed by 1/4 of a signal period. (e.g. ECN113 and EQN1325 with 2048 signal periods)

1.3.3.3.93 NC Software – ACP10 V1.193

ID#135632 : solved problem, solved since V1.193

The short-circuit-controlled movement stop was not performed correctly when certain drive errors occurred (only in V1.180 – V1.192)

Encoder error:

Short-circuit-controlled movement stop not activated. As a result, the motor does not have active braking.

Temperature error (e.g. IGBT junction, motor, heat sink):

Short-circuit-controlled movement stop is terminated too soon. As a result, the motor only has limited braking.

Lag error:

The short-circuit-controlled movement stop is not activated after the speed-controlled movement stop. As a result, the motor only has limited braking when the axis limit values are set too high for acceleration.

1.3.3.3.94 NC Software – ACP10 V1.192

ID#135117 : solved problem, solved since V1.192

Access to NC data modules did not function with certain AR versions

Management for BR modules has been changed in the following AR versions:

- AR for SG4 E2.73 – V2.79
- AR for SG4 starting with F2.85

For this reason, access to the following NC data modules did not function with the AR versions

listed above:

- NC Deployment tables
- NC INIT Parameter modules
- NC Error Text tables

1.3.3.3.95 NC Software – ACP10 V1.191

ID#134342 : solved problem, solved since V1.191

Override values were not transferred to the ACOPOS after ACOPOS restart

The override values "move.basis.override.v" and "move.basis.override.a" should be transferred to the ACOPOS after each change.

These values should be transferred after an ACOPOS startup (network initialization) if they differ from the default value "10000".

Until now, this was only done during the first ACOPOS startup. After restarting the ACOPOS, these values falsely were not re-transferred, if they differ from the default value "10000".

ID#134302 : solved problem, solved since V1.191

Some controller parameters were not transferred to the ACOPOS after ACOPOS restart

After calling the NC actions "ncCONTROLLER, ncINIT" or "ncGLOBAL, ncINIT", the following parameters are only transferred to the ACOPOS if the value of the corresponding variable in the NC structure has changed or differs from the default value (see also the Online Help):

- Parameter "SCTRL_TI_FIL" for variable "controller.speed.t_filter" from V1.120 on
- Parameter "CONTROLLER_MODE" for variable "controller.mode" from V1.130 on

In the past, these parameters falsely were not re-transferred to the ACOPOS if, after successfully executing one of the NC actions mentioned above, an ACOPOS startup (network initialization) was executed and the NC actions mentioned above were called up again.

1.3.3.3.96 NC Software – ACP10 V1.190

ID#133350 : solved problem, solved since V1.190

Target system ARwin (AR010), POWERLINK, processor blocked for the Windows operating system while establishing communication (only in V1.183 – V1.189)

At the beginning of the basis initialization (function for start up of all ACOPOS modules connected to the network), an attempt is made to establish communication to all ACOPOS modules that have been configured. In V1.183 – 1.189 during this attempt to establish communication, the processor for the Windows operating system was blocked from the low-priority NC-IDLE task on the PLC. This lasted approximately 11 seconds, if just one of the configured ACOPOS modules was not connected to the POWERLINK network.

From V1.190 on, the NC-IDLE task on the PLC the processor for the Windows operating system is no longer blocked during this function.

ID#133342 : solved problem, solved since V1.190

Target system SG4, POWERLINK, initial ACOPOS parameter tables, the data for type STRxx parameters was sometimes falsely transferred (only in V1.182 – V1.189)

Initial ACOPOS parameter tables are tables that are defined for an NC object in an NC deployment table. The parameters contained in these ACOPOS parameter tables are transferred to the ACOPOS during the ACOPOS startup function.

If a type STRxx parameter was present in an initial ACOPOS parameter table, then the data of the second-to-last data segment was incorrectly contained in the last data segment (WR_BLOCK_LAST_SEGM).

This was the reason why the strings were not correctly transferred in the following cases:

- ParID 40 (MOTOR_ORDERTEXT, type STR32) for strings that are 30 bytes and longer
- ParID 41 (MOTOR_SERIALNUMBER, type STR16) for strings that are 12 bytes and longer

1.3.3.3.97 NC Software – ACP10 V1.188

ID#133202 : new function since V1.188

ACOPOS parameter tables, handling the "VersionFrom" attribute

Some ACOPOS parameters can only be used starting with a specific version of the ACOPOS operating system. For such parameters, this minimum version is entered in the module created from an ACOPOS parameter table with the attribute "VersionFrom" when using AS versions V2.5.2.0002 and higher during the Build procedure.

The "VersionFrom" attribute is now evaluated by the ACP10 software on the PLC when processing ACOPOS parameter tables. The parameter is not transferred to the ACOPOS if the ACOPOS operating system version there is older than the minimum version defined with "VersionFrom".

Transferring such a parameter (e.g. 849 "MOTOR_TAU_THERM") with older versions of the ACP10 software will cause the response error "1: Invalid parameter ID" and transfer of the ACOPOS parameter table is aborted. This problem can be avoided by disabling this parameter in the ACOPOS parameter table.

ID#133010 : solved problem, solved since V1.188

Target system SG4, POWERLINK, transfer of ACOPOS parameters from the hardware tree was aborted (only in V1.181 – V1.187).

Among other things, the parameters defined for an ACOPOS via the hardware tree are transferred to the ACOPOS in the startup function.

Since January 12, 2006, parameter 849 "MOTOR_TAU_THERM" is also defined. If this parameter is contained in the hardware tree for AS versions earlier than V2.5.2.0002, then the transfer of the ACOPOS parameters for ACP10–SW V1.181 – V1.187 is falsely aborted after this parameter has been detected. In this case, ACP10 software V1.188 or later must be used.

1.3.3.3.98 NC Software – ACP10 V1.187

ID#131762 : new function since V1.187

NC actions for operation of NC objects with type "ncACP10USCOB"

If in the "Number of HPRIO–WRITE–COBs for ACP10USCOB" in the NC configuration a value greater than zero is defined, NC objects with type "ncACP10USCOB" can be operated with the following actions:

- "ncREAD_COB,ncDEFINE": Define Read CAN object with CAN_defineCOB()
- "ncWRITE_COB,ncSEND": Send Write CAN object with CAN_sendCOB()

ID#132080 : solved problem, solved since V1.187

POWERLINK, jump in speed with network coupling

With loss of a cyclic POWERLINK frame a speed jump occurred. Extrapolating the position caused a wrong initialization for one POWERLINK cycle.

ID#131280 : solved problem, solved since V1.187

Wrong status for initialization of a Parameter Sequence

During the initialization of a parameter sequence after calling the NC action "ncPAR_SEQU+ncSERVICE,ncINIT" wrongly "status.init = ncTRUE" was set, despite the last parameter caused an error.

1.3.3.3.99 NC Software – ACP10 V1.186

ID#130582 : solved problem, solved since V1.186

Error after calling the NC action "ncNETWORK,ncINIT"

If an error occurs during network initialization after calling the NC action "ncNETWORK,ncINIT{+ncRESET}", then the appropriate error set remains falsely stored. This leads then to the fact that with each following call of this NC action the network initialization is not started at all, but an abort with displaying of this error record takes place immediately.

1.3.3.3.100 NC Software – ACP10 V1.185

ID#129100 : solved problem, solved since V1.185

"monitor.status.error/warning" were operated only with active communication (only in V1.103 – V1.184)

If cyclic network communication to the ACOPOS was not active, then the following status components were not operated:

- monitor.status.error
- monitor.status.warning

1.3.3.3.101 NC Software – ACP10 V1.184

ID#128517 : solved problem, solved since V1.184

Encoder interface AC122, AC123: In the case of temporary encoder errors no error message was logged (only in V1.111 – V1.183)

In the case of temporary encoder errors (<800usec) the motor was stopped by short circuit halt or eddy current halt. However no error message was logged.

ID#128000 : solved problem, solved since V1.184

Motor temperature model was deactivated (only in V1.181 – V1.183)

When current was applied to the motor, the temperature of the motor temperature model (TEMP_MOTOR_MODELL) hardly changed. This can cause thermal damage to the motor windings. Small motors (rated current < 5A) are especially susceptible when peak current is applied, as are motors without a temperature sensor when the current applied is higher than the rated current.

ID#127230 : solved problem, solved since V1.184

The ready LED and the error LED of the drive were not correctly controlled in the simulation mode (only in V1.180 – V1.183)

1.3.3.3.102 NC Software – ACP10 V1.183

ID#127202 : solved problem, solved since V1.183

POWERLINK, basis initialization, faster recognition of ACOPOS modules that are not connected

During the basis initialization (function for start up of all ACOPOS modules connected to the network), an attempt is made to connect to all of the ACOPOS modules that have been configured. The system is now considerably faster at recognizing, if an ACOPOS is not connected to the network. This can speed up the basis initialization (the more configured ACOPOS modules that are not connected to the network, the more noticeable the acceleration).

1.3.3.3.103 NC Software – ACP10 V1.182

ID#126617 : new function since V1.182

ACOPOS Parameter table: Parameters with more than 6 bytes data are now transferred

Up to now, if Parameters with data length greater than 6 bytes were contained in an ACOPOS Parameter table (e.g. the parameter MOTOR_ORDER_TEXT), then the transfer of this table was aborted with following error:

– 32157: Length of parameter data too large for ACOPOS parameter in XML data

1.3.3.3.104 NC Software – ACP10 V1.181

ID#125612 : new function since V1.181

Target system SG4, POWERLINK, faster transfer of initial ACOPOS parameter tables

Initial ACOPOS parameter tables are tables that are defined for an NC object in an NC deployment table. During the basis initialization (function for startup of all ACOPOS modules connected to the network), the parameters contained in these ACOPOS parameter tables are now transferred parallel to all ACOPOS modules (previously, sequentially ACOPOS for ACOPOS).

This accelerates the basis initialization (the more ACOPOS modules that are used, the more noticeable the acceleration).

1.3.3.3.105 NC Software – ACP10 V1.180

ID#123247 : new function since V1.180

New NC structure component "controller.ff" for controller mode with feed forward control

ID#110805 : new function since V1.180

Motor holding brake control monitoring: No error message with defective relay

If after the command "controller switch off" due to an brake control error the brake output status does not get low, the controller remains active. In this case now the error number 6047 is logged.

ID#123646 : solved problem, solved since V1.180

Induction motor, Flux controller, Flux weakening controller: Torque limitation and current fluctuation

The torque was limited in speeds over the rated speed (MOTOR_SPEED_RATED) too strongly. In addition it could happen that over the rated speed (MOTOR_SPEED_RATED) the direct

current (ICTRL_ISD_ACT) fluctuated strongly.

Avoidance of compatibility problems:

If at least one of the following parameters were changed, then a compatibility problem is to expect after an firmware exchange: FCTRL_KV and/or FWEAK_I (=ParID 261). The internal parameter FWEAK_I was deleted. To avoid compatibility problems remove changes of the flux controller (FCTRL_KV and FCTRL_TN). The changed automatic configuration of the flux weakening controller should lead to a better controller behavior.

1.3.3.3.106 NC Software – ACP10 V1.171

ID#123547 : solved problem, solved since V1.171

The loop for reading the parameter BOOT_STATE could be aborted too early

After transfer of the parameters SW_RESET or CMD_BOOT_STATE the NC manager sends in a loop so long a Read Request for the parameter BOOT_STATE to the ACOPOS, until the ACOPOS answers with Read Response or a timeout is reached.

If the NC manager before the next Read Request after an unsuccessful read attempt (Read Request without Response) were interrupted so long that the timeout was reached, then the loop with an timeout error was aborted too early, without a further Read Request was sent.

1.3.3.3.107 NC Software – ACP10 V1.170

ID#122777 : new function since V1.170

Acceleration of parameter transfer when using "ACP10_MC"

When using the PLCopen-MC-Library "ACP10_MC", a function for accelerating the parameter transfer is only activated if an AR version 2.80 or later is being used on the PLC and an integer ratio is set between the SystemTick and the POWERLINK cycle time.

The following information is added to the logbook after this function has been successfully activated:

- Acp10NetCyc_SIOS: Install OK
- NetCyc: PL_Cycle/SysTick OK

ID#123400 : solved problem, solved since V1.170

CAN, no network monitoring after NC action "ncNETWORK,ncINIT+ncRESET"

If after successful completion of the ACOPOS startup the NC action "ncNETWORK,ncINIT+ncRESET" was called, then in the subsequent ACOPOS startup the parameter "NETWORK_LIVE_CTRL" was not transferred to the ACOPOS and therefore the network monitoring not activated.

ID#122772 : solved problem, solved since V1.170

NC Action "ncMESSAGE,ncTEXT": Error despite correct error text data module

The following message was mistakenly output if not all of the bytes after the actual module name were set to zero in "message.text.parameter.data_modul":

- Module not existing (or wrong type)

1.3.3.3.108 NC Software – ACP10 V1.166

ID#120102 : solved problem, solved since V1.166

Target system SG4, data block transfer was blocked in rare cases

In rare cases, the data block transfer could be blocked after calling one of the following NC actions if "Taskclass for NC Manager task" in the NC configuration was set greater than or equal to "Idle taskclass" in the CPU configuration:

- ncACP_PAR+ncSERVICE, ncDOWNLOAD
- ncCAM_PROF+ncSERVICE, ncDOWNLOAD
- ncPAR_SEQU+ncSERVICE, ncDOWNLOAD {+ncINIT}

If this problem occurs, the following values in the status data of the data block operation, that were set after calling the NC action, remain unchanged:

- status.data_len = 0
- status.ok = ncFALSE
- status.error = ncFALSE

1.3.3.3.109 NC Software – ACP10 V1.164

ID#118360 : solved problem, solved since V1.164

POWERLINK, wrong response with writing a parameter via the acyclic channel

With writing a parameter via the acyclic channel (e.g. with transfer of ACOPOS Parameter tables, Parameter Sequences or Cam Profiles), an old response frame was sent back.

This could only occur if previously cyclic user data (CYCL_USER_FRDRV) with zero length were requested from the drive.

1.3.3.3.110 NC Software – ACP10 V1.162

ID#114872 : solved problem, solved since V1.162

Speed controller: No movement stop with disabled speed controller (only in V1.101 – V1.161)

If the speed controller were switched off at the speed controller enable input (SCTRL_ENABLE_PARID), then in case of an error no automatic movement stop was started.

ID#114242 : solved problem, solved since V1.162

Despite switched off controller it could occur that the error 9012: "Motor temperature sensor: Not connected or destroyed" was falsely displayed. (only in V1.157 – V1.161)

ID#114245 : solved problem, solved since V1.162

Parameter sequence and parameter list: Data address equal to zero now is tested

For parameter records with format "ncFORMAT_ADR" in a parameter sequence or a parameter list, now a corresponding error is indicated if the data address is equal to zero.

Previously, before the processing of a parameter record was not tested whether the data address is equal to zero and in this case an address error (page fault) could occur.

1.3.3.3.111 NC Software – ACP10 V1.160

ID#112807 : new function since V1.160

POWERLINK, new parameters for network initialization in the NC configuration

In the NC configuration the structure "Network Initialization (ACOPOS startup)" was expanded with following two parameters:

- 1) Warning for non-ascending node numbers (only for POWERLINK): Yes/No
After changing the default setting "Yes" to "No", the following warnings are suppressed:
 - 64002: Delay before SW Reset (network with ascending node numbers ?)

– 64003: Delay before NC System Start (network with ascending node numbers ?)
For example, this setting can be used, if network wiring with ascending nodenumbers is not unconditionally necessary.

2) Indicate network errors before first NC action (only for POWERLINK): Yes/No
After changing the default setting "Yes" to "No", monitoring of network communication is activated first then if for this ACOPOS an NC action is called, with which parameters will be transferred to the ACOPOS. Until this point in time no network errors are indicated in this case.
For example, this setting can be used if the ACOPOS startup should be carried out for each ACOPOS individually with the NC action "ncNETWORK,ncINIT+ncRESET" without considering the wiring sequence in the network.

1.3.3.3.112 NC Software – ACP10 V1.157

ID#109397 : solved problem, solved since V1.157

Servo drives 8V10xx.00–2: Junction temperature was not monitored sufficiently

Under the following conditions the junction temperatures of the transistors U+, V+ and W+ of the servo drives 8V10xx.00–2 were not monitored.

- The motor did not move.
- The motor was in a special position.
- The current of the servo drive was larger than the rated current (ACOPOS_CURR_RATED).

Usually this scenario arises only with blocked rotor.

ID#110032 : new function since V1.157

Multimotor operation: If several motors are attached at a servo drive, then for all motors the temperature models are computed now.

1.3.3.3.113 NC Software – ACP10 V1.156

ID#110292 : solved problem, solved since V1.156

Encoder interface AC123, SSI encoder: During parameterising of SSI encoders a wrong actual position could be set up.

The bugfix described with ID#99252 did not work for all SSI encoders.

ID#109922 : solved problem, solved since V1.156

Encoder interface AC130: At some 8V101x.xx–2 servo drives, the encoder emulation did not work.

The outputs A, B and R were not set by the encoder emulation.

1.3.3.3.114 NC Software – ACP10 V1.155

ID#109417 : solved problem, solved since V1.155

Servo drive 8V1640.13–2: The junction temperature was not monitored sufficiently

ID#108997 : solved problem, solved since V1.155

Encoder interface AC120, EnDat encoder: Sometimes the wrong motor data set was used

In use of at least two EnDat encoders with motor data set, an incorrect motor data set could be initialized. The motor data set of the encoder that was read last, was always used per default for the controller.

1.3.3.3.115 NC Software – ACP10 V1.154

ID#108717 : solved problem, solved since V1.154

Induction motor: The torque was limited in the field weakness area to strongly

ID#108232 : solved problem, solved since V1.154

Sometimes NC actions were processed in the wrong order

If for an ACOPOS both NC object types (ncAXIS and ncV_AXIS) in an application were used, then in rare cases the treatment of an NC action for the one NC object type was earlier executed although the NC action for the other NC object type in the application had been earlier called.

ID#108025 : solved problem, solved since V1.154

ACOPOS Functions Block "CMP" (Comparator): In the comparator modes 1, 4, 9 and 12 the hysteresis function could not be activated.

1.3.3.3.116 NC Software – ACP10 V1.153

ID#107877 : solved problem, solved since V1.153

Encoder interface AC130, incremental encoder emulation without reference pulse: An error occurred in the encoder emulation, after 2^{25} impulses were produced.

By an internal overflow the position was incremented with the maximum counting rate in the inverse direction and the error number 39016 "Incremental encoder emulation: Frequency too high" was logged.

1.3.3.3.117 NC Software – ACP10 V1.152

ID#106272 : solved problem, solved since V1.152

Encoder interface AC130, AC123, Incremental encoder reference pulse check: The value of the reference pulse width of the encoder 3 could not be set.

ID#105672 : solved problem, solved since V1.152

Current controller: In the case of change of switching frequency F_SWITCH the current controller parameters (ICTRL_KV und ICTRL_TI) were not adjusted automatically. (only in V1.140 –1.151)

By the fact it could occur that the error of the current controllers and all overlaid controllers was increased. In some cases the current controller could become unstable.

It could occur that at least one of the following errors was indicated.

6019, 9300, 4007, 9000, 9010, 9030, 9040, 9070, 9050, 9060, 9075, 41001, 41011, 41031, 41041, 41070, 41051, 41061 or 41075

ID#106392 : new function since V1.152

Encoder interface AC130, AC123, Incremental encoder reference pulse check: The parameters ENCOD_REF_CHK_DELTA, ENCOD2_REF_CHK_DELTA und ENCOD3_REF_CHK_DELTA are available for reading the reference pulse interval error.

1.3.3.3.118 NC Software – ACP10 V1.151

ID#104255 : solved problem, solved since V1.151

Simulation mode, 8V1010.50–2 und 8V1016.50–2 (only in V1.141 – V1.150)

The following errors were mistakenly displayed in the simulation mode with the servo drives 8V1010.50–2 and 8V1016.50–2.

- 9040: Bleeder temperature model: Overtemperature
- 41041: Bleeder temperature model: Overtemperature

ID#101510 : solved problem, solved since V1.151

Encoder interface AC120, sine/cosine encoder: Short signal disturbances in the AB line are not detected

If the signal amplitude exceeds the border 1.44V_{ss} for incremental signals longer than 400µs , the following error is now indicated:

- 7031: Encoder: Incremental signal amplitude too large (disturbance)

IMPORTANT: This correction only affects AC120 modules starting with Rev. K0.

1.3.3.3.119 NC Software – ACP10 V1.150

ID#103062 : solved problem, solved since V1.150

From now on, EnDat parameters transferred from PLC to the ACOPOS always work

From now on, parameters will be transferred from PLC to the ACOPOS as soon as reading motor parameters from EnDat encoders has been completed.

Until now, a motor parameter could be already transferred from PLC to the ACOPOS, before reading of the motor parameters of the corresponding EnDat encoder has been completed. In this case the value which was read from the encoder worked and not the value transferred from PLC to the ACOPOS.

From now on, always that value works, which is transferred from PLC to the ACOPOS.

ID#102945 : solved problem, solved since V1.150

Monitoring of the ACOPOS continuous power: The error numbers 9075 and 41075 were mistakenly displayed (only in V1.141 – V1.145)

The following errors were mistakenly displayed with servo drives 8V1010.50–2 and 8V1016.50–2.

- 9075: ACOPOS continuous power: Overload
- 41075: ACOPOS continuous power: Overload

ID#102347 : solved problem, solved since V1.150

Cam automat: Wrong slave position with compensation gear mode ncSL_ABS (only in V1.020–V1.145).

The slave position with a ncSL_ABS–compensation was wrong, if the change was released by an event ncAT_ONCE while a compensation curve was active.

ID#102120 : solved problem, solved since V1.150

Encoder interface AC130: In the mode "encoder emulation without reference pulse" the digital outputs DO5 and DO6 could not be set.

ID#101322 : solved problem, solved since V1.150

Cam automat: Position jump with negative direction of master movement (only in V1.006–V1.144).

During negative direction of master movement a position jump could occur with an ncAT_ONCE–event, if no "ncST_END+ncNEGATIVE" event was configured in the automat state.

ID#101317 : solved problem, solved since V1.150

Cam automat: Wrong default reaction with FFFF cam profile and negative direction of master movement (only in in V1.006–V1.144).

If an "ncST_END+ncNEGATIVE" event was not configured in a automat state, then the left edge of a FFFF curve (predefined linear curve) was not limited "horizontally". Therefore the slave movement at master reversal was not locked.

ID#100810 : solved problem, solved since V1.150

Digital outputs AC130, AC131 with POWERLINK network: The digital outputs could not be set, if the digital IO configuration was transferred immediately after the start of the NC operating system.

ID#101307 : new function since V1.150

Cam automat: The maximum number of events for a state was increased from 4 to 5.

ID#101157 : new function since V1.150

Entering parameter sequence records in network command trace can now be activated

If the selection "Network command trace, enter parameter sequence record " is set to "Yes" in the NC configuration, then the individual parameter records are entered in the network command trace when transferring parameter sequences to the ACOPOS device.

Starting with Automation Studio V2.4.0.1106 these entries are displayed in the Network Command Trace with type "Parameter Sequence Record", with older Automation Studio versions with type "Broadcast".

1.3.3.3.120 NC Software – ACP10 V1.145

ID#102130 : solved problem, solved since V1.145

Stopped axis moves during power failure

If external load torque was applied to a stopped axis during a power failure, then it was possible that the axis moved while the holding brake was activated.

The error correction only functions for servo drives with active phase failure monitoring. For this, all contacts on connector X3 (L1, L2 and L3) must be connected to the power mains.

The following ACOPOS servo drives do not have phase failure monitoring:

8V1022.00–2 from Rev.:A0 up to and including Rev.:F0

8V1045.00–2 from Rev.:A0 up to and including Rev.:F0

8V1090.00–2 from Rev.:A0 up to and including Rev.:F0

ID#102100 : solved problem, solved since V1.145

During a power failure in Controller mode "U/f controller", the axis stops even though movement

interruption is deactivated (ERRESP_UDC_POWERFAIL is 0) (only in V1.103 – V1.144)

1.3.3.3.121 NC Software – ACP10 V1.143

ID#100850 : solved problem, solved since V1.143

After movement abortion the controller sometimes was not switched off (only in V1.067 – V1.142)

In a few cases, the controller was not switched off after a movement was aborted due to an error (green and orange LEDs are lit and the status was "Controller on").

1.3.3.3.122 NC Software – ACP10 V1.142

ID#106832 : solved problem, solved since V1.142

CAN, time for response timeout after Parameter Request increased

The time for response timeout after Parameter Request telegrams was increased from 10ms to 60ms. With versions starting from V1.142 therefore the following errors occur 50ms later:

- 32010: Drive not responding to Read Request (is the drive in the network ?)
- 32011: Drive not responding to Write Request (is the drive in the network ?)

ID#100282 : solved problem, solved since V1.142

POWERLINK, inconsistent data records in Network Commando Trace

The function, which the NC Manager idle time task used to write data records into the Network Commando Trace, could be interrupted by the respective function in the cyclic NC Manager task. This could cause inconsistent data records in Network Commando Trace.

In the NC Manager idle time task, the parameter data contained in acyclic POWERLINK frames (e.g. for data block download) are entered into the Network Commando Trace and the parameter data contained in the cyclic POWERLINK frames are entered in the cyclic NC Manager task. The problem occurred most often if both types of parameter transfer were used in an application at the same time (both the type using cyclic and the type using acyclic POWERLINK frames).

ID#100067 : solved problem, solved since V1.142

"move.reference" was contained in the "ACP10VAXIS_typ" data type instead of "move.homing" (only in V1.110 – V1.141)

Due to reasons of compatibility with the corresponding component in the "ACP10VAXIS_typ" data type, the "move.reference" component in the "ACP10VAXIS_typ" data type was corrected to "move.homing".

This change causes a compiler error if this component is used in an application program. In this case, "move.reference" must also be changed in the application program to "move.homing".

ID#99252 : solved problem, solved since V1.142

Encoder interface AC123, SSI multiturn encoder

During parameterising the AC123 interface of a SSI multiturn encoder a wrong actual position could be set up.

ID#100072 : new function since V1.142

NC Manager errors are now entered in the Network Command Trace

Starting with Automation Studio V2.4.0.1106 these entries are displayed in the Network Command Trace with type "NC Manager Info", with older Automation Studio versions with type "Broadcast".

1.3.3.3.123 NC Software – ACP10 V1.141

ID#106837 : solved problem, solved since V1.141

POWERLINK, cycles for response timeout after Parameter Request within cyclic frames increased

The number of cycles or response timeout after Parameter Request within cyclic frames was increased by 3, because some CPUs (above all SG3) with POWERLINK have a so bad performance that the task class cycle time must be set to an higher value than "pl_cycle*7". The value 1 for the number of cycles for this Response Timeout, computed in this case, was sometimes too small. This could lead then to the following errors:

- 32010: Drive not responding to Read Request (is the drive in the network ?)
- 32011: Drive not responding to Write Request (is the drive in the network ?)

ID#97902 : solved problem, solved since V1.141

Functions could be blocked after a network failure or network initialization (only in V1.100 – V1.140)

After detecting a network failure or after calling the NC action for network initialization, the command interfaces in the NC manager are re-initialized. An error in the respective INIT function caused the following functions for future calls to blocked (return status "ncACTIVE" after calling the corresponding NC action), if they were being processed during the execution of this INIT function:

- Basis movements
- Data block download

ID#100820 : new function since V1.141

The servo drives 8V1010.50–2 und 8V1016.50–2 are now supported

If the servo drive 8V1010.50–2 und 8V1016.50–2 is used with older versions, then the following error is displayed after switching on the controller:

- 6033: "Serial EEPROM: Critical date is not valid"

ID#99247 : new function since V1.141

Encoder interface Ac120, EnDat encoder

EnDat encoder with not EnDat compliant zero shift are supported.

1.3.3.3.124 NC Software – ACP10 V1.140

ID#97692 : solved problem, solved since V1.140

Encoder interface AC120, EnDat encoder

Now, all encoder errors which occur during the boot procedure in the ACOPOS operating system are deleted because according to the encoder manufacturer, errors may be incorrectly displayed by switching the encoder on/off.

ID#97687 : solved problem, solved since V1.140

CAN, reconfiguring the cyclic monitor data (only in V1.102 – V1.132)

Reconfiguring the cyclic monitor data for CAN with the parameters CYCL_MON_REQU1 and CYCL_MON_REQU2 only worked correctly if a "ncV_AXIS" type NC object was configured.

ID#97682 : solved problem, solved since V1.140

Sometimes the controller was not switched off if a movement was aborted in simulation mode (only in V1.131 – V1.132)

ID#97612 : solved problem, solved since V1.140

Encoder interface AC123, SSI encoder (up to V1.062 and from V1.111 to V1.132)

Incremental encoder error messages could be displayed if one of the following configurations were performed immediately after setting the parameter ENCOD_TYPE, ENCOD2_TYPE, ENCOD3_TYPE to "ncSSI" for the corresponding encoder interface:

- Homing the encoder
- Define the actual encoder position on FB inputs
- Define the actual encoder position for vector controller or position controller

ID#97672 : new function since V1.140

The maximum length of the parameter data for cyclic user data to the drive ("ncCYCL_USER_TODRV") was increased from 8 to 18.

ID#97667 : new function since V1.140

ACOPOS Parameter Tables: Disabling parameter records

Parameter records in an ACOPOS parameter table can now be disabled using the XML data "Disabled=TRUE".

In the editor for ACOPOS parameter tables disabling parameters is possible starting with V2.4.0.1106.

ID#97662 : new function since V1.140

NC Deployment Tables: Disabling NC object blocks

NC object blocks in a NC deployment table can now be disabled using the XML data "Disabled=TRUE".

With Automation Studio V2.x this data can only be entered in the editor for NC deployment tables in the "Additional Data" column.

1.3.3.3.125 NC Software – ACP10 V1.132

ID#97647 : solved problem, solved since V1.132

U/f Control

A position jump of up to 90 degrees electrically could occur if an emergency stop triggered by an internal error occurred while a controller was switched on and in standstill.

1.3.3.3.126 NC Software – ACP10 V1.131

ID#97637 : solved problem, solved since V1.131

Initialization of a parameter list aborted due to an error

Now, parameter transfer is immediately aborted after calling the NC action "ncSERVICE+ncPAR_LIST,ncINIT", if a response error occurs for a parameter.

Previously, if this occurred the rest of the parameters in the parameter list would have been transferred anyways. This could cause problems if one of the remaining parameters was a command parameter with a condition dependent on the successful initialization of the preceding parameter.

ID#97632 : solved problem, solved since V1.131

Encoder interface AC120, EnDat encoder position synchronization (only in V1.052 – V1.130)

Values which only occurred occasionally and were larger than 1/4 of a sine period were not tolerated if there were deviations between the incremental position and the serial EnDat positions. Position jumps 1/4 of a sine period could occur. The following warning was entered:
–39001 "Encoder: Position correction active"

ID#97642 : new function since V1.131

The servo drives 8V1640.03–2 and 8V1640.13–2 are now supported

If the servo drive 8V1640.03–2 or 8V1640.13–2 is used with older versions, then the following error is displayed after switching on the controller:
– 6033: "Serial EEPROM: Critical date is not valid"

1.3.3.3.127 NC Software – ACP10 V1.130

ID#93617 : new function since V1.130

New NC structure component "controller.uf" for controller mode "U/f Control"

ID#93612 : new function since V1.130

New NC structure component "controller.mode" for parameter CONTROLLER_MODE

Up to now, the parameter CONTROLLER_MODE could only be transferred to an ACOPOS via service interface. Therefore due to compatibility reasons, after call of NC action "ncCONTROLLER,ncINIT" this parameter is only transferred to the ACOPOS, if the value of "controller.mode" was changed.

ID#93607 : new function since V1.130

New NC structure component "limit.parameter.a_stop"

ID#85130 : new function since V1.130

The number of data records for the network command trace is now calculated

The number of data records for the network command trace is no longer accepted directly from the NC configuration.

This number is now calculated by multiplying the value of the new NC configuration parameter "Number of data records per ACOPOS for Network Command Trace" with the number of configured ACOPOS modules.

1.3.3.3.128 NC Software – ACP10 V1.121

ID#93495 : solved problem, solved since V1.121

Incorrect limitation of set stator current of the quadrature component on asynchronous motors during generator operation (only in V1.040 – V1.120)

The set stator current of the quadrature component (Parameter ICTRL_ISQ_REF) was incorrectly limited on asynchronous motors during generator operation. This could cause the following errors:

- Jump in ICTRL_ISQ_REF when speed is increasing
- 4007: Lag error stop limit exceeded

1.3.3.3.129 NC Software – ACP10 V1.120

ID#92540 : solved problem, solved since V1.120

Supply voltage failure was sometimes not displayed (only in V1.106 – V1.111)

The following error was mistakenly not displayed if the supply voltage failed during the "controller ON, standstill" state:

- 7215: DC link circuit: At least one phase of the power line failed

ID#92100 : solved problem, solved since V1.120

With NC Deployment tables only one POWERLINK interface could be used

Each NC object, which was defined for POWERLINK network in a NC Deployment table, was assigned to the first POWERLINK interface. Therefore diverse errors occurred when operating such NC objects in an application program or in Automation Studio, which were defined for another POWERLINK interface than the first one.

ID#92172 : new function since V1.120

New NC object with type "ncV_AXIS"

ID#92042 : new function since V1.120

Target system SG4, POWERLINK, ACOPOS startup, synchronization between ACP10 software and ARNC0 software

If the same POWERLINK interface is used to operate ACOPOS modules simultaneously from the ACP10 software and the ARNC0 software, then within the basis initialization the network initialization (ACOPOS startup) is executed synchronized between the ACP10 software and the ARNC0 software.

This now makes it possible to alternately connect ACOPOS modules for ACP10 software and ARNC0 software within one POWERLINK line.

Up to now, using a common POWERLINK interface could lead to errors, whereby an unsynchronized ACOPOS reset command triggered by one of the NC software programs interrupted the network communication of the other NC software program.

ID#92037 : new function since V1.120

Wait for the network communication during the basic network initialization

If "Wait for ACOPOS" is selected in "Network Initialization (ACOPOS startup), Execute at NC software initialization" in the NC configuration, then the basic network initialization for all ACOPOS devices within the NC software initialization is started as soon as the network communication is active with at least one ACOPOS.

ID#92032 : new function since V1.120

New status "ok" for download of ACOPOS Parameter data

If processing of NC action "ncACP_PAR,ncSERVICE+ncDOWNLOAD" has been successfully completed, from now on additionally "status.ok=ncTRUE" is set after successful completion of operation, because ACOPOS Parameter data without any parameter to be transferred do not cause an error and after successful completion of operation "status.daten_len=0" is displayed as well as "status.error=ncFALSE".

ID#92027 : new function since V1.120

New NC structure component "controller.speed.t_filter" for parameter SCTRL_TI_FIL

Up to now, the parameter SCTRL_TI_FIL could only be transferred to an ACOPOS via service interface. Therefore due to compatibility reasons, after call of NC action "ncCONTROLLER,ncINIT" this parameter is only transferred to the ACOPOS, if the value of "controller.speed.t_filter" was changed.

1.3.3.3.130 NC Software – ACP10 V1.106

ID#90772 : solved problem, solved since V1.106

POWERLINK, error during download of cam profiles or parameter sequences

During download of cam profiles or parameter sequences with more than 240 bytes data at transfer of the last data segment (parameter WR_BLOCK_LAST_SEGM) the following error could wrongly occur:

- 41: Value of parameter higher than maximum value

ID#89147 : solved problem, solved since V1.106

POWERLINK, problems when using an ACOPOS with property "multiplexed" as coupling master (only in V1.102 – V1.105)

The Parameter MA_CYCLE_TIME was only transferred to those ACOPOS modules, for which the POWERLINK property "multiplexed" was set. This could lead to problems if an ACOPOS with property "multiplexed" was used as master for coupling functions.

1.3.3.3.131 NC Software – ACP10 V1.105

ID#89152 : solved problem, solved since V1.105

Target system SG3, wrongful timeout errors (only in V1.100 – V1.104)

Inconsistency when reading the system tick could lead to wrongful timeout errors when transferring parameters to/from ACOPOS. Up to now this problem has only occurred when transferring NC operating system directly from Automation Studio to the ACOPOS modules.

ACP10 software V1.100 – V1.104 should no longer be used for SG3.

1.3.3.3.132 NC Software – ACP10 V1.104

ID#88672 : solved problem, solved since V1.104

Reading the boot status of configured, but inactive ACOPOS modules could prevent data block download (only in V1.100 – V1.104)

A function for reading the boot status was activated every 250 NC task cycles for all configured ACOPOS modules, on which the network initialization was not fully completed. While this

function was being processed in the NC-IDLE task, all other NC IDLE task functions were blocked (e.g. data block download). If one of these ACOPOS modules was not connected to the network at all, then this process lasted the entire timeout time of the corresponding communication channel:

- CAN: Read channel1, timeout time 20 msec
- POWERLINK: Acyclic channel1, timeout time at least 210 msec

The problem could be avoided by removing or disabling all those ACOPOS modules in the configuration which were not connected to the network.

For CAN from now on, reading of the boot status is executed directly in the cyclic NC task and therefore NC idle task functions are no longer influenced.

For POWERLINK from now on, reading of the boot status for one of these ACOPOS modules is only activated, if that ACOPOS is recognized as being connected to the network. A status function from the POWERLINK library is used to detect this.

1.3.3.3.133 NC Software – ACP10 V1.103

ID#88572 : solved problem, solved since V1.103

Encoder interface AC120. EnDat encoder (only in V1.061–V1.102)

During the transfer of the serial absolute position, a CRC error could wrongly lead to the following error:

- 39001: Encoder: Position correction active

ID#88242 : solved problem, solved since V1.103

Processing of status bits from ACOPOS

Processing of some status bits is only allowed a specific number of cycles after receiving the corresponding command response from the ACOPOS. This concerns to the status bits belonging to the following status data:

- Movement "In Position"
- "Parameter sequence initialized"

From now on, these status bits are only then processed if the receipt of the new cyclic status bits from the ACOPOS has been detected. Up to now, status inconsistencies could occur in rare cases, if the telegram with the cyclic status bits from the ACOPOS failed in exactly the task class cycle, in which the processing of these status bits was enabled again.

ID#87920 : solved problem, solved since V1.103

Two-encoder control cannot be activated using "CONTROLLER_MODE=3" (only in V1.021 – V1.102)

If two-encoder control was activated by setting the CONTROLLER_MODE parameter to the value "3", the actual value of Encoder1 was used instead of the actual value of Encoder2.

ID#88292 : new function since V1.103

Parameters with 5 and 6 bytes data now can be used within a Parameter Sequence

Up to now only parameters with at most 4 bytes data could be used within a Parameter Sequence.

ID#88207 : new function since V1.103

DIO interface AC130, AC131

From now on, reading the event counters is allowed.

1.3.3.3.134 NC Software – ACP10 V1.102

ID#87612 : solved problem, solved since V1.102

Target system SG3, the NC system download could be mistakenly aborted (only in V1.100 – V1.101)

If "Network initialization (ACOPPOS startup), Execute automatically after ACOPPOS reset" was set to "Yes" in the NC configuration, then the direct NC system download (without saving to the PLC) could be mistakenly aborted.

ID#87607 : solved problem, solved since V1.102

The cyclic status bits are now processed one task class cycle earlier for POWERLINK

Until now, the cyclic status bits from the drive were processed for POWERLINK one task class cycle after being received. Therefore, status indicators (e.g. "Controller ON" or "In Position") derived from the cyclic status bits are now provided in the application program one task class cycle earlier.

ID#87252 : solved problem, solved since V1.102

Virtual axis, movement stop

Previously, a movement could be mistakenly started during a movement stop with CMD_MOVEMENT_STOP_VAX1.

ID#87247 : new function since V1.102

Handling the POWERLINK property "multiplexed"

1.3.3.3.135 NC Software – ACP10 V1.100

ID#84157 : solved problem, solved since V1.100

Implicit commands are only executed if network initialization is already complete

The following implicit commands are now only executed if network initialization has already completed:

- Write override
- Write time for network monitor (only for CAN)
- Read error block
- Read homing status

Previously, if network initialization was not yet complete, the following error would have been displayed for the implicit commands after opening the motion test:

- 32011: No response of drive for Write Request (exists drive in network ?)

ID#84317 : new function since V1.100

New NC action "ncPAR_LIST+ncSERVICE,ncINIT" for initialization of a parameter list.

ID#84012 : new function since V1.100

Subsequent network initialization (ACOPOS startup after completing the NC software initialization) now is possible

If selected by the user, subsequent network initialization is started automatically, after a configured ACOPOS device is detected on the network, for which the network initialization was not yet fully completed.

The network initialization can be started in an application program with the NC action "ncNETWORK,ncINIT".

New status "network.nc_sys_restart". This status can be acknowledged with the new NC action "ncNETWORK+ncNC_SYS_RESTART,ncACKNOWLEDGE".

1.3.3.3.136 NC Software – ACP10 V1.069

ID#83325 : solved problem, solved since V1.069

Supply voltage; loading relay oscillates during DC bus voltage and in single-phase mains operation (only in V1.064 – V1.068)

If a servo drive with active phase failure monitoring was not supplied with a three-phase mains supply (e.g.: DC bus voltage and single-phase mains operation), then the loading relay was cycled on and off with charged DC bus voltage. The oscillation of the loading relay was able to be prevented by disabling the phase failure monitor (PHASE_MON_IGNORE = 1).

ID#82405 : solved problem, solved since V1.069

Phasing in dither mode, invalid commutation angle

An invalid commutation angle (MOTOR_COMMUT_OFFSET = "NAN") was detected for motor encoders with a low number of increments per revolution (SCALE_ENCODx_INCR parameter) and low rotor phasing current (PHASING_CURR parameter) or blocked rotor.

The following errors are displayed when the controller is switched on:

- 4005 "controller cannot be turned on: Drive in error state"
- 9050 "ACOPOS peak current: Overload"
- 9060 "ACOPOS continuous current: Overload"
- 9070 "Motor temperature model: Over-temperature"

ID#82385 : solved problem, solved since V1.069

Hardware limit switch malfunction when using a cam profile automat

Only the edges of one hardware limit switch signal are evaluated depending on the direction of movement, i.e. the edge of the positive hardware limit switch only stopped movement if the automat speed was positive and the edge of the negative hardware limit switch only stopped movement if the automat speed was negative.

When using an encoder position as master axis, this could cause a malfunction when a hardware limit is reached at low speeds.

The value of the hardware limit switch is now checked cyclically depending on the direction of movement.

ID#82395 : new function since V1.069

Activation of phase failure monitoring

The phase failure monitoring has been activated for the following servo drives:

- 8V1022.00–2 starting with Rev.H0
- 8V1045.00–2 starting with Rev.I0
- 8V1090.00–2 starting with Rev.I0

The following errors are sent when a phase failure occurs:

7215 "DC link circuit: At least one phase of the power line failed"
 7210 "DC link circuit: Voltage unstable"

ID#82285 : new function since V1.069

The holding brake is now activated with a delay for short-circuit braking

To ease the load on the holding brake, it is now activated once the braking procedure is complete.

1.3.3.3.137 NC Software – ACP10 V1.068

ID#81787 : solved problem, solved since V1.068

Encoder interface AC121, Stegmann Hiperface encoder: Absolute position error or commutation error

If the Hiperface encoder position was decremented during the boot phase, the absolute encoder position could be incorrectly determined. This also affects the rotor commutation of motor encoders with synchronous motors and causes unstable control with the following error:

– 4007 "lag error, abort limit exceeded"

ID#81140 : solved problem, solved since V1.068

Limited range for permissible power supply

It was possible to operate the servo drives with supply voltages under 3x400VAC or with a DC bus voltage under 565.7 VDC. In this case, external DC bus power supplies do not function.

The permissible range for the mains supply was reduced and standardized for all servo drives:

– 8V1022.00–2 – 8V1090.00–2 from 3x380–3x480VAC to 3x400–3x480VAC
 – 8V1180.00–2 – 8V128M.00–2 from 3x380–3x480VAC to 3x400–3x480VAC

If the servo drives are supplied with supply voltages that lead to a DC bus voltage lower than $509.1\text{VDC} = \sqrt{2} \cdot 0.9 \cdot 400\text{VAC}$, then the following error message is given:

– 7218 "DC link circuit: Voltage too low → Nominal voltage detection not possible"

ID#81020 : new function since V1.068

The following parameters for the motor temperature model and the ACOPOS loads can now be defined:

The following parameters can be defined:

– LOAD_CONT_CURR (ACOPOS continuous current: Load [%])
 – LOAD_PEAK_CURR (ACOPOS peak current: Load [%])
 – TEMP_BLEEDER (braking resistor temperature model: Temperature [°C])

The following parameter has been redefined:

– LOAD_MOTOR_MODEL (motor temperature model: Load [%])

1.3.3.3.138 NC Software – ACP10 V1.067

ID#80027 : solved problem, solved since V1.067

Encoder interface AC121, Stegmann Hiperface encoder:

The following encoder errors could be displayed when using Hiperface encoders even though the encoder is functioning properly:

- 7038 "Encoder: Position value not synchronous with absolute value"
- 7015 "Encoder: Timeout error during transfer parameter"
- 7044 "Encoder: Parity"

ID#79645 : new function since V1.067

Movement stop due to short-circuit braking

The following errors indicate that movement was stopped due to the controller being switched off.

- 6019 "Hardware: Over-current in the IGBTs"
- 9300 "Current controller: Over-current IGBT (current not measurable)"
- 7200 "DC link circuit: Overvoltage signaled by hardware"

This causes the motor to spin out. When encoder errors occur, a stop of movement is executed with calculated encoder position.

Now, movement is stopped with controlled short-circuit when the errors mentioned above occur. There are cases where the short-circuit braking is interrupted (e.g.: defective power transistor, etc.).

1.3.3.3.139 NC Software – ACP10 V1.066

ID#79882 : solved problem, solved since V1.066

Encoder interface AC123 and AC130, reference pulse monitoring

An error message was only entered after the permissible range was exceeded two times.

ID#79687 : solved problem, solved since V1.066

Encoder Interface AC123, SSI multi-turn motor encoder: Disturbance pulse on speed controller actual speed when encoder position overflow occurs

When the encoder position is exceeded, an extremely high value could be determined for 200us on the speed controller actual speed. An undefined acceleration with lag error interruption could occur if the speed controller filter was also used. This only occurred when used as motor encoder.

ID#79575 : solved problem, solved since V1.066

Overloaded braking resistor

The braking resistor was sometimes overloaded during the braking operation with the following configuration:

- ARNC0-SW with CAN network and target systems ARwin (AR010), AC140 and PP2xx

1.3.3.3.140 NC Software – ACP10 V1.065

ID#79595 : solved problem, solved since V1.065

The current controller occasionally malfunctions.

In rare cases, motor current could not be applied despite the controller being switched on (green and orange LEDs lit and controller status "On"). When this occurs, the error 4007 "Lag error stop limit exceeded" was displayed when a movement was started.

ID#79642 : new function since V1.065

New homing mode ncDCM

Incremental encoders with distance-coded reference marks can now be referenced using the "ncDCM" mode or "ncDCM+ncCORRECTION".

1.3.3.3.141 NC Software – ACP10 V1.064

ID#79637 : solved problem, solved since V1.064

Switch on controller, holding brake

After the "switch on controller" command, the controller could not be switched off using the "switch off controller" command or lag error emergency stop, until the mechanical holding brake was released. Only the position controller was disabled. This error state could not be ended using successive "switch off controller" commands either.

ID#79627 : solved problem, solved since V1.064

Movement start, switch on / switch off controller, holding brake

After the "switch on controller" command, another movement could be started until the mechanical holding brake is engaged. This unauthorized movement start (without error response) was not executed. Depending on the duration of the movement and the controller configuration, a position jump could occur the next time the controller was switched on or during the next movement start.

ID#79585 : solved problem, solved since V1.064

Limited range for permissible power supply

It was possible to operate the servo drives with supply voltages under 3x380VAC or with a DC bus voltage under 537.4 VDC. In this case, internal or external DC bus power supplies did not function.

If devices from the group 8V1022.00–x – 8V1090.00–x are coupled with devices from the group 8V1180.00–x – 8V128M.00–x via the DC bus, then it was possible that the loading relay closed for a short time if the DC bus was charged and the mains supply was not connected after starting the ACOPOS operating system. If the supply was reconnected in this situation, the loading current increased which could damage the line contactor, the supply line fuse or the rectifier in the servo drive.

In single-phase operation with devices from the group 8V1022.00–x – 8V1090.00–x, the DC bus was overloaded if the power was reconnected via the line filter. As a result, nominal voltage detection does not function. The servo drive group 8V1022.00–2 – 8V1090.00–2 had a different voltage range for nominal voltage detection than the servo drive group 8V1180.00–2 – 8V128M.00–2

The permissible range for the mains supply has now been reduced and standardized for all servo drives:

- 8V1022.00–2 – 8V1090.00–2 from 3x208–3x480VAC to 3x380–3x480VAC
- 8V1180.00–2 – 8V128M.00–2 from 3x360.6–3x480VAC to 3x380–3x480VAC

Nominal voltage detection is only active in this voltage range. Nominal voltage detection is not active in single-phase operation.

If the servo drives are supplied with supply voltages that lead to a DC bus voltage lower than $483.66\text{VDC} = \sqrt{2} \cdot 0.9 \cdot 380\text{VAC}$, then the following error message is given:

–7218 "DC link circuit: Voltage too low → Nominal voltage detection not possible"

ID#78450 : solved problem, solved since V1.064

Cam profile automat for virtual axis

The speed of the virtual axis was not calculated in the cam profile automat if the parameter SGEN_SW_END_IGNORE_VAX1 was set to the value "3".

ID#79590 : new function since V1.064

Supply voltage range; Conditionally permissible power supply

The servo drive can be operated with DC bus voltages in the range of 24 – 678 VDC (equal to one three-phase supply voltage range of 3x17 – 3x480VAC) (e.g.: at 3x220VAC → $UDC_{NOMINAL} = \sqrt{2} \cdot 220VAC = 311.12VDC$) by writing the UDC_NOMINAL parameter.

DANGER:

With supply voltages under 3x380V, the functionality of the DC bus power supply and phase failure monitoring is no longer guaranteed. Under certain conditions, this can cause the servo drive to FAIL or to be DAMAGED.

1.3.3.3.142 NC Software – ACP10 V1.063

ID#79622 : solved problem, solved since V1.063

Encoder Interface AC123, SSI encoder

Incremental encoder error messages could be displayed if one of the following configurations were performed immediately after setting the parameter ENCOD_TYPE, ENCOD2_TYPE, ENCOD3_TYPE to "ncSSI" for the corresponding encoder interface:

- Homing the encoder
- Define the actual encoder position on FB inputs
- Define the actual encoder position for vector controller or position controller

ID#77180 : solved problem, solved since V1.063

The value of the air gap torque TORQUE_ACT was frozen when the controller was switched off

1.3.3.3.143 NC Software – ACP10 V0.554

ID#151272 : solved problem, solved since V0.554

IGBT junction temperature model: The drives 8V1640.xx–2, 8V1320.00–2 and 8V1180.00–2 could be overloaded thermally.

1.3.3.3.144 NC Software – ACP10 V0.553

ID#145867 : solved problem, solved since V0.553

Control of the Motor Holding Brake: During the functional test of the holding brake torque the test torque was incorrect monitored

The actual test torque was monitored absolutely to the set test torque (limit 0.05Nm).
Now the actual test torque is monitored relatively to the set test torque (limit 5%).

1.3.3.3.145 NC Software – ACP10 V0.552

ID#135242 : solved problem, solved since V0.552

Access to NC data modules did not function with certain AR versions

Management for BR modules has been changed in the following AR versions:

- AR for SG4 E2.73 – V2.79
- AR for SG4 starting with F2.85

For this reason, access to the following NC data modules did not function with the AR versions listed above:

- NC INIT Parameter modules
- NC Error Text tables

ID#135132 : solved problem, solved since V0.552

Encoder Interface AC120: With new EnDat encoders, a permanent encoder error is mistakenly shown (only in V0.546 – V0.551)

With new Heidenhain EnDat encoders, an excessively restrictive time-out in the ACOPOS operating system prevents the encoder initialization from being completed. This problem causes the following errors to be permanently shown:

- 7022: Encoder: Initialisation is active
- 7015: Encoder: Timeout error during parameter transfer
- 7038: Encoder: Position value not synchronous with absolute value
- 7019: Encoder: OEM data not valid
- 7048: Error during the reading of encoder memory
- 6036: Motor parameters missing or invalid

Because of this problem, versions 0.546 – 0.551 should no longer be used with EnDat encoders.

1.3.3.3.146 NC Software – ACP10 V0.550

ID#125657 : new function since V0.550

Motor holding brake control monitoring: No error message with defective relay

If after the command "controller switch off" due to an brake control error the brake output status does not get low, the controller remains active. In this case now the error number 6047 is logged.

1.3.3.3.147 NC Software – ACP10 V0.548

ID#106777 : new function since V0.548

Encoder interface AC130, AC123, Incremental encoder reference pulse check: The parameters ENCOD_REF_CHK_DELTA, ENCOD2_REF_CHK_DELTA und ENCOD3_REF_CHK_DELTA are available for reading the reference pulse interval error.

1.3.3.3.148 NC Software – ACP10 V0.546

ID#100607 : solved problem, solved since V0.546

Encoder interface AC120, EnDat encoder

Now, all encoder errors which occur during the boot procedure in the ACOPOS operating system are deleted because according to the encoder manufacturer, errors may be incorrectly displayed by switching the encoder on/off.

ID#100582 : solved problem, solved since V0.546

Error number 6036 "Motor parameters missing or invalid": The additional information was falsely always set to zero

1.3.3.3.149 NC Software – ACP10 V0.545

ID#97627 : solved problem, solved since V0.545

Encoder interface AC120, EnDat encoder position synchronization (only in V0.538 – V0.544)

Values which only occurred occasionally and were larger than 1/4 of a sine period were not tolerated if there were deviations between the incremental position and the serial EnDat positions. Position jumps 1/4 of a sine period could occur. The following warning was entered:
– 39001 "Encoder: Position correction active"

1.3.3.3.150 NC Software – ACP10 V0.544

ID#82900 : solved problem, solved since V0.544

Target system SG4, the idle time commands were not processed in the NC manager (only in V0.540–0.543)

In the NC Manager, the idle time commands were not processed. This had the following effects:

- Motion functions test, Trace and Watch could not be opened.
- The data block operations were not carried out.
- The error text identification was not carried out.
- The Trace functions were not carried out.

1.3.3.3.151 NC Software – ACP10 V0.543

ID#80905 : solved problem, solved since V0.543

Braking resistor overload (only in V0.491 – V0.542)

The braking resistor was sometimes overloaded during the braking operation with the following configuration:

- ARNC0–SW with CAN network and target systems ARwin (AR010), AC140 and PP2xx

ID#80322 : solved problem, solved since V0.543

Encoder interface AC120, EnDat encoder: Timeout error due to cable disturbances

Once an interruption occurred on the EnDat encoder cables, the error 7015 "Encoder: Timeout error during parameter transfer" could be displayed continuously and not be acknowledged.

ID#79887 : solved problem, solved since V0.543

The current controller occasionally malfunctions.

In rare cases, motor current could not be applied despite the controller being switched on (green and orange LEDs lit and controller status "On"). When this occurs, the error 4007 "Lag error stop limit exceeded" was displayed when a movement was started.

ID#79892 : new function since V0.543

Switch on controller, holding brake

After the "switch on controller" command, the controller could not be switched off using the "switch off controller" command or lag error emergency stop, until the mechanical holding brake was released. Only the position controller was disabled. This error state could not be ended using successive "switch off controller" commands either.

1.3.3.3.152 NC Software – ACP10SDC Wichtige Information

ID#217737 : Important Information

ACP10SDC is only supported with Automation Studio starting with V3.0.80.

1.3.3.3.153 NC Software – ACP10SDC V2.220

ID#400048362 : solved problem, solved since V2.220

ACP10SDC Cam profile automat: Missing trigger event with force function

A digital trigger input, which was set with the force function (CMD_DIG_IN_FORCE), did not work as an event for the cam profile automat

1.3.3.3.154 NC Software – ACP10SDC V2.200

ID# 400043620, 400043760, 400044195, 400044403, 400047529 : solved problem, solved since V2.200

ACP10SDC with stepper motor modules: Error 31247 (Drive Interface: DrvOK not set from HW Module) was reported to early.

ID# 400019163, 400040068 : solved problem, solved since V2.200

ACP10SDC Status Enable:

The drive interface of an ACP10SDC axis was expanded by the data point 'iStatusEnable'. The state of the data point is used only to update the status of the cyclic bit enable. There is no further functionality behind the state of the data point.

1.3.3.3.155 NC Software – ACP10SDC V2.171

ID#220362 : solved problem, solved since V2.171

ACP10SDC Function block PID: Depending on the task class cycle time a wrong transfer function was calculated.

ID#220357 : solved problem, solved since V2.171

ACP10SDC Function block DELAY: Depending on the task class cycle time a wrong delay time was calculated.

ID#400034717 : solved problem, solved since V2.171

ACP10SDC Extrapolation filter for actual position of encoder1 and encoder2 did not work.

A configured ENCODx_S_FILTER_TE caused a position jump on ENCODx_S_ACT_FILTER.

ID# 400035087, 400036603 : solved problem, solved since V2.171

ACP10SDC with ARNC0 and stepper motor: Operation only with standstill current caused by incorrect current selection.

1.3.3.3.156 NC Software – ACP10SDC V2.170

ID#400034357 : solved problem, solved since V2.170

ACP10SDC with ARsim (AR000): Error 32006 or 32007

If in a ARsim (AR000) project the function naction() was called in that task class, which was defined as "Task class for NC Manager Task" in the NC configuration, then one of the following errors could occur in rare cases:

- 32206: Cyclic channel: Read Request in spite of Wait for Response
- 32207: Cyclic channel: Write Request in spite of Wait for Response

With older versions of the ACP10 software this problem can be avoided by configuring the application task with the naction() call into another task class as "Task class for NC Manager Task".

1.3.3.3.157 NC Software – ACP10_MC V2.281

ID#400070355 : solved problem, solved since V2.281

MC_BR_CamTransition: Start position of the cam profile could be shifted permanently.

When MC_BR_CamTransition was used with the "CamMode" mcTIME_BASED, the start position of the cam profile within the master period was permanently shifted, if the FB was activated while the master axis was in standstill.

1.3.3.3.158 NC Software – ACP10_MC V2.280

ID#400067469 : solved problem, solved since V2.280

MC_BR_RegMarkCapture001calculated wrong "ActPosition"

If a PLCopen axis factor which was unequal to "1" was used for an axis specified on input "Axis", the first "ActPosition" values were calculated wrongly.

ID#400067363 : solved problem, solved since V2.280

MC_BR_TorqueControl: Wrong behaviour after stop of movement during a parameter update

The following problems occurred, if an MC_BR_TorqueControl was aborted by MC_Power or MC_Stop while an online update of parameters ("InitData = TRUE") was in progress.

- The output "CommandAborted" was permanently set. All other outputs were not set.
- The FB started a movement after "Enable" and "StartSignal" were set to TRUE, but the check of the mode "+mcTIME_LIMIT" did not work.

ID#400065396 : solved problem, solved since V2.280

MC_BR_CamTransition: Wrong behaviour with "CamMode" mcTIME_BASED

If the MC_BR_CamTransition was used with the "CamMode" mcTIME_BASED the following wrong behaviours could occur:

- The output "InCam" was not set while the velocity of the master axis was changing.
- The "MasterStartPosition" within the cam profile was permanently shifted with change of the master velocity.
- The error "29217: Invalid input parameter" was reported if the value "0" was assigned to the input "MasterScaling", although this is allowed.
- The input "InitData" was ignored if it was set in the same cycle as "LeadInSignal" or "LeadOutSignal" were set.

ID#254405 : solved problem, solved since V2.280

MC_BR_MoveCyclicPosition, MC_BR_MoveCyclicVelocity: Problem after network failure or drive reset

If the FBs MC_BR_MoveCyclicPosition or MC_BR_MoveCyclicVelocity were activated again after a network failure or drive reset, they occupied a new area in the POWERLINK broadcast channel. If this broadcast channel was already fully occupied, the FBs reported an error and could only be used again after a restart of the PLC.

ID#400066266 : new function since V2.280

MC_BR_CalcCamFromPoints: Coefficient a of the first polynomial ("PolynomialData[0].a") is now set to the value "0.0"

Due to roundings a value for "PolynomialData[0].a" could be calculated which is different from "0.0" in the decimal places. If this cam profile data was transferred to an axis, the error 5304: "Format error in cam profile data" was reported.

ID#261050 : new function since V2.280

New FB MC_BR_BrakeControl

Using this function block the following commands for the holding brake can be executed. Combinations of certain commands are possible.

- Open the holding brake
- Close the holding brake
- Initialize control parameters for the holding brake
- Initialize parameters for the torque check
- Execute a torque check of the holding brake
- Get the mechanical status of the holding brake

ID#259575 : new function since V2.280

MC_BR_PowerMeter: New additional mode mcMAX_IV_TIME

By using the additional mode mcMAX_IV_TIME the MC_BR_PowerMeter can now be used with an interval duration of 10 minutes. The interval, as usual, can be finished any time by using the input "RestartInterval" or by an event configured on the input "EventInput".

ID#400061080 : new function since V2.280

MC_BR_RegMarkCapture001: New additional mode mcCONTINUE_CONTROLLER_OFF

By using the additional mode mcCONTINUE_CONTROLLER_OFF the MC_BR_RegMarkCapture001 does not report an error when the controller of the axis is switched off and continues its operation.

ID#400035061 : new function since V2.280

New FBs MC_BR_InitSendParID, MC_BR_InitReceiveParID, MC_BR_ReceiveParIDOnPLC

MC_BR_InitSendParID: Initializes sending of a ParID from a drive to the network (via MA1/2/3_CYCLIC_SEND).

MC_BR_InitReceiveParID: Initializes receiving of a ParID from the network on a drive.

MC_BR_ReceiveParIDOnPLC: Reads the value of a sent ParID (via MA1/2/3_CYCLIC_SEND) from the network into the PLC.

1.3.3.3.159 NC Software – ACP10_MC V2.271

ID#259502 : solved problem, solved since V2.271

Handling of cyclic data in different task classes: Page fault in the initialization phase (only in V2.180 – V2.270)

If for the handling of cyclic data another task class than the NC Manager task class is defined (this is possible from V2.180 on), then in very rare cases a page fault could occur.

ID#400064382 : solved problem, solved since V2.271

MC_BR_VelocityControl, MC_BR_MoveCyclicVelocity: Incorrect movement behavior when started outside the software limits.

If the FBs MC_BR_VelocityControl or MC_BR_MoveCyclicVelocity were activated outside the software limits, the movement behavior was not correct.

Neither an error was reported if a movement in invalid direction should be started, nor a movement which was started for the valid direction was executed. In these cases the FBs set their output "Active" or "Valid"

1.3.3.3.160 NC Software – ACP10_MC V2.270

ID#400064399 : solved problem, solved since V2.270

MC_BR_CalcCamFromSections swapped input parameters

The function block MC_BR_CalcCamFromPoints used the value of "Configuration.EndSlope" instead of "Configuration.StartCurvature" and vice versa, if "CamType = mcNON_PERIODIC" was configured.

ID#400061396 : solved problem, solved since V2.270

MC_CamIn: Non-periodic cam is not gone through completely

If a negative master movement took place over the left boundary of a non-periodic cam and the master moved in positive direction thereafter, the non-periodic cam was exited at its right boundary although it has not been gone through completely. Now the non-periodic cam is exited not until it was completely gone through either in positive or negative master direction.

ID#255810 : new function since V2.270

MC_ReadParameter can also be called in a INIT-SP of a task now

The function block MC_ReadParameter for reading PLCopen parameters can be called in a INIT-SP of a task now.

ID#400064099 : new function since V2.270

Axis can be used without NC INIT parameter module now

Axis can now be operated with FBs of the ACP10_MC library even if no NC INIT Parameter module is specified in the NC Mapping table. Instead of that the correct initialization values can be assigned to the axis structure within a INIT SP of a task. If this is not done when no NC INIT Parameter module is specified, an error will occur during the automatic global initialization of the axis, which is reported by any FB which is called for this axis.

ID#400063956 : new function since V2.270

MC_BR_DownloadParSequ now also supports the format setting ncFORMAT_T14

With the function block MC_BR_DownloadParSequ also parameter sequences can be transferred now, whose parameter records are configured with the format "ncFORMAT_T14" (data text with 14 bytes).

ID#254460 : new function since V2.270

New FB MC_BR_DigitalCamSwitch

Using this FB a set of cam switches can be configured and operated. Compared with the FB MC_DigitalCamSwitch, the new function block provides additional functionality, such as output of the track on FB output, configuration of several sets of switching data and fast switching between these.

ID#254425 : new function since V2.270

New FB MC_BR_TorqueControl

This function block starts a torque movement with limited speed and provides additional functionalities compared to MC_TorqueControl.

ID#254420 : new function since V2.270

New FB MC_TorqueControl

This function block starts a torque movement with limited speed.

ID#400061907 : new function since V2.270

MC_Home waits now until the axis is initialized

The FB MC_Home reported the error 29207: "This movement type is currently not allowed" on execution before or while the internal initialization of the axis took place. Now the FB waits until the initialization procedure is completed and output "Busy" is set during this time.

ID#252640 : new function since V2.270

New PLCopen parameters 1010: MoveCyclicPosInterpolationMode and 1011: MoveCyclicVelInterpolationMode

When the FBs MC_BR_MoveCyclicPosition or MC_BR_MoveCyclicVelocity are used and the cycle time of the task class in which they are executed is bigger than the cycle time of the drive, the set value which is transferred from the PLC to the drive is interpolated there. The following interpolation modes are available:

- 0 ... interpolation is switched off
- 1 ... linear interpolation
- 2 ... quadratic interpolation (less delay time, overshoot possible)
- 4 ... quadratic interpolation (more delay time, no overshoot)

By default the FB MC_BR_MoveCyclicPosition uses the mode "2" and the FB MC_BR_MoveCyclicVelocity uses the mode "1". With the new PLCopen parameters, which can be written by the FB MC_WriteParameter and read by the FB MC_ReadParameter, the interpolation mode for both function blocks can be changed now by the user.

ID#400061322 : new function since V2.270

Stop index from the initialization parameters is now supported

It is possible now to select a stop index, whose parameters are configured in the initialization parameters of the axis, by writing the desired index to the PLCopen parameter 1013. MC_Stop then uses the selected stop configuration.

ID#400061362 : new function since V2.270

MC_AUTDATA_TYP: New element "EventStartPositionInterval"

Up to four relative positions within the "StartInterval", which are used to generate the events ncS_START_IV1 to ncS_START_IV4, can be configured with the new element. The new events for a state transition of the cam profile automat can be used for a cyclic synchronization with the master position.

ID#400060748 : new function since V2.270

New FB MC_BR_GetHardwareInfo

This function block provides Model Number, Serial Number and Revision of drives, plug-in cards and motors, which are stored on the respective hardware component.

ID# 400061584 : new function since V2.270

MC_BR_InitCyclicRead: Mode mcEVERY_RECORD is supported

With the new mode mcEVERY_RECORD, the ParID will be configured in each cyclic telegram from the drive. This results in a constant refresh rate for the ParID value. However, the maximum number of ParIDs that can be read cyclically from a drive is reduced.

ID#400057942 : new function since V2.270

New FB MC_BR_SetHardwareInputs

Using this FB the digital hardware inputs of a real axis can be forced.

ID#400054573 : new function since V2.270

New PLCopen parameter 1012: DefaultMoveParameters

This parameter configures which values are transferred to the drive for the basis movement parameters , if the according FB input is left open or written with the value "0".

The following values are configurable for the transfer:

- mcFB_INPUTS: The value assigned to the FB input is transferred. (No change of behavior to earlier versions, Default setting)
- mcLIMIT_PARAMETERS: The directional limit values of the axis structure (limit.parameter) will be transferred.
- mcBASIS_PARAMETERS: The directional basis movement parameters of the axis structure (move.basis.parameter) will be transferred.

For the following FBs the behavior of transfer can be configured using this parameter:

- MC_MoveAbsolute

- MC_MoveAdditive
- MC_MoveVelocity
- MC_BR_MoveAbsoluteTriggStop
- MC_BR_MoveAdditiveTriggStop
- MC_BR_MoveVelocityTriggStop
- MC_BR_EventMoveAbsolute
- MC_BR_EventMoveAdditive
- MC_BR_EventMoveVelocity
- MC_Stop
- MC_Halt
- MC_BR_MoveCyclicPosition
- MC_BR_MoveCyclicVelocity
- MC_BR_VelocityControl
- MC_GearIn
- MC_GearInPos
- MC_BR_AutControl
- MC_BR_AutCommand

1.3.3.3.161 NC Software – ACP10_MC V2.261

ID#400061568 : solved problem, solved since V2.261

Invalid function block output status if the internal initialization of the axis was not completed

The output status of some FBs was invalid (output "Busy" was not set), if the internal initialisation of the axis was not completed.

This could happen e.g. after a network failure, if the active axis errors were not acknowledged.

The following FBs were affected by this problem:

- MC_BR_AutoCamDwell
- MC_BR_CamDwell
- MC_BR_CamTransition
- MC_BR_EventMoveAbsolute
- MC_BR_EventMoveAdditive
- MC_BR_EventMoveVelocity
- MC_BR_InitAutPar
- MC_BR_InitMasterParIDTransfer
- MC_CamIn
- MC_CamTableSelect
- MC_GearIn
- MC_GearInPos

1.3.3.3.162 NC Software – ACP10_MC V2.260

ID#400059328 : solved problem, solved since V2.260

Axes used a wrong position or velocity which is transferred via the network

Under the following circumstances a axis used a wrong position or velocity which is transferred via the network.

- The real and virtual axis of a channel of an ACOPOS on a POWERLINK Interface should use a position or velocity of different master axes or from the PLC.
- For each axis one of the following function blocks was used to configure the transfer of a position or velocity via the network.
- The function blocks which configure the transfer of a position or velocity via the network were activated simultaneously.

The following FBs were affected by this problem:

- MC_GearIn
- MC_GearInPos
- MC_CamIn

- MC_DigitalCamSwitch
- MC_BR_AutControl
- MC_BR_InitMasterParlIDTransfer
- MC_BR_InitAutPar
- MC_BR_InitAutData
- MC_BR_CamDwell
- MC_BR_AutoCamDwell
- MC_BR_CamTransition
- MC_BR_RegMarkCapture001
- MC_BR_MoveCyclicPosition
- MC_BR_MoveCyclicVelocity

ID#249085 : solved problem, solved since V2.260

MC_DigitalCamSwitch: Input value was applied wrongly

The PLCOpen axis factor was not considered for the input value "TrackOptions.Hysteresis".

ID#248680 : solved problem, solved since V2.260

Some function blocks were using the same send slot for two or three master axis on a CAN interface

If ParlIDs of more than one master axes on a CAN interface were configured for sending via the network at the same time, the same send slot was used. This problem occurred if some of the following FBs were activated at the same time.

The following FBs were affected by this problem:

- MC_GearIn
- MC_GearInPos
- MC_CamIn
- MC_DigitalCamSwitch
- MC_BR_AutControl
- MC_BR_InitMasterParlIDTransfer
- MC_BR_InitAutPar
- MC_BR_InitAutData
- MC_BR_CamDwell
- MC_BR_AutoCamDwell
- MC_BR_CamTransition
- MC_BR_RegMarkCapture001

ID#248080 : solved problem, solved since V2.260

MC_ReadAxisError: Output "Valid" was set too early

The output "Valid" was already set before the error text was completely evaluated.

ID#249710 : new function since V2.260

MC_DRIVESTATUS_TYP: New element "ResetDone"

In the data type MC_DRIVESTATUS_TYP, which is used by the FB MC_BR_ReadDriveStatus, the element "ResetDone" was added. It is set if the drive was reset before the most recent activation of the network connection and therefore all parameters must be transferred anew.

ID#249700 : new function since V2.260

New FB MC_BR_GetParIDInfo

This function block determines data type and data length for a specified ParID.

ID#249650 : new function since V2.260

MC_BR_SetupController: Orientation of the axis adjustable for controller setup

For the controller setup the orientation of the axis can now be chosen out of the following two options using the parameter "Orientation" (MC_SETUP_CONTROLLER_PAR_REF):

- mcHORIZONTAL
- mcVERTICAL

ID#246320 : new function since V2.260

New FB MC_BR_AxisErrorCollector

This function block reports the following information either for one single axis or for all axes of the system.

- The output "Error" of at least one PLCopen FB is set to TRUE
- At least one axis error was reported
- At least one axis warning was reported
- A axis is in the axis state Errorstop

ID#246300 : new function since V2.260

New FB MC_BR_ReadAxisError

With this function block the information about axis errors can be determined similar to the FB MC_ReadAxisError. Additionally it offers the following functions.

- Acknowledge all queued errors automatically
- Output all additional information about the errors
- Itemize how many errors of a certain type (axis error, axis warning, function block error) are pending.
- Explicit configuration if the error text should be evaluated or not
- Complete configuration of the error text evaluation by inputs at the function block

ID#246295 : new function since V2.260

Error numbers (ErrorID) of function blocks are entered into the axis structure now

From now on all errors of PLCopen FBs are entered into the axis structure. These error numbers are displayed at the output "AxisErrorID" of the function block MC_ReadAxisError because of that. Furthermore the error text for the error numbers can be determined now. As additional information the type of the function block is output which reported the error.

Resetting the error with the input "Acknowledge" of the function block MC_ReadAxisError has no effect on the outputs "Error" and "ErrorID" of the error reporting FBs.

1.3.3.3.163 NC Software – ACP10_MC V2.250

ID# 400058633, 400053279 : solved problem, solved since V2.250

MC_Home: The axis position could be wrong after a repeated execution with the mode mcHOME_RESTORE_POS

If the function block MC_Home was called with "HomingMode" mcHOME_RESTORE_POS after a calibration (MC_Home with "HomingMode" other than mcHOME_RESTORE_POS), or if it was called several times with mcHOME_RESTORE_POS the axis position could be wrong, if the actual raw position of the encoder and the ratio between the NC manager cycle time and the POWERLINK cycle time was very big.

ID#400057857 : solved problem, solved since V2.250

MC_ReadAxisError, MC_BR_ReadDriveStatus: Problem after task download in "Copy mode"

After a task download in "Copy mode" the memory area of variables, whose addresses are applied to the function block inputs "DataAddress" or "AdrDriveStatus", can change. The FBs MC_ReadAxisError and MC_BR_ReadDriveStatus however, adopted the new addresses only after a new rising edge on the input "Enable". As a consequence the variables have not been fed by the function blocks after a task download.

From now on, the address is also utilized if the "Enable" input of the FB is already set.

ID#247080 : solved problem, solved since V2.250

MC_BR_RegMarkCalc001: Mode mcQUEUED did not work correctly, output values were not reset

1. When using the mode mcQUEUED, the values of the inputs "LengthError" and "PositionError" were not delayed by "ControllerParameters.ValuesForQueuing".
2. After the FB was deactivated by "Enable = FALSE", the values of some outputs remained set.

ID#400058685 : new function since V2.250

MC_Home: Further homing modes are allowed in axis state Disabled

The following homing modes are allowed also in axis state Disabled now:

- mcHOME_REF_PULSE
- mcHOME_DCM
- mcHOME_DCM_CORR

ID#244265 : new function since V2.250

MC_BR_SetupController: New setup modes available

The controller setup can now also be executed with the following modes:

- mcSPEED + mcUSE_FILTER_PAR
- mcISQ_F1_NOTCH + mcISQ_F2_NOTCH
- mcISQ_F1_NOTCH + mcISQ_F2_NOTCH + mcISQ_F3_NOTCH

ID#242762 : new function since V2.250

New FB MC_BR_CheckAutCompensation

With this FB the compensation parameters for an automat state can be checked for adherence of the limit values, and the limits of particular compensation parameters can be calculated respectively.

1.3.3.3.164 NC Software – ACP10_MC V2.241

ID#400054965 : solved problem, solved since V2.241

Deadlock after error at initialization (only in V2.200 – V2.240)

For some FBs an error during the automatic internal initialization led to setting the outputs "Error" and "ErrorID" for only one cycle, resetting the other outputs and not react on an activation or deactivation of their inputs "Execute" and "Enable" anymore. This situation could only be solved by restarting the PLC.

The following FBs were affected by this problem:

- MC_Power
- MC_ReadActualPosition
- MC_ReadActualVelocity
- MC_ReadActualTorque
- MC_ReadParameter
- MC_ReadBoolParameter
- MC_SetOverride
- MC_BR_InitModPos
- MC_BR_InitParSequ
- MC_BR_ReadDriveStatus

1.3.3.3.165 NC Software – ACP10_MC V2.240

ID#243490 : solved problem, solved since V2.240

MC_BR_RegMarkCapture001: Trigger search did not work.

If the function block MC_BR_RegMarkCapture001 was used for an axis with a PLCopen axis factor unequal to 1, the trigger search did not work, because the expected trigger position was shifted incorrectly.

ID#400054320 : solved problem, solved since V2.240

FB–Deadlock after execution of MC_Stop

Under the following circumstances it was possible that the FBs MC_WriteDigitalOutput, MC_BR_InitAutState and MC_BR_InitAutEvent got deadlocked, i.e. their "Busy" output was set but they did not execute their function:

- A movement was started by a FB.
- One of the function blocks mentioned above was activated.
- The transfer of the parameter list of the activated FB was aborted by MC_Stop

ID#400054339 : solved problem, solved since V2.240

MC_BR_MoveCyclicPosition, MC_BR_MoveCyclicVelocity and MC_GearIn reported the error 29207 erroneously

If one of the function blocks MC_BR_MoveCyclicPosition, MC_BR_MoveCyclicVelocity or MC_GearIn was activated while the FB MC_Halt was active, they reported error "29207: This movement type is currently not allowed" without cause. The same error was reported by the FBs MC_BR_MoveCyclicPosition and MC_BR_MoveCyclicVelocity if they were activated while a movement caused by MC_BR_EventMoveAbsolute, MC_BR_EventMoveAdditive or MC_BR_EventMoveVelocity was active.

ID#400053332 : solved problem, solved since V2.240

Prohibit one direction of movement

By setting the velocity limit for one direction to "0" (limit.parameter.v_pos, limit.parameter.v_neg) now movements into this direction can be prohibited. Till now, when

using this setting, an error was reported, if a function block tried to start a movement into the allowed direction.

ID#241015 : solved problem, solved since V2.240

Axis state "Stopping" after "Errorstop" although MC_Stop reported "CommandAborted" (only in V2.230 – V2.232)

When the FBs MC_Reset and MC_Stop are activated while the state is "Errorstop", then MC_Stop sets the "CommandAborted" output at the end of the deceleration ramp, but the axis state changes to "Stopping".

ID#400051302 : solved problem, solved since V2.240

Input values of FBs were possibly not transferred correctly.

If the transfer of parameters of a FB was aborted by an error, it was possible, that a later called FB didn't transfer its input parameters to the drive correctly. Only FBs with an active change control of parameters were affected by this problem.

ID#243140 : new function since V2.240

New FB MC_BR_ParTraceConfig

This FB makes it possible to save and load axis trace configurations to and from data objects respectively.

ID#243110 : new function since V2.240

MC_BR_ParTrace: New command mcSTART+mcSAVE

The new command mcSTART+mcSAVE makes it possible to start an axis trace and automatically save the recorded data into a data object.

ID#400054125 : new function since V2.240

MC_BR_BrakeOperation now can also be used in axis state Errorstop

With the function block MC_BR_BrakeOperation a holding brake can now also be operated in axis state Errorstop, if the controller is switched off. So far this was only possible in axis state Disabled.

ID#241495 : solved problem, solved since V2.240

MC_BR_RegMarkCapture001: "Valid" output set incorrectly in some cases

While using the mode "mcLENGTH_ONLY", if a valid trigger is detected after invalid trigger events ("MissedTriggers" > 0), then the "Valid" output is set even though no new values (e.g. "ActLength" or "LengthError") have been output. Now "Valid" is only set if 2 consecutive valid triggers are detected and new, usable values have been calculated.

ID#241140 : solved problem, solved since V2.240

MC_SETUP_OUTPUT_REF: DataObjectIdent with wrong data type.

The structure element "DataObjectIdent" of the data structure MC_SETUP_OUTPUT_REF was of data type USINT instead of UDINT until now.
The result was a wrong value shown on this output element, if the data object index exceeded 255.

The following FBs were affected by this problem:

- MC_BR_SetupController
- MC_BR_SetupInductionMotor
- MC_BR_SetupMotorPhasing
- MC_BR_SetupIsqRipple

ID#240695 : solved problem, solved since V2.240

MC_BR_RegMarkCapture001: Manual search not ended after a valid trigger was found

When the manual search detected a valid trigger, the internal mechanism wasn't reset from search mode to normal mode.

As a result, the expected trigger position was still incorrect by the amount "LengthChange", which could easily cause valid triggers to be missed because they are assumed to be outside of the window.

ID#240650 : solved problem, solved since V2.240

MC_BR_RegMarkCapture001: Outputs were not set correctly

If invalid trigger events ("MissedTriggers" > 0) are followed by valid triggers, the "MissedTriggers" output was set to 0, but all other outputs, including "Valid", "ValidTriggers", "LengthError" and "PositionError" were not set, incremented or assigned values, or were set one or several cycles delayed.

ID#400049291 : solved problem, solved since V2.240

MC_BR_Offset, MC_BR_Phasing: FBs could report the error 29217.

MC_BR_Offset and MC_BR_Phasing reported the error 29217: "Invalid input parameter" if a "MasterParID" was assigned and "MasterParIDMaxVelocity" was set to zero on one of the FBs mentioned below .

- MC_GearIn
- MC_GearInPos
- MC_BR_AutoCamDwell
- MC_BR_CamDwell
- MC_BR_CamTransition

ID#400045757 : solved problem, solved since V2.240

MC_BR_Offset, MC_BR_Phasing: At repeated activation it was possible that only the first shift was performed.

If after the first successfully performed shift, the inputs "Enable" and "InitData" of the FBs MC_BR_Offset or MC_BR_Phasing were reset in the same cycle and were also set in the same cycle at a new activation, no further shifting was possible.

1.3.3.3.166 NC Software – ACP10_MC V2.232

ID#400052807 : solved problem, solved since V2.232

The axis state was changed to Errorstop although no axis error was reported (only in V2.230 –

V2.231)

1) In certain cases with cyclic position set values, the status bit12 (Stop after drive event active) was set without reaching the SW limits. Due to this problem, it could occur, that the axis changed its state to Errorstop, although no axis error was reported.

2) If the drive detected that the SW limits would be really exceeded, the status bit12 was set at the beginning of the stop ramp and the axis changed its state to Errorstop. If a movement stop (e.g. with MC_Stop, MC_Power, ...) was applied by the application program while the stop ramp was active, it could happen that the expected error (5003/5004: Positive/Negative SW limit reached) was not reported.

1.3.3.3.167 NC Software – ACP10_MC V2.230

ID#400049666 : new function since V2.230

MC_BR_MoveCyclicPosition: Ok to specify a position outside the period of a periodic axis

Previously, only a position within the range "0 < x < period" could be specified for a periodic axis using the function block MC_BR_MoveCyclicPosition. The FB will now also accept a position outside of this range for a periodic axis. The periodic position will continue to be calculated by the ACP10_MC library. Therefore, the periodic position will also be displayed on the FB MC_ReadActualPosition. The periodic position will also be valid when starting other movement FBs.

This update makes it possible to operate periodic ACP10_MC axes using ARNC0 rotary axes.

ID#239920 : solved problem, solved since V2.230

MC_BR_CamTransition: CamMode mcDISTANCE_BASED and MasterParID lead to error 29226

Parametrizing "CamMode = mcDISTANCE_BASED" and a MasterParID for MC_BR_CamTransition led to the error 29226: "Error on drive. Use MC_ReadAxisError for details".

ID#239281 : solved problem, solved since V2.230

MC_BR_VelocityControl does not revert changes, if not enough free cyclic write data available on drive

Once the function block reports error 29264: "Cyclic write data full" the axis behavior afterwards is different. Due to parameter download to the control loop via the function block. From now on the control loop will be changed afterwards, if cyclic write data have been initialized correctly.

ID#239180 : solved problem, solved since V2.230

The function blocks MC_BR_GetCamMasterPosition and MC_BR_GetCamSlavePosition could calculate a wrong output value.

After the following sequence it was possible that a wrong value was calculated by the function blocks MC_BR_GetCamMasterPosition and MC_BR_GetCamSlavePosition:

- The function block MC_BR_GetCamMasterPosition is called with a master axis with an axis factor unequal to 1 or MC_BR_GetCamSlavePosition is called with a slave axis with an axis factor unequal to 1.
- Reset of input "Execute".
- MC_BR_GetCamMasterPosition is called again without an assigned master axis or MC_BR_GetCamSlavePosition is called again without an assigned slave axis.

ID# 400036648, 400041830 : known problem since V3.00.80.25

An axis error during a movement not always led to the state Errorstop

An axis error during a movement did not lead to the state Errorstop as intended under the following circumstances:

- MC_Stop was called during the deceleration ramp
- MC_Power was disabled during the deceleration ramp
- All errors were acknowledged during the deceleration ramp

1.3.3.3.168 NC Software – ACP10_MC V2.220

ID#236980 : new function since V2.220

New FB MC_BR_SetupIsqRipple

MC_BR_SetupIsqRipple: Starts and stops the setup for the ISQ–Ripple compensation and saves the data determined during setup.

ID#235810 : new function since V2.220

New FB MC_BR_AutCommand

With this function block the following actions for the cam automat can be executed:

- start the automat
- stop the movement on the slave axis
- restart the slave axis after stop of the movement or abort of the movement after an axis error
- end the cam automat
- set the signals 1–4 of the cam automat
- reset the signals 1–4 of the cam automat
- transferring the parameter for the lock of the online parameter change or cam download

ID#400038858 : new function since V2.220

MC_BR_PowerMeter: The function block can now also be activated, if the controller is switched off.

The function block MC_BR_PowerMeter can also be activated now, if the controller of the power supply module is switched off.

With an active power supply module no valid power data can be determined in this case, so the output "Valid" is not set or it is reset if the controller is switched off while the power evaluation is active. As soon as the controller is active again, valid data are displayed on the outputs and "Valid" is set.

With the passive power supply module the determined and displayed values are always valid.

ID#400050162 : solved problem, solved since V2.220

MC_BR_PowerMeter returned no information at the output "PowerData" after a restart of the power supply module

If the function block MC_BR_PowerMeter was again called after the power supply module was restarted while the PLC was running, no information at the output "PowerData" was returned.

ID#237830 : solved problem, solved since V2.220

Function blocks with an "Execute" input did not report network failures (only in V2.200 – V2.219)

In case of a network failure the outputs "Error" and "ErrorID" of function blocks with "Execute" inputs were not set for one task class cycle, if the input "Execute" was already reset.

ID#400050132 : solved problem, solved since V2.220

MC_BR_PowerMeter reported error 29235 for PPS

If MC_BR_PowerMeter was called on a passive power supply module, it reported the error 29235.

ID#400050042 : solved problem, solved since V2.220

Deadlock after reading or writing of a single ParIDs

A deadlock of function blocks for an axis could occur, if one of the following function blocks was called shortly after a MC_BR_TouchProbe, MC_CamIn or MC_GearInPos was activated.

- MC_BR_ReadParID
- MC_BR_WriteParID
- MC_BR_ReadParIDText
- MC_BR_WriteParIDText
- MC_BR_ReadAutPosition

Other FBs subsequently report the status, "Busy," when called.

ID#400049661 : solved problem, solved since V2.220

After a MC_BR_InitModPos FB was called, the FB MC_ReadActualPosition displayed a position greater than the axis period

After a non periodic axis was changed into a periodic axis with the FB MC_BR_InitModPos, a position greater than the axis period was provided by MC_ReadActualPosition. Each NC Manager cycle the position was compensated by one period. As a result it could take some time until the correct position was shown within the period.

ID#237090 : solved problem, solved since V2.220

MC_BR_CamTransition reported an error even if correct input values were used

The function block reported the error 29217: "Invalid input parameter" though correct input values were used, if "Master" and "Slave" were axes of the same channel (e.g. the virtual axis of a channel is "Master" and the real axis of the same channel is "Slave").

ID#400049106 : solved problem, solved since V2.220

Under certain circumstances the axis state never changed to "DiscreteMotion" (only in V2.000 – V2.219)

With the following conditions the axis state did not become "DiscreteMotion":

- Cycle time of the task class in which the PLCopen FBs are called is greater than the cycle time of the NC Manager task class.
- The duration of the movement is shorter than the cycle time of the task class in which the PLCopen FBs are called.

This behaviour could lead to problems in application programs where changing the state in a state sequencer e.g. is depending on the axis state.

The following FBs were affected by this problem:

- MC_Halt
- MC_MoveAdditive
- MC_MoveAbsolute
- MC_BR_MoveAdditiveTriggStop
- MC_BR_MoveAbsoluteTriggStop
- MC_BR_EventMoveAdditive (only with "Mode = mcONCE")
- MC_BR_EventMoveAbsolute (only with "Mode = mcONCE")

1.3.3.3.169 NC Software – ACP10_MC V2.211

ID#400048772 : solved problem, solved since V2.211

Real and virtual axes on the same channel sometimes used SPT resources from the respective other axis

The following are a few examples of what could occur due to this problem:

1. When using the same MC_BR_EventMove FB type on real and virtual axes on the same channel, the last called FB used the same target position, distance and speed respectively as the first FB that was called.
- 2 . When using MC_BR_MoveCyclicVelocity FBs on real and virtual axes on the same channel, the speed of the last called FB was used for both axes.
- 3 . The phase shift and offset shift for an axis are unintentionally set to 0 when the following occurs:
 - Coupling FBs used on the real and virtual axis of a channel.
 - One or both of the axes also uses an MC_BR_Phasing or MC_BR_Offset
 - The coupling is started for one axis

The following FBs were affected by this problem:

- MC_BR_EventMoveAbsolute
- MC_BR_EventMoveAdditive
- MC_BR_EventMoveVelocity
- MC_BR_MoveCyclicVelocity
- MC_GearIn
- MC_GearInPos
- MC_CamIn
- MC_BR_AutControl
- MC_BR_CamDwell
- MC_BR_AutoCamDwell
- MC_BR_CamTransition

1.3.3.3.170 NC Software – ACP10_MC V2.210

ID#400047174 : new function since V2.210

MC_BR_TouchProbe now supports additional functions for trigger events

Positive edge and evaluation of the signal width using only "TriggerInput.MinWidth". The status is set and the window position is shifted after "TriggerInput.MinWidth".

Necessary parameter settings:

- TriggerInput.Edge = mcP_EDGE
- TriggerInput.MinWidth > 0
- TriggerInput.MaxWidth = 0

Time average (or latch average) value of positive and negative edge and evaluation of the signal width with "TriggerInput.MinWidth" and "TriggerInput.MaxWidth". Processing begins at negative edge.

Necessary parameter settings:

- TriggerInput.Edge = mcMIDDLE

- TriggerInput.MaxWidth > TriggerInput.MinWidth >= 0

ID#233645 : new function since V2.210

Determine exact cause of error for axes that can't be linked

If the master and slave axes specified on a link FB are not able to be linked, then the cause of error can be determined accurately now. In the past, the function block only registered the error 29200:

"The axis object is invalid" or 29298: "Error in network configuration".

Function block now outputs Error 29226: "Error on Drive", and the exact cause of error can be read as axis error using the MC_ReadAxisError function block.

This improvement has been made on the following FBs:

- MC_CamIn
- MC_GearIn
- MC_GearInPos
- MC_BR_InitMasterParlDTransfer
- MC_BR_InitAutPar
- MC_BR_InitAutData
- MC_BR_CamTransition
- MC_BR_CamDwell
- MC_BR_AutoCamDwell
- MC_BR_AutControl
- MC_BR_MoveCyclicVelocity
- MC_BR_MoveCyclicPosition

ID#233640 : new function since V2.210

Performance increase on inactive function blocks.

The call time for inactive function blocks has been minimized by optimizing the sequence in the FB.

It now takes up to 70% less time than before to call inactive function blocks (average 50% faster).

ID#232650 : new function since V2.210

New PLCopen parameter 1009: Automat positioning tolerance

With MC_MoveAbsolut, a position with the internal decimal places of the automat position can be approached via mcAUTOMAT_POS in order to ensure a high-precision automat restart

If the difference between the set position and the target position on a periodic axis is smaller than or equal to the parameter 1009, then the selected direction will be ignored and the target position will be approached by the shortest distance.

ID#235310 : solved problem, solved since V2.210

Input values of coupling FBs were applied wrongly

The following input values could be applied differing by 1 unit, particularly if they were negative (e.g. -1999 instead of -2000):

- FB MC_GearInPos: MasterSyncPosition and MasterStartDistance
- FB MC_BR_CamDwell: SlaveScaling
- FB MC_BR_AutoCamDwell: SlaveLength
- FB MC_BR_CamTransition: SlaveScaling

The following input values were not multiplied by the PLCopen axis factors:

– FB MC_BR_AutoCamDwell: SlaveLength and MasterLength

ID#234175 : solved problem, solved since V2.210

MC_BR_InitAutData used either no factors or partially used the wrong PLCopen Axis Factors

The parameter "MasterSpeedMax" was not multiplied with the PLCopen Axis Factor of the master axis if a master reference and no MasterParID was used.

The parameters "MasterStartInterval", "StartMaRelPos" and "MasterCompDistance" were mistakenly multiplied with the slave's PLCopen Axis Factor, instead of the master's, if a master reference and no MasterParID was used.

ID#234165 : solved problem, solved since V2.210

MC_BR_CamTransition could trigger division by ZERO

If the value "0" or a value smaller than 1/PLCopen_ModPos factor was specified on the "MasterInterval" input, then MC_BR_CamTransition caused a division by ZERO. Now when this occurs, error 29217 "Invalid input parameter" will be registered.

ID#233390 : solved problem, solved since V2.210

When a FB error occurred, the slave stayed coupled to the master, but its axis status was set to Standstill

Coupling function blocks that detected an error didn't stop the slave axis, but changed the axis state to Standstill.

Now the slave is stopped when an error occurs.

Affected FBs:

- MC_BR_CamDwell
- MC_BR_AutoCamDwell
- MC_BR_CamTransition
- MC_BR_AutControl (didn't change the axis status to Standstill)

ID#232660 : solved problem, solved since V2.210

MC_WriteParameter: SW end position deviates from specified value by +/- 1 unit

If the SW end positions are written with MC_WriteParameter, the effective internal values could deviate from the specified values by +/- 1 unit.

ID#232645 : solved problem, solved since V2.210

MC_MoveAbsolute: Direction + mcAUTOMAT_POS also works on non-periodic axis

The additive setting mcAUTOMAT_POS on the direction input of MC_MoveAbsolute now also works on non-periodic axes. The specified position plus the internal decimal places of the automat position is approached, which allows an automat restart to be performed with more precision.

ID# 400037129, 400038213 : solved problem, solved since V2.210

MC_Home: New homing mode mcHOME_AXIS_REF

With the new homing mode mcHOME_AXIS_REF all homing parameters in the axis structure

including the position are used for homing. The input "Position" of MC_Home is not taken into account.

1.3.3.3.171 NC Software – ACP10_MC V2.200

ID#400039171 : new function since V2.200

Outputs were not set cyclically

With some function blocks, the outputs "Error" and "ErrorID" were not set cyclically and were able to be overwritten by the application program or in the watch window.

ID#400044390 : solved problem, solved since V2.200

MC_MoveVelocity: In rare cases "InVelocity" was not reported

In rare cases (e.g. for non–integral velocity values) it could occur that the FB MC_MoveVelocity did not set the exit "InVelocity", although the axis reached the target velocity.

ID#229990 : solved problem, solved since V2.200

Function blocks that require SPT FBs on the drive in order to function properly were possibly not able to create or access these resources

Under certain circumstances, some function blocks were not able to create or access the required SPT FB resources on the drive. This resulted in an error or incorrect behavior on the affected function blocks.

Affected function blocks:

- MC_BR_AutControl
- MC_BR_AutoCamDwell
- MC_BR_CamDwell
- MC_BR_CamTransition
- MC_BR_EventMoveAbsolute
- MC_BR_EventMoveAdditive
- MC_BR_EventMoveVelocity
- MC_BR_HomeAcpEncoder
- MC_BR_MoveCyclicPosition
- MC_BR_MoveCyclicVelocity
- MC_BR_Offset
- MC_BR_Phasing
- MC_BR_PowerMeter
- MC_BR_RegMarkCapture001
- MC_BR_TouchProbe
- MC_BR_VelocityControl
- MC_CamIn
- MC_DigitalCamSwitch
- MC_GearIn
- MC_GearInPos
- MC_Phasing
- MC_TouchProbe

ID#229980 : solved problem, solved since V2.200

Incorrect output behavior upon network failure

If communication between the drive and controller was disrupted by a network failure, then the function blocks did not perform correctly.

The output "Error" was not set and the output "ErrorID" changed between the values "0" and "29265".

This affected all of the function blocks from the ACP10_MC library.

ID#400035116 : solved problem, solved since V2.200

New FB MC_BR_CyclicReadDataInfo

MC_BR_CyclicReadDataInfo: Provides administrative information about the cyclic telegrams from a drive

1.3.3.3.172 NC Software – ACP10_MC V2.191

ID#400044414 : solved problem, solved since V2.191

MC_BR_ReadAutPosition reports error 29226 in unfavorable circumstances

After a rising edge on the "Execute" input, the MC_BR_ReadAutPosition FB reports error 29226: "Error on drive. Use MC_ReadAxisError for details" if parameters are being transferred to or from the drive at the same moment.

This error was caused by the occurring axis error 32063: "Data address zero (set/read parameter via service interface)".

ID#400044704 : solved problem, solved since V2.191

MC_BR_VelocityControl: Values of inputs were not applied; Problem with NC–Test

- Now the values of the inputs "Acceleration" and "Deceleration" will be transferred to the drive.
- Now the movement which was started by the FB MC_BR_VelocityControl will not be aborted, if the NC Test for this axis is opened.

1.3.3.3.173 NC Software – ACP10_MC V2.190

ID#227315 : new function since V2.190

New FB MC_BR_VelocityControl

MC_BR_VelocityControl: Configures and starts a movement with cyclic velocity transfer, in which only the velocity and current controller of the drive are active.

ID#226950 : new function since V2.190

New FB MC_BR_CalcCamFromPoints

MC_BR_CalcCamFromPoints: Calculation of a polynomial cam profile from two node vectors.

ID#226935 : new function since V2.190

New FB MC_BR_CamTransition

MC_BR_CamTransition: Starts a cam profile coupling with optional entry and exit and optional transition between cam profiles. Specifying a time for the cam profile is possible.

ID#226845 : new function since V2.190

New FB MC_BR_SetupMotorPhasing

MC_BR_SetupMotorPhasing: Starts and stops the setup for phasing for an motor and saves the data determined during setup.

ID#400042928 : solved problem, solved since V2.190

MC_BR_MoveCyclicVelocity: The information of the input "Direction" was not used. (only in V2.170 – V2.180)

The direction of the movement of the axis was only depending on the sign of the value of the input "CyclicVelocity".

ID#400038891 : solved problem, solved since V2.190

MC_BR_RegMarkCapture mit Modus "+ mcINTERVAL_EVENT" not functioning correctly

Under the following conditions, the function block did not calculate the value of the output "ActPosition" correctly with the additional mode "+ mcINTERVAL_EVENT":

- All parameters required for the mode "+ mcINTERVAL_EVENT" were already set in the input structure "TriggerInput"
- The function block was activated without the additional mode "+ mcINTERVAL_EVENT"
- The input "InitData" was set after the function block was activated
- After the function block was deactivated, the mode was changed to "+ mcINTERVAL_EVENT" and then the function block was activated again

ID#400040234 : solved problem, solved since V2.190

An invalid axis reference could lead to a pagefault

The function block MC_BR_InitMasterParIDTransfer caused a pagefault, if the axes assigned to the inputs "Master" and "Slave" were not linkable.

A pagefault could also be caused by the following function blocks, if an invalid axis reference was assigned to the input "Axis" or "Slave" for one cycle:

- MC_BR_InitMasterParIDTransfer
- MC_ReadDigitalOutput
- MC_ReadDigitalInput
- MC_BR_AutControl
- MC_WriteParameter
- MC_BR_MoveCyclicPosition
- MC_BR_MoveCyclicVelocity

ID#400039347 : solved problem, solved since V2.190

It was possible that some function blocks were using the same send slot for real and virtual master

If ParIDs of the real and virtual axis of an ACOPOS communication channel were configured for sending via the network at the same time, the same send slot was used. This could happen if some of the following FBs were activated at the same time.

The following FBs were affected by this problem:

- MC_GearIn
- MC_GearInPos
- MC_CamIn
- MC_DigitalCamSwitch
- MC_BR_AutControl
- MC_BR_InitMasterParIDTransfer
- MC_BR_InitAutPar

- MC_BR_InitAutData
- MC_BR_CamDwell
- MC_BR_AutoCamDwell
- MC_BR_RegMarkCapture001

ID#400038618 : solved problem, solved since V2.190

MC_BR_InitAxisSubjectPar: PLCOpen Motion Parameters have not been refreshed

If the FB MC_BR_InitAxisSubjectPar was used to initialize changed limit values of an axis, the PLCOpen Motion Parameters have not been refreshed.

1.3.3.3.174 NC Software – ACP10_MC V2.180

ID#224520 : new function since V2.180

Cyclic data to/from the drive via POWERLINK independent of the NC Manager task class

Previously, cyclic data via POWERLINK was always handled by the ACP10_MC library in the task class configured as "Task class for NC Manager task". From now on, the following settings can be used to change the task class in which the cyclic data should be handled.

Global settings for a POWERLINK interface in the ACP10 configuration:

- Task class for handling of cyclic data with PLCOpen (only for SG4)

Local settings for an ACOPOS communication channel in the NC mapping record of a real or virtual axis in the "Additional Data" column with the following XML attribute:

- PLCOpen_CyclicData_TaskClass = "<TaskClass_Number>" (TaskClass_Number: 0,1,2 or 3, 0: Use NC Manager task class)

Note:

The real and virtual axis with the same node number and the same channel number are operated using the same ACOPOS communication channel. The following error is output if different task classes are defined for the real and the virtual axis from the same communication channel:

- 32499: PLCOpen_CyclicData_TaskClass: Values for real and virtual axis are not equal

ID#400039568 : solved problem, solved since V2.180

Deadlock after activation of a coupling of axes on a CAN bus (only in V2.170 to V2.172)

After the activation of the coupling between two axes on a CAN bus, the master axis could not be used anymore. Other FBs subsequently reported the status "Busy" when called.

The following FBs were concerned by this Problem:

- MC_GearIn
- MC_GearInPos
- MC_CamIn
- MC_DigitalCamSwitch
- MC_BR_AutControl
- MC_BR_InitMasterParIDTransfer
- MC_BR_InitAutPar
- MC_BR_InitAutData
- MC_BR_CamDwell
- MC_BR_AutoCamDwell

ID#400038674 : solved problem, solved since V2.180

MC_BR_AutControl always Busy

If MC_Stop is called for the slave axis shortly before MC_BR_AutControl is enabled, MC_BR_AutControl always shows that it is busy, but there is no error on the Error and ErrorID outputs. Resetting the Enable input and then setting it again takes MC_BR_AutControl out of the busy status.

ID#223630 : solved problem, solved since V2.180

MC_BR_GetErrorText: The error text was eventually not determined.

If the input "Execute" of the function block MC_BR_GetErrorText was set for only a few cycles, it was possible that the error text was not determined.

ID#400037909 : solved problem, solved since V2.180

MC_BR_ReadActualPosition: After homing the new axis position was displayed too late.

After homing, the function block MC_ReadActualPosition displayed the new position of an axis one task cycle after the output "Valid" was set.

ID#400036085 : solved problem, solved since V2.180

The axis state "StandStill" was activated to early

The axis state "StandStill" was already activated after the halt command was successfully sent to the drive and not when the axis stand still by the following function blocks:

- MC_BR_AutControl
- MC_BR_AutoCamDwell
- MC_BR_CamDwell
- MC_BR_MoveCyclicPosition
- MC_BR_MoveCyclicVelocity

1.3.3.3.175 NC Software – ACP10_MC V2.172

ID#400037720 : solved problem, solved since V2.172

Until now, MC_BR_AutControl checked the controller status and reference status when setting signals and changing the ParLock input

The function block MC_BR_AutControl checked the controller status and the reference status when setting signals and changing the ParLock input. This caused the error number 29206 "The controller is off" or 29205 "Axis not referenced" to be output. Starting in V2.172, these two states will only be checked with movement commands (Start, Stop, Restart).

ID#400037644 : solved problem, solved since V2.172

MC_BR_AutControl sometimes reports error 29206 when Enable=TRUE

If the controller was switched off when MC_BR_AutControl was active (MC_Power or axis error), one or more signal entries were set from 1 to 0 and MC_BR_AutControl was disabled, then MC_BR_AutControl reported error 29206 "The controller is off" right after setting the "Enable" input again and as soon as an action was performed (Start, Stop, Restart, Signal1–4, ParLock).

ID#221630 : solved problem, solved since V2.172

Linked movement does not start if master position is close to DINT overflow

If the internal position of a periodic master axis was close to DINT overflow (less than 2 periods), then movements linked to this master axis would sometimes not start.

Affected FBs:

- MC_CamIn
- MC_BR_InitAutPar
- MC_BR_InitAutData
- MC_BR_AutControl
- MC_BR_CamDwell
- MC_BR_AutoCamDwell

ID#400033458 : solved problem, solved since V2.172

After DINT overflow of the master position, linked movements were no longer able to be started

Linked movements were no longer able to be started after (internal) DINT overflow of the master position of a periodic master axis. The link would only begin after the master axis (internal) had reached a positive DINT position again. The link is now started at the next possible position within the current period or in the next period if the master position is already greater than that of the start position.

Affected FBs:

- MC_BR_InitAutData (started by MC_BR_AutControl)
- MC_BR_CamDwell
- MC_BR_AutoCamDwell
- MC_DigitalCamSwitch (switching points can be shifted)

ID#400032353 : solved problem, solved since V2.172

Input values were not rounded correctly

Some of the input values of the following function blocks were simply cut off and not rounded correctly before they were transferred to the drive:

- MC_BR_AutControl
- MC_BR_AutoCamDwell
- MC_BR_CamDwell
- MC_CamIn
- MC_BR_InitAutData
- MC_BR_InitAutState
- MC_BR_InitAutPar

1.3.3.3.176 NC Software – ACP10_MC V2.171

ID#400034856 : solved problem, solved since V2.171

MC_TouchProbe reports error 29230 in unfavorable circumstances (only in V2.020 – V2.170)

After a rising edge on the "Execute" input, the MC_TouchProbe FB reports error 29230: "Internal error: Error at parameter list transfer" if parameters are being transferred to or from the drive at the same time.

ID#220315 : solved problem, solved since V2.171

MC_BR_MoveCyclicVelocity, MC_BR_MoveCyclicPosition: A page fault occurs if the cycle time of the NC manager task class is different than the cycle time of the POWERLINK network (only in V2.170)

A page fault occurs when there are different cycle times for the NC manager task class and the POWERLINK network to which the axes operated by the FBs are connected.

ID#220310 : solved problem, solved since V2.171

MC_BR_MoveCyclicVelocity: Commanded speed might not have been reached (only in V2.170)

The function for assigning cyclic velocity limits the velocity to the value of the basis movement parameter. This could cause a problem if a basis movement function block with a small value on the "Velocity" input was called before MC_BR_MoveCyclicVelocity. Now the FB always initializes the basis movement parameters with the limit values configured for the axis.

ID#400035270 : solved problem, solved since V2.171

MC_ReadAxisError: Error 29260 reported.

When there is no error text module specified on the "DataObjectName" input, the FB determines the error texts using the error text module that is specified in the init parameter module. This causes the FB to report the error 29260: "No data object name specified," if it is called immediately after starting the controller with "Enable = 1".

1.3.3.3.177 NC Software – ACP10_MC V2.170

ID#218385 : new function since V2.170

New FB MC_BR_MoveCyclicVelocity

Configures and starts a movement with cyclic velocity transfer

ID#218380 : new function since V2.170

New FB MC_BR_PowerMeter

Starts and stops the measurement of power data of an ACOPOS multi power supply module and outputs the evaluated values

ID#400031217 : new function since V2.170

MC_BR_CyclicRead: New mode mcEVERY_RECORD

With the new mode mcEVERY_RECORD, the ParID will be configured in each cyclic telegram from the drive. This results in a constant refresh rate for the ParID value. However, the maximum number of ParIDs that can be read cyclically from a drive is reduced.

ID# 400030208, 400031383 : new function since V2.170

New FBs MC_BR_ReadParIDText, MC_BR_WriteParIDText

MC_BR_ReadParIDText: The value of a ParID is read from the drive and output as text

MC_BR_WriteParIDText: The value for a ParID is passed on to the FB as text, converted to the correct data type and transferred to the drive

ID#400032741 : solved problem, solved since V2.170

Wrong axis state after error during a homing procedure

If an axis error occurs that causes the controller to be switched off immediately during an active homing procedure, then the axis mistakenly changes to the state Disabled. Now when this occurs, the axis will change to the state Errorstop as intended by the PLCopen standard.

1.3.3.3.178 NC Software – ACP10_MC V2.160

ID#214125 : new function since V2.160

Abort of basis movement FBs by Coupling–FBs possible

Every function block which starts a basis movement can be aborted now by the function blocks "MC_GearIn" and "MC_BR_AutControl".

ID#400029438 : solved problem, solved since V2.160

Pagefault after error during initialization phase

If the ACP10_MC library reported the error 29498: "ACP10_MC library: Initialization aborted" during the initialization phase of the PLC, then calling one of the following FBs would cause a Pagefault:

- MC_BR_GetErrorText
- MC_BR_ParTrace
- MC_BR_ReadParTraceStatus
- MC_BR_NetTrace
- MC_BR_ReadNetTraceStatus

ID#400014307 : solved problem, solved since V2.160

POWERLINK, problems with cyclic data from the drive

1) Configuring cyclic data from a drive that is operated with a large multiplex–prescale–factor on POWERLINK network, caused a deadlock of the initializing FB.

2) Data from one or more monitor records was not refreshed under certain circumstances:

- More than one monitor record from the drive is required
- Unfavorable conditions between NC Manager task class cycle time (Default Cyclic #1) and POWERLINK cycle time or unfavorable conditions between NC Manager task class cycle time (Default Cyclic #1) and POWERLINK cycle time * Multiplex prescale factor at a "Multiplexed station"

Example:

POWERLINK cycle time = 2 * NC Manager task class cycle time and 2 monitor records from a drive are required

=> Only the data from the first or second monitor record from the drive was read.

ID#173605 : solved problem, solved since V2.160

MC_BR_CamDwell, MC_BR_AutoCamDwell – It's possible the movement was not able to be started again

If the input "LeadInSignal" was set again while the movement was active, then the movement was not able to be started again at a positive edge of the input "LeadInSignal".

1.3.3.3.179 NC Software – ACP10_MC V2.153

ID#212985 : solved problem, solved since V2.153

Calculation of the periodic position was not executed (only in V2.150 – V2.152)

The position of the axis, which is displayed by the FB "MC_ReadActualPosition", was not calculated if a homing was aborted by an error or MC_Stop.

1.3.3.3.180 NC Software – ACP10_MC V2.152

ID#211675 : solved problem, solved since V2.152

The FB MC_BR_MoveCyclicPosition allowed no more than 32 axes to be operated on a POWERLINK interface

If more than 32 axes were operated on the same POWERLINK interface with the FB "MC_BR_MoveCyclicPosition", then all axes from the 33rd onward used an incorrect set position.

ID#211655 : solved problem, solved since V2.152

Position of a periodic axis slowly counts towards 0 after homing

The position could have been counted towards 0 when homing a periodic axis with a mode unequal to mcHOME_RESTORE_POS and an initialized address of a permanent variable for endless position. One period was corrected each NC manager cycle.

ID#211465 : solved problem, solved since V2.152

MC_Home restored the axis position in the mode mcHOME_RESTORE_POS, even though the data on the permanent variable was invalid

If, between calling the FBs MC_BR_InitEndlessPosition and MC_Home utilizing mode mcHOME_RESTORE_POS, the permanent variable whose address was initialized with MC_BR_InitEndlessPosition was overwritten, then the axis was homed to an incorrect position. MC_Home now registers error 29297 if the data on the permanent variable is invalid.

ID#211445 : solved problem, solved since V2.152

Restoring the axis position after CPU restart did not work if the controller was switched on at the same time.

The homing mode "mcHOME_RESTORE_POS" on the FB "MC_Home" could home the axis to an incorrect position if the axis demonstrated a limited range of movement and MC_Power was enabled during homing.

ID#211440 : solved problem, solved since V2.152

Restoring the axis position after CPU restart did not work if the motor encoder was rotated beyond the overflow.

The homing mode "mcHOME_RESTORE_POS" on the FB "MC_Home" could home the axis to an incorrect position if the motor encoder of a limited axis was rotated beyond the overflow while turned off.

ID#400027022 : solved problem, solved since V2.152

Restoring the axis position after CPU restart did not work if the motor encoder is connected to slot 3 or slot 4 on an ACOPOS drive.

The homing mode "mcHOME_RESTORE_POS" of the FB "MC_Home" could home the axis to

an incorrect position if the motor encoder was a multi-turn encoder and connected to slot 3 or slot 4 on an ACOPOS drive.

1.3.3.3.181 NC Software – ACP10_MC V2.151

ID#207465 : new function since V2.151

Abort of Coupling-FBs by basis movement FBs possible

Every function block which engages a coupling between two axis can be aborted by a function block which starts a basis movement.

1.3.3.3.182 NC Software – ACP10_MC V2.150

ID#400024421 : solved problem, solved since V2.150

Master-slave coupling no longer functioning after a network error (only in V2.050 – V2.149)

The slave axis of a master-slave coupling that was previously started was no longer able to perform any movements after a network error, although it seemed like it was able to be restarted using the coupling FB (e.g. MC_GearIn).

ID#400023135 : solved problem, solved since V2.150

After homing a periodic axis with the NC Test, a position > period is displayed (only in V2.100 – V2.149)

The FB "MC_ReadActualPosition" sometimes returned a position > period after homing a periodic axis with the NC Test. Each ACP10 manager cycle it was compensated by one period. As a result it could take some time until the position was shown within the period.

ID#400014423 : solved problem, solved since V2.150

MC_BR_Phasing or MC_BR_Offset had no longer an effect after an initialization by the FB MC_BR_InitAutData

The phase or offset shift was no longer performed, if the parameters "AUT_MA_ADD_AXIS" ("AddMasterParID") or "AUT_SL_ADD_AXIS" ("AddSlaveParID") of the cam profile automat were initialized by the FB MC_BR_InitAutData, while a phase or offset shift was already activated.

1.3.3.3.183 NC Software – ACP10_MC V2.140

ID#205565 : new function since V2.140

Network trace, new ACP10_MC-FB Infos

From now on the following information is entered into the network trace by the FBs:

- FB type and error number if an error occurred in a FB instance
- The type of the FB which aborted an active FB instance ("CommandAborted")
- Calls of FBs which do not execute a naction()

Note:

Some of the new informations are "NC manager global" and are therefore entered into the network trace with a new type.

In Automation Studio versions, in which this new type is implemented, these global informations are indicated with "NCMAN" in the column "Interface".

In older Automation Studio versions these informations are indicated with "NET_ID=254[0]" in

the column "Interface".

ID#203840 : new function since V2.140

New FBs MC_BR_GetCamSlavePosition, MC_BR_GetCamMasterPosition

MC_BR_GetCamSlavePosition: Calculation of the slave position in a cam profile for a given master position.

MC_BR_GetCamMasterPosition: Calculation of the master position in a cam profile for a given slave position and master start position.

ID#203835 : new function since V2.140

New FBs MC_BR_MoveCyclicPosition, MC_BR_ReadCyclicPosition

MC_BR_MoveCyclicPosition: Movement start with cyclic position transfer.

MC_BR_ReadCyclicPosition: Cyclic reading of axis position.

ID#203825 : new function since V2.140

New FBs MC_BR_SetupInductionMotor, MC_BR_SetupController

MC_BR_SetupInductionMotor: Starts and stops the setup (motor parameter identification) for an induction motor and saves the data determined during setup.

MC_BR_SetupController: Starts and stops the setup (parameter identification) for a drive's speed controller and position controller and saves the data determined during setup.

ID#400011455 : solved problem, solved since V2.140

MC_CamIn "InSync" output set too soon

If, when using a non-periodic cam profile, the "Execute" input of the MC_CamIn function block was set again without the parameter having changed, then the "InSync" output was set immediately instead of being set at the next start of the cam profile.

1.3.3.3.184 NC Software – ACP10_MC V2.130

ID#201345 : new function since V2.130

MC_BR_CyclicRead, MC_BR_CyclicWrite – New PV address from the input "DataAddress" will be applied even when the FB is already active

In the past, the "Enable" input had to be reset after a task download with the copy mode to ensure that the value of the ParID would be copied back to the PV or transferred from the PV to the drive. The reason for this was because the PV address can change after the task download to the target system.

From now on, the address will also be applied when the "Enable" input of the FB has already been set.

ID#200210 : new function since V2.130

Support of ACOPOSmulti 8BAC0130.00x–1 plug-in modules

Starting with this version the following FBs support the ACOPOSmulti 8BAC0130.00x–1 plug-in modules:

– MC_DigitalCamSwitch

- MC_ReadDigitalInput
- MC_ReadDigitalOutput
- MC_WriteDigitalOutput.

ID#400020740 : solved problem, solved since V2.130

MC_BR_InitCyclicWrite could report the internal error 29244

If the "ParID" input value for an instance of the FB MC_BR_InitCyclicWrite was changed while the "Busy" output was set, then the FB reported the internal error 29244.

ID#400020513 : solved problem, solved since V2.130

After homing a periodic axis, a position > period is displayed (only in V2.100 – V2.129)

The FB "MC_ReadActualPosition" sometimes returned a position > period after homing a periodic axis with multi-turn encoders using the homing mode mcHOME_ABSOLUTE. Each ACP10 manager cycle it was compensated by one period. As a result it could take some time until the position was shown within the period.

ID# 400019462, 400019532, 400018512, 400019640 : solved problem, solved since V2.130

Deadlock after "ncPAR_LIST,ncSERVICE+ncINIT" immediately after "ncMOVE,ncSTOP" (only in V2.000 – V2.129)

Under the following conditions, a FB deadlock could occur for an axis:

- A FB calls the NC Action "ncMOVE,ncSTOP"
- A move FB calls afterwards immediately the NC Action "ncPAR_LIST,ncSERVICE+ncINIT"
- The call of the NC Action "ncPAR_LIST,ncSERVICE+ncINIT" leads to the status "ncACTIVE"

Other FBs subsequently report the status, "Busy," when called.

ID#400017194 : solved problem, solved since V2.130

MC_ReadActualPosition displayed a wrong position (only in V2.100 – V2.129)

Under the following conditions the FB "MC_ReadActualPosition" could display a wrong position:

- The axis period was changed by the FB "MC_BR_InitModPos".
- The axis was homed by the FB "MC_Home" after the period was changed.

1.3.3.3.185 NC Software – ACP10_MC V2.120

ID#400008625 : solved problem, solved since V2.120

Deadlock after task download

Under the following conditions, a FB deadlock could occur for an axis during or after a task download:

- FBs from the ACP10_MC library are used in the task to operate the axis
- The task is downloaded while a FB, which transfers parameters to the drive or reads parameters from the drive, is "busy".

Other FBs subsequently report the status, "Busy," when called.

In V2.120 and higher of the ACP10_MC library, a deadlock no longer occurs under the previously described conditions if the following conditions are maintained:

- Copy mode is used for the download
- Global axis PVs are used

- Active ACP10_MC FBs (= those on which the output "Busy" is set) cannot be removed

1.3.3.3.186 NC Software – ACP10_MC V2.110

ID#400013558 : new function since V2.110

New NC constants for "DataType"

With all FBs for reading and writing of ParIDs, from now on the following new NC constants can be used for the FB input "DataType":

- ncPAR_TYP_STR16 für ParIDs with data type "STR16"
- ncPAR_TYP_STR32 für ParIDs with data type "STR32"

Note:

If these NC constants are used for "DataType" with ACP10_MC before V2.110, then this leads to the error 29241 (Wrong data type for specific ParID).

ID#193650 : solved problem, solved since V2.110

The datatype of the constant mcHOME_RESTORE_POS was UINT instead of USINT

1.3.3.3.187 NC Software – ACP10_MC V2.100

ID#190855 : new function since V2.100

MC_Home: New mode mcHOME_RESTORE_POS

New mode "mcHOME_RESTORE_POS" for restoring the position from the saved values in a permanent variable.

ID#190850 : new function since V2.100

New FB MC_BR_InitEndlessPosition

Initialization of the address of a permanent variable for saving and restoring the axis position.

ID#400012461 : solved problem, solved since V2.100

Under certain conditions the FB MC_BR_HomeAcpEncoder reported constantly busy

The FB constantly reported busy, if one of the following conditions was true:

- Encoder 2 (Slot 3) was already homed and encoder 3 (Slot 4) should be homed
- Encoder 3 (Slot 4) was already homed and encoder 2 (Slot 3) should be homed

ID#400010181 : solved problem, solved since V2.100

MC_BR_AutControl: Signals are set before being reset

If signals are set and others reset at the same time, unwanted state changes could occur depending on the design of the automat.

Now the command for resetting the signals is sent first, then the one to set the signals.

1.3.3.3.188 NC Software – ACP10_MC V2.091

ID#400011455 : solved problem, solved since V2.091

MC_CamIn sets InSync output for only one cycle

If a non-periodic cam profile was started, then the "InSync" output was set for just one task cycle. "InSync" now stays set to "TRUE", as long as the non-periodic cam profile is active and the "Execute" input is set.

1.3.3.3.189 NC Software – ACP10_MC V2.080

ID#187090 : solved problem, solved since V2.080

Deadlock after MC_BR_CyclicWrite and MC_BR_InitCyclicWrite

Calling "MC_BR_CyclicWrite" or "MC_BR_InitCyclicWrite" while a FB was configuring cyclic data could cause a deadlock of the FBs for this axis.

Other FBs subsequently reported the status, "Busy," when called.

ID#400006875 : solved problem, solved since V2.080

MC_BR_CalcCamFromSections: When using 65 points, cam profile data were calculated wrongly

If 65 points (maximum) for the calculation of a cam profile were defined, by the FB "MC_BR_CalcCamFromSections" the values of "MasterPeriod" and "SlavePeriod" of the cam profile data were calculated wrongly. Due to this calculation error, the transfer of these cam profile data with the FB "MC_BR_DownloadCamProfileData" was aborted with following error:

- 29222: Error at cam Download

In addition, by the drive the following response error was indicated:

- 5304: Format error in cam profile data

1.3.3.3.190 NC Software – ACP10_MC V2.071

ID#186562 : solved problem, solved since V2.071

ACP10TUN V2.070 could cause a Pagefault of the library ACP10_MC

With ACP10TUN from V2.071 on this problem does no longer occur.

1.3.3.3.191 NC Software – ACP10_MC V2.070

ID#400007056 : solved problem, solved since V2.070

MC_BR_InitAutData falsely returned error 29208

If the global automat parameters were not initialized with the FB "MC_BR_InitAutData" (but via data type "MC_AUTDATA_TYP" with the FB "MC_BR_AutControl"), the FB "MC_BR_InitAutData" for call with "GlobalParams=mcNO_PARAMS" falsely returned the following error:

- 29208: The axis object was changed since last FB call

ID#400006660 : solved problem, solved since V2.070

MC_GearIn, MC_CamIn: Negative master direction did not function correctly (only in V2.050 – V2.060)

MC_CamIn:

When leaving the cam profile in negative master direction the cam profile was not changed, but the gradient of the left cam profile boundary point boundary was maintained.

MC_GearIn:

The distance, which the master had driven into negative direction, had to be driven again into positive direction, before the transmission relationship could be changed.

ID#185155 : solved problem, solved since V2.070

MC_BR_ReadDriveStatus: On "AxisError" the number of errors was written

On the BOOL component "AxisError" of the data type "MC_DRIVESTATUS_TYP" falsely the number of still existing errors was written.

Now on "AxisError" correctly the BOOL status is written, whether still errors exist or not.

1.3.3.3.192 NC Software – ACP10_MC V2.060

ID#183005 : new function since V2.060

MC_BR_ReadDriveStatus – Changed reaction after network failure

The FB doesn't longer report an error, if the network fails. Instead of this, the output "Valid" and the structure component "NetworkInit" are reset.

ID#183000 : new function since V2.060

New FBs "MC_BR_ParTrace", "MC_BR_ReadParTraceStatus"

ID#182995 : new function since V2.060

New FBs "MC_BR_NetTrace", "MC_BR_ReadNetTraceStatus"

ID#177840 : new function since V2.060

New FB "MC_BR_GetErrorText"

ID#184095 : solved problem, solved since V2.060

Slave axes followed the wrong master axis, if more than one master axis was used on one CAN bus (only in V2.000 to V2.054)

If more than one master axis was used on one CAN bus, it could occur that FBs used the position of the first sending master axis, although another master axis was configured. The same behavior occurred also when using master ParIDs.

The following FBs were concerned by this Problem:

- MC_GearIn
- MC_GearInPos
- MC_CamIn
- MC_DigitalCamSwitch
- MC_BR_AutControl
- MC_BR_MasterParIDTransfer
- MC_BR_InitAutPar
- MC_BR_InitAutData
- MC_BR_CamDwell
- MC_BR_AutoCamDwell

ID#183220 : solved problem, solved since V2.060

MC_BR_ReadAutPosition – Output "AutPosition" was not reset

The output "AutPosition" was not reset if the input "Execute" was set to "0".

1.3.3.3.193 NC Software – ACP10_MC V2.053

ID#179955 : solved problem, solved since V2.053

Division error when using "MC_BR_ReadAutPosition" for non-periodic axes

If the FB "MC_BR_ReadAutPosition" was called for a non-periodic axis, the following exception occurred:

- SG4: 25300 – AR-RTK: EXCEPTION Divide error
- SG3/SGC: 9104 – EXCEPTION: Division by Zero Error

ID#400002532 : solved problem, solved since V2.053

SG3 and SGC target systems : Address error when using CPU Service Mode

On SG3 and SGC target systems in CPU Service Mode the ACP10_MC Library caused one of the following errors:

- 9100 EXCEPTION: Bus error
- 9101 EXCEPTION: Address error
- 9102 EXCEPTION: Illegal instruction

With ACP10MAN from V2.053 on this problem does no longer occur.

1.3.3.3.194 NC Software – ACP10_MC V2.050

ID#177865 : new function since V2.050

Starting with ACP10_MC V2.050 some FBs check their input values for changes since the last call

The following FBs check their input values for changes. Thus the time of the parameter transfer will be shortened, if the input values were not changed. Now only these parameters will be transferred which have been changed since the last FB call.

Affected FBs:

- MC_GearIn
- MC_GearInPos
- MC_CamIn
- MC_BR_CamDwell
- MC_BR_AutoCamDwell
- MC_BR_InitAutData

ID#177860 : new function since V2.050

New FB "MC_BR_InitAutData"

ID#177850 : new function since V2.050

MC_MoveAbsolute can now move to the automat position

An absolute movement to the automat position is now possible by adding the constant "mcAUTOMAT_POS" to the "Direction" input.

ID#177845 : new function since V2.050

New FB "MC_BR_ReadAutPosition"

ID#177815 : new function since V2.050

New FB "MC_BR_CalcCamFromSections"

ID#178295 : solved problem, solved since V2.050

Deadlock after network error in initialization phase

If a network error occurred on an axis during the initialization phase, this axis was no longer able to be operated after the network problem was corrected.

1.3.3.3.195 NC Software – ACP10_MC V2.042

ID#175155 : solved problem, solved since V2.042

MC_BR_AutControl: StateMaCamLeadIn, StateMasterComp and MasterMinCompS multiplied with PLCopen axis factor

The parameters "StateMaCamLeadIn", "StateMasterComp" and "MasterMinCompS" are incorrectly multiplied with the PLCopen axis factor if an automat-global Master ParID is used. If a master axis was specified, then the PLCopen factor of this axis was used, otherwise the PLCopen factor from the slave axis is used.

1.3.3.3.196 NC Software – ACP10_MC V2.040

ID#174875 : new function since V2.040

MC_BR_AutControl: New parameter "MasterCamLeadIn" in MC_AUTDATA_TYP

ID#171305 : new function since V2.040

New FB "MC_BR_Simulation"

ID#171300 : new function since V2.040

New FB "MC_BR_ReadDriveStatus"

ID#174880 : solved problem, solved since V2.040

MC_BR_CamDwell, MC_BR_AutoCamDwell: "LeadInSignal" and "LeadOutSignal" were always evaluated

The "LeadInSignal" and "LeadOutSignal" inputs were always evaluated if they were set. However, only edges were supposed to be evaluated on these inputs. As a result, the cam profile was only run through one time if "LeadInSignal" was set while "LeadOutSignal" was still set. Now, only edges on these inputs are evaluated.

1.3.3.3.197 NC Software – ACP10_MC V2.033

ID#173100 : solved problem, solved since V2.033

MC_BR_TouchProbe – Error 29279 could occur falsely (only in V2.020 – V2.032)

The error 29279: "Output value cannot be calculated" could occur falsely. This error could be reported immediately after the FB is activated, depending on the defined mode and the current value of the ParID, which should be saved by the FB. The error could also occur if the value of the ParID was reset (e.g. due to homing) right before a trigger event is received.

ID#172455 : solved problem, solved since V2.033

MC_BR_AutControl – Error 29226 could occur when "InitAutData = TRUE" (only in V2.030 – V2.032)

If the FB input "InitAutData" was set to "TRUE" while the cam profile automat was active, then the FB reported the error 29226: "Error on drive. Use MC_ReadAxisError for details".

1.3.3.3.198 NC Software – ACP10_MC V2.031

ID#171455 : solved problem, solved since V2.031

MC_BR_AutControl – Output "AutDataInitialized" was not reset

The output "AutDataInitialized" was not reset if the input "Enable" was set to FALSE or if an error in the FB occurred.

ID#171440 : solved problem, solved since V2.031

MC_BR_AutControl – The ACP10–SW error number 32191 was reported after the automat was started by the FB

If the automat was started by the FB "MC_BR_AutControl" while a FB of the type "MC_BR_Phasing" or "MC_BR_Offset" was enabled, the error 32191 was wrongly reported.

ID#171035 : solved problem, solved since V2.031

MC_BR_Offset, MC_BR_Phasing – "ShiftMode = mcABSOLUTE_NO_RESET" does not function (only in V2.020 – V2.030)

The FB did not function as described if the "mcABSOLUTE_NO_RESET" mode was used on the FBs "MC_BR_Offset" and "MC_BR_Phasing" for the "ShiftMode" input. The behavior was similar to "mcABSOLUTE" mode.

More information about the differences between the modes can be found in the help files.

ID#170410 : solved problem, solved since V2.031

MC_GearIn, MC_CamIn – The FBs could be started although other multi axis FBs were already active.

"MC_GearIn" could be started if a "MC_GearInPos" was active.

"MC_CamIn" could be started if a "MC_BR_(Auto)CamDwell" was active

1.3.3.3.199 NC Software – ACP10_MC V2.030

ID#169455 : new function since V2.030

New FBs "MC_BR_CyclicRead", "MC_BR_CyclicWrite"

MC_BR_CyclicRead:

With this FB the value of a ParID can cyclically be read from the drive.

MC_BR_CyclicWrite:

With this FB the value for a ParID can cyclically be sent to the drive.

ID#169445 : new function since V2.030

New FB "MC_BR_HomeAcpEncoder"

Using this function block, it's possible to home an external encoder, which is read in slot 3 or slot 4 of an ACOPOS drive.

ID#168615 : new function since V2.030

New FBs "MC_BR_CamDwell", "MC_BR_AutoCamDwell"

MC_BR_CamDwell:

Linking with alternating cam profile and standstill. Start/Stop via FB inputs or ParID.

MC_BR_AutoCamDwell:

Linking with alternating automatically calculated cam profile and standstill. Start/Stop via FB inputs or ParID.

ID#166595 : new function since V2.030

MC_BR_AutControl supports AUT_S_START_MODE

AUT_S_START_MODE can now also be configured using the FBK "MC_BR_AutControl" (Data type: MC_AUTDATA_TYP).

ID#169925 : solved problem, solved since V2.030

MC_BR_WriteParID and MC_BR_ReadParID set "Error" und "ErrorID" only for one cycle (only in V2.000 – V2.022)

Both FBs set the outputs "Error" and "ErrorID" only for one task cycle, even if the input "Execute" was set for more than one task cycle.

ID#169060 : solved problem, solved since V2.030

MC_011BR_InitCyclicWrite causes address error 9101 and bus error 9100 (only in V2.020 – V2.022)

On SG3 targets CP47x and PPxx, calling MC_011BR_InitCyclicWrite caused address error 9101 and bus error 9100.

ID#168605 : solved problem, solved since V2.030

Cyclic write data via CAN – Value of user variable is not transferred to the drive

If no cyclic read data were configured, the value "0" is transferred for the cyclic write data configured with MC_BR_InitCyclicWrite.

ID#168575 : solved problem, solved since V2.030

Axis changes to "standstill" although errors have occurred on the axis

If a drive error occurs and MC_Stop is called immediately, the status of the axis changes to "standstill" instead of "errorstop".

ID#164820 : solved problem, solved since V2.030

Unplugging the network can result in deadlock

If an error occurred immediately after the network cable is plugged back in, when FBs are called that transfer parameters, the following error occurs: 29491 "Error during internal initialization (software limits)". This status can only be ended by restarting the automation target.

ID#155480 : solved problem, solved since V2.030

MC_BR_AutControl supports Event-ParIDs 2 – 4

Event-ParIDs 2–4 can now also be configured using the FBK "MC_BR_AutControl" (Data type: MC_AUTDATA_TYP).

1.3.3.3.200 NC Software – ACP10_MC V2.021

ID#167445 : solved problem, solved since V2.021

Constant "mcWITHOUT_PERIOD" had a wrong value for target systems SG3 and SGC (only in V2.020)

The constant "mcWITHOUT_PERIOD" had for the target systems SG3 and SGC the wrong value "32768" instead of the correct value "4". If this constant was used at the input "Mode" of the FB "MC_BR_TouchProbe", the FB returned the error 29217: "Invalid input parameter".

1.3.3.3.201 NC Software – ACP10_MC V2.020

ID#166355 : new function since V2.020

Starting with ACP10_MC V2.020 some FBs check their input values for changes since the last call

The following FBs check their input values for changes. Thus the time of the parameter transfer e.g. of basis move FBs will be shortened, if the values of "Velocity" or "Acceleration" were not changed. Now only these parameters will be transferred which have been changed since the last FB call.

FBs:

- MC_MoveAbsolute
- MC_MoveAdditive
- MC_MoveVelocity
- MC_BR_MoveAbsoluteTriggStop
- MC_BR_MoveAdditiveTriggStop
- MC_BR_MoveVelocityTriggStop
- MC_BR_EventMoveAbsolute
- MC_BR_EventMoveAdditive
- MC_BR_EventMoveVelocity
- MC_TouchProbe

ID#166350 : new function since V2.020

New FBs "MC_BR_EventMoveAbsolute", "MC_BR_EventMoveAdditive" and "MC_BR_EventMoveVelocity"

With these FBs a basis movement can be started by an event on the drive.

ID#166345 : new function since V2.020

New FBs "MC_BR_Phasing" and "MC_BR_Offset"

With these FBs a phase shift respectively an offset shift can be performed on the slave axis while a "Synchronized Motion" is active.

ID#147520 : new function since V2.020

New FB "MC_BR_TouchProbe"

With this FB the value of any ParID on a drive can be latched.

ID#166220 : solved problem, solved since V2.020

"MC_MoveAdditive" or "MC_BR_MoveAdditiveTriggStop" could perform a wrong movement if they were started after "MC_Halt".

If a "Synchronized Motion" was aborted by a "MC_Halt" and if a movement was started by "MC_MoveAdditive" or "MC_BR_MoveAdditiveTriggStop" before "MC_Halt.Done = TRUE", the axis performed a wrong movement.

ID#165315 : solved problem, solved since V2.020

Values of PLCopen parameters 1001 to 1006 were wrong

The values of the PLCopen parameters 1001 to 1006, when read with "MC_ReadParameter", appeared to be by the "PLCopen axis factor" too big.

ID#165305 : solved problem, solved since V2.020

"MC_TouchProbe" returned "Done" erroneously

If a lot of values were read cyclically from the drive it could occur that the FB "MC_TouchProbe" returned "Done" and a value at "RecordedPosition", even though there was no event to latch a position.

ID#164630 : solved problem, solved since V2.020

Invalid values could be read via cyclic telegrams

After a ParID was configured for cyclic reading (e.g. by "MC_BR_InitCyclicRead") it was possible, that invalid values were read for a few task class cycles.

ID#158290 : solved problem, solved since V2.020

Axis moves to wrong position if "MC_MoveAbsolute" is called after network error

If the axis period or the PLCopen axis factor are only set via the FB "MC_BR_InitModPos" and if the FB "MC_MoveAbsolute" is called after a network error, the axis moved to a wrong position or in the wrong direction.

ID#158260 : solved problem, solved since V2.020

Values of cyclic telegrams were not refreshed after a network error

If ParIDs were configured for cyclic reading from the drive (e.g. by "MC_BR_InitCyclicRead"), the values were not refreshed after a network error occurred. The last valid value of the ParID was kept.

ID#158220 : solved problem, solved since V2.020

"old" events could be still active after a reinitialization of the CAM automat

With "MC_BR_AutControl" only events of types different from "ncOFF" could be configured. Thus it could happen, that after a reinitialization of the CAM automat still some "old" events were active. As consequence some unexpected state transitions could occur.

1.3.3.3.202 NC Software – ACP10_MC V2.010

ID#163380 : solved problem, solved since V2.010

Pagefault when using more than 10 drives (only in V2.000 – V2.002)

With versions V2.000 – V2.002 a pagefault occurs after ACOPOS startup, if more than 10 drives are operated via the network.

ID#163020 : solved problem, solved since V2.010

Page fault caused by NC object PV with INIT value

If a global PV is used instead of a data structure pointer for NC objects with the type "ncAXIS" or "ncV_AXIS" (this is possible starting with V1.210), then an INIT value should not be defined in the variable declaration for this PV.

In the past, a page fault occurred if an INIT value was defined for this PV in the variable declaration despite the issue mentioned above.

Now, in this case a page fault no longer occurs, but the following error is reported:

29489 NC object data invalid (PV with INIT value in variable declaration ?)

1.3.3.3.203 NC Software – ACP10_MC V2.002

ID#162400 : solved problem, solved since V2.002

MC_MoveVelocity always sets the "InVelocity" output for just one cycle (only in V2.000 – V2.001)

The "InVelocity" output was always set for just one cycle, even if the "Execute" input stayed set to TRUE.

ID#162375 : solved problem, solved since V2.002

MC_GearIn always sets the "InGear" output for just one cycle (only in V2.000 – V2.001)

The "InGear" output was always set for just one cycle, even if the "Execute" input stayed set to TRUE.

ID#162370 : solved problem, solved since V2.002

MC_CamIn always sets the "InSync" output for just one cycle (only in V2.000 – V2.001)

The "InSync" output was always set for just one cycle, even if the "Execute" input stayed set to TRUE.

1.3.3.3.204 NC Software – ACP10_MC V2.001

ID#161830 : solved problem, solved since V2.001

FB constantly reports "Busy" when no more cyclic read data is available (only in V2.000)

A drive can only read a certain number of ParIDs cyclically (depending on the network). If this maximum is already filled by data, and if another FB requires cyclic read from the drive for its own function, then this FB always reports the status "Busy". From now on, the error message 29242 "Cyclic read data full" will be output in this situation.

ID#159840 : solved problem, solved since V2.001

MC_DigitalCamSwitch – Page fault when "Enable = 1"

A page fault occurred if the "Enable" input from the MC_BR_DigitalCamSwitch FB was set to "1" before the axis initialization was finished by the ACP10_MC library.

1.3.3.3.205 NC Software – ACP10_MC V2.000

ID#159467 : new function since V2.000

Library ACP10_MC from V2.000 on also for SGC target system

From V2.000 on, the ACP10_MC library is also available for the SGC target system. With SGC target system it is possible to operate ACOPOS servo drives via CAN bus.

For performance reasons, it is recommended to only use the ACP10_MC library on SGC CPUs with a clock rate of 25 MHz (not on those with 16 MHz). With SGC CPUs with a clock rate of 25 MHz it is possible to operate up to 6 ACOPOS servo drives with a cycle time of 10 ms.

ID#157755 : new function since V2.000

New FB "MC_BR_InitAxisSubjectPar"

This FB is used to selectively initialize individual subcomponents in the NC axis structure.

ID#154075 : new function since V2.000

MC_Power should switch off the controller after a task overload

The controller stayed on when the "Enable" input of "MC_Power" was set to 0 during a Taskoverload in the "Overload" mode (=default). It was possible to switch off the controller by setting and resetting the "Enable" input.

Now the controller is switched off when this occurs. In other download modes, no variables are initialized with 0, so that the controller keeps its previous state.

ID#153285 : new function since V2.000

MC_ReadParameter – Reading values of the axis period and the axis factor

Starting from ACP10_MC V2.0, the MC_ReadParameter FB can be used to read the currently set value of the axis period and the axis factor. The vendor-specific parameters 1007 (AxisFactor) and 1008 (AxisPeriod) were provided for this reason.

ID#148270 : new function since V2.000

Modified behavior of MC_BR_AutControl

Axis state "SynchronizedMotion":

Before V2.00, the axis state "SynchronizedMotion" was switched to as soon as the "Enable" input was set. Starting with V2.00, the axis state "SynchronizedMotion" is not switched to until the "Start" input has been set. Among other things, this makes it possible to initialize a cam profile automat with "MC_BR_AutControl" while using movement FBs.

The error 29272 "Data for MC_BR_AutControl not initialized" is registered if one of the FBs "MC_CamIn", "MC_GearIn" or "MC_GearInPos" was called between the automat parameter initialization (automat Init FBs or with "InitAutData" input) and the setting of the "Start" input.

The axis state "Standstill" is activated when using the "Stop" input. The "Stop" input can only be used to cancel a link that was started with "MC_BR_AutControl". "MC_BR_AutControl" registers the error 29207 "This movement type is currently not allowed" if this input is set during another movement.

"ParLock" and signals:

Starting in V2.00, these inputs can be used in all axis states, even if an error is present or when in the "Errorstop" state. The error 29238 "This FB cannot be used in the current state" is only registered by "MC_BR_AutControl" in the event that a link is active which was started by "MC_CamIn", "MC_GearIn" or "MC_GearInPos".

ID#159855 : solved problem, solved since V2.000

Deadlock after MC_BR_InitAutPar

A deadlock could occur when an axis error appears during parameter transfer of this FB. Other function blocks subsequently reported the status "Busy", when called.

ID#159620 : solved problem, solved since V2.000

MC_GearIn – Wrong behaviour after FB was started again

In some cases, the output "InGear" of the FB "MC_GearIn" might not get set immediately when starting the FB while the master axis is stopped. This behavior occurs only when the FB was stopped after being active.

ID#158245 : solved problem, solved since V2.000

MC_GearIn, MC_GearInPos: Linking on a master whose controller is off could cause the error 29231

The error 29231 "The master velocity is invalid, 0 or negative" could occur if "MC_GearIn" or "MC_GearInPos" was started while the master's controller was turned off.

Starting with V2.0, this error will only be registered when the master's controller is turned on or the master is a virtual axis and the master speed is negative.

The new behavior also makes it possible to use an encoder as master axis, particularly with the ACOPOSmulti.

ID#157795 : solved problem, solved since V2.000

MC_BR_WriteParID could cause a deadlock (only in V1.242 – V1.244)

If the "MC_BR_WriteParID" FB was called while a FB's parameters were being transferred and its "Execute" input was only set for one cycle, then a deadlock of the FB could occur for this axis. Other FBs subsequently registered the status, "Busy," when called.

ID#157240 : solved problem, solved since V2.000

MC_DigitalCamSwitch – The FB can no longer be started after an error

The MC_DigitalCamSwitch FB could no longer be started after an error occurred. The error 29217: "Invalid input parameter" was reported after the "Enable" input was set again.

ID#156570 : solved problem, solved since V2.000

MC_DigitalCamSwitch – Changing the switching data on an active FB

Until now (versions < 2.0), it was not possible to completely move cams while an FB was active (new "on" position > old "off" position). Furthermore, the changed switching positions were applied immediately, even on periodic axes.

Starting in V2.0, the switching data can be changed as needed. Changes are not applied on a periodic axis until the beginning of the next period.

The change will still be made immediately when using a non-periodic axis.

ID#156420 : solved problem, solved since V2.000

MC_Home – New homing modes "mcHOME_DCM" and "mcHOME_DCM_CORR"

Until now, the homing mode for distance coded reference marks could only be configured using the NC INIT parameter module and executed using the "HomingMode" "mcHOME_DEFAULT". With the two new modes, it is now possible to set this type of homing on the FB input "HomingMode", even during runtime.

ID#155090 : solved problem, solved since V2.000

MC_BR_ReadParID / MC_BR_WriteParID – Pagefault when "Axis" input is invalid or "DataAddress = 0"

A Pagefault could occur if an invalid axis reference was connected to the "Axis" input on the MC_BR_ReadParID or MC_BR_WriteParID FB or if the value "0" was specified on the "DataAddress" input.

ID#154365 : solved problem, solved since V2.000

MC_BR_InitAutPar, Deadlock when "Execute" is set when a synchronized movement (via MC_GearIn, MC_BR_GearInPos, MC_CamIn) is already active

A library deadlock could occur if the "Execute" input of the MC_BR_InitAutPar Fb was set when a synchronized movement was already active. In this case, the FB registered the error 29255: "Initialization not possible, axis coupling is active"

ID#154290 : solved problem, solved since V2.000

MC_CamIn: Starting a cam profile after a non-periodic cam causes the error 29207

The axis remained in "SynchronizedMotion" after a non-periodic cam profile. When starting another cam profile, MC_CamIn sends the error 29207 "This movement type is currently not allowed". Now, "Standstill" is switched to when this occurs.

ID#154070 : solved problem, solved since V2.000

MC_TouchProbe – "RecordedPosition" output was not reset when the "Execute" input was reset

If the MC_TouchProbe FB saved a position one time when a trigger event occurred and if the "Execute" input was reset, then the value of the saved position was kept on the

"RecordedPosition" output. However, the PLCopen FBs should reset all outputs when the "Execute" input is set to "0".

ID#153895 : solved problem, solved since V2.000

MC_WriteParameter – "Busy" output stays set too long when an error occurs

If an FB error occurs (e.g. 29204: Invalid parameter number), then the "Busy" output stays set for one more cycle, even though only the "Error" and "ErrorID" outputs should remain set.

ID#153725 : solved problem, solved since V2.000

MC_BR_InitModPos causes ACOPOS error 1002 if the "Period" on a virtual axis is initialized with "0"

If the MC_BR_InitModPos FB sets the axis period of a virtual axis to "0", then the ACOPOS returns the error message 1002: "Parameter outside the valid range" after transferring a ParID. This then causes the FB to register the error 29226: "Drive error. Call MC_ReadAxisError for details".

ID#153065 : solved problem, solved since V2.000

MC_GearInPos: Problem with phasing in the negative direction

If the master in a "MC_GearInPos" coupling is resting and the phase was changed in the negative direction with "MC_Phasing", then the slave in the phase follows only to a certain point and then comes to a rest.

Now the slave follows a negative phase shift as well as a master moving in the negative direction.

If a master is moving in the negative direction, then coupling still cannot take place.

ID#153060 : solved problem, solved since V2.000

MC_GearIn: Problem with phasing in the negative direction

If the master in a "MC_GearIn" coupling is resting and the phase was changed in the negative direction with "MC_Phasing", then the slave in the phase follows only to a certain point and then comes to a rest.

Now the slave follows a negative phase shift as well as a master moving in the negative direction.

If a master is moving in the negative direction, then coupling still cannot take place and the gear ratio cannot be changed.

ID#152605 : solved problem, solved since V2.000

MC_GearIn, MC_GearInPos writes a negative slave factor to the drive even though RatioNumerator is positive

A negative slave factor was transferred to the drive when "RatioNumerator" had a large positive value and a large master maximum speed. This caused the slave to incorrectly change to negative direction.

ID#150470 : solved problem, solved since V2.000

MC_Power – Axis error after "MC_Power.Enable = 0"

The axis error "4011: Controller cannot be switched off: Movement active" could be registered if the "Enable" input of the MC_Power FB was set to "0" shortly after a movement was started (e.g. with the FBs MC_GearIn or MC_GearInPos).

ID#149685 : solved problem, solved since V2.000

MC_MoveVelocity, MC_CamIn, MC_GearIn, MC_GearInPos – FB output status revised

Behavior of the outputs on the above FBs prior to V2.0 of the ACP10_MC–Library:

The "Busy" output was reset if the "InVelocity", "InSync" or "InGear" output was set. The "CommandAborted" output was not set if a continuous movement (MC_MoveVelocity), cam coupling (MC_CamIn) or gear coupling (MC_GearIn, MC_GearInPos) was interrupted (e.g. via FB MC_Stop).

Behavior of the outputs on the above FBs after V2.0 of the ACP10_MC–Library:

When the "InVelocity", "InSync" or "InGear" output is set, the "Busy" output also remains active. The FB must be called until the "Busy" output has been reset by the FB. This occurs if the FB that is currently active gets interrupted by another FB (e.g. MC_Stop, other movement FB, disabling MC_Power, etc.). In this case the "CommandAborted" output is set, as is required by the PLCopen standard.

1.3.3.3.206 NC Software – ACP10_MC V1.995

ID#158990 : solved problem, solved since V1.995

MC_BR_WriteParID could cause a deadlock (only in V1.990 – V1.994)

If the "MC_BR_WriteParID" FB was called while a FB's parameters were being transferred and its "Execute" input was only set for one cycle, then a deadlock of the FB could occur for this axis. Other FBs subsequently registered the status, "Busy," when called.

ID#158980 : solved problem, solved since V1.995

ACP10_MC–Library could report Error 29490 under certain conditions

The ACP10_MC error message 29490: "Internal initialization error (Global–Init)" could occur if the network connection to an ACOPOS was interrupted and then re–established, all error messages acknowledged in the meantime and then the controller was switched on with the MC_Power FB immediately after "network.init = ncTRUE".

ID#158975 : solved problem, solved since V1.995

MC_Power constantly reporting "Busy" when called for a configured, but unconnected ACOPOS unit

If the "Enable" input of the MC_Power FBK was set to "1" for a configured, but unconnected ACOPOS unit, the FBK constantly returns "Busy".

Now error 29490 is returned in this case after the timeout has expired. The axis state switches to "Errorstop".

ID#158970 : solved problem, solved since V1.995

MC_DigitalCamSwitch reports an error if it was disabled while a drive error was present

If "MC_DigitalCamSwitch" was disabled or "EnableMask" was set to 0 while a drive error was present, then it reports the error 29230 "Internal error: Error at parameter list transfer"

ID#158965 : solved problem, solved since V1.995

AxisState does not change to "Standstill" when "MC_BR_AutControl.Enable" is set to "0"

The PLCopen axis state is not changed to "Standstill" when "MC_BR_AutControl.Enable" is set to "0" if "MC_BR_AutControl.Stop" was previously set to "1" and if the slave axis was already in standstill when "MC_BR_AutControl.Enable = 0".

1.3.3.3.207 NC Software – ACP10_MC V1.994

ID#157370 : solved problem, solved since V1.994

AS V3.0, SG4 target system: Pagefault when transferring a project in Run mode

In AS V3.0, transferring a project to the target system with the ACP10_MC library while the CPU was in Run mode could have caused a Pagefault.

1.3.3.3.208 NC Software – ACP10_MC V1.991

ID#151955 : solved problem, solved since V1.991

MC_BR_AutControl: Enable=0 in case of an error caused a drive error (only in V1.990)

If the "Enable" input on the MC_BR_AutControl FB was set to "0" while it was in an error state and if an active cam profile automat was not first terminated using the the FB input "Stop" or by resetting the "Enable" input, then the value "0" was transferred to the parameter AXLIM_A2_POS. This caused the drive to report an error.

ID#151425 : solved problem, solved since V1.991

POWERLINK, faulty cyclic read data at high CPU load

If there was a high load on the CPU and a ratio smaller than 8 between the NC Manager cycle time and the POWERLINK cycle time, in rare cases the cyclic read data were faulty.

ID#151422 : solved problem, solved since V1.991

CAN, crash of target system (only in V1.990)

If more than 1 ACOPOS were operated on the CAN bus, the target system crashed.

1.3.3.3.209 NC Software – ACP10_MC V1.990

ID#150632 : new function since V1.990

The operation of ACOPOSmulti from now on is supported.

1.3.3.3.210 NC Software – ACP10_MC V1.244

ID#153215 : solved problem, solved since V1.244

AxisState does not change to "Standstill" when "MC_BR_AutControl.Enable" is set to "0"

The PLCopen axis state is not changed to "Standstill" when "MC_BR_AutControl.Enable" is set to "0" if "MC_BR_AutControl.Stop" was previously set to "1" and if the slave axis was already in standstill when "MC_BR_AutControl.Enable = 0".

ID#152950 : solved problem, solved since V1.244

ACP10_MC–Library could report Error 29490 under certain conditions

The ACP10_MC error message 29490: "Internal initialization error (Global–Init)" could occur if the network connection to an ACOPOS was interrupted and then re–established, all error messages acknowledged in the meantime and then the controller was switched on with the MC_Power FB immediately after "network.init = ncTRUE".

ID#152575 : solved problem, solved since V1.244

MC_DigitalCamSwitch reports an error if it was disabled while a drive error was present

If "MC_DigitalCamSwitch" was disabled or "EnableMask" was set to 0 while a drive error was present, then it reports the error 29230 "Internal error: Error at parameter list transfer"

1.3.3.3.211 NC Software – ACP10_MC V1.243

ID#151940 : solved problem, solved since V1.243

MC_BR_AutControl: Enable=0 in case of an error caused a drive error (only in V1.242)

If the "Enable" input on the MC_BR_AutControl FB was set to "0" while it was in an error state and if an active cam profile automat was not first terminated using the the FB input "Stop" or by resetting the "Enable" input, then the value "0" was transferred to the parameter AXLIM_A2_POS. This caused the drive to report an error.

ID#151752 : solved problem, solved since V1.243

POWERLINK, faulty cyclic read data at high CPU load

If there was a high load on the CPU and a ratio smaller than 8 between the NC Manager cycle time and the POWERLINK cycle time, in rare cases the cyclic read data were faulty.

1.3.3.3.212 NC Software – ACP10_MC V1.242

ID#150480 : solved problem, solved since V1.242

MC_BR_ReadParID and MC_BR_WriteParID, deadlock during network interruption (only in V1.190 – V1.241)

A deadlock could occur if the network connection was interrupted while one of the function blocks "MC_BR_ReadParID" or "MC_BR_WriteParID" was "Busy." Other function blocks subsequently reported the status "Busy", when called. This problem could only be corrected by restarting the control system.

ID#150465 : solved problem, solved since V1.242

MC_BR_InitCyclicRead and MC_BR_InitCyclicWrite, the use of invalid ParIDs resulted in the transfer of incorrect data

The use of an invalid ParIDs for "MC_BR_InitCyclicRead" or "MC_BR_InitCyclicWrite" (e.g. Write-only, Read-only, SPT ParID from a function block not yet created) caused one of the following errors:

- 1017: Invalid parameter ID for cyclic read access
- 1018: Invalid parameter ID for cyclic write access

Calling "MC_BR_InitCyclicRead" or "MC_BR_InitCyclicWrite" again with a valid ParID then caused the respective parameter value to be transferred to/from the ACOPOS at the wrong

location in the cyclic frame.

ID#150455 : solved problem, solved since V1.242

MC_BR_InitCyclicRead and MC_BR_InitCyclicWrite, using a ParID repeatedly no longer causes an error

Repeatedly calling "MC_BR_InitCyclicRead" or "MC_BR_InitCyclicWrite" using the same ParID previously caused the error 29258 or 29259. Now, this situation no longer causes an error to be displayed or a new data point to be transferred to/from the ACOPOS in the cycle frame. If the address of the user data ("DataAddress") is changed, then the new address is used as data target/source.

ID#150450 : solved problem, solved since V1.242

MC_BR_InitCyclicRead and MC_BR_InitCyclicWrite, deadlock during the parameter transfer of other FBs

A deadlock could occur when calling one of the FBs "MC_BR_InitCyclicRead" or "MC_BR_InitCyclicWrite" during the parameter transfer of another FB. Other function blocks subsequently reported the status "Busy", when called. This problem could only be corrected by restarting the control system.

ID#150345 : solved problem, solved since V1.242

MC_BR_InitCyclicRead and MC_BR_InitCyclicWrite, "Done" is output even though no parameter was entered

If multiple instances of the FBs "MC_BR_InitCyclicRead" or "MC_BR_InitCyclicWrite" were called within a cycle using "Execute = 1", then "Done" was occasionally output even though no parameter was entered in the cycle data to/from the drive.

ID#150220 : solved problem, solved since V1.242

MC_BR_ReadParID and MC_BR_WriteParID can now also be called when an axis error is present

ID#150215 : solved problem, solved since V1.242

MC_BR_ReadParID and MC_BR_WriteParID, deadlock during the parameter transfer of other FBs

A deadlock could occur when calling one of the FBs "MC_BR_InitCyclicRead" or "MC_BR_InitCyclicWrite" during the parameter transfer of another FB. Other function blocks subsequently reported the status "Busy", when called. This problem could only be corrected by restarting the control system.

ID#150135 : solved problem, solved since V1.242

MC_ReadAxisError – Error texts could be mixed

If two or more axis error were acknowledged with the MC_ReadAxisError FBK, the error texts could have been mixed.

ID#150130 : solved problem, solved since V1.242

MC_ReadAxisError showing an axis error although it was already acknowledged with the MC_Reset FBK

If an axis error was acknowledged with the MC_Reset FBK, the MC_ReadAxisError FBK continued to show the error number on the "AxisErrorID" output.

ID#150125 : solved problem, solved since V1.242

MC_Reset generating a change in status from "error stop" to "standstill" although network communication interrupted

The PLCopen state switches to "error stop" if the ACOPOS unit's network connection is interrupted. This status should remain until everything is OK with the network again and the MC_Reset FB is called.

If the MC_Reset FB was called while the network connection was still interrupted, then the FBK incorrectly switched the state to "Standstill".

ID#150110 : solved problem, solved since V1.242

MC_Power constantly reporting "Busy" when called for a configured, but unconnected ACOPOS unit

If the "Enable" input of the MC_Power FBK was set to "1" for a configured, but unconnected ACOPOS unit, the FBK constantly returns "Busy".

Now error 29490 is returned in this case after the timeout has expired. The axis state switches to "Errorstop".

ID#150085 : solved problem, solved since V1.242

MC_Power outputs not correctly operated if the "Enable" input was set to "0" after network communication was lost

If the "Enable" input of the MC_Power FBK was set to "0" after network communication to an ACOPOS unit was lost, then the "Status" and "Error" outputs were operated alternately.

ID#149915 : solved problem, solved since V1.242

Value of the "Deceleration" input not checked for MC_Halt

If the value is "0.0" or greater than one of the configured delay limit values, an axis error was reported after setting the "Execute" input, and the movement remained active.

The value is now checked; if it's "0.0" or greater than one of the delay limit values, then that limit value is always used to stop the movement.

ID#149885 : solved problem, solved since V1.242

MC_Stop registers CommandAborted if "Enable=0" was set for MC_BR_AutControl

In the event that the "Execute" input for "MC_Stop" was set to 1 at the same time that the "Enable" input for "MC_BR_AutControl" was set to 0, then "MC_Stop" falsely registered "CommandAborted", even though the stop ramp for "MC_Stop" was run to the end.

In this case, "MC_Stop" no longer registers "CommandAborted", because it cannot be interrupted by "MC_BR_AutControl."

ID#149880 : solved problem, solved since V1.242

MC_BR_AutControl not ending active movements if "Enable" set to "0" (only in V1.211 – V1.241)

If the "Enable" input of the "MC_BR_AutControl" FBK was set to "0" during active cam profile coupling, then this movement was not aborted.

ID#149805 : solved problem, solved since V1.242

Value of the "Deceleration" input not checked for MC_BR_AutControl

If the value is "0.0" or greater than one of the configured delay limit values, an axis error was reported after setting the "Stop" input, and the automat movement remained active.

The value is now checked; if it's "0.0" or greater than one of the delay limit values, then that limit value is always used to stop the movement.

ID#149565 : solved problem, solved since V1.242

MC_BR_InitModPos not always transferring "Period"

This FBK didn't transfer the value of the "Period" input to the drive if an axis period wasn't defined in the mapping table.

An oriented stop didn't work correctly with the "MC_MoveAbsolute" FBK because of this.

The software limits were also not ignored when using a periodic axis.

ID#148200 : solved problem, solved since V1.242

MC_BR_AutControl only transferring the ParLock ParID in some cases

If the inputs "ParLock" and "InitAutData" were set in the same TC cycle, then only the ParLock ParID was transferred. The automat parameters were not initialized.

ID#146535 : solved problem, solved since V1.242

MC_DigitalCamSwitch using the value "1" as the period for a non-periodic axis

This causes the outputs to switch incorrectly as well as accelerated switching after the last switch-off position (output had 12V).

Now the value "2147483646" is specified as the interval for a non-periodic axis, or the user sets the new input "Period" to the value of the desired interval in the structure of type "MC_CAMSWITCH_REF".

1.3.3.3.213 NC Software – ACP10_MC V1.214

ID#148245 : new function since V1.214

MC_BR_InitCyclicWrite now for CAN as well

The "MC_BR_InitCyclicWrite" FB can now also be used for the CAN bus.

ID#148475 : solved problem, solved since V1.214

MC_Phasing with MC_GearInPos

"MC_Phasing" didn't work with an active "MC_GearInPos" and returned error 29217 "Invalid input parameter".

Axis error 1017 "Invalid parameter ID for cyclic read access" was also returned.

1.3.3.3.214 NC Software – ACP10_MC V1.213

ID#147530 : solved problem, solved since V1.213

MC_GearIn and MC_GearInPos reporting errors with very small gear ratios

If the gear ratios for "MC_GearIn" and "MC_GearInPos" are very small (e.g. 1:1), it could have caused error 5102 "Too many cam profile changes per cycle (master period too short)".

ID#147445 : solved problem, solved since V1.213

"MC_TouchProbe" always used the positive edge

The position was always latched with the positive trigger edge even if the negative edge was selected.

ID#147145 : solved problem, solved since V1.213

Lag error when coupling to moving virtual masters

Start of "MC_GearIn" or "MC_GearInPos" with a moving virtual master axis could cause a lag error.

ID#146850 : solved problem, solved since V1.213

Unable to restart a movement after axis error

If an axis error occurred during a movement FBK that didn't stop the axis (e.g. parameter error), the FBK constantly returns "Busy".

An additional positive edge on the "Execute"-input had no effect. The FB only escaped this state once the axis was stopped.

Affected FBs:

- MC_MoveAbsolute
- MC_MoveAdditive
- MC_MoveVelocity
- MC_BR_MoveAbsoluteTriggStop
- MC_BR_MoveAdditiveTriggStop
- MC_BR_MoveVelocityTriggStop
- MC_Halt
- MC_GearIn
- MC_GearInPos
- MC_GearOut
- MC_CamIn
- MC_CamOut

ID#146690 : solved problem, solved since V1.213

Deadlock due to axis error during MC_BR_ReadParID or MC_BR_WriteParID

If an axis error occurred during the execution of "MC_BR_ReadParID" or "MC_BR_WriteParID", it could have deadlocked the FBs for this axis. Subsequent FBs were not able to perform any actions on the axis and always returned "Busy".

1.3.3.3.215 NC Software – ACP10_MC V1.211

ID#145950 : new function since V1.211

MC_Home: New mode mcHOME_SWITCH_GATE

The mode, "mcHOME_SWITCH_GATE" makes it possible to use a switch with 2 edges.

ID#143690 : new function since V1.211

MC_Stop: Deceleration outside the valid range

Braking takes place using the limit value if the "Deceleration" is 0 or greater than the limit value for a real axis.

If the "Deceleration" is 0 for a virtual axis, the base parameter is used for braking.

In earlier versions, an error was output and the axis did not brake.

ID#146215 : solved problem, solved since V1.211

MC_BR_MoveVelocityTriggStop constantly reports busy after MC_Stop

If the function block "MC_BR_MoveVelocityTriggStop" was started in negative direction after "MC_Stop" and a remaining distance was specified so small that the axis had to reverse, then the axis was decelerated to a speed of 0 when a trigger event occurred and the function block constantly reported "Busy".

ID#146125 : solved problem, solved since V1.211

MC_BR_InitCyclicRead at the same time as MC_Home, quickstop or drive error can cause incorrect cyclic data

Incorrect cyclic data could occur on the "DataAdress" of the "MC_BR_InitCyclicRead" if "MC_Home" was called, a quickstop was triggered or a drive error occurred in the same task cycle before a "MC_BR_InitCyclicRead" call.

ID#145990 : solved problem, solved since V1.211

MC_Power: The axis remained in the "Disabled" state if the controller was not ready

If "MC_Power" is enabled and the controller is not ready the axis now changes to the "Errorstop" state. This behavior corresponds to the PLCopen state diagram.

ID#145495 : solved problem, solved since V1.211

MC_BR_InitParList, MC_BR_DownloadParSequ, and MC_BR_InitParSequ constantly reported busy

The "MC_BR_InitParList", "MC_BR_DownloadParSequ", and "MC_BR_InitParSequ" FBs constantly reported busy if one of the following events occurred shortly beforehand on the same axis:

- Activation of a MC FB.
- Error on the drive => reading of parameter "ERROR_REC" by the NC-Manager
- Completion of homing movement => reading of parameters "HOMING_TR_S_REL" and "HOMING_OFFSET" by the NC-Manager
- A override change => writing of parameter "OVERRIDE" by the NC-Manager

ID#145055 : solved problem, solved since V1.211

MC_GearIn and MC_GearInPos: Lag error or speed jump when starting

If a ParID is used as a master for "MC_GearIn" and "MC_GearInPos" and it was "in motion", coupling the slave could have caused a speed jump or lag error. Now the speed specified at the "MasterParIDMaxVelocity" input is used to calculate the entry movement to couple gently.

ID#144610 : solved problem, solved since V1.211

Invalid state change with MC_Stop possible

Clearing "Execute" on the "MC_Stop" function block caused the state to change to "Standstill", even if the axis was in a state, which could not normally be changed by this event (e.g. error stop). The state is now only changed to "Standstill" under these circumstances (clearing "Execute" on the "MC_Stop" function block) if the axis is in the "Stopping" state.

ID#144605 : solved problem, solved since V1.211

MC_SetOverride: Error if override values very small

A value of 0.0001 (1%) is recognized as 0; for the acceleration override this results in error 29217: "Invalid input parameter".

A value of 0.0002 (2%) is recognized as 1. Larger values are processed correctly.

ID#144490 : solved problem, solved since V1.211

Error 29228 from FBKs with a master input

For various master and slave axis types (real, virtual axis), calling the FB for the fourth time caused the following error message for drive-spanning couplings:

29228 "No further master position can be read from the network by this drive"

Affected FBs:

- MC_CamIn
- MC_GearInPos
- MC_DigitalCamSwitch
- MC_BR_MasterParIDTransfer
- MC_BR_InitAutPar
- MC_BR_AutControl

ID#144215 : solved problem, solved since V1.211

MC_BR_AutControl: Clearing "Enable" caused a drive error when the controller was off

If the "Enable" input of "MC_BR_AutControl" was set to FALSE while the controller was already switched-off (e.g.: because of "MC_Power" or lag error), an attempt was still made to stop movement. This caused error 5005 "Start of movement not possible: Position controller inactive."

ID#144185 : solved problem, solved since V1.211

MC_BR_DownloadCamProfileObj doesn't work (V1.210 only)

Calling the FB returns error 32181 "Data address zero (user data for parameter list operation)". The cam profile was not transferred.

ID#144170 : solved problem, solved since V1.211

FBs transferring 0 instead of the input value

If a FB is called immediately after the controller is booted, it's possible that it transferred 0 to the drive instead of the values on its inputs.

Affected input data included position, distance, speed, and acceleration values.

ID#143670 : solved problem, solved since V1.211

MC_ReadAxisError returning errors without DataObjectName

If a "DataAddress" is specified for "MC_ReadAxisError" to find out an error text, but a "DataObjectName" is not specified, it should be obtained from the init parameter module. Instead, error 29260 "No data object name specified" is returned.

Now, the "DataObjectName" from the init parameter module is used when this happens.

ID#142485 : solved problem, solved since V1.211

Busy status for FBs if no init parameter module specified

If an init parameter module was not specified in the mapping table, the FBs constantly returned busy.

In this case now, error 29490 "Internal initialization error (Global-Init)" is returned.

1.3.3.3.216 NC Software – ACP10_MC V1.210

ID#141805 : new function since V1.210

New FBs: "MC_BR_InitAxisPar", "MC_BR_SaveAxisPar" and "MC_BR_LoadAxisPar"

ID#141790 : new function since V1.210

MC_BR_AutControl: New outputs "ActualStateIndex" and "ActualCamType"

ID#142887 : solved problem, solved since V1.210

Target system SG4 (I386), POWERLINK: In rare cases, "MC_Stop" could result in blocking parameter transfer(only with ACP10_MC from V1.170 on with AR from V2.80 on)

Under the following conditions, the transfer of parameters to and from an ACOPOS was blocked:

- The real axis of an ACOPOS was not yet referenced.
- The "MC_stop" FB was activated for the real axis of this ACOPOS.
- An MC FB was also activated for the virtual axis of this ACOPOS in the exact same task cycle.
- Both of the activations mentioned above occurred in the "Task class for NC manager task" defined in the NC configuration
- The Activation for the virtual axis occurred in this task cycle before the activation for the real axis.

ID#141775 : solved problem, solved since V1.210

MC_BR_InitParSequ returning error 29254 if the parameter sequence only has one parameter

If the POWERLINK cycle time was the same as the task cycle time and only one parameter was contained in the sequence, error 29254 "Error initializing parameter sequence" was reported.

ID#141505 : solved problem, solved since V1.210

MC_BR_InitAutState returning error if automat active

If MC_BR_InitAutState was used when the automat was active, the system returned error 5302 "Parameter write not allowed: Cam automat active."

1.3.3.3.217 NC Software – ACP10_MC V1.197

ID#140340 : new function since V1.197

New homing mode "mcHOME_ABSOLUTE_CORR" for FB "MC_Home"

The offset specified at the "Position" input is added to the encoder absolute value and counter range correction is carried out.

ID#141115 : solved problem, solved since V1.197

"MC_Power": Previously possible to switch from "Errorstop" to "Disabled" state with a neg. edge on "Enable"

If an error caused the controller to turn off and the axis was in the "Errorstop" state because of it, the axis could be put into the "Disabled" state with a negative edge on the "Enable" input of the "MC_Power" FBK.

The axis now remains in the "Errorstop" state.

ID#140655 : solved problem, solved since V1.197

"MC_CamIn": The start mode "mcDIRECT" did not work correctly

When a cam coupling was started with the FB "MC_CamIn" with start mode "mcDIRECT", the coupling was started at a wrong master position or the following error was reported:

– 5318: Relative distance of master axis higher than cam profile period

ID#140585 : solved problem, solved since V1.197

Cyclic data sometimes overwritten or set to 0

If more than 24 bytes of cyclic data is read by the drive, it was possible for values to be set to 0 or overwritten.

ID#140345 : solved problem, solved since V1.197

Error 29490 for "MC_Reset" after network error (V1.194–V1.196 only)

If attempting to change the axis from the "ErrorStop" state to the "Disabled" state using "MC_Reset" after a network error, then the FB returns error 29490.

ID#140335 : solved problem, solved since V1.197

Homing mode "mcHOME_ABOLUTE" with the FB "MC_Home" used counter range correction

Now, only the offset specified at the "Position" input is added to the read encoder absolute value.

ID#140330 : solved problem, solved since V1.197

Invalid master axis for "MC_CamTableSelect" crashed the target system

The "Master" input is no longer evaluated; no master is necessary for the FB function.

1.3.3.3.218 NC Software – ACP10_MC V1.196

ID#138735 : solved problem, solved since V1.196

FBs respond as "Busy" after initializing an empty Acopos parameter table

After initializing an empty Acopos parameter table with "MC_BR_InitParTabObj", other FBs were no longer able to execute any operations and responded as "Busy".

ID#138730 : solved problem, solved since V1.196

Now "MC_Phasing" can also be used with "MC_GearInPos", previously the error 29207 was reported.

1.3.3.3.219 NC Software – ACP10_MC V1.195

ID#138685 : new function since V1.195

"MC_BR_AutControl": New "Deceleration" input to define the ramp while stopping.

ID#138680 : solved problem, solved since V1.195

"MC_BR_AutControl": Error message if parameters were initialized while an automat was running

An attempt is no longer made to transfer the parameter AUT_MA_ID if the parameters are initialized while an automat is running.

ID#138675 : solved problem, solved since V1.195

"MC_BR_AutControl": If the automat was stopped, then the "Running" output remained set (automat came to a stop).

ID#138670 : solved problem, solved since V1.195

"MC_CamIn": The output "EndOfProfile" continued to output pulses if the coupling was already interrupted with "MC_CamOut" or "MC_Stop".

ID#138665 : solved problem, solved since V1.195

"MC_CamIn" sometimes did not start the coupling (only V1.184 – V1.194)

If the "Execute" input was set for only one cycle at the StartMode "mcRELATIVE", then the coupling was not started.

ID#138660 : solved problem, solved since V1.195

Jolt time is overwritten in the axis structure with 0.0004s

If the jolt time was 0.0 in the Init parameter module, then it was initialized with 0.0, but 0.0004s was written to the axis structure.

ID#138655 : solved problem, solved since V1.195

Cyclic data with a length of 4 bytes could be read incompletely (only V1.193 – V1.194)

If more than 16 bytes of cycle data were used, then sometimes only 2 bytes of a 4-byte parameter were read.

Affected FB outputs:

- "Torque" from MC_ReadActualTorque
- "Done" and "RecordedPosition" from MC_TouchProbe
- "EndOfProfile" from MC_CamIn
- "Value" from MC_ReadDigitalInput
- "Value" from MC_ReadDigitalOutput
- User variables connected to MC_BR_InitCyclicRead via "DataAddress"

ID#138650 : solved problem, solved since V1.195

The "SlaveChannel" input of the "MC_BR_InitMasterParIDTransfer" function block had the data type UINT on SG3 targets instead of USINT.

1.3.3.3.220 NC Software – ACP10_MC V1.194

ID#136270 : new function since V1.194

Error messages from automatic initialization

If an error occurs during the automatic initialization, it will be indicated by a corresponding error number for the "ErrorID" output of the FB being called.

ID#136255 : new function since V1.194

New input "Periodic" for "MC_BR_DownloadCamProfileObj"

New input "Periodic" to use the cam profile with "MC_CamIn".

ID#136245 : new function since V1.194

"Direction" mode "mcEXCEED_PERIOD"

New "Direction" mode "mcEXCEED_PERIOD" has been implemented for "MC_MoveAbsolute" and "MC_BR_MoveAbsoluteTriggStop".

ID#136240 : new function since V1.194

New FB "MC_BR_DownloadCamProfileData"

ID#136710 : solved problem, solved since V1.194

FBs that start continuous movements did not report "Done" or "InVelocity" at high speeds

Affected FBs: "MC_MoveVelocity", "MC_GearOut" and "MC_CamOut"

The outputs "InVelocity" and "Done" were not set when running at high speeds (approx. 6 000 000).

ID#136705 : solved problem, solved since V1.194

MC_Home: "mcHOME_DEFAULT" no longer functioned after a homing procedure with a mode not equal to "mcHOME_DEFAULT"

If a homing procedure with any mode other than "mcHOME_DEFAULT" was performed before a homing procedure with "mcHOME_DEFAULT", then the parameters from the previous homing procedure were used instead of those from the INIT parameter module.

ID#136640 : solved problem, solved since V1.194

Cyclic data was 0 with short Acp10 manager cycle time

This problem could occur with a small ratio between the defined Acp10man cycle time (default TC1) and POWERLINK cycle time and more than 3 axes.
(e.g. 400µs Acp10man cycle time, 400µs POWERLINK cycle time, 4 axes)

Error image

The following FB outputs were always zero:

- "Torque" from MC_ReadActualTorque
- "Done" and "RecordedPosition" from MC_TouchProbe
- "InSync" and "EndOfProfile" from MC_CamIn
- "Done" from MC_Phasing
- "InGear" from MC_GearIn
- "StartSync" and "InSync" from MC_GearInPos
- "Running" from MC_BR_AutControl
- "Value" from MC_ReadDigitalInput
- "Value" from MC_ReadDigitalOutput
- User variables connected to MC_BR_InitCyclicRead via "DataAddress" were always set to zero.

ID#136490 : solved problem, solved since V1.194

"MC_ReadDigitalInput" and "MC_ReadDigitalOutput": Invalid values for "Slot" or "Channel" caused the system to crash

2–4 are permissible values for "Input.Slot" and "Output.Slot". 1–8 are permitted for "Input.Channel" and 1–10 for "Output.Channel".
Entries outside of this range caused the target system to crash.

ID#136265 : solved problem, solved since V1.194

Modulo position only corrected by one period in each cycle after initialization

If the position value read after a warm restart or homing procedure is greater than a period (absolute encoder), it could take several cycles to calculate the modulo position. The "Position" output of the "MC_ReadPosition" FB changed by one period every cycle until the output position was less than one period. Now the modulo position is calculated within one cycle.

ID#136260 : solved problem, solved since V1.194

Output "Value" from "MC_ReadDigitalInput" and "MC_ReadDigitalOutput" remained "TRUE"

The "Value" output remained TRUE even when the "Enable" input was set to FALSE or an error occurred.

ID#136250 : solved problem, solved since V1.194

"MC_Stop": "Busy" and "Done" could be set at the same time for a cycle

If Execute was set to FALSE before the "Done" FB responded, then the "Busy" and "Done" output were simultaneously set for one cycle.

1.3.3.3.221 NC Software – ACP10_MC V1.193

ID#135660 : solved problem, solved since V1.193

POWERLINK, cyclic data from the drive, in some cases 1-byte or 2-byte parameters were not able to be read

Due to an error in the configuration of the drive's cyclic data, 1-byte or 2-byte parameters were sometimes not able to be read and the FB outputs or user variables derived from this were always set to zero.

The following FB outputs were always set to zero when this problem occurred:

- "InSync" from MC_CamIn
- "Done" from MC_Phasing
- "InGear" from MC_GearIn
- "StartSync" and "InSync" from MC_GearInPos
- "Running" from MC_BR_AutControl
- "Value" from MC_ReadDigitalInput
- "Value" from MC_ReadDigitalOutput

If this problem occurred, then user variables connected to MC_BR_InitCyclicRead via "DataAddress" (for which 1-byte or 2-byte parameters were configured) were set to zero.

1.3.3.3.222 NC Software – ACP10_MC V1.192

ID#135260 : solved problem, solved since V1.192

When enabling MC_BR_AutControl a crash of the target system could occur (only in V1.190).

1.3.3.3.223 NC Software – ACP10_MC V1.190

ID#133870 : new function since V1.190

"MC_DigitalCamSwitch": New parameters can be initialized now when the FB is active.

With the new inputs "InitSwitches" and "InitTrackOptions" it is possible now to initialize new parameters while the FB is active

ID#133425 : new function since V1.190

New FBs for SG3 Targets

- MC_001_ReadActualVelocity
- MC_002_ReadActualTorque
- MC_003_GearInPos
- MC_004BR_BrakeOperation
- MC_005BR_MoveAbsoluteTriggSto
- MC_006BR_MoveAdditiveTriggSto
- MC_007BR_MoveVelocityTriggSto
- MC_008BR_ReadParID
- MC_009BR_WriteParID
- MC_010BR_InitCyclicRead
- MC_011BR_InitCyclicWrite
- MC_012BR_InitParList
- MC_013BR_InitParTabObj

- MC_014BR_DownloadCamProfileOb
- MC_015BR_DownloadParSequ
- MC_016BR_InitParSequ
- MC_017BR_InitAutPar
- MC_018BR_InitAutState
- MC_019BR_InitAutEvent
- MC_020BR_AutControl
- MC_021_ReadDigitalInput
- MC_022_ReadDigitalOutput
- MC_023_WriteDigitalOutput
- MC_024BR_InitMasterParIDTrans
- MC_025BR_InitModPos

ID#133420 : new function since V1.190

New FB "MC_BR_InitModPos" for SG4-Targets

ID#133855 : solved problem, solved since V1.190

Incorrect error message 29207 from MC_GearInPos

MC_GearInPos reported the error 29207 if the master and slave axes were on different drives and a parameter transfer to the master axis was active.

The FB now waits until this parameter transfer is complete and no longer reports this error.

ID#133410 : solved problem, solved since V1.190

"MC_BR_InitCyclicRead" and "MC_BR_InitCyclicWrite": Calling the same ParID again could lead to a deadlock.

A deadlock could occur if "MC_BR_InitCyclicRead" or "MC_BR_InitCyclicWrite" was called a second time for the same ParID. The deadlock could only be fixed by restarting.

ID#133405 : solved problem, solved since V1.190

"MC_MoveAbsolute" and "MC_BR_MoveAbsoluteTriggStop": The mode "mcSHORTEST_WAY" delivers the error 29217 (only in V1.170 – V1.187)

The "mcSHORTEST_WAY" mode on the "Direction" input was rejected by "MC_MoveAbsolute" and "MC_BR_MoveAbsoluteTriggStop" with error 29217.

ID#133385 : solved problem, solved since V1.190

"MC_BR_AutControl": The data type of the "ParLock" input is now USINT

The data type for the "ParLock" input in the "MC_BR_AutControl" function block was changed from BOOL to USINT. Parlock can now also be set to 2.

ID#133380 : solved problem, solved since V1.190

The done output from "MC_BR_InitCyclicWrite" was not set

If the "Execute" input was only set for one cycle, then the "Done" output was not set.

ID#133370 : solved problem, solved since V1.190

Deadlock with "MC_BR_InitCyclicRead" / "MC_BR_InitCyclicWrite"

A deadlock could occur if another FB was called in the same cycle as "MC_BR_InitCyclicRead" or "MC_BR_InitCyclicWrite". The deadlock could only be fixed by restarting.

1.3.3.3.224 NC Software – ACP10_MC V1.184

ID#128695 : solved problem, solved since V1.184

New "Execute" of "MC_Stop" during the deceleration ramp led to a wrong deceleration if the PLCopen-unit-factor was used.

If an FB-instance received another positive edge on the "Execute"-input during the deceleration ramp, the PLCopen-unit-factor was not taken into account. This resulted in a flattening of the deceleration ramp and thus in a longer braking distance.

ID#128685 : solved problem, solved since V1.184

The value of the input "TriggerDistance" was not multiplied with the PLCopen-unit-factor.

The input "TriggerDistance" of the FBs "MC_BR_MoveAbsoluteTriggStop", "MC_BR_MoveAdditiveTriggStop" and "MC_BR_MoveVelocityTriggStop" was not multiplied with the PLCopen-unit-factor. If this factor was used a wrong rest distance was moved.

ID#128680 : solved problem, solved since V1.184

Periodic axes moved a wrong distance when the internal position value exceeded 2^{31} .

On periodic axes the FBs "MC_MoveAdditive" and "MC_BR_MoveAdditiveTriggStop" moved a wrong distance when the internal position exceeded 2^{31} .

ID#128675 : solved problem, solved since V1.184

The data type of the input "CamTable" was STRING(10) for SG3-Targets and is now STRING(12)

1.3.3.3.225 NC Software – ACP10_MC V1.181

ID#126380 : solved problem, solved since V1.181

The input "MasterParID" of the FBs "MC_GearIn", "MC_GearInPos" and "MC_CamIn" had no function.

ID#126375 : solved problem, solved since V1.181

The values of the constants "mcSHORTEST_WAY" and "mcCURRENT_DIR" were twisted.

That could have resulted in unexpected behavior of the FB "MC_MoveAbsolute".

1.3.3.3.226 NC Software – ACP10_MC V1.180

ID#125640 : solved problem, solved since V1.180

"MC_BR_BrakeOperation" used invalid commands

For opening the brake the input "BrakeCommand" of the FB "MC_BR_BrakeOperation" wrongly had to be set to 2, for closing to 1.

Now it works as described, 1 for opening and 0 for closing the brake.

ID#125635 : solved problem, solved since V1.180

If "MC_GearInPos" was called after "MC_GearIn", the input "MasterSyncPosition" was not evaluated.

1.3.3.3.227 NC Software – ACP10_MC V1.170

ID#123380 : new function since V1.170

New FBs for SG4 targets

- MC_GearInPos
- MC_ReadActualVelocity
- MC_ReadActualTorque
- MC_ReadDigitalInput
- MC_ReadDigitalOutput
- MC_WriteDigitalOutput
- MC_BR_BrakeOperation
- MC_BR_MoveAbsoluteTriggStop
- MC_BR_MoveAdditiveTriggStop
- MC_BR_MoveVelocityTriggStop
- MC_BR_ReadParID
- MC_BR_WriteParID
- MC_BR_InitCyclicRead
- MC_BR_InitCyclicWrite
- MC_BR_DownloadCamProfileObj
- MC_BR_DownloadParSequ
- MC_BR_InitParSequ
- MC_BR_InitParList
- MC_BR_InitParTabObj
- MC_BR_InitMasterParIDTransfer
- MC_BR_InitAutPar
- MC_BR_InitAutState
- MC_BR_InitAutEvent
- MC_BR_AutControl

ID#123375 : new function since V1.170

New FB for SG3 and SG4 targets

"MC_Halt"

ID#123370 : new function since V1.170

"MC_GearIn" und "MC_CanIn": New input "MasterParID"

Every ParID of the master axis can be used as master not just the set position.

ID#123360 : new function since V1.170

MC_ReadAxisError: Additional in– and outputs

New inputs "DataAddress", "DataLength" and "DataObjectName" for error text evaluation

New outputs "AxisErrorID", which now provides the ACP10 error number and "AxisErrorCount"

that shows the number of queued errors .

ID#123350 : new function since V1.170

MC_SetOverride: The input "Execute" was changed to "Enable"

The bahavior of the FB changed accordingly !

ID#123345 : new function since V1.170

MC_Home: New input "HomingMode"

ID#123340 : new function since V1.170

MC_DigitalCamSwitch: The component "Node" of the data type "MC_OUTPUT_REF" was replaced by "Axis".

ID#123325 : new function since V1.170

Now every FB has a new output "Busy".

ID#123330 : solved problem, solved since V1.170

Possibly MC_DigitalCamSwitch could not leave an error state

Resetting "Enable" before "InOperation" was set resulted in a state where a new "Enable" led to an error. This state could have only be left by a Warm- / Coldstart.

1.3.3.3.228 NC Software – ACP10_MC V1.160

ID#113070 : solved problem, solved since V1.160

MC_TouchProbe could block the parameter transfer

If the Execute-input of MC_TouchProbe was only set to TRUE for one cycle (or a few cycles), the paramter transfer was blocked for the whole axis. The FB did not report an error in this case.

1.3.3.3.229 NC Software – ACP10_MC V1.157

ID#111080 : solved problem, solved since V1.157

FB-Outputs were set for two cycles

The following FB-Outputs were set for two cycles when the FB-Input "Execute" was reset before these FB-Outputs were set.

"Done" or "CommandAborted":

- MC_Home
- MC_MoveAbsolute
- MC_MoveAdditive

"Done":

- MC_CamOut
- MC_GearOut
- MC_Phasing

"InVelocity" or "CommandAborted":

- MC_MoveVelocity

"InSync" or "CommandAborted":

– MC_CamIn

"InGear" or "CommandAborted":

– MC_GearIn

Now these outputs are only set for one cycle. The FBs can be called with Execute = TRUE again.

Thus, under certain conditions, an FB-cycle can be saved in the application program.

1.3.3.3.230 NC Software – ACP10_MC V1.154

ID#109035 : Information valid since V1.154

New FB "MC_SetOverride" was implemented

1.3.3.3.231 NC Software – ACP10_MC V1.152

ID#107355 : solved problem, solved since V1.152

At a negative position MC_TouchProbe delivered a big positive value

ID#106995 : solved problem, solved since V1.152

MC_Power: When the controller was switched on there was the possibility that previously reported errors were reported again.

Previously reported errors are now cleared when the controller is switched on.

ID#106990 : solved problem, solved since V1.152

Errormessage when phasing with dither mode

When phasing with dither mode an error message from MC_Power could occur.

ID#106985 : solved problem, solved since V1.152

With a negative start position MC_CamIn coupled too late

With a negative master start position and start mode mcRELATIVE, a positive start position was calculated.

ID#106541 : solved problem, solved since V1.152

Possibility of internal deadlock (only in V1.151)

It could have occurred, that the internal locking for an axis was not released again. Thus no other FB for this axis could be called, no error was reported.

ID#106975 : Information valid since V1.152

Function for output "EndOfProfile" was implemented in FB "MC_CamIn"

1.3.3.3.232 NC Software – ACP10_MC V1.151

ID#104565 : solved problem, solved since V1.151

The input "SlaveOffset" of the FB "MC_CamIn" was only used for the first start.

MC_CamIn: The "SlaveOffset" was only taken into account the first time started, at every following start the slave was coupled at the position it was currently standing.

ID#104560 : solved problem, solved since V1.151

FB-Datatransfer was locked

When several FBs for the same axis were called in fast succession, the data of the first FBs could be overwritten.

Now each FB waits until the active one has finished transferring its data.

1.3.3.3.233 NC Software – ACP10_MC V1.150

ID#102075 : new function since V1.150

New function blocks

- MC_TouchProbe
- MC_AbortTrigger
- MC_DigitalCamSwitch

1.3.3.3.234 NC Software – ACP10_MC V1.140

ID#97495 : solved problem, solved since V1.140

State "Standstill" will be reached when the initialization is complete.

Before that the FB "MC_ReadStatus" reports "Done"=TRUE, but no status output is set.

ID#97485 : solved problem, solved since V1.140

For virtual axis the controller state is not any more checked, when a move is started.

ID#97480 : solved problem, solved since V1.140

Homing of an axis is now also possible when the controller is off, if the mode "Offset" or "Direkt" with "Refimpuls" is used.

ID#97465 : solved problem, solved since V1.140

MC_Home: When Execute was set only for one cycle and an error occurred the outputs Error and ErrorID were not set.

ID#90917 : solved problem, solved since V1.140

MC_Home: The position factor was not taken into account.

With a position factor >1 and a home position <> 0 the homing was done wrong.

ID#97500 : new function since V1.140

Starting with V1.140 Multiaxis-FBs are also available with CAN-Bus.

1.3.3.3.235 NC Software – ARNC0 Wichtige Information**ID#257892 : Important Information****NC Manager task-class Stack Usage**

When running in Automation Runtime B3.01 (or higher) ARNC0 versions 1.05.2 and higher utilise a cyclic task class (TC#1 or starting with V1.25.1 the NC Manager task-class, respectively) for calculating axis set positions in real-time. Since ARNC0 uses the stack memory of that task-class, it can be necessary to increase the task-class stack size.

Especially when programming multiple coordinate system transformations (e.g. frame operations, G92, G192, G292, G53–G59, or G159) in a row -- i.e. without any movement blocks in between -- the default task-class stack size might be too small. Each coordinate system transformation consumes approximately 800 Bytes of stack memory and if they are programmed in a row the stack consumption is approximately 800*n Bytes (n being the number of subsequent coordinate system transformations).

ID#239197 : Important Information**Minimum ARNC0 version for AR A3.08 or higher**

For AR versions E3.08 or higher only the ARNC0 versions V1.252 or higher can be used. If an ARNC0 version before V1.252 is used with AR versions E3.08 or higher, then the ARNC0 initialization will be aborted (Error description in AR Logger : "NC Manager: NC Manager module not found", ASCII data: "arnc0man.br not found!")

For AR versions A3.08 or higher only the ARNC0 versions V1.220 or higher can be used.

ID#234012 : Important Information**Minimum Requirements for ARNC0 V1.20.0**

Starting with ARNC0 V1.20.0 your system has to meet the following requirements:

- Automation Studio 3.0.80.25 or higher
- Automation Runtime V3.00 or higher

ID#206552 : Important Information**Minimum Requirements for ARNC0 V1.00.0**

Starting with ARNC0 V1.00.0 your system has to meet the following requirements:

- Automation Studio 3.0.80 or higher
- Automation Runtime O2.95 or higher

ID#102522 : Important Information**External encoder operation**

An external encoder is operated correctly only on slot 3 of the ACOPOS.

1.3.3.3.236 NC Software – ARNC0 V1.281**ID#400072360 : solved problem, solved since V1.281**

M function programmed before blocks with zero movement distance has not been set if the rounding edges (G126) was active (only in V1.270 – V1.280).

ID#266790 : solved problem, solved since V1.281

Path-synchronous variable has not been assigned before blocks with circular interpolation if the rounding egges (G126) was active (only in V1.270 – V1.280).

ID#267500 : Information valid since V1.281

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.280

For ACOPOSmulti 8BVxxxx.xx-x: ACP10SYS V2.280

Library Acp10man Version 2.28.0 to 2.28.9 required.

1.3.3.3.237 NC Software – ARNC0 V1.280

ID#263495 : solved problem, solved since V1.280

Occasional cycle time violation from TC#1

Combination of intensive subprogram calling and programming of multiple path synchronous jobs (e.g. FBs) from an NC program could cause a cycle time violation of TC#1.

ID#263115 : solved problem, solved since V1.280

Workspace monitoring – change to modelling based on the robot arm radius

Problem occurred if the protected area lay closer than the robot arm radius.

ID#400051865 : solved problem, solved since V1.280

New parameter "ipl_mode"

The new parameter "ipl_mode" in the "cnc_obj.axis.axis[i]" structure – interpolation mode for cyclic position. Parameter is valid only for ACP10 axes. The problem with a position overshoot at the end of an NC program has been solved with this new parameter.

ID# 400051713, 400051247 : solved problem, solved since V1.280

Error caused by Axis Factor not equal to 1

Axis Factor not equal 1 can be now set for ACP10 axes used in a CNC channel

ID#263630 : Information valid since V1.280

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.280

For ACOPOSmulti 8BVxxxx.xx-x: ACP10SYS V2.280

Library Acp10man Version 2.28.0 to 2.28.9 required.

1.3.3.3.238 NC Software – ARNC0 V1.273

ID#262650 : solved problem, solved since V1.273

Optional brackets for functions with no arguments in the alternative language 1 G-Code

In the alternative language 1 G-Code a function that does not require any arguments can be called without using brackets.

ID#262590 : solved problem, solved since V1.273

Exception 9101 – address error after <ncMOVE, ncSTOP>

Exception 9101 occurs if <ncMOVE, ncSTOP> NC action is sent before the first <ncPROGRAM, ncLOAD/ncSTART> if any additional LANG_INCLUDE files were loaded during ARNC0 startup.

ID#262575 : solved problem, solved since V1.273

Program freezes if it runs out of path synchronous commands (only in V1.251 – V1.272)

Starting with ARNC0 V1.25.1 the interpreter keeps track of all path synchronous jobs (path synchronous variable assignment, function calls) that are in the backtracing buffer (block_buffer).

The interpreter was only keeping track of a fixed amount of path synchronous jobs. The high value for <cnc_obj>.limits.block_buffer together with a high number of path synchronous jobs in an NC program caused the interpreter to run out of available jobs and freeze up.

The number of path synchronous jobs is now configurable in gmcipcfg in <MPQUEUE> section.

ID#262150 : solved problem, solved since V1.273

Output of blocks with non-synchronous technology functions or path synchronous variables and tool data number in the wrong order.

If a block with a tool data number follows immediately after a block with a non-synchronous technology function (S and T functions) or a calculation with path-synchronous variables, then the block with the tool data number will be output first.

Note: Both blocks are output in the same ARNC0 cycle, which is why this effect can only be observed in single-step operation in Halt mode after each block (this occurs only in ARNC0 V1.27.0 to V1.27.2).

ID#400063767 : solved problem, solved since V1.273

Restart not possible if restart switched off and on.

If the function for saving restart info is switched off and on (ncRESTART, ncSWITCH_OFF / ncSWITCH_ON) between aborting and restarting an NC program, the restart will be aborted with error 15307 (Program failed to load).

ID#262295 : Information valid since V1.273

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.271

For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.271

Library Acp10man Version 2.27.0 to 2.27.9 required.

1.3.3.3.239 NC Software – ARNC0 V1.272

ID#260980 : Information valid since V1.272

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555
For ACOPOS 8V1xxx.00-2: ACP10SYS V2.271
For ACOPOSmulti 8BVxxxx.xx-x: ACP10SYS V2.271
Library Acp10man Version 2.27.0 to 2.27.9 required.

1.3.3.3.240 NC Software – ARNC0 V1.271

ID#232652 : new function since V1.271

Program end command (e.g. M30) allowed in controll blocks (e.g. block with \$IF)

ID#260325 : Information valid since V1.271

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555
For ACOPOS 8V1xxx.00-2: ACP10SYS V2.271
For ACOPOSmulti 8BVxxxx.xx-x: ACP10SYS V2.271
Library Acp10man Version 2.27.0 to 2.27.9 required.

ID#260210 : solved problem, solved since V1.271

NC block with G170 + non synchronous M function, wrong order of execution (only ARNC0 V1.27.0)

In blocks with G170 + non synchronous M function, the M flag will be set not before G170 will be acknowledged.

1.3.3.3.241 NC Software – ARNC0 V1.270

ID#252125 : new function since V1.270

Decomposition of frame to orientation angles and offsets

For determining the angles, depending on the used angle type, the interpreter functions F_TO_ANGLES, F_TO_EULER and F_TO_RPY are provided. For determining the offsets of the frame the function F_TO_TRANS is available.

ID#256647 : Information valid since V1.270

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555
For ACOPOS 8V1xxx.00-2: ACP10SYS V2.271
For ACOPOSmulti 8BVxxxx.xx-x: ACP10SYS V2.271
Library Acp10man Version 2.27.0 to 2.27.9 required.

ID#253145 : Information valid since V1.270

Memory optimization within the interpreter

Both the own memory usage of the interpreter and the memory consumption for loaded programs have been reduced.

ID#400065531 : solved problem, solved since V1.270

Polar Coordinate Machine: To low path Speed at Circular and Linear Blocks.

Numerical problems in dynamic calculation can cause low path speed.

ID#400064009 : solved problem, solved since V1.270

Polar Coordinate Machine: Low Path Speed at tangential Block Transitions.

The axes jolt filter was not be taken in consideration in the calculation of path speed at tangential block transitions. The calculated value of path speed at block transition was too small. (only for polar coordinate machines)

ID#400059569 : solved problem, solved since V1.270

Deadlock while executing an NC program

A Deadlock in the CNC system can occur, if the following sequence is processed repeatedly with the same NC program:

(1) Start NC program

(2) Stop NC program

The deadlock can only be resolved with a warm restart of the PLC.

ID#400062135 : solved problem, solved since V1.270

Non synchronous Technology Functions will set on a wrong path position if G126 is active.

Non synchronous Technology Functions will set on the begin of the bezier spline instead in the centre of the spline if G126 is active.

1.3.3.3.242 NC Software – ARNC0 V1.261

ID#254322 : Information valid since V1.261

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.262

For ACOPOS multi 8BVxxxx.xx–x: ACP10SYS V2.262

Library Acp10man Version 2.26.0 to 2.26.9 required.

ID#254317 : solved problem, solved since V1.261

Startup of ARNC0 axes get stuck in network phase 80 (only in V1.251 – V1.260)

ARNC0 axes with channel number 2, belonging to a drive connected to the POWERLINK network, get stuck in network phase 80 during startup.

1.3.3.3.243 NC Software – ARNC0 V1.260

ID#242667 : new function since V1.260

Parameterized subroutine return (RET)

Usually, the end of subroutine returns to the calling program and the lines following the subroutine call will be executed. Parameterized RET allows program resumption at another, user defined position

ID#252382 : Information valid since V1.260

Included drive operating systems, dependency

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.260

For ACOPOSmulti 8BVxxx.xx-x: ACP10SYS V2.260

Library Acp10man Version 2.26.0 to 2.26.9 required.

ID#251792 : solved problem, solved since V1.260

Circular blocks: standstill at block transition.

A standstill can occur at block transition between circular-circular blocks or circular-linear blocks.

The error can occur if the parameter "cnc_obj->limit.blocktransition = ncSTANDARD" or "cnc_obj->limit.blocktransition = ncAUTO" is set.

1.3.3.3.244 NC Software – ARNC0 V1.252

ID#248880 : solved problem, solved since V1.252

Reverse movement problem

Pagefault occurred if a path synchronous variable was assigned while moving backwards in an NC block.

ID#248795 : solved problem, solved since V1.252

Error in trigger configuration for axes accessed with PLCopen IF

It was not possible to select only the desired trigger events for the axes accessed with PLCopen IF. This can now be done using the configuration parameter "cnc_object.axis.axis[i].trg_source.trg_conf".

ID#234112 : solved problem, solved since V1.252

ARNC0 Deadlock if the same axis was connected to a CNC channel more than once

ID#249930 : new function since V1.252

CNC programming instructions ADR and SIZEOF

ADR[] – determines the address of a data point

SIZEOF[] – determines the size of a variable in bytes

ID#249740 : new function since V1.252

Memory consumption optimization

Size of AIL opcode which was generated when loading NC program has been reduced.

ID#249382 : Information valid since V1.252

Included drive operating systems, dependency

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.250
 For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.250
 Library Acp10man Version 2.25.0 to 2.25.9 required.

ID#249512 : solved problem, solved since V1.252

G211 – Improved speed profile for short NC blocks

G211 (blended move mode) active: The combination of short NC blocks and long programmed acceleration time \$TA could lead to dips in path speed profile.

1.3.3.3.245 NC Software – ARNC0 V1.251

ID#248045 : solved problem, solved since V1.251

Pagefault when restarting NC program

A pagefault could occur by restarting an NC program with rotary axes (ncROTARY). Problem only in the version V1.25.0.

ID#247817 : new function since V1.251

The cyclic ARNC0 task is now installed in the NC Manager task class

The real-time part of the ARNC0 is now installed into the "NC Manager task class" which can be defined via the Arnc0cfg.ncc configuration module. Up to now, the "NC Manager task class" was solely used for the communication between ARNC0 and the application tasks, whereas the real-time part of the ARNC0 has always been installed into TC#1 (unless the ForceSIOS parameter was set).

ID#248300 : Information valid since V1.251

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.241
 For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.241

ID#400059370 : solved problem, solved since V1.251

Page Fault or Memory Access Violation during backward movement on the path.

During backward movement on the path a page fault or a memory access violation can occur if path synchronous variables or function blocks are used or if subprograms are called.

ID#400058384 : solved problem, solved since V1.251

Startup of POWERLINK axes blocked in phase 80

If POWERLINK axes with node numbers greater or equal 100 are used, the startup of the axes may block in network phase 80.

1.3.3.3.246 NC Software – ARNC0 V1.250

ID# 400056079, 400062509 : solved problem, solved since V1.250

Corrupted error text modules

Some of the error texts have not been evaluated correctly after calling of NC action ncMESSAGE, ncTEXT.

NOTE: All error text modules on an automation target must be updated for correct determination of error texts in ARNC0 V1.25.0!

ID#400058124 : new function since V1.250

New start modes for NC action ncPROGRAM, ncSTART

Two new start modes ncFILE_XL+ncBLOCKMONITOR and ncDNC+ncBLOCKMONITOR have been defined to enable CNC block monitor for large or streamed NC programs.

ID#247420 : new function since V1.250

New parameters "rot_period" and "rot_offset"

The new parameters "rot_period" and "rot_offset" in the "cnc_obj.axis.axis[i]" structure can be used to set the period and offset of a rotary axis (ncROTARY+...).

ID#247410 : new function since V1.250

A new axis type in ARNC0: ncNOFEED

The single axes can be excluded from the feed rate calculation by adding ncNOFEED to the axis type. This makes it possible to exclude the axes of the types:

ncCNC + ncNOFEED
ncLINEAR + ncNOFEED
ncLINEAR + ncNOSTOP + ncNOFEED
ncROTARY + ncNOFEED
ncROTARY + ncNOSTOP + ncNOFEED
ncROTARY + ncSHORT_PATH + ncNOFEED
ncROTARY + ncNOSTOP + ncSHORT_PATH + ncNOFEED

from the feed rate calculation.

ID#242672 : new function since V1.250

New Systemvariables \$P_EP and \$P_EM

ID#242287 : new function since V1.250

G180

(1) Beside the current syntax "G180=000" also "G180" is allowed.

(2) The last circle in a series of joined blocks may be programmed with center point, radius and angle.

ID#247575 : Information valid since V1.250

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.241
 For ACOPOSMulti 8BVxxxx.xx–x: ACP10SYS V2.241

ID#243502 : solved problem, solved since V1.250

Error in Restartinfo when read from a data module.

When loading Restartinfo from a data module, the restart may be aborted with error 7150 ("Mismatched NC program lengths upon 'RESTART'").
 Condition: Parameter cnc_obj->restart.parameter.param_buffer = 0

ID#400053445 : solved problem, solved since V1.250

Incorrect angle of rotation in G102

If the last circular block before G102 is a full circle (360° angle of rotation), then the programmed arc as well as a full circle might be traversed in the block with G102.
 Whether the error will occur or not depends on the position of the center point.

ID#400052417 : solved problem, solved since V1.250

G70/G71 was taken in consideration also for axe of the type ncROTARY.

Inch/mm conversion not allowed for angle units.

1.3.3.3.247 NC Software – ARNC0 V1.242

ID#246200 : solved problem, solved since V1.242

G172 can cause a CNC–system deadlock (only in V1.24.0 – V1.24.1)

ID#247167 : Information valid since V1.242

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.241
 For ACOPOSMulti 8BVxxxx.xx–x: ACP10SYS V2.241

1.3.3.3.248 NC Software – ARNC0 V1.241

ID#245135 : new function since V1.241

Check of the orientation axes

When full transformations are switched on, the user is informed via a warning from ARNC0 when the positions of the programmed orientation axes in NC program are not uniquely defined.

ID#245115 : Information valid since V1.241

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.240
 For ACOPOSMulti 8BVxxxx.xx–x: ACP10SYS V2.240

1.3.3.3.249 NC Software – ARNC0 V1.240

ID#244030 : solved problem, solved since V1.240

Performance issue fixed: re-loading of modified global subprogram had been very slow.

ID#243575 : solved problem, solved since V1.240

The G201 at NC block with zero movement distance caused a deadlock.

ID#243765 : new function since V1.240

Extended monitor data

NC monitor structure have been extended with the call_level element which displays current call level of subprograms. The hierarchy of subprogram calling can be displayed as NC block numbers in a data buffer provided by an application program. An address of the data buffer has to be specified during ncBLOCKMON, ncSET calling.

ID#243150 : new function since V1.240

Accepting an ncPROGRAM,ncLOAD when an NC program is active

An ncAction ncPROGRAM,ncLOAD should be accepted when an NC program is active. The new functionality should allow user to speed-up loading of global subprograms if they are modified between the NC program start and calling of them.

ID#243945 : Information valid since V1.240

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.240

For ACOPOSmulti 8BVxxxx.xx-x: ACP10SYS V2.240

ID#400053501 : solved problem, solved since V1.240

Invalid set position values in network interface

In very rare cases, an invalid value (NaN) is entered in the network interface for the decimal part of the set position.

ID#400030537 : solved problem, solved since V1.240

Restart – Deadlock at program abort

ARNC0 may become blocked if the program is aborted while restarting an NC program and ARNC0 is in the state "Waiting for movement to continue". The target must be restarted in order to remove the deadlock.

1.3.3.3.250 NC Software – ARNC0 V1.232

ID#242370 : Information valid since V1.232

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.232

For ACOPOSMulti 8BVxxxx.xx-x: ACP10SYS V2.232

ID#242465 : solved problem, solved since V1.232

Workspace monitoring – self collision reported too early

Self collision error has been reported too early.

ID#242320 : solved problem, solved since V1.232

Unit factor not considered by G200/G201

The CNC unit factor was not taken in consideration by the latch position calculation (functions G200/G201).

1.3.3.3.251 NC Software – ARNC0 V1.231

ID#240955 : new function since V1.231

Workspace monitoring – diameters of the robot arms as an array

Diameters of the robot arms can be defined as an array of values – separately for each arm.

ID#242070 : Information valid since V1.231

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.232

For ACOPOSMulti 8BVxxxx.xx-x: ACP10SYS V2.232

ID#400053739 : solved problem, solved since V1.231

System Crash if a ACOPOS parameter table is downloaded

During the download of an ACOPOS parameter table (ncACP_PAR + ncSERVICE, ncDOWNLOAD) the system can crash (page fault). In ARNC0 V1.22.0 and higher

ID#240975 : solved problem, solved since V1.231

NC monitor status "name_ncprog" not properly updated

The name of current NC program "name_ncprog" has not been properly updated for global subprograms.

ID#240970 : solved problem, solved since V1.231

Workspace monitoring – diameter of the robot arm not considered

Diameter of the robot arm hasn't been considered by crossing a protected area.

ID#400052416 : solved problem, solved since V1.231

Contour violation when wrapping is active

A contour violation occurred when wrapping or mapping was active and CDC with arc transitions (G133) was chosen.

ID#240557 : solved problem, solved since V1.231

Error determining the RESTART-INFO in single-step operation

If the RESTART-INFO is determined with the parameter "restart.info.parameter.restart_type = ncBLOCKNUMBER") while single-step operation is active (path generator), then cryptic characters might be output for blocks:

- with a shift of the coordinate system (e.g. G92, G54)
- with synchronous or non-synchronous M-functions
- with real-time parameters (M-parameters)
- with dwell time (G04)

Whether the error will occur or not depends on the internal timing of the ARNC0.

ID#239420 : solved problem, solved since V1.231

G201 and NC program restart

NC program restart and restart info didn't run correctly if G201 had been used.

ID#400043500 : solved problem, known since V1.038, solved since V1.231

Deadlock with neagitive override

ARNC0 was blocked if the following sequence was executed:

- start NC block or NC program
- set OVR to neative value
- wait until startposition of NC program is reached
- set OVR to zero
- set OVR to a negative value again.

Restart of target was needed to resolve the deadlock.

1.3.3.3.252 NC Software – ARNC0 V1.230

ID#240450 : new function since V1.230

Motion packet log

If enabled in Arnc0cfg, the motion packet log continuously records the contents of each motion packet packet into .mpl files. This functionality is switched on by default.

The log files are written into mplog* file devices which must be created by a user, one device per CNC channel (by default mplogA for 1st CNC channel, mplogB for 2nd CNC channel, ...).

New NC actions have been defined:

"ncMP_LOG, ncSWITCH_OFF" – switches the motion packet logging off

"ncMP_LOG, ncSWITCH_ON" – switches the motion packet logging on

ID#237477 : new function since V1.230

Logical operators

Following logical operators have been added to the G-code syntax:

&& – logical binary AND

|| – logical binary OR

XOR – logical binary XOR

! – logical unary NOT

ID#240445 : Information valid since V1.230

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.230

For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.230

ID#240285 : solved problem, solved since V1.230

The movement didn't slow down to standstill if G201 was used in a rotated product coordinate system

The G92 or \$WFRAME was used to rotate the product coordinate system. If an axis with a programmed zero distance was set as a trigger source then the movement didn't slowdown to standstill at NC block with G201 when the trigger occurred.

ID#240260 : solved problem, solved since V1.230

Latch system variables not set for CNC channel higher than 1

ID#400051683 : solved problem, solved since V1.230

Pagefault when calling AIL local function

ARNC0 crashed when analyzing a template function that contained a call to an AIL local function.

ID#239200 : solved problem, solved since V1.230

The M0 was skipped at the NC block with move distance equal to 0.0

ID#239075 : solved problem, solved since V1.230

NC program file not closed if syntax error

NC program file was locked if a global subprogram loaded from the main program contained a syntax error.

1.3.3.3.253 NC Software – ARNC0 V1.220

ID#238180 : new function since V1.220

\$CO_ORDS_MODE, \$CENTER_MODE, \$MOVE_CMD_MODE

New system variables have been added:

\$CO_ORDS_MODE represents modal coordinate definition

\$CENTER_MODE represents modal circle center point definition

\$MOVE_CMD_MODE represents modal movement command

ID#237940 : new function since V1.220

TRANS, ROT, ATRANS, AROT

New functions for programming of zero point offset and rotation of coordinate system have been

added.

ID#237910 : new function since V1.220

Non-modally effective, coordinate programming mode specifiers

The coordinate programming mode (relative or absolute) can be specified non-modally with the AC and IC statements.

ID#237865 : new function since V1.220

GOTO Statement

A jump to NC block with defined block number can be created with the GOTO statement.

ID#236635 : new function since V1.220

Setup ISQ-Ripple for automatically determining the ripple parameters

New NC structure component "setup.isq_ripple".

New NC actions "ncSETUP+ncISQ_RIPPLE,ncSTART" und "ncSETUP+ncISQ_RIPPLE,ncSAVE".

ID#233727 : new function since V1.220

G211 (Blended Move Mode)

Prommable, linear feed rate profile on block transitions.

ID#239215 : Information valid since V1.220

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.220

For ACOPOSmulti 8BVxxx.xx-x: ACP10SYS V2.220

ID#239212 : solved problem, solved since V1.220

SG4 target system with AR A3.08 or higher: Error 9650 when using ARNC0 before V1.220

After optimizations some system functions are no longer contained in AR versions A3.08 or higher, which are needed by ARNC0 versions before V1.220. If a ARNC0 version before V1.220 is used with AR versions A3.08 or higher, then the following error is indicated during the project transfer or registered in the Logger during the PLC startup:

– 9650: Library function not available (System GOT)

For AR versions A3.08 or higher only the ARNC0 versions V1.220 or higher can be used.

ID#237822 : solved problem, solved since V1.220

Axis error during emergency stop: Movement state will not be actualized.

If an axis error (e.g. lag error) occurs while an emergency stop is active; it can happen that the movement state of the axis and the CNC-system will not be set correct after stand still. Possibly

a restart of the target is necessary.

ID#237740 : solved problem, solved since V1.220

G201 in CNC simulation mode

NC program containing G201 got stuck if it was run in CNC simulation mode.

ID#237735 : solved problem, solved since V1.220

G172 in CNC simulation mode

NC program containing G172 got stuck if it was run in CNC simulation mode.

ID#237045 : solved problem, solved since V1.220

The G201 didn't work properly if as a trigger source was used an axis on SDC IF

The movement at NC block with G201 didn't slow down to standstill if the trigger was forced inside the trigger path section.

ID#234757 : solved problem, solved since V1.220

Exceedance of programmed feed rate at block transition

Although G111 is programmed, the programmed feed rate of the consecutive block can be exceeded at block transition.

ID#234540 : solved problem, solved since V1.220

Deadlock issued by G201

NC program got stuck if there was the G201 function in the last NC block.

1.3.3.3.254 NC Software – ARNC0 V1.211

ID#236285 : Information valid since V1.211

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.211

For ACOPOSMulti 8BVxxxx.xx–x: ACP10SYS V2.211

ID#236465 : solved problem, solved since V1.211

Using G172 when the CDC is active will cause an NC program standstill

ID#236102 : solved problem, solved since V1.211

Interpreter does not find task-local PVs

On rare occasions the Interpreter was not able to find task-local PVs that were declared in the Configuration-Module "gmcipvar" by using the syntax "TaskName:PvName".

ID#236045 : solved problem, solved since V1.211

Pagefault G200/G201

Pagefault occurred when an axis in standstill has been used as trigger source for G200/G201 functions and less than 15 axes have been configured in the CNC channel. This problem occurred only in version V1.21.0.

ID#400048448 : solved problem, solved since V1.211

Error when calling an NC subprogram

A syntax error occurred when calling a global subprogram with a name that starts with a number.

ID#234760 : solved problem, solved since V1.211

Robot orientation axes moved after a change was made to the product coordinate system

1.3.3.3.255 NC Software – ARNC0 V1.210

ID#235227 : Information valid since V1.210

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.210

For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.210

1.3.3.3.256 NC Software – ARNC0 V1.201

ID#233920 : solved problem, solved since V1.201

Workspace monitoring: Extension for Frames

Workspace could previously only be defined in the global coordinate system, now can it be defined in any coordinate system. The current coordinate system is remembered together with each protected area.

ID#228277 : solved problem, solved since V1.201

Functions G70 and G71 are ignored for the rotary axes

The units switch (G70 and G71) is from now ignored for the rotary axes (ncROTARY). The system units are always used for the rotary axes.

1.3.3.3.257 NC Software – ARNC0 V1.200

ID#233102 : Information valid since V1.200

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.201

For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.201

ID#232817 : solved problem, solved since V1.200

The movement state of an axis was not correct after movement abort

After abort of a movement (axis movement or CNC program) the axis state was set to move.mode = ncOFF, before the axis was in standstill.

ID#227727 : solved problem, solved since V1.200

Exceedance of axis acceleration on tangential corners due to t_axfilter

The axis jolt filter can cause a violation of the allowed axis acceleration limits (acceleration on the path was not taken in consideration).

1.3.3.3.258 NC Software – ARNC0 V1.102

ID#232990 : Information valid since V1.102

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.201

For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.201

ID#233075 : solved problem, solved since V1.102

Memory footprint grew by 4 bytes per timestamp check

The timestamp is checked for each NC program start and each global subprogram call. Each timestamp check consumed 4 bytes of free memory.

ID#232770 : solved problem, solved since V1.102

The G201 deactivated programmed rotation of the coordinate system

ID#232735 : solved problem, solved since V1.102

Status of NC action remained "ncACTIVE"

Status of the NC action remained ncACTIVE after global init performed for a CNC object with more than 4 axes in a basis version of ARNC0.

ID#400046593 : solved problem, solved since V1.102

NC program got stuck on short path elements

The NC Program got stuck on very short path elements if the path element had to be skipped because of high path speed (warning 7236 "Contour segment had to be skipped, contour speed too high"), and if the element was followed by a non-tangential transition.

1.3.3.3.259 NC Software – ARNC0 V1.101

ID#232680 : Information valid since V1.101

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.201

For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.201

ID#400045295 : solved problem, solved since V1.101

The parameter global.init not set

The parameter global.init of an axis object hasn't been set in some cases, if the axis object had been represented by a global PV.

1.3.3.3.260 NC Software – ARNC0 V1.100

ID# 400046336, 400046111 : solved problem, known since 1.09.7, solved since V1.100

Page Fault during Boot Phase with Win7/ARsim (AR000)

When working with ARsim (AR000) on Windows 7, the ARNC0 caused a page fault during the system boot phase.

ID#232417 : Information valid since V1.100

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.200

For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.200

ID#231897 : solved problem, solved since V1.100

Member "class" of structure ARNC0MSREC_typ renamed to "errorclass"

In order to use ARNC0 in C++ programs the structure member "class" of ARNC0MSREC_typ has to be renamed to "errorclass". "class" is recognized as keyword for the C++ compiler and leads to an error.

ID#400045497 : solved problem, known since 1.09.6, solved since V1.100

Path speed is reduced to zero on short NC blocks.

Sometimes the movement on the path stops at short NC blocks, if mode "cnc_obj->limit.blocktransition = ncAUTO" is set.

1.3.3.3.261 NC Software – ARNC0 V1.093

ID#231787 : Information valid since V1.093

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.200

For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.200

1.3.3.3.262 NC Software – ARNC0 V1.092

ID#231560 : Information valid since V1.092

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.191
 For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.191

ID#231530 : solved problem, solved since V1.092

Homing procedure aborted by error

The homing procedure on an ARCN0 axis was aborted with the error 5112: "Search Home procedure cancelled by Event ". The error started to occur in ARNC0 version 1.05.2 in combination with Automation Runtime B3.01.

ID#231315 : solved problem, solved since V1.092

Page Fault during ARsim (AR000) Boot Phase

When working on ARsim (AR000), a rather high number of axes could have caused an ARNC0 page fault during the system boot phase.

ID#226497 : solved problem, solved since V1.092

Trajectory speed jump because of different path acceleration at consecutive blocks

If in several blocks a lower path acceleration is programmed (e.g. G110), the path speed will not ramp to zero at a stand still but the speed will be forced to zero by the ARNC0. Furthermore the allowed acceleration on the axes can be violated.

1.3.3.3.263 NC Software – ARNC0 V1.091

ID#230100 : Information valid since V1.091

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.190
 For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.190

ID#230720 : solved problem, solved since V1.091

Pagefault trying to configure more than 2 CNC channels

Pagefault occurred if user configured more than 2 CNC channels in the NC deployment table. This error was present from version 1.02.0.

ID#230705 : solved problem, solved since V1.091

Error stopping NC block or NC program

The following errors occurred after an NC block or NC program was stopped during the loading phase: 10106: "Event not allowed in current state", 15743: "Errors detected in block text" and 15319; "Operation aborted by user". The error 10106 was additionally followed by a deadlock.

ID#230155 : solved problem, solved since V1.091

Error 1114 with NC–Action ncGLOBAL/ncINIT

When there is a high CPU load on the runtime target, the NC action ncGLOBAL/ncINIT could fail with error 1114.

ID#230095 : solved problem, solved since V1.091

Deadlock if NC-program was aborted when calling global subprogram

A deadlock would occur if an NC-program, which had called a global NC subprogram, was aborted by an error.

ID#230085 : solved problem, solved since V1.091

Pagefault when calling NC-subprogram with parameters

A deadlock would occur if an NC-program, which had called a global NC subprogram, was aborted by an error.

ID#400043708 : solved problem, solved since V1.091

The synchronized M Function is ignored if a path-synchronous variable is used in the same NC block.

1.3.3.3.264 NC Software – ARNC0 V1.090

ID#228755 : solved problem, solved since V1.090

Interpreter-Error was displayed in wrong CNC-Channel

An Interpreter-Error (e.g. Interpreter detects a syntax error during NC-Action ncPROGRAM/ncLOAD) in a CNC-Channel with Index other than 0 might have affected the CNC-Channel with Index 0.

ID#226952 : solved problem, solved since V1.090

Negative values for G108/G109/G110 ACC=<value> were not rejected

An error is reported if the path acceleration exceeds the valid range.

ID#228590 : new function since V1.090

Version control on config files according to ARNC0 version number

The standard configuration (AS package "GmclpConfig") files must have a version number that matches the first three digits of the ARNC0 version number (Vx.yy.z)

ID#228575 : new function since V1.090

Setup phasing for automatically determining the commutation offset

New NC structure component "setup.motor_phasing".

New NC actions "ncSETUP+ncMOTOR_PHASING,ncSTART" und "ncSETUP+ncMOTOR_PHASING,ncSAVE".

ID#225877 : new function since V1.090

New Debugfunctionality for CNC Program Execution

- Breakpoints
- Variable watch and force function
- Expression execution
- Direct access to interpreter variables from PLC application tasks
- CNC blockmonitor display either path synchronous or interpreter synchronous

ID#228560 : Information valid since V1.090

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.190
 For ACOPOSmulti 8BVxxxx.xx–x: ACP10SYS V2.190

ID#225882 : Information valid since V1.090

Extension of Interpreter Single Step Functionality

- Step into subprograms or step over
- Definition of a number of blocks to halt after

ID#228750 : solved problem, solved since V1.090

The ARNC0 trace failed with the error 2104: Invalid NC object for trace test data .

The trace test data were set properly but NC object "ncMODULE" issued the error 2104.

ID#228642 : solved problem, solved since V1.090

AILHeader section is limited to 4096 bytes in language configuration file (LCF).

ID#228595 : solved problem, solved since V1.090

Path speed drops to zero when assigning path synchronous variable

When path synchronous variable e.g. M–parameter was assigned in NC–program the path speed always dropped to zero. This happened even when the path synchronous variable was assigned between two tangentially connected path elements.

ID#227440 : solved problem, solved since V1.090

ncAUTOSAVE on ARwin (AR010) – Problem regarding access time

Trace with ncAUTOSAVE setting (saves trace data in text file automatically) took a long time when running on ARwin (AR010). The access time has now been optimized.

ID#227400 : solved problem, solved since V1.090

Position jump when using CAM wrapping

A position jump could occur on the rotary axis when the CAM wrapping hasn't been switched off in the previous NC program.

ID#227310 : solved problem, solved since V1.090

Internal errors after calling of external function from NC-program

Error sequence 10638, 10640, 10636 (internal errors) occurred as a response to a ncPROGRAM/ncSTART NC-Action if a previous program run had been aborted by a runtime error caused by an external function call (in case of a path-synchronous function with return type STATUS that returned a value between 1 and 65533).

ID#400041582 : solved problem, known since ARNC0 V 1.05.6, solved since V1.090

NC action ncAXES, ncINIT + cycle time violation

NC action ncAXES, ncINIT was adapted so that it no longer causes a cycle time violation when CPU load is too high.

ID#226460 : solved problem, solved since V1.090

G193, G194 not working since ARNC0 V1.00.0

The functions G193/194 (enable/disable "Linear feed characteristic" mode) have not been working since version V1.00.0. The functions G193, G194 are now supported again.

ID#226015 : solved problem, solved since V1.090

POWERLINK drive startup

If a drive that had not finished starting up was switched to ncCNC SYS simulation mode, the remaining drives didn't finish starting up.

ID#224940 : solved problem, solved since V1.090

Page fault when initializing the axis settings

A page fault occurs while initializing the axis settings if the axis object "cnc_object.axis.axis[i].nc_object" has not been assigned to a CNC object.

ID#400038567 : solved problem, solved since V1.090

Rotation angle H falsely interpreted as variable name

Syntax error occurred when using G02 argument H (rotation angle) after use of variable starting with H.

ID#400034909 : solved problem, solved since V1.090

Axis Movement State at NC Program Emergency Stop

At NC program emergency stop (ncMOVE, ncE_STOP) with the parameter cnc_obj->move.e_stop.path = ncAXIS, the axis movement state will be set to axis_obj->move.mode = ncOFF before the axis stands still.

1.3.3.3.265 NC Software – ARNC0 V1.070

ID#226295 : Information valid since V1.070

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.180
 For ACOPOSMulti 8BVxxxx.xx–x: ACP10SYS V2.180

ID#226305 : solved problem, solved since V1.070

FRAME independent from TRF_LIB version

Reorientation of axes is now independent from the TRF_LIB version if FRAME is used.

ID#226300 : solved problem, solved since V1.070

Usage of local_frame without frame axes

local_frame is used also if frame axes are not defined. Values from the transformation variable are then considered.

1.3.3.3.266 NC Software – ARNC0 V1.063

ID#225365 : Information valid since V1.063

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.180
 For ACOPOSMulti 8BVxxxx.xx–x: ACP10SYS V2.180

ID#224795 : Information valid since V1.063

Default error level for function blocks called from an NC–program changed from error level 4 (warning) to error level 3 (program halt)

ID#224855 : solved problem, solved since V1.063

Poor performance accessing files during startup

Reading the XML configuration files from the CF took a long time during ARNC0 startup. The access time has now been made 5 times faster.

ID#224815 : solved problem, solved since V1.063

Cutter diameter compensation: \$RAD_IDX error

The change to an external parameter (EXF), which was used for indirectly accessing the tool radius, was detected too late. As a result, the tool radius value was updated too late. This error was present from version V1.00.0.

ID#224415 : solved problem, solved since V1.063

Error 40137: "Internal Error – Invalid Job ID in ARNC0 response" on the axis object

The error 40137: "Internal Error – Invalid Job ID in ARNC0 response" was issued on the axis object if the NC program was aborted due to an interpreter error.

ID# 400036515, 400037166 : solved problem, solved since V1.063

Backwards Compatibility: Local Sub-Program and Main-Program may have the same Program-Number

Starting with ARNC0 V1.00.0 using the same program-number for a local sub-program and the main-program resulted in error 15196. For the sake of backwards compatibility, this is now allowed again.

1.3.3.3.267 NC Software – ARNC0 V1.061

ID#223355 : Information valid since V1.061

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.171

For ACOPOSmulti 8BVxxxx.xx-x: ACP10SYS V2.171

ID#223350 : solved problem, solved since V1.061

NC program stops after approx. 250 subprogram calls

ID#223345 : solved problem, solved since V1.061

Error 10442 occurs upon return from an NC subprogram

The error 10442: "A line containing an expression must not contain anything else" occurs after returning from an NC subprogram. The frequency of the error depends on the length configured for the MP queue.

1.3.3.3.268 NC Software – ARNC0 V1.060

ID#400038189 : new function since V1.060

Allowed Contour Violation caused by the Axis Jolt Filter can be programmed in the NC Program.

The axis jolt filter causes contour deviation at circular blocks. The allowed contour deviation can be programmed in the NC program with system variable \$filter_err_cir.

ID#223047 : Information valid since V1.060

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.171

ID#223167 : solved problem, solved since V1.060

CNC path movement stops after return from global subprogram.

1.3.3.3.269 NC Software – ARNC0 V1.052

ID#222215 : new function since V1.052

Additive Frame

The user-defined frame is added to the currently used workpiece frame.

Syntax: \$WFRAME_ADD = <frame_name>

ID#222985 : Information valid since V1.052

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.171

ID#222760 : solved problem, solved since V1.052

Workspace monitoring: If the function TRF_get_joints_pos is not available

If the function TRF_get_joints_pos from TRF_LIB is not available for certain mechanical constructions, the NC program is no longer interrupted. Instead, only a warning is produced.

ID#222435 : solved problem, solved since V1.052

Error 40112 when loading data from INIT parameter module with subsequent global initialization

Loading data from INIT parameter module with subsequent global initialization (NC action ncGLOBAL, ncLOAD+ncINIT) was aborted with the error 40112:"Timeout at processing an ARNC0 command" if the same NC action had previously been aborted with the error 40245: "Error loading init parameter module". Error occurred only on the axis object.

ID#222225 : solved problem, solved since V1.052

Deadlock with runtime error

The deadlock occurred when the NC-program was aborted by runtime error (e.g. division by zero).

1.3.3.3.270 NC Software – ARNC0 V1.051

ID#221365 : Information valid since V1.051

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.170

ID#400035441 : solved problem, solved since V1.051

Speed limit of tangential axis exceeded

The speed limit of the tangential axis was exceeded when circular interpolation was used.

1.3.3.3.271 NC Software – ARNC0 V1.050

ID#220825 : new function since V1.050

In_pos_tolerance for full transformations

If a movement is started with full transformations switched on, then path and joint axes have to be in the corresponding positions. These positions are checked via direct transformation, and there is an allowed tolerance for path axes ("axis.transformation.in_pos_tolerance").

ID#220820 : new function since V1.050

Frame axes

In addition to current joint and path axes, frame axes were introduced to the full transformations as well. These new axes are used if the whole robot (i.e. its basement) is moving.

ID#220835 : new function since V1.050

Workspace monitoring

Workspace monitoring has been implemented. The working area can be defined and monitored.

ID#220810 : new function since V1.050

Frames – Coordinate system definition

FRAME variable describes new workpiece coordinate system. FRAME variable can be modified by set of operations as translation or rotation.

ID#220815 : Information valid since V1.050

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
For ACOPOS 8V1xxx.00–2: ACP10SYS V2.171

1.3.3.3.272 NC Software – ARNC0 V1.040

ID#400034873 : solved problem, known since V1.x, solved since V1.040

ARNC0 Axis: In ARNC0NCMON_typ the structure element "s_ncrecord" was used instead of "s_ncblock"

ID#220730 : Information valid since V1.040

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
For ACOPOS 8V1xxx.00–2: ACP10SYS V2.171

ID#220190 : solved problem, solved since V1.040

Error 10726 when calling naction() for NC objects, for which ncacces() or ncalloc() have not been called

It is possible to define a global PV with type "ncAXIS" or "ncCNCSYS" for an NC object. In this case the address of this PV can be used as NC object for naction (), i.e. the NC object does not have to be determined with naccess () or nalloc (). However so far this did not function, because with call of naction () the error 10726 occurred for all NC objects, for which naccess() or nalloc() have not not called.

ID#219985 : solved problem, solved since V1.040

Error 40112 for POWERLINK axis in simulation mode "ncCNCSYS"

If the NC action "ncGLOBAL,ncINIT" was called for an POWERLINK axis in simulation mode "ncCNCSYS", when the correspondig ACOPOS was not available on the network, then the following error occurred:

– 40112: "Timeout at processing an ARNC0 command"

ID#213407 : solved problem, solved since V1.040

Error 10704 by nalloc() and naccess() in TC#5 .. TC#8

The error 10704 occurred until now when calling nalloc() or naccess() in TC#5 .. TC#8.

1.3.3.3.273 NC Software – ARNC0 V1.034

ID#219482 : Information valid since V1.034

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.160

ID#219477 : solved problem, solved since V1.034

Axis acceleration Limits exceeded at transient block transitions

On transient block transitions, the axis acceleration limits can be ecceded for one CNC cycle up to twice–time of the limit value.

1.3.3.3.274 NC Software – ARNC0 V1.033

ID#217567 : new function since V1.033

Skip Function

There are up to 10 independent skip level available.

ID#218670 : Information valid since V1.033

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.160

ID#218695 : solved problem, solved since V1.033

Cycle time violation of ARNC0 tasks

The cycle time violation occurred when NC-program ran on system with the high CPU load ($\geq 95\%$).

ID#217900 : solved problem, solved since V1.033

Pagefault by a circular interpolation

A page fault occurred if a circular interpolation has been decoded and the first axis of a CNC object (cnc_obj.axis.axis[0]) hasn't been a Cartesian one.

1.3.3.3.275 NC Software – ARNC0 V1.032

ID#217120 : new function since V1.032

Error message 5152: 'In-Position-Tolerance' at START/RESTART of CNC move " has been replaced

The error message 5152: "Position out of 'In-Position-Tolerance' at START/RESTART of CNC move " has been replaced by the error message 7743 with the same meaning. The error 7743 is now issued by a CNC-object.

ID#217150 : Information valid since V1.032

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.160

ID#217175 : solved problem, solved since V1.032

Deadlock issued by NC-program loader error

If there is a calling of non-existing global subprogram at NC-program very begin, the program is blocked.

ID#217165 : solved problem, solved since V1.032

Deadlock with NC-program started in ncFILE_XL mode

If an NC-program that has been started in ncFILE_XL mode was stopped, it couldn't be started again unless it was explicitly removed from memory.

ID#215385 : solved problem, solved since V1.032

Error 15138: "Bad arguments to exec built-in function " on ARsim (AR000)

Starting of an NC-program can cause the error 15138: "Bad arguments to exec built-in function "

1.3.3.3.276 NC Software – ARNC0 V1.031

ID#215925 : Information valid since V1.031

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.160

ID#215915 : solved problem, solved since V1.031

Speed jump on ncLINEAR+ncNOSTOP axis

s_jump_t is correctly interpreted for ncLINEAR+ncNOSTOP axes.

ID#215910 : solved problem, solved since V1.031

G92 and full transformations

G92 is usable for path axes without any limitation.

1.3.3.3.277 NC Software – ARNC0 V1.030

ID#214372 : new function since V1.030

New NC structure component "nc_obj_inf.hardware" with information to identify the connected ACOPOS hardware module.

ID#213295 : new function since V1.030

New NC action "ncSTOP,ncINIT" for POWERLINK and SDC axes for initialization of the stop configuration.

ID#210922 : new function since V1.030

New NC structure components "limit.parameter.dv_stop" and "dv_stop_mode" to configure speed error monitoring.

ID#210917 : new function since V1.030

New NC structure component "move.stop.drive_error" to define the deceleration ramp after occurrence of a drive error.

ID#215692 : Information valid since V1.030

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V2.160

ID#215407 : solved problem, solved since V1.030

With active axis jolt filter sometimes an axis movement was not completed

Sometimes with very high position values, the target position was reached but the positioning was not completed. This error occurred only with active axis jolt filter. Also the abort command (NC action "ncMOVE, ncSTOP") could be affected by this problem.

1.3.3.3.278 NC Software – ARNC0 V1.022

ID#214130 : solved problem, known since V1.021, solved since V1.022

Pagefault while NC-program running on ARsim (AR000)

An NC-program running on ARsim (AR000) causes an exception followed by the service mode.

ID#215340 : Information valid since V1.022

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.153

ID#215305 : solved problem, solved since V1.022

The same node numbers on the axes on the different interfaces

Some problems like "Timeout at processing an ARNC0 command" could have occurred if the axes with the same node- and channel-numbers have been used on different interfaces. This problem occurred starting in version V0.240.

ID#215255 : solved problem, solved since V1.022

NC-program restart with rotary axis

Second program restart resulted to deadlock when rotary axis was out of 'In-Position-Tolerance'

ID#214415 : solved problem, solved since V1.022

Trace not saved when more network Interfaces used

The recorded Trace data wasn't been automatically saved to file when more than one network Interface had been configured.

1.3.3.3.279 NC Software – ARNC0 V1.021

ID#213660 : new function since V1.021

Parameter "line_ncprog" in nc-monitor structure

A new parameter "line_ncprog" (line number in CNC program) in ARNC0NCMON_typ data type.

ID#214140 : Information valid since V1.021

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V2.152

ID#214135 : solved problem, solved since V1.021

Error 14126: "No cyclic positions from drive" on ARsim (AR000)

Error 14126: "No cyclic positions from drive" (only on ARsim (AR000)) is caused by usage of the SDC axes.

ID#213550 : solved problem, solved since V1.021

NC action ncLIMITS, ncINIT aborted with an error (only in Version 1.02.0)

NC action ncLIMITS, ncINIT may be aborted with an error 14198: "Error by acp10 mode switch".

ID#213447 : solved problem, known since V1.020, solved since V1.021

Timestamp check fails for subprograms

The time stamp was checked only for main program. The subprograms weren't reloaded when changed.

1.3.3.3.280 NC Software – ARNC0 V1.020

ID#211150 : new function since V1.020

Error Levels of Function Block

Error level of function block determines what should happen when the FB returned an error. There are four error levels according severity of the error to define the reaction (1 – Emergency Stop, 2 – Program Stop, 3 – Program Halt, 4 – Warning).

ID#213310 : Information valid since V1.020

Binary AIL–based Interpreter

The G–code Interpreter has been modified to work on binary AIL. The modification reduced memory consumption and enhanced performance of the AIL interpretation. The syntax of the Interpreter configuration files was changed. The G–code which is defined in the language configuration files in text–based AIL is translated to binary AIL during ARNC0 startup. The <AILHeader> section is only translated to binary AIL and not executed while NC–program starts.

ID#210827 : Information valid since V1.020

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.152

ID#213320 : solved problem, solved since V1.020

Bigger lookahead causes deadlock

If the size of the lookahead buffer was significantly increased, the deadlock could occur with several combination of naction called in short time interval.

ID#213270 : solved problem, solved since V1.020

ParID Trace only for one ParID possible

Only the first configured ParID can be recorded with the ParID Trace, although more ParIDs has been configured.

ID#212522 : solved problem, solved since V1.020

Watch Dog Error

If the function `ncaction()` was not called in that task class, which was configured as "Task class for NC Manager task", then in very rare cases a watch dog error (logger error 9206) occurred.

ID#212080 : solved problem, solved since V1.020

Pagefault if a global PV is used as an NC object

A pagefault occurs when a global PV is used as an NC object.

1.3.3.3.281 NC Software – ARNC0 V1.011

ID#210755 : Information valid since V1.011

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.151

1.3.3.3.282 NC Software – ARNC0 V1.010

ID#209635 : Information valid since V1.010

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.150

ID#209625 : solved problem, solved since V1.010

G100 and G101

Point to point (PTP) movements are integrated into ARNC0. Transformation functions from TRF_LIB are called. Path axes and joint axes are still hold in the corresponding positions.

ID#400023876 : solved problem, known since V0.84.3, solved since V1.010

Page Fault during Init–Phase in Service Mode

On rare occasions a page fault occurred in service mode during the initialisation phase of ARNC0. This page fault resulted in a cyclic (i.e. infinite) rebooting of the runtime target, which consequently inhibited online connections to the target.

1.3.3.3.283 NC Software – ARNC0 V1.000

ID#216600 : Information valid since V1.000

Position latch (G200/G201) syntax changed

Latched axes positions are copied to dedicated latch system variables. The automatic decoder and path movement synchronisation performed when EV–flag had been accessed was removed.

ID#216585 : Information valid since V1.000

C2 spline boundary conditions syntax changed

G801/G802: spline boundary conditions consist of axis name and boundary condition value.

Example:

G801 CE=0.1 BC1 X2.3 C0 A5.5 Z1.2 B3.8

ID#206605 : Information valid since V1.000

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.140

ID#205065 : solved problem, solved since V1.000

ACP10MAN as axis driver for Powerlink and SDC axes

ACP10MAN is used as axis driver for Powerlink and SDC axes. Library acp10man has to be installed and is added automatically with the library arnc0man.

ID#400023139 : solved problem, solved since V1.000

Pagefault and CAN DDC error after ARNC0 startup

A pagefault occurred when no configured ARNC0 CAN-axis has been connected during ARNC0 startup.

ID#201445 : solved problem, solved since V1.000

New NC actions for PLK and SDC axes

New NC actions for PLK and SDC axes have been implemented:

```
"ncDAT_MOD+ncSERVICE,ncSAVE"
"ncPAR_SEQU+ncSERVICE,ncDOWNLOAD"
"ncPAR_SEQU+ncSERVICE,ncDOWNLOAD+ncINIT"
"ncPAR_SEQU+ncSERVICE,ncINIT"
"ncPAR_LIST+ncSERVICE,ncINIT"
"ncPAR_LIST+ncSERVICE,ncREAD"
"ncSETUP+ncCONTROLLER, ncSTART"
"ncSETUP+ncCONTROLLER, ncSAVE"
"ncSETUP, ncSTOP"
```

ID#400017838 : solved problem, solved since V1.000

Delay of a set position on an axis on a virtual interface in mode 3

Usage of an ACOPOS or an ACOPOSmulti on an virtual interface in mode 3 caused a delay by copying from ACP10PAR_CYC_MASTER_SET_POS to ACP10PAR_SGEN_S_SET.

ID#184365 : solved problem, known since V0.670, solved since V1.000

Now block number allowed in the line with the programmnumber (before ARNC0 V1.000)

ID#176370 : solved problem, solved since V1.000

Reading the EPROM serial number

The reading of an EPROM serial number did not run correctly on the powerlink axes.

ID#162920 : solved problem, solved since V1.000

Error if last line was a control block

If the last row of a text file is any control block (e.g. \$ENDIF) without <end-line> character, then the program was aborted with "Error 10259 (unknown statement)"

ID#161067 : solved problem, solved since V1.000

Error if NC program was started with ncFILEOFFSET

If a program was started in a block with a tool place number or a tool data number close before a subroutine call, the program could be aborted by the error 10212 (Multiple use or illegal combination of NC block type)

ID#146537 : solved problem, solved since V1.000

Everything programmed together with G17 or G18 or G19 was ignored.

ID#137557 : solved problem, solved since V1.000

No Program Abort at syntax error

NC program was not aborted at error 10276 "Unknown Term (syntax error)"

1.3.3.3.284 NC Software – ARNC0 V0.853

ID#210427 : Information valid since V0.853

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.151

ID#210497 : solved problem, solved since V0.853

CNC Monitor was not updated immediately after Program Start

It could take some cycles after program start until the CNC monitor was updated first time (depending on system configuration and CPU load).

1.3.3.3.285 NC Software – ARNC0 V0.852

ID#206607 : Information valid since V0.852

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.150

ID#400022995 : solved problem, solved since V0.852

Pagefault by a circular interpolation

A page fault occurred if a circular interpolation has been decoded and the first axis of a CNC object (cnc_obj.axis.axis[0]) hasn't been a Cartesian one.

1.3.3.3.286 NC Software – ARNC0 V0.851

ID#206477 : Information valid since V0.851

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.140

ID#205612 : solved problem, solved since V0.851

Position error on the automatic tangential axis at very short path sections when CDC is active.

When CDC is active, position errors can occur on an automatic tangential axis at very short path sections with allowed contour violations.

ID#205322 : solved problem, solved since V0.851

Contour Violation – Tool Radius too large (error 9247)

At a contour violation in consequence of a large tool radius the program will be aborted or only a warning will be displayed. In both cases the error number 9247 was used. Now for warning 9247 and for error 9274 is used.

ID#400013252 : solved problem, solved since V0.851

G39 – Position error at very short path sections if coordinate system is rotated

When CDC is active and the coordinate system is rotated (G92, G192, G292), position jumps can occur if contour violations are allowed.

ID#204947 : solved problem, solved since V0.851

Page Fault at the end of a movement block

A page fault can arise if there is a gap between entries in the CNC axis configuration. The page fault occurs at the end of a movement block.

ID#400020183 : solved problem, solved since V0.851

Strange Characters in NC block monitor

If the decoder has reached the end of NC program and the path is still running, strange characters can be displayed in NC block monitor.

ID#400013671 : solved problem, solved since V0.851

System Crash if NC Program is active

Caused by a memory limitation in the ARNC0, the system can crash under certain conditions (overflow of an internal stack).

1.3.3.3.287 NC Software – ARNC0 V0.850

ID# 400021031 : solved problem, solved since V0.850

Set Tabel Data from Data Modul

Tabel data (tool data, R parameter or zero point data) can be set also if a NC program is active. Saving the data is only allowed if no NC program is active.

1.3.3.3.288 NC Software – ARNC0 V0.820

ID# 400007035, 400011965, 400015991 : solved problem, solved since V0.820

Pagefault at ARwin (AR010) + ARNC0 startup

A page fault occurs if a cycle time less then 800us is set.

ID#136785 : solved problem, solved since V0.820

ARwin (AR010) + ARNC0 – Cycle time violation or page fault if cycle time is set to 400µs

1.3.3.3.289 NC Software – ARNC0 V0.801

ID#171740 : solved problem, solved since V0.801

Full circle detection in plot buffer

The CNC Plot Buffer outputs one more circle if a full circle is defined in a CNC program.

1.3.3.3.290 NC Software – ARNC0 V0.670

ID#176105 : new function since V0.670

G144/G145: Continuous Alignment of Automatic Tangential Axis

The functions G144 and G145 are used to modify behavior of the automatic tangential axis on linear interpolation section (G01)

G144: Continuous alignment of automatic tangential axis

The tangential axis is continuously positioned during current NC block to be aligned with start tangent of the next path section. This mode is analogous to the behavior of automatic tangential axis on the rapid interpolation section (G00).

G145: Standard automatic tangential axis behavior

The tangential axis keeps the position tangential to current path section. In tangential block transition (if maximum speed jump is exceeded) or in non-tangential block transition a stop is made and the tangential axis aligned.

1.3.3.3.291 NC Software – ARNC0 V0.651

ID#174657 : Information valid since V0.651

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.032

1.3.3.3.292 NC Software – ARNC0 V0.650

ID#169352 : Information valid since V0.650

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.032

ID#169390 : solved problem, solved since V0.650

ARNC0 deadlock with CDC

When the CDC is active and the tool radius equals the radius of the programmed circle, then the ARNC0 can block.

ID#168952 : solved problem, solved since V0.650

New mode for calculation of acceleration on the path

With the parameter "cnc_obj.decoder.parameter.v_path_mode" can be selected, if the acceleration on the path is allways limited to the value in "cnc_obj.limit.a_pos" or "cnc_obj.limit.a_neg" or only if cartesian axes are programmed in the NC block.

1.3.3.3.293 NC Software – ARNC0 V0.640

ID#166477 : new function since V0.640

New restart option ncNO_CHECK. New NC action "ncPROGRAM, ncBLOCKSEARCH"

A restart of a modified NC–program is now possible with option ncNO_CHECK.

The NC action "ncPROGRAM, ncBLOCKSEARCH" determines the starting positions of all axes when an NC program is started with a simulation run to a specified starting point.

ID#168992 : solved problem, solved since V0.640

G126: when switching off G126, parameter \$VE is not reset to 1

1.3.3.3.294 NC Software – ARNC0 V0.624

ID#168412 : Information valid since V0.624

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.021

ID#168397 : solved problem, solved since V0.624

New ACOPOS Parameter are not trnafered to ACOPOS (only ARNC0 V0.623)

ID#168242 : solved problem, solved since V0.624

Warning "acp10man.br not found!" will be written as error in the AR–Log.

ID#167765 : solved problem, solved since V0.624

Error 8103 in circular blocks.

Error 8103 (No feed rate ...) could occur in circular blocks, even though a feed rate is programmed in NC program.

1.3.3.3.295 NC Software – ARNC0 V0.623

ID#168137 : Information valid since V0.623

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.021

ID#168132 : solved problem, solved since V0.623

Error in blocks with G92 + G170

If after a block with G92 a block with G170 is programmed, on certain targets an error occurs.

1.3.3.3.296 NC Software – ARNC0 V0.622

ID#167420 : Information valid since V0.622

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.021

ID#167415 : solved problem, solved since V0.622

ACOPOS–Multi doesn't run correct in ARNC0

ACOPOS–Multi couldn't be used as a Acp10 axis by ARNC0.

1.3.3.3.297 NC Software – ARNC0 V0.621

ID#167025 : new function since V0.621

Usage of Acp10 axes in ARNC0

Acp10 axes can be used by ARNC0. It is possible to use e.g. ACOPOS–Multi for ARNC0 axes and the complete range of Acp10 manager functions (e.g. auto–tuning).

ID#167080 : Information valid since V0.621

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V2.020

1.3.3.3.298 NC Software – ARNC0 V0.620

ID#167017 : Information valid since V0.620

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#167012 : solved problem, solved since V0.620

Restart for blocks without traverse path and without block number

The restart point is defined by the byte offset of the NC block (please note changes in data structure).

ID#166485 : solved problem, solved since V0.620

Halt in an NC block containing a synchronized M–Function

The NC program can not be continued when a halt is performed in an NC block containing a synchronized M–Function.

ID#162135 : solved problem, solved since V0.620

Restart in NC block with G201 generates error 7169

This problem occurs only when the NC program was aborted due to an axis error and the trigger input had not been activated.

1.3.3.3.299 NC Software – ARNC0 V0.611

ID#165907 : new function since V0.611

Length of ARNC0DBLST_typ now matches the length of the ACP10 data type

ID#165912 : Information valid since V0.611

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

1.3.3.3.300 NC Software – ARNC0 V0.610

ID#165647 : Information valid since V0.610

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#165577 : solved problem, solved since V0.610

Positioning with target position 0 before first movement block

The first statement in an NC–program is M0 or M1. When a positioning with target position zero is started, then the NC–program will be executed until the beginning of the first movement block.

ID#165572 : solved problem, solved since V0.610

Continue movement with negative override before the first movement block

The first statement in an NC-program is M0 or M1. When the movement is continued with negative override, then the error 5107 "Event not allowed in current state" occurs on all CNC axes and the NC-program is aborted.

ID#164830 : solved problem, known since V0.602, solved since V0.610

Position jump for G92 + G126

If, after a block with G92 (rotation of the coordinate system), a linear block is immediately followed by a block with G126, a position jump occurs (ARNC0 V0.550 and higher).

ID#164282 : solved problem, solved since V0.610

Position jump for G92 + Subprogram Call

If, after a block with G92, subprogram is called immediately, a position jump occurs.

ID#164110 : solved problem, known since V0.601, solved since V0.610

Restart-Info contains wrong axes positions

When the restart-info is determined with the block number of the first movement block, then the axes positions of the restart point are incorrect.

ID#164080 : solved problem, known since V0.601, solved since V0.610

Filter time for contour jolt filter is not considered when running in simulation mode

The filter time for the contour jolt filter is considered only after an NC-program is run with the simulation mode switched off.

1.3.3.3.301 NC Software – ARNC0 V0.605

ID#163962 : Information valid since V0.605

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.244

ID#163742 : solved problem, solved since V0.605

Polar coordinate motor + G114: Path speed too slow at circle path sections.

Even though G114 has no effect on the polar coordinate motor, the path speed was reduced to a very low value when programming with G114.

Note: In calculation of path dynamics, a reduction of the path speed, which may be necessary, is carried out for the polar coordinate motor so that the relationship between the path speed and the path acceleration after the reduction is the same as the relationship between the limit values for the path speed and the path acceleration.

ID#163370 : solved problem, solved since V0.605

CNC Restart with sync. M-Functions generates error 7134

The error occurs only when M-function groups are defined such that a synchronized M-function is set at the restart point.

1.3.3.3.302 NC Software – ARNC0 V0.604

ID#162742 : Information valid since V0.604

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#163407 : solved problem, solved since V0.604

Polar coordinate motor: Axis limits exceeded

The axis limits for the rotating axis could be exceeded in a coordinate system that is rotated or shifted with G92/G192.

ID#163312 : solved problem, solved since V0.604

Polar coordinate motor: Path speed too slow at circle path sections.

Programmed speed sometimes not reached at circle path sections. Depending on the position and dimensions of the circle path section, parts of the circle which were not traversed were also included when calculating the limit values.

1.3.3.3.303 NC Software – ARNC0 V0.603

ID#163100 : Information valid since V0.603

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#162765 : solved problem, solved since V0.603

NC action "ncGLOBAL,ncSAVE": The hardware assignment was not applied if an existing module was newly created

If an existing INIT parameter module is newly created with "ncGLOBAL,ncSAVE" and this module was assigned to an NC object via hardware configuration, then this hardware assignment should also be applied to the newly created module.

In previous versions this hardware assignment was not applied to the newly created module.

ID#160655 : solved problem, solved since V0.603

Page fault in ARNC0 after naction(ncBLOCK, ncSTART)

At first an NC program that does not exist is started. Then after naction(ncBLOCK, ncSTART) a page fault occurs in the ARNC0.

ID#160472 : solved problem, solved since V0.603

Parameter "sl_chain" has no effect

If the master axis is an CNC axis, the set positions of all coupled axes are not delayed according to "sl_chain". This produces a position difference between the master axis and the slaves axes.

ID#157082 : solved problem, solved since V0.603

Page fault, if a global NC subprogram is started with (ncBLOCK, ncSTART)

The page fault occurs upon return from the global NC subprogram.

1.3.3.3.304 NC Software – ARNC0 V0.602

ID#160477 : new function since V0.602

G90 and G91 or G161 and G162 in the same NC block

Absolute and relative coordinates can be used in the same movement block.

ID#160842 : Information valid since V0.602

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.555

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#160965 : solved problem, solved since V0.602

The automatic switch off the compensation of the mechanical impreciseness of an axis.

The compensation of the mechanical impreciseness of an axis is switched off automatically if the controller is switched off. The compensation switch on is possible only if controller is on.

ID#160960 : solved problem, solved since V0.602

Rebuilding: Absolute positioning of the axes ncROTARY in a CNC program.

The behaviour has been so changed that the start position of the axis ncROTARY is not taken into consideration.

ID#160817 : solved problem, solved since V0.602

G171 after non-synchronized M Function

When a non-synchronized M Function in the DNC-Interface is followed by G171, then the flag for this M Function is not set.

1.3.3.3.305 NC Software – ARNC0 V0.601

ID#159302 : new function since V0.601

Improved synchronization of CAN communication (ACOPOS – ARNC0)

Starting with AR P2.90, B2.92, the ARNC0 can detect system jitters in Automation Runtime and take them into consideration during synchronization.

ID#159722 : Information valid since V0.601

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#159500 : solved problem, solved since V0.601

Error in circle programming with angle specification.

If a block with circular interpolation with angle specification immediately follows a block with a coordinate transformation (e.g. G92 or G192), then the NC program is aborted with the error 8134 (Radius difference between beginning and end).

ID#159497 : solved problem, solved since V0.601

Restart at block number, S, T and M functions are not updated.

When an NC program is restarted at a defined block number, the S, T and M functions are not updated at the restart point.

1.3.3.3.306 NC Software – ARNC0 V0.600

ID#158320 : new function since V0.600

Absolute positioning of the axes ncROTARY in a CNC program.

The behaviour has been modified in this way that now it more matches the characteristic of "rotary" axes.

ID#158067 : new function since V0.600

Runtime of an NC-program in simulation mode

The runtime of an NC-program can be determined by running an NC-program in simulation mode.

ID#158345 : Information valid since V0.600

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#158330 : solved problem, solved since V0.600

Free definition of the active plane using the mapping functions

The functions G217, G218, G219 allow the free definition of active plane using the mapping. These combinations of definition axis-types are possible: ncCNC–ncROTARY, ncCNC–ncLINEAR, ncCNC–ncCNC (standard case).

ID#158325 : solved problem, solved since V0.600

Set positions of the axes ncROTARY in the monitor of the CNC object

For the set positions is used the interval (0.0, 360.0) instead of the interval (–360.0, 360.0).

1.3.3.3.307 NC Software – ARNC0 V0.592

ID#157670 : Information valid since V0.592

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#157665 : solved problem, solved since V0.592

Problem with CAM coupling

If a step change in desired position comes for a slave axis the peek in acceleration in opposite direction occurs at the 3rd sample after the step change.

1.3.3.3.308 NC Software – ARNC0 V0.591

ID#156805 : new function since V0.591

Position not equal zero by Wrapping on/off allowed.

It is no more necessary that the positions of "source" and "destination" axes are by Wrapping on/off equal zero.

ID#157075 : Information valid since V0.591

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#157257 : solved problem, solved since V0.591

Circle calculation error in the CDC

An error in the CDC could cause a radius of zero to be calculated for a circle path section. In such a case, the NC program was stopped (G36 active) or the circle was replaced by a straight line (G37 active).

ID#157252 : solved problem, solved since V0.591

Combination of G220 + G170 + G40 produces a deadlock of the ARNC0.

The ARNC0 stops if blocks with G220 (signal before path section end over multiple path sections), G40 and G170 follow one another consecutively, without having a traverse path programmed in between.

1.3.3.3.309 NC Software – ARNC0 V0.590

ID#156877 : Information valid since V0.590

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#155532 : solved problem, solved since V0.590

Wrong path speed in blocks with G126

In CNC systems without a tangential axis the path speed may be wrong in blocks with G126.

1.3.3.3.310 NC Software – ARNC0 V0.584

ID#156505 : new function since V0.584

New G–codes G114, G115

With G114, bigger part of acceleration limits is allowed to be consumed by centripetal acceleration on arcs. G115 means the original behaviour, and it is default. G114 is valid from its first occurrence till G115 or till the end of CNC program.

ID#156495 : Information valid since V0.584

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

1.3.3.3.311 NC Software – ARNC0 V0.583

ID#155942 : new function since V0.583

Internal Error – Job ID already acknowledged.

Access conflicts to the DPR–Fifo can occur in the CNC System if a large number NC actions were made or many warnings occurred in a short amount of time.

ID#155947 : Information valid since V0.583

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

1.3.3.3.312 NC Software – ARNC0 V0.582

ID#155642 : new function since V0.582

G102 – Circle in general position

The G102 command is used to program a circle segment in a general position in space. Programming is done by specifying the end point and any point on the circle.

ID#155652 : Information valid since V0.582

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

1.3.3.3.313 NC Software – ARNC0 V0.581

ID#154865 : Information valid since V0.581

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#154897 : solved problem, solved since V0.581

Restart at block number – Restart point not found.

Processing a NC program with very short path sections or using a block buffer with few elements (limit.block_buffer), it could happen that the restart point will not be found. There is no error if the restart point is defined by path distance.

ID#154860 : solved problem, solved since V0.581

CNC Plot Buffer: – The decoding–end is not reported in Plot Buffer Header in simulation mode.

In simulation mode remains the old value of the parameter "plot_header.status" (ARNC0PLOTHEADER_typ), although decoding has been finished.

1.3.3.3.314 NC Software – ARNC0 V0.580

ID#154382 : new function since V0.580

Single step mode – Stop also at blocks with no movement

ID#154387 : Information valid since V0.580

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

ID#154645 : solved problem, solved since V0.580

CNC Plot Buffer doesn't take the functions G92 and G126 into consideration.

The functions G92 (Programmed Zero Point Offset and Rotation of the Coordinate System) and G126 (Rounding Edges) had no influence on the CNC Plot Buffer.

ID#154392 : solved problem, solved since V0.580

Synchronizataion ACOPOS via CAN

The ARNC0 synchronization mechanism for CAN network calculates the start for an ideal time frame according to the mean jitter of the system. The start is set in a way that the mean jitter

(for 96 synchronization periods) tends to zero. If the mean jitter is above or below, the start is shifted by 1µs per periode in order to achive zero jitter.

1.3.3.3.315 NC Software – ARNC0 V0.571

ID#154470 : solved problem, solved since V0.571

CNC–Plot–Buffer doesn't function in simulation mode.

The writting to the CNC–Plot–Buffer didn't function, if the CNC object was switched to the simulation mode.

1.3.3.3.316 NC Software – ARNC0 V0.570

ID#154305 : new function since V0.570

CNC–Plot–Buffer.

A memory–area allocated in the application can be used as a CNC–Plot–Buffer.
New / changed elements in the data structure:

German:

"cnc_object.grenzwert.plot.access_adr"

English:

"cnc_object.limits.plot.access_adr"

ID#154310 : Information valid since V0.570

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

1.3.3.3.317 NC Software – ARNC0 V0.560

ID#153737 : new function since V0.560

Restart for blocks without traverse path

NC programs restart when using blocks. The reset point is defined by the block number (please note changes in data structure).

ID#153742 : Information valid since V0.560

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

1.3.3.3.318 NC Software – ARNC0 V0.552

ID#153657 : Information valid since V0.552

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.244

1.3.3.3.319 NC Software – ARNC0 V0.551

ID#153027 : solved problem, solved since V0.551

Set position jump due to a G92 sequence (only ARNC0 V0.550).

A position jump occurs on the axes if two blocks with G92 follow each other with only one block programmed between them having a traverse distance $s=0$.

ID#153452 : Information valid since V0.551

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.242

ID#153185 : solved problem, solved since V0.551

Pagefault in CNC channels with ncROTARY Axes (only ARNC0 V0.550).

Pagefault was caused by using a CNC channel with ncROTARY axes, if fewer than 9 axes were defined.

ID#153107 : solved problem, solved since V0.551

Positioning in the current NC Program fails to reach target position 0

When a positioning with target position 0 is started while `s_ncprog` in the CNC–monitor is negative, then this positioning fails.

1.3.3.3.320 NC Software – ARNC0 V0.550

ID#152680 : new function since V0.550

ncROTARY – the new axis type

The new axis type has been implemented to allow the Flat Cam Programming.

ID#152342 : new function since V0.550

No stop after blocks with G92

Until now, a stop was always implemented at transition blocks after blocks with G92/G192, a tool data number or an absolute zero point offset (G54 etc.). The permissible speed at the path section transition is now calculated according to the axis and path limits.

ID#152690 : Information valid since V0.550

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.242

ID#152347 : solved problem, solved since V0.550

Wrong speed at the path section transition.

In a rotated coordinate system (G92, G192), the speed at the path section transition is sometimes calculated incorrectly.

1.3.3.3.321 NC Software – ARNC0 V0.541

ID#152097 : Information valid since V0.541

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.242

ID#152077 : solved problem, solved since V0.541

Page fault in global NC subprogram

When a global NC subprogram is terminated by %progn instead of M2, M29 or M30, then a page fault occurs.

1.3.3.3.322 NC Software – ARNC0 V0.540

ID#151282 : new function since V0.540

New trace data points in the CNC block monitor

These variables in the CNC block monitor can now be traced: path length until end of current NC-block, path length of current NC-block, path length of next NC-block in the direction of motion.

ID#151277 : new function since V0.540

New path length variables in CNC block monitor

The CNC block monitor additionally displays the path length of the current NC-block and the path length of the next NC-block in the direction of motion.

ID#151182 : new function since V0.540

Restart – Current axis positions in the DPR trace

The current axis positions are now recorded in the DPR trace when restarting an NC program. In previous versions, the positions were stored when starting the programming.

ID#147417 : new function since V0.540

Path distance in CNC Monitor after CNC Init

The ncaction(..., ncLIMITS, ncINIT) resets all variables in the CNC monitor except the set positions. It also resets the path length variables in the CNC block monitor.

ID#151197 : Information valid since V0.540

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.242

1.3.3.3.323 NC Software – ARNC0 V0.531

ID#150992 : Information valid since V0.531

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.242

ID#150207 : solved problem, solved since V0.531

External encoder – Homing error

The mode without reference pulse is always used no matter which homing mode has been defined (with or without pulse). An error message is not given.

1.3.3.3.324 NC Software – ARNC0 V0.530

ID#149462 : Information valid since V0.530

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.213

ID#148940 : solved problem, solved since V0.530

Save data to an INIT–Parameter–Module. Target memory User ROM.

The INIT–Parameters contained in the NC–object user data are saved to the given INIT–Parameter–Module in User ROM using the NC–action "ncGLOBAL,ncSAVE" .

1.3.3.3.325 NC Software – ARNC0 V0.520

ID#148420 : new function since V0.520

Save data to an INIT–Parameter–Module. Target memory User RAM.

The INIT–Parameters contained in the NC–object user data are saved to the given INIT–Parameter–Module using the NC–action "ncGLOBAL,ncSAVE" .

ID#149457 : Information valid since V0.520

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.213

ID#148752 : solved problem, solved since V0.520

Overlapping signal function in a path section with zero length

When an overlapping signal function is programmed in a path section with zero length, the error 8155 "Distance is equal to 0.0, signal will be ignored" results, although there is enough distance for the signal ahead of this path section.

1.3.3.3.326 NC Software – ARNC0 V0.512

ID#149452 : Information valid since V0.512

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#146767 : solved problem, solved since V0.512

Non synchronized M-functions between dwell times

If non synchronized M-functions are programmed between two dwell times, then the M-functions are output after the second dwell time has passed.

1.3.3.3.327 NC Software – ARNC0 V0.511

ID#146897 : Information valid since V0.511

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#146905 : solved problem, solved since V0.511

Deadlock with function combination G221+G220/G222+G170

The CNC blocks at the G221, when G221 is programmed together with a synchronized M-function and the NC-block containing a G220 or G222 has zero length and is followed by a G170.

ID#146892 : solved problem, solved since V0.511

Standstill when changing the active working plane.

Movement is not stopped when changing the working plane if tool length compensation is not active (tool length = 0) or the programmed plane is already selected.

1.3.3.3.328 NC Software – ARNC0 V0.510

ID#146032 : new function since V0.510

Control structure for NC test

The behaviour of NC test functions for the NC objects ncAXIS and ncCNCSYS can be selected by the new component nc_test.

nc_test.Open_UseAppINcObj:

1 = Test function with application object

0 = Test function with standalone test object

nc_test.Close_NoMoveAbort:

1 = No move abort when the test function is closed.

0 = Abort all active movements when the test function is closed.

The global initialization is done with the attribute NcManCtrl of the NC Object ncMANAGER in the NC mappin table.

ID#146027 : Information valid since V0.510

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.196

ID#146585 : solved problem, solved since V0.510

Turning of a circle & its dynamics

In case of too low axis acceleration limits (lower than limits of CNC object), the path-speed on the circles (G2, G3) could be reduced more than necessary.

ID#146575 : solved problem, solved since V0.510

Problem with Restart of an NC-program

NC-program creation time was not saved correctly in case of "move.ncprogram.start_mode == ncFILE" or "move.ncprogram.start_mode == ncFILE_XL". Error 7151 could occur sometimes.

ID#146037 : solved problem, known since V0.500, solved since V0.510

Error in german user data structure

The german user data structure for the NC Object ncCNCSYS contained the member monitor.typ_ncblock instead of monitor.typ_ncsatz.

1.3.3.3.329 NC Software – ARNC0 V0.503

ID#145857 : solved problem, solved since V0.503

Position error on the tangential axis when activating the cutter diameter.

If cutter diameter compensation is activated with the following conditions, the automatic tangential axis in the path section that immediately follows the activation will be aligned incorrectly. As a result, the tangential axis will be aligned to the end position of the block during movement as in a block with G00.

- Automatic tangential axis is active
- Linear interpolation block (G01)
- Indirect activation with transition block (G137)
- The transition angle of the subsequent path section transition is greater than 180° (outside corner)

ID#145862 : Information valid since V0.503

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.196

ID#145952 : solved problem, solved since V0.503

Incorrect cutter diameter.

The radius from the previous NC program is used when activating CDC if a cutter diameter has not been defined in an NC program (tool data number or \$RAD).

ID#145937 : solved problem, solved since V0.503

The tool length and tool offset are wrongly accounted for in CNC systems with less than three path axes.

In a CNC System with two cartesian axes, the tool length correction and the tool offset of the non-existent third cartesian axis are calculated in the first linear axis.

In a CNC system with one cartesian axis, the compensations for both of the non-existent cartesian axes are incorporated in the first two linear axes.

ID#144385 : solved problem, solved since V0.503

Unjustified error 8134:"Radius difference between start and end".

The error occurs under the following conditions: There are only two cartesian axes and the ZX-plane has been selected.

1.3.3.3.330 NC Software – ARNC0 V0.501

ID#145102 : Information valid since V0.501

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#145092 : solved problem, solved since V0.501

Compensation matrix for cartesian axis is not taken in consideration.

It could happen, that the the compensation matrix ("p_cnc_obj.axis.compensation.matrix_el[]") is not taken in consideration.

ID#144130 : solved problem, known since V0.471, solved since V0.501

Page Fault while calling a local subroutine.

A page fault occurs if in a line with the call of a local subroutine are additional syntax elements.

1.3.3.3.331 NC Software – ARNC0 V0.500

ID#144907 : new function since V0.500

New display mode and data in the CNC monitor, new system variables for tool data and zero point offset.

New display mode for position in the CNC monitor:

- Machine coordinates
- Consideration of the coordinate system transformation, tool data offset and tool length
- Consideration of the coordinate system transformation
- Consideration of tool data offset and tool length

CNC monitor shows number of the active tool data record and index of absolute zero point offset.

New system variables: Active tool data record, tool location number and index of absolute zero point offset can be read in the NC program.

ID#133367 : new function since V0.500

Unification of the trace record number calculation (ACP10 – ARNC0).

ID#145082 : Information valid since V0.500

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

1.3.3.3.332 NC Software – ARNC0 V0.491

ID#144955 : Information valid since V0.491

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#144940 : solved problem, solved since V0.491

CNC program in form of text file can lie in any directory

Till version V0.490 the text files had to lie in directory "C:\CNC_Prg". Now can the directory be chosen using the "CPU-properties-File Devices".

1.3.3.3.333 NC Software – ARNC0 V0.490

ID#144950 : Information valid since V0.490

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#144135 : solved problem, solved since V0.490

Start of CNC programs and subprograms from text files

CNC programs can be used in form of text files without the previous conversion. Parameter "move.ncprogram.start_mode" defines the start mode of a CNC program.

1.3.3.3.334 NC Software – ARNC0 V0.483

ID#144022 : solved problem, solved since V0.483

Automatic tangential axis: first and last synch. M-function can not be used as sync1_t or sync2_t

Use of the first or last synch. M-function for sync1_t or sync2_t, generates the error 8244 "G141 M-function sync1_t or sync2_t not in the admissible range".

ID#144017 : solved problem, solved since V0.483

Rotation angle of 90 degrees results in a half circle

If a circular arc is programmed via a rotation angle immediately after a circular arc, it can happen that a wrong arc is traversed or the error 8134: "Radius difference between start and end" occurs.

ID#143262 : solved problem, solved since V0.483

Reduction in path speed along short NC-blocks

An undesired reduction in path speed along short NC-blocks can occur with the parameter setting "cnc_obj->limit.blocktransition=ncAUTO".

ID#141325 : solved problem, known since V0.451, solved since V0.483

Unjustified error after ncaction(ncAUTOMAT, ncINIT)

When initializing the Cam Profile Automat with correct data, the error 5157: "Cam Profile Automat INIT – Invalid parameter in the basis state" occurs. This bug exists since version V0.430.

ID#138380 : solved problem, known since V0.426, solved since V0.483

"cnt_ncprog" remains "1" after stopping a movement

If immediately after starting an NC-program a "ncMOVE, ncHALT" followed by a "ncMOVE, ncSTOP" is given, the CNC-System blocks.

1.3.3.3.335 NC Software – ARNC0 V0.482

ID#142662 : Information valid since V0.482

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552
For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#142652 : solved problem, solved since V0.482

Incorrect display in the CNC monitor.

Incorrect positions could be displayed in the CNC monitor during standstill.

ID#142647 : solved problem, solved since V0.482

Page Fault at ncaction (nc_object, ncZEROPMON, ncSWITCH_ON/ncSWITCH_ON)

A Page Fault could occur if one of the two actions were called before an NC program was started.

1.3.3.3.336 NC Software – ARNC0 V0.481

ID#142297 : Information valid since V0.481

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#142507 : solved problem, solved since V0.481

Cutter diameter accounted for at G153.

The cutter diameter was taken into consideration at G153 (position entry in the machine coordinates) if cutter diameter compensation was active. The corresponding point on the equidistant segments was moved to instead of the programmed point.

ID#141601 : solved problem, known since V0.460, solved since V0.481

NC program aborted when selecting an automatic tangential axis.

The NC program was aborted with error 8244 if one of the two parameters "limit.s_sync1_t" or "limit.s_sync2_t" was set to the value ncOFF when selecting the automatic tangential axis (G141).

An M-function for lifting the tool is not output if "limit.s_sync1_t" has the value ncOFF. An M-function is also not output for lowering the tool if "limit.s_sync2_t" = ncOFF. In both cases, a warning is generated when activating the tangential axis.

ID#141555 : solved problem, solved since V0.481

Page Fault when restarting an NC program (since ARNC0 V0.400).

A Page Fault could occur when restarting an NC program.

1.3.3.3.337 NC Software – ARNC0 V0.480

ID#141995 : new function since V0.480

Saved trace file includes informations about the traced values.

Saved trace file format has been changed from MathCad to MathLab, which includes also the header with the information about the traced data points. Header carries an information if the traced data point is CNC or Axis (including its index)parameter, data point name, trace date and time, X and Y units.

ID#141987 : new function since V0.480

M-Functions are set after a restart

It is now possible to define groups of M-Functions. After a restart the last programmed M-Function of every group is set.

ID#141762 : new function since V0.480

New ARNC0 behavior after a block with a tool data number.

After a block with a tool data number, the tool length and the tool offset are only traversed with absolute programming (G90) and with programmed axes. The compensation movements are not executed with relative programming (G91) or non-programmed axes (see ARNC0 documentation).

Monitor display: The setting "monitor.status.nullpver = ncON" causes the position of the tool bit in the programmed coordinate system to be displayed in the CNC monitor. The position of the new tool bit is displayed immediately after a block with a new tool data number.
The setting "monitor.status.nullpver = ncOFF" causes the position (tool clamping point) in the machine coordinate system to be displayed.

ID#141772 : Information valid since V0.480

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#141835 : solved problem, solved since V0.480

Pagefault after Calling naction(ncCOMP, ncSTART)

Pagefault was caused by calling naction(ncCOMP, ncSTART) with the parameter"move.compensation.parameter.mode = ncOFF".

ID#141767 : solved problem, solved since V0.480

Incorrect tangential axis position in the first movement block after multiple rotations of the coordinate system.

The position of the tangential axis in the first movement block could be incorrect if the coordinate system is rotated several times consecutively without moving an axis in the meantime.

ID#137597 : solved problem, solved since V0.480

Position error on the tangential axis after rotating the coordinate system.

The tangential axis is aligned to the wrong angle in the transition block if a subprogram is called before G92 or G192 with a rotation of the coordinate system .

1.3.3.3.338 NC Software – ARNC0 V0.471

ID#141862 : Information valid since V0.471

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#141230 : solved problem, known since V0.451, solved since V0.471

Pagefault after Calling a Global Subprogram

Pagefault was caused by calling a global subprogram (presented as a BR-module on PLC) from a main program started from file.

1.3.3.3.339 NC Software – ARNC0 V0.470

ID#139932 : new function since V0.470

Override for G0 (R_override)

For G0 function new "rapid" override "move.R_override" is used instead of the "move.F_override". The allowed value range spans 0 to 10000 (0.00 – 100.00% of the axes limits). If greater value would be inserted by the user, value will be limited to 10000 by ARNC0.

ID#141382 : Information valid since V0.470

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#141375 : solved problem, solved since V0.470

Inverse feed rate (G93) by circular interpolation (G2/G3).

Inverse Feed Rate (G93) by circular interpolation (G2/G3) functioned correctly only if the rotation angle was defined.

ID#141372 : solved problem, solved since V0.470

NC-program blocks upon CDC activation with G137

Upon CDC activation with G137 in the range of 180 to 360 degrees, the NC-program sometimes blocks.

ID#141367 : solved problem, solved since V0.470

CDC: incorrect arc transition after circles programmed with a rotation angle

If the CDC inserts an arc transition after a circle programmed with a rotation angle, then the arc transition has the same rotation angle as the programmed circle. This error exists since version V0.428.

ID#141362 : solved problem, solved since V0.470

CDC: Full circle instead of arc transition.

If the CDC inserts an arc transition ≤ 90 degrees after a programmed full circle, then instead of the arc transition a full circle is traversed.

ID#140870 : solved problem, solved since V0.470

Full circle is traversed two times

With active CDC it can happen, that a full circle is traversed two times. This error can occur since Version V0.428

ID#139937 : solved problem, solved since V0.470

Restart: the values of the S and T parameters are incorrect after a restart.

ID#139927 : solved problem, solved since V0.470

Feed override was valid also for G0

Parameter "move.F_override" was incorrectly taken into consideration also by G0.

1.3.3.3.340 NC Software – ARNC0 V0.461

ID#140560 : new function since V0.461

Inverse Feed Rate, Functions G93, G94.

Function G93 switches the inverse feed rate on. Parameter F defines the inverse of the time (in minutes) needed to complete the NC-block. Function G94 switches the inverse feed rate off.

ID#134500 : new function since V0.461

New Speed Profile for a Circular Interpolation.

A dynamics on an arc/circle/helix has been changed. A movement with G02/G03 can be faster in general. All axes limits, as well as CNC limits are respected.

ID#139992 : Information valid since V0.461

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#140377 : solved problem, solved since V0.461

Incorrect behavior when disabling CDC with G39

If a cutter diameter that is too large was detected right before deactivating CDC with active G39, then a point located far from the contour was traversed to while deactivating CDC.

ID#140187 : solved problem, known since V0.400, solved since V0.461

Polar coordinate motor not possible.

In case of polar coordinate motor the decoder initialization have been cancelled with the error 10103 ("PKM – No compensationparameters for Cartesian axis").

1.3.3.3.341 NC Software – ARNC0 V0.460

ID#139817 : new function since V0.460

Maximum number of tool data blocks and tool placement numbers has been raised to 500.

ID#139812 : new function since V0.460

G171 – immediate processing of NC blocks.

G171 forces immediate processing of the blocks which previously were buffered.

ID#139512 : new function since V0.460

G153 – Specifying the positions as absolute coordinates in the machine coordinate system

In rapid feed blocks and interpolation blocks, all coordinate specifications are interpreted as absolute coordinates in the machine coordinate system independent of any transformations or compensation (G54 – G59, G92, G159, G192, tool offset and tool length).

ID#139702 : Information valid since V0.460

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#139737 : solved problem, solved since V0.460

Incorrect conversion of ACOPOS parameters from input texts.

In ACOPOS parameter tables and with the "service.data_text" component, values for ACOPOS parameters can be defined in hexadecimal as input text. For ACOPOS parameters of data type "DINT", input texts in the range "0x80000000" to "0xFFFFFFFF" were previously converted to the value "0x7FFFFFFF" by mistake.

1.3.3.3.342 NC Software – ARNC0 V0.453

ID#139602 : new function since V0.453

Additional module format for ARNC0 error text modules

Until now, ARNC0 error text modules were managed as standard data modules. Starting now, an additional module format, that enables management of error texts according to version in AutomationStudio, will be supported for error text modules. See also A&P#138900.

ID#139597 : new function since V0.453

Standard priority for background tasks too low

Until now, the standard priority of ARNC0 background tasks was set quite low. This sometimes caused the processing of CNC programs to be interrupted, particularly on target platforms with low processing power or high load. From now on, the standard priority of the background tasks will be increased so that the CNC background tasks have a higher priority than the tasks for online communication and visualization. The previous state (low priority of the background tasks) can be restored by setting the attribute 'ARNC0SystemConfig="1,10,1"' for an NC object with the type 'ncMANAGER' in an NC deployment table.

ID#139592 : Information valid since V0.453

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

1.3.3.3.343 NC Software – ARNC0 V0.452

ID#138907 : Information valid since V0.452

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#139407 : solved problem, known since 0.451, solved since V0.452

Transition angle of very short path section defined as non-tangential.

The transition angle of very short path sections was defined as non-tangential ($\alpha > s_jump_t$) if $v_path_mode == 1$.

1.3.3.3.344 NC Software – ARNC0 V0.451

ID#138902 : Information valid since V0.451

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.196

ID#139137 : solved problem, solved since V0.451

G113 syntax error

In G113, the unit factor k must be absolute in the NC program instead of being specified as a percentage (since ARNC0 V0.440).

ID#138970 : solved problem, solved since V0.451

Tangential transitions on linear axes

New mode of CNC axis ($cnc_obj.axis[i].type == 17$) has been introduced. If there is a transition between NC-blocks, realized exclusively by axes of such type, then this transition should be considered as tangential.

ID#138860 : solved problem, solved since V0.451

New mode of feed rate calculation

With the parameter $cnc_obj.decoder.parameter.v_path_mode == 1$ all axes types (except ncTANGENT) are taken into consideration by the feed rate calculation.

ID#137130 : solved problem, solved since V0.451

In DPR-Trace was the ARNC0 Sampling Time 0 Microseconds

In DPR-Trace was the ARNC0 Sampling Time 0 Microseconds and wrong values by ARNC0MAN-ID and ARNC0SSY-ID.

1.3.3.3.345 NC Software – ARNC0 V0.450

ID#138552 : Information valid since V0.450

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.194

ID#138577 : solved problem, solved since V0.450

CDC deactivation with G137 caused erroneous axes movements normal to the main plane

The programmed Z–movement was already done in the transition block instead of in the programmed

NC–block after G40. (in ARNC0 V0.441 only)

ID#138565 : solved problem, solved since V0.450

Incorrect values of remaining distance for linear axes.

In CNC system with only linear axes the monitor of remaining distance (monitor.s_ncsatz and monitor.s_ncblock) were not valid.

ID#136072 : solved problem, solved since V0.450

Exit movement of CDC deactivation immediately after G40

In combination with the new mode and G137, the deactivation movement is executed immediately after G40.

Activate this behavior by making the following entry in the data structure:

German: "cnc_object.decoder.parameter.wrk.abwahl" = ncAUTO

English: "cnc_object.decoder.parameter.cdc.exit" = ncAUTO

This makes it possible to deactivate CDC immediately before the program is ended.

1.3.3.3.346 NC Software – ARNC0 V0.441

ID#134987 : Information valid since V0.441

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.194

ID#138072 : solved problem, solved since V0.441

With activated CDC the z–axis and the slave axes do not move.

The CDC is active and only the z–axis is programmed in an NC–block. When the z–axis is programmed again in the next NC–block as part of a move in the main plane then it does not move. This error also affects both the linear and tangential slave axes.

ID#136292 : solved problem, solved since V0.441

CDC activation with G137 causes erroneous axes movements normal to the main plane

The programmed Z-movement is already done in the transition block instead of in the programmed NC-block. This error affects both the linear and tangential slave axes too.

1.3.3.3.347 NC Software – ARNC0 V0.440

ID#137497 : new function since V0.440

Reduction of path speed at tangential path section transitions depending on the transition angle.

G113 makes it possible to reduce the path speed at tangential path section transitions depending on the transition angle.

ID#137492 : new function since V0.440

G108/G109/G110 Set Path Acceleration/Path Deceleration

With the command G108, G109 and G110 the acceleration or deceleration can be programmed as absolute or relative value.

ID#137487 : new function since V0.440

G103/G104 (Radius Dependent Feed Adjustment)

Radius dependent feed adjustment can be programmed proportional to the radius or reciprocal proportional to the radius of the path section.

ID#137502 : Information valid since V0.440

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.194

1.3.3.3.348 NC Software – ARNC0 V0.430

ID#136155 : new function since V0.430

Compensation of the mechanical impreciseness of an axis

Compensation of the mechanical impreciseness of the axis (backlash, spindle slope and combination) has been added. Call from an application:
ncaction(nc_obj,ncCOMP,ncSTART), ncaction(nc_obj,ncCOMP,ncSTOP).

ID#135360 : Information valid since V0.430

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.193

1.3.3.3.349 NC Software – ARNC0 V0.428

ID#136107 : solved problem, known since V0.426, solved since V0.428

Wrong contour results from G180=0 with active mirroring

Only the rotational direction of the circle is reflected, but not the centerpoint coordinates.

ID#136117 : new function since V0.428

Warning 10459 when activating CDC

The warning 10459 is output if the first movement block after CDC activation does not contain a movement in the active plane.

ID#135667 : new function since V0.428

Circle programming with an angle.

The angle of the circle is specified with H. It is possible to program full circles and circles with more than one full revolution.

ID#136112 : solved problem, solved since V0.428

Error deactivating CDC with G137

If the movement block does not contain a path in the active plane immediately before or after CDC deactivation (G40), then an additional movement normal to the active plane is executed in the inserted exit block (G137).

ID#135972 : solved problem, solved since V0.428

Violation of the Software Ends

Starting with version V0.400 the errors 8141 "Position on the Circle > positive SW End" and 8142 "Position on the Circle < negative SW End" could be erroneously reported.

1.3.3.3.350 NC Software – ARNC0 V0.427

ID#136282 : Information valid since V0.427

Only for internal tests

ID#135977 : Information valid since V0.427

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.193

1.3.3.3.351 NC Software – ARNC0 V0.426

ID#135647 : Information valid since V0.426

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.193

1.3.3.3.352 NC Software – ARNC0 V0.425

ID#135257 : Information valid since V0.425

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.552
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.192

ID#135247 : solved problem, solved since V0.425

Access to NC data modules did not function with certain AR versions

Management for BR modules has been changed in the following AR versions:

- AR for SG4 E2.73 – V2.79
- AR for SG4 starting with F2.85

For this reason, access to the following NC data modules did not function with the AR versions listed above:

- NC Deployment tables
- NC INIT Parameter modules

1.3.3.3.353 NC Software – ARNC0 V0.424

ID#135122 : solved problem, solved since V0.424

Position jump during reverse movement of an NC program

During reverse movement of an NC program, a position jump occurred on all axes when entering a path section.

ID#135252 : Information valid since V0.424

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.550
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.190

1.3.3.3.354 NC Software – ARNC0 V0.423

ID#134882 : solved problem, solved since V0.423

Standstill after a path section following G60, synchronous M–function or G04

Movement was always stopped at the end of a path section after an accuracy hold G60, after a synchronous M–function or after a dwell time G04 (since ARNC0 V0.421).

ID#135355 : Information valid since V0.423

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.550
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.190

1.3.3.3.355 NC Software – ARNC0 V0.422

ID#134402 : solved problem, solved since V0.422

Division by zero at G103/G104.

A division by zero is performed if the center point is not completely specified using center point programming for blocks with G103/G104.

ID#134527 : new function since V0.422

Switching from inches to mm.

G70/G71 can be used to select the unit for the NC program (inch or mm).

ID#134647 : Information valid since V0.422

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.550

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.190

1.3.3.3.356 NC Software – ARNC0 V0.421

ID#134652 : Information valid since V0.421

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.550

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.190

ID#134432 : solved problem, known since ARNC0 V0.402 bis V0.420, solved since V0.421

Violation of axis acceleration and axis speed limits at circular blocks

At circular blocks the limits of axis acceleration and axis speed limits can be exceeded. The limits of path speed and path acceleration are taken in consideration in a correct way. (ARNC0 V0.402 – V0.420)

1.3.3.3.357 NC Software – ARNC0 V0.420

ID#134232 : solved problem, solved since V0.420

NC program is not terminated.

In some cases, the path speed on very short path sections is reduced to the value 0 and the program stops being processed. The NC program remains active, but can be cancelled.

ID#134657 : Information valid since V0.420

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.550

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.190

ID#134262 : solved problem, solved since V0.420

Contour error with a combination of G40 and G141.

Arcs are replaced by straight sections if G40 and G141 follow each other one right after another.

ID#134257 : solved problem, solved since V0.420

NC program blocked with a combination of G170 and G141.

In some cases, the NC program might stop being processed if G170 and G141 follow each other one right after another.

ID#134172 : solved problem, solved since V0.420

Limit value violation (axis acceleration) at the path section transition.

The axis acceleration on very short path sections could exceed the defined limit values at the path section transition (path section runtime shorter than the axis jolt filter time).

On very short path sections where the programmed offset is not reached, the maximum path speed is now reduced to the entrance speed in the next path section. This prevents accelerating and braking on the path.

If the path section runtime is shorter than the axis jolt filter time, then multiple path section transitions might be present in the filter, which can cause the axis limit values (acceleration) to be exceeded at the path section transition. The permissible speed jump on the axes is now reduced at these path section transitions.

Activating can be done by setting the variable as it's written bellow:

German: "cnc_object.grenzwert.satzuebergang" = 1

Englisch: "cnc_object.limit.blocktransition" = 1

ID#120492 : solved problem, solved since V0.420

ARNC0 trace buffer size is configurable

The trace size can be changed in the NC configuration "Size of data buffer for cyclic ARNC0 trace" for ARNC0. For the trace data uploading of the different size than the default value of 20kB (0x5000), version 2.5.2.0004 of Automation Studio is required. When the trace data size is changed and Automation Studio is not capable to upload the data, a warning is output to the logbook.

1.3.3.3.358 NC Software – ARNC0 V0.410

ID#134682 : Information valid since V0.410

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.550

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.190

ID#133207 : solved problem, solved since V0.410

ACOPOS parameter tables, handling the "VersionFrom" attribute

Some ACOPOS parameters can only be used starting with a specific version of the ACOPOS operating system. For such parameters, this minimum version is entered in the module created from an ACOPOS parameter table with the attribute "VersionFrom" when using AS versions V2.5.2.0002 and higher during the Build procedure.

The "VersionFrom" attribute is now evaluated by the ARNC0 software on the PLC when

processing ACOPOS parameter tables. The parameter is not transferred to the ACOPOS if the ACOPOS operating system version there is older than the minimum version defined with "VersionFrom".

Transferring such a parameter (e.g. 849 "MOTOR_TAU_THERM") with older versions of the ARNC0 software will cause the response error "1: Invalid parameter ID" and transfer of the ACOPOS parameter table is aborted. This problem can be avoided by disabling this parameter in the ACOPOS parameter table.

ID#126657 : solved problem, solved since V0.410

ACOPOS Parameter table: Parameters with more than 6 bytes data are now transferred

Up to now, if Parameters with data length greater than 6 bytes were contained in an ACOPOS Parameter table (e.g. the parameter MOTOR_ORDER_TEXT), then the transfer of this table was aborted with following error:

- 14180: "Error transferring ACOPOS-Parameter "
- Info: "Length of parameter data too large for ACOPOS parameter in XML data"

1.3.3.3.359 NC Software – ARNC0 V0.403

ID#134677 : Information valid since V0.403

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.180

1.3.3.3.360 NC Software – ARNC0 V0.402

ID#133377 : new function since V0.402

Automatic tangential axis at straight line path section transition.

With the new constant ncS_SPR_T the behaviour at straight line path section transitions (alpha equal or less than s_sprung_t) can be influenced.

ID#134672 : Information valid since V0.402

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.180

ID#132107 : solved problem, solved since V0.402

Position jump of tangential axis at G126 + G60

If G60 was used in combination with G126 the tangential axis jumped to a wrong position and back again to the correct one at the path section

1.3.3.3.361 NC Software – ARNC0 V0.401

ID#134667 : Information valid since V0.401

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.180

ID#132102 : solved problem, solved since V0.401

Tangential axis orients itself on a path section.

If the angle difference at a non-tangential path section transition is less than the parameter `s_jump_t` and the actual speed jump of the tangential axis is less than the parameter `v_jump_t`, then the tangential axis now jumps to its new orientation at the start of the path section.

1.3.3.3.362 NC Software – ARNC0 V0.400

ID#129727 : solved problem, solved since V0.400

Position jump at a full circle after a block with G92.

A position jump occurs if a full circle without coordinate specification is programmed after a block with G92.

ID#130892 : new function since V0.400

Rotating the coordinate system freely in space.

Programmed zero point offset G92: The coordinate system can be shifted and rotated in space as needed.

Span correction: The coordinate system can be shifted and rotated again in addition to G92.

Correction to the Cartesian coordinate system: A matrix can be defined for correcting any angles that are not exactly 90° in the machine coordinate system.

ID#134662 : Information valid since V0.400

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.180

ID#130867 : solved problem, solved since V0.400

Incorrect tangential axis position at G92 transition blocks.

If the coordinate system is rotated and shifted when a tangential axis is switched on and if blocks without a traverse path (e.g.: M-Functions) follow immediately after the shift, then the tangential axis could be set to an incorrect angle in the transition block.

1.3.3.3.363 NC Software – ARNC0 V0.393

ID#135547 : Information valid since V0.393

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548
 For ACOPOS 8V1xxx.00–2: ACP10SYS V1.180

ID#130317 : solved problem, solved since V0.393

Error 9263: "Angle calculation impossible, vector length is 0"

When an NC-program contained very short path sections (e.g. 0.0001 CNC-units), then with activated CDC the error 9263: "Angle calculation impossible, vector length is 0" was reported.

ID#130247 : solved problem, solved since V0.393

path speed is too high for the tangential axis.

At tangential path section transitions the path speed was too high for the tangential axis, if the limit speed of the second path section was higher than the limit speed of the first path section.

ID#130065 : solved problem, solved since V0.393

Error when using eight and more ACOPOS on ETHERNET Powerlink

When using eight and more ACOPOS on an ETHERNET Powerlink line, error 14126: "No cyclic positions from drive" was output accidentally.

ID#128132 : solved problem, solved since V0.393

Error while determining the RESTART-INFO.

Determining the RESTART-INFO delivers a wrong name of the NC init program (from ARNC0 V0.380).

ID#124975 : solved problem, solved since V0.393

CNC parameter "halt=ncV_JUMP" does not work properly.

When the CNC parameter "cnc_obj->limit.halt" was set to "ncV_JUMP", than the axes stopped at every non-tangential path section transition.

1.3.3.3.364 NC Software – ARNC0 V0.392

ID#126357 : Information valid since V0.392

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.180

ID#126137 : solved problem, solved since V0.392

ARNC0 V0.390 with ACOPOS 8V1xxx.xx-1: Response errors for FFCTRL parameters

With ARNC0 software V0.390 after calling the NC actions "ncGLOBAL,ncINIT" or "ncCONTROLLER,ncINIT" all FFCTRL parameters are always transferred to the ACOPOS. For ACOPOS 8V1xxx.xx-1 this causes the following response error for each FFCTRL parameter:

– 1: Invalid parameter ID

Apart from these response errors has this no further effects.

1.3.3.3.365 NC Software – ARNC0 V0.391

ID#126347 : Information valid since V0.391

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.180

ID#125760 : solved problem, solved since V0.391

NC–block–number was not set by SW limit error.

The errors 8137/8138 were set instead of errors 8258/8259.

ID#125570 : solved problem, solved since V0.391

CNC program was stopped after G126 with \$LIN.

A CNC program was interrupted at the end of a path section after a linearized rounding edges function (G126 + \$LIN), depending on the set movement parameters.

1.3.3.3.366 NC Software – ARNC0 V0.390

ID#124460 : solved problem, solved since V0.390

Wrong axis positions in the CNC monitor.

When an NC–program was started after homing, the last CNC positions were displayed for one ARNC0–cycle, instead of the current axes positions.

ID#124377 : new function since V0.390

New parameter 'mode' for Cam Profiles

mode == ncSTANDARD: default. The slave axis behaves in the usual manner. I.e. it follows the master axis as closely as the slave's software end values and acceleration and speed limit values permit it to do.

mode == ncGANTRY: the slave axis follows the master axis without regard to its own software end values and acceleration and speed limit values.

ID#115792 : new function since V0.390

Maximum length for the names of data modules extended to 12 bytes

The maximum length of the data module names is now 12 bytes (was 10).

ID#125572 : Information valid since V0.390

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.180

ID#124682 : solved problem, solved since V0.390

Full circle together with G180.

If a full circle was programmed together with G180, the full circle was not traversed. The NC

program was interrupted and could not be continued at this point.

ID#124635 : solved problem, solved since V0.390

Problem during the restart of a NC program

The CNC program cannot be continued at the restart point (since ARNC0 V0.370).

ID#123950 : solved problem, solved since V0.390

Position jumps when using G25 or G180 together with G92.

Position jumps occurred on the CNC axes if G25 (tangential arc transitions) or G180 (tangential line-circle programming) was used in a coordinate system rotated with G92.

1.3.3.3.367 NC Software – ARNC0 V0.380

ID#124372 : Information valid since V0.380

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.180

1.3.3.3.368 NC Software – ARNC0 V0.372

ID#124630 : solved problem, solved since V0.372

Refresh of monitor for ncAXIS and ncEXTENCOD

The monitor structure nc_obj->monitor of the NC objects ncAXIS and ncEXTENCOD is refreshed in every cycle of the ARNC0 Manager. Until now, the data was refreshed in every second cycle.

ID#125567 : Information valid since V0.372

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.170

1.3.3.3.369 NC Software – ARNC0 V0.371

ID#123727 : new function since V0.371

NC object name in NC object information.

The NC Object Name from a deployment table is copied to the NC Object Information structure: nc_obj->nc_obj_inf.nc_obj_name

ID#123732 : Information valid since V0.371

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.170

ID#119675 : solved problem, solved since V0.371

Status of ncaccess() wrong

If an NC INIT parameter module was defined in a NC mapping table which was not present on the target, function ncaccess() output ncOK, which was wrong.

1.3.3.3.370 NC Software – ARNC0 V0.370

ID#122427 : Information valid since V0.370

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.164

ID#122257 : solved problem, solved since V0.370

Stop after a trigger path section (G201).

No other NC programs can be started if a stop is executed immediately after a trigger path section (G201).

ID#121532 : solved problem, solved since V0.370

Position jumps when using multiple interfaces simultaneously in one CNC system.

Position jumps could occur on the Cartesian axes when a stop or accuracy hold is executed if the axes in a CNC system are distributed on multiple interfaces (e.g. Powerlink IF and virtual IF) (since ARNC0 V0.130).

1.3.3.3.371 NC Software – ARNC0 V0.368

ID#120907 : solved problem, solved since V0.368

Error at expanded zero–point offset (G159).

In blocks with G159 (zero–point offset), incorrect values are sometimes used for the zero–point offset due to an error during the index calculation (since ARNC0 V0.260).

ID#120720 : solved problem, solved since V0.368

NC Programm will not be terminated.

In NC programs with very large values for the programmed coordinates, the ends of path sections may sometimes not be detected and therefore the NC program will not be terminated.

ID#120072 : solved problem, solved since V0.368

NC program is terminated at the first block with a zero–point offset (G53 – G59, G159).

Occasionally, blocks may no longer be processed after a block with a zero–point offset (G53 – G59, G159). The program is terminated at this block.

ID#119265 : solved problem, solved since V0.368

The start of an NC block caused the simulation mode "ncCNCSYS" to be switched off.

ID#121767 : Information valid since V0.368

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.164

1.3.3.3.372 NC Software – ARNC0 V0.367

ID#120067 : solved problem, solved since V0.367

Axis limit exceeded during circular movement.

The acceleration limits for the circle axes were sometimes exceeded in circular blocks.

ID#119842 : new function since V0.367

Compensation movement when changing the tool length and axis offset.

The entire compensation movement is processed at once if multiple NC blocks occur consecutively, causing a change in the tool length or axis offset (G16, G17, G18, G19, G53 to G59, G158 or tool data number).

This occurs either in the subsequent movement block (if linear block) or immediately before the next movement block (if circular block).

ID#121557 : Information valid since V0.367

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.164

1.3.3.3.373 NC Software – ARNC0 V0.366

ID#119267 : solved problem, solved since V0.366

Changing the direction of the tool length compensation while changing the main level.

The direction of the tool length compensation is automatically changed to the new main level when the main level is changed with G17/G18/G19. Note: The level switching does not affect the direction of the tool length compensation if G16 was used to define the direction of the tool length compensation in the direction of an axis (e.g. G16 Q+).

ID#120917 : Information valid since V0.366

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.164

1.3.3.3.374 NC Software – ARNC0 V0.365

ID#117812 : solved problem, solved since V0.365

The automatic tangential axis may not reach the target position on the shortest distance.

In NC blocks with G00 it can happen, that the automatic tangential axis may not reach the target position on the shortest distance.

ID#118227 : Information valid since V0.365

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.163

1.3.3.3.375 NC Software – ARNC0 V0.364

ID#116912 : solved problem, solved since V0.364

The program is not aborted when a positioning movement is held up at M0/M1.

A positioning movement held up at M0/M1 in the NC program can now be aborted using the NC action "ncMOVE, ncHALT".

ID#116907 : solved problem, solved since V0.364

NC action "ncMOVE, ncHALT" not allowed while in the "ncHALT_SST" state.

It is now also possible to apply the NC action "ncMOVE, ncHALT" while in the "ncHALT_SST" state (halt via single step operating mode).

ID#116902 : solved problem, solved since V0.364

Positioning not allowed in the NC program while in the "ncHALT_PRG" state.

It is now also possible to start a positioning movement in the NC program while in the "ncHALT_PRG" state (halt via M0/M1).

ID#116917 : new function since V0.364

Addition to the time signal function

The override to be used for calculating the runtime can be specified using an optional parameter for the G function G221.

ID#118222 : Information valid since V0.364

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.163

1.3.3.3.376 NC Software – ARNC0 V0.363

ID#116607 : Information valid since V0.363

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.163

1.3.3.3.377 NC Software – ARNC0 V0.362

ID#115712 : Information valid since V0.362

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.162

1.3.3.3.378 NC Software – ARNC0 V0.361

ID#114447 : solved problem, solved since V0.361

Error message in response to correct time signal output

When the path section was programmed with the signal function G220 immediately after a G221, the error 7178:"Signal time longer than path section runtime", occurred even though the time signal was output correctly.

ID#114407 : solved problem, solved since V0.361

Error in edge detection for trigger2 by using the force function.

When forcing Trigger2, positive edges were detected as negative edges.

ID#114012 : solved problem, solved since V0.361

Incorrect shift of coordinate system with G92 for linear axes

The calculation for shifting the coordinate system with G92 was made incorrectly for linear axes (ARNC0 versions 0.345 to 0.360).

ID#114402 : new function since V0.361

New G function: G12

G12 makes it possible to influence the override on the transition arc inserted by the CDC.

ID#115087 : Information valid since V0.361

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.157

1.3.3.379 NC Software – ARNC0 V0.360

ID#113837 : new function since V0.360

ARNC0 sampling time not dependent on TC1

Starting with AutomationRuntime V2.80, it is possible to set the ARNC0 sampling time independently from the cycle time of TC 1 when using ETHERNET Powerlink. However, the ARNC0 sampling time must still be a multiple of the ETHERNET Powerlink cycle time and the ACOPOS position controller cycle (400µs).

ID#114757 : Information valid since V0.360

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.157

1.3.3.380 NC Software – ARNC0 V0.350

ID#112712 : solved problem, solved since V0.350

No reverse movement at G170 or trigger event delay.

If a G170 or a trigger event delay (\$IF <axis><edge>.EV) was moved in the reverse direction, the CNC system could come to a halt, depending on the course of the contour. This error was present starting with version V0.320.

ID#112707 : solved problem, solved since V0.350

Reverse movement not possible on path sections with G201.

The CNC system came to a halt if reverse movement was made on a path section with G201.

ID#112702 : solved problem, solved since V0.350

CNC monitor not initialized.

The previous values were still displayed in the CNC monitor after starting an NC program. This caused problems if a program halt already occurred at the beginning of an NC program (e.g. M0/M1, G170 or override at zero). The fields are initialized as follows:

NC block monitor: The s_ncblock field is zero.

CNC monitor: The fields s_ncblock[], v_path, pos_ncprog, block_ncprog, t_ncprog, s_ncprog and v_ncprog all contain zero. The fields name_ncprog and nr_ncprog contain the name and program number of the current NC program.

ID#112697 : solved problem, solved since V0.350

CAN synchronization PP2xx

On PP2xx, large jitter in the system timing could cause generated set positions to be transferred to the ACOPOS at the wrong time (too early). The error 104007:"Lag error stop limit exceeded" or 105024:"Cyclic set value mode aborted: Set positions missing" could be triggered if large interruptions occur.

ID#110785 : solved problem, solved since V0.350

CNC halt after program was aborted.

The CNC system came to a halt if an NC program was aborted in the next PLC cycle after startup. "move.status.cnt_ncprog" remained at 1. The error state could only be exited by resetting the controller.

ID#113832 : Information valid since V0.350

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.157

1.3.3.3.381 NC Software – ARNC0 V0.345

ID#110847 : solved problem, solved since V0.345

Position error after G92 and active tool compensation (tool offset or tool length compensation)

Starting with ARNC0 0.260: The target position was not calculated correctly in the automatically created transition block after G92 and during active tool offset or tool length compensation.

Up to ARNC0 0.250: The target position was not calculated correctly in the relatively programmed transition blocks after G92 and during active tool offset or tool length compensation.

ID#113827 : Information valid since V0.345

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.157

1.3.3.3.382 NC Software – ARNC0 V0.344

ID#110677 : solved problem, solved since V0.344

After some restart errors, cnt_ncprog remains at 1.

During restart, if the NC program does not match the saved restart information, an appropriate error message appeared, but the system was not restarted, and the restart was not aborted.

ID#110672 : solved problem, solved since V0.344

Not an error message if multiple signals of the same type are contained in the same path section.

In certain situations, time or path entries require multiple G220 or G222 signals to be output in a single path section. However, since only one signal of each type can be output at a time, an error message appears. The previously entered signal is retained.

ID#110667 : solved problem, solved since V0.344

G222 signal is ignored during restart.

Reset occurred in a path section with G222, but the G222 signal was not output.

ID#110662 : solved problem, solved since V0.344

Incorrect G222 signal output during path positioning.

The G222 signal was only output one time during positioning within the path section. When the path section was entered backwards, the G222 signal was immediately output forwards, and the change in direction occurred between the correct signal position and the end of the path section.

ID#110657 : solved problem, solved since V0.344

G222 signal output in the wrong position.

The length of a path section was not a whole number, and the G222 signal was output from the wrong position.

ID#110652 : solved problem, solved since V0.344

CNC system deadlock during G220 / G222.

Multiple path sections with G220 or G222 followed directly after one another and no G221 with synchronous M function was found, causing the CNC system to halt.

ID#110647 : solved problem, solved since V0.344

CNC system deadlock during G221.

A G221 with synchronous M function was run in an NC program, and the NC program finished before a path section was completed with G220 or G222, causing the CNC system to halt at G221.

ID#110642 : solved problem, solved since V0.344

Error message appears without cause for signal functions.

One of the following error messages appeared during the G220 and G222 signal functions, which overlap different path sections, although sufficient runtime and path distance were available: 7177: "Remaining path distance for signal is too long", 7178: "Signal time longer than path section runtime", or 8228: "Path command with undefined length or runtime."

ID#113822 : Information valid since V0.344

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.156

1.3.3.3.383 NC Software – ARNC0 V0.343

ID#106350 : solved problem, solved since V0.343

G126 with G141 together in an NC block

If G126 and G141 were together used, it could occur that the NC program did not terminate.

ID#109112 : Information valid since V0.343

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.154

1.3.3.3.384 NC Software – ARNC0 V0.342

ID#108477 : solved problem, solved since V0.342

Signal function G220 and path jolt time > 0.

The signal function G220, which overlaps different path sections, registers error 7163: "Time is longer than section run time " if a path jolt time was set > 0. This error mostly occurred in NC programs with short path sections.

ID#108472 : solved problem, solved since V0.342

Signal function G220 and override.

The override was not correctly calculated during the signal function G220, which overlaps different path sections.

ID#107017 : solved problem, solved since V0.342

Invalid Job-ID at ARNC0 response

It was possible that error 40137: "Internal Error – Invalid Job ID in ARNC0 response" occurred after the completion of a CNC program and after the controller of an axis used in the CNC channel was switched off.

ID#108467 : new function since V0.342

Dwell time 3 NC cycles too long.

The delay was 3 NC cycles longer than the programmed dwell time.

ID#108147 : Information valid since V0.342

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.152

1.3.3.3.385 NC Software – ARNC0 V0.341

ID#105257 : solved problem, solved since V0.341

Global NC subprograms are not terminated correctly

A global NC subprogram could not be correctly terminated if it was not completed with M02, M29 or M30 or if more than three axes were used. In this case, the CNC system would freeze.

ID#103052 : new function since V0.341

Init ACOPOS parameter tables

The transfer of parameters from an Init Acopos parameter table (from NC mapping table) to the drive is now also performed when parameters for this drive are present in the NC configuration.

ID#107492 : Information valid since V0.341

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.548

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.152

1.3.3.3.386 NC Software – ARNC0 V0.340

ID#105182 : solved problem, solved since V0.340

"Divide error" after \$TIME or G04

If a dwell time (\$TIME bzw. G04) was used in a NC programm when the CNC cycle time was < 1 ms, the system error 25300:"Divide error" (division by 0) occurred.

ID#105112 : solved problem, solved since V0.340

Position error after rotation of coordinate system without shift offset (G92)

If the first block of a NC programm contained G92 with rotation but without offset, an additional offset (depending on previous NC programs), was included to the coordinate system.

ID#104915 : solved problem, solved since V0.340

Incorrect rotation direction of the automatic tangential axis after G92

After a block with G92, the automatic tangential axis may not be aligned to the new position via the shortest distance.

ID#103900 : solved problem, solved since V0.340

NC program can get held up if the sign for the movement override is changed

An NC program could get held up if a positive movement override and than a negative movement override was set several times in the NC program.

ID#92615 : solved problem, solved since V0.340

CNC program cannot be aborted if the override is ≤ 0 when the program is started

If the override was negative or zero at the start of an NC program, then the NC program could no longer be aborted.

ID#106482 : new function since V0.340

Signal functions G221 and G222

The signal function G220, together with G221, outputs a signal to the PLC at a specific time before the target is reached. The signal function G222 outputs a signal to the PLC at a specific remaining path distance before the target is reached. Both signal functions overlap different path sections.

ID#106487 : Information valid since V0.340

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.547

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.151

1.3.3.3.387 NC Software – ARNC0 V0.330

ID#104207 : solved problem, solved since V0.330

Wrong INIT states after switching off the simulation mode "ncCNCSYS "

If one of the following NC actions

- ncCONTROLLER,ncINIT
- ncDIG_IN,ncINIT
- ncENCODER_IF,ncINIT
- ncLIMITS,ncINIT
- ncGLOBAL,ncINIT

was called in the simulation mode "ncCNCSYS" or "ncCNCSYS+ncDRIVE", the corresponding INIT states ("controller.init", "dig_in.init", "encoder_if.init", "limit.init" or "global.init") should be set to "ncFALSE" after switching off the simulation mode "ncCNCSYS ". Up to now the values of this INIT states could falsely remain on "ncTRUE".

ID#103877 : solved problem, solved since V0.330

Transfer errors during initialization of digital inputs blocked further commands

If an error occurs when transferring a parameter to the ACOPOS during initializing of digital inputs, error 14170:"Error initialize digital Inputs" was indicated.

Up to now, in this case the execution of nearly all further commands was blocked. This problem could be eliminated only with a restart of the PLC–CPU.

ID#104002 : new function since V0.330

New NC structure component "dig_in.force"

ID#103517 : new function since V0.330

Force function for digital Inputs

Digital inputs can now be set with an application using the NC action "ncDIG_IN,ncFORCE".

ID#104342 : Information valid since V0.330

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.547

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.151

1.3.3.3.388 NC Software – ARNC0 V0.324

ID#103692 : solved problem, solved since V0.324

Tool radius from the tool table sometimes was not used (only in V0.270 – 0.323)

If for a tool in the tool table a length or an offset not equal to zero were defined, then the tool radius defined in the tool table was not used.

ID#104337 : Information valid since V0.324

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.546

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.150

1.3.3.3.389 NC Software – ARNC0 V0.323

ID#102907 : new function since V0.323

Inconsistent referenced status

An inconsistency between the user status "move.homing.status.ok" and the corresponding status on the drive could occur after a change in the simulation mode (ncDRIVE) of an axis (ncSIMULATION, ncSWITCH_ON/ncSWITCH_OFF).

ID#103257 : Information valid since V0.323

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.546

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.150

1.3.3.3.390 NC Software – ARNC0 V0.322

ID#102552 : solved problem, solved since V0.322

Error processing structure blocks such as \$IF, etc.

If parts of structure blocks were skipped over (e.g. the section from \$ELSE to \$ENDIF), \$ functions contained in the structure block such as \$TIME, \$RAD etc. were evaluated instead of being ignored.

ID#102532 : solved problem, solved since V0.322

Cycle time violation TC1 during the initialization of a PV interface

A cycle time violation could occur in TC 1 during a PV interface initialization.

ID#101897 : solved problem, solved since V0.322

CNC standstill after consecutive NC blocks with M parameters.

Writing more than 10 NC blocks with M parameters immediately following each other causes a CNC standstill. This error also occurred if more than 10 NC blocks immediately followed each other, which just contained non-synchronous M functions, S or T functions.

ID#87847 : solved problem, solved since V0.322

Incorrect target position after backwards positioning before a G170.

An incorrect target position was calculated on the path during backwards positioning if a stop was executed after the last path section before a G170 using a halt command. Backwards positioning first started when the decoder was resumed using the SYNC command. After error correction, the positioning now starts immediately and reaches the correct target.

ID#102547 : new function since V0.322

EnDat parameters transferred to ACOPOS always work

From now on, parameters will be transferred from ARNC0 to the ACOPOS as soon as reading motor parameters from EnDat encoders has been completed.

Until now, a motor parameter could be already transferred the ACOPOS, before reading of the motor parameters of the corresponding EnDat encoder has been completed. In this case the value which was read from the encoder worked and not the value transferred from PLC to the ACOPOS.

From now on, always that value works, which is transferred from PLC to the ACOPOS.

ID#102047 : new function since V0.322

Change to the user status, "controller.ready"

The user status, "controller.ready" is always set to ncTRUE for drives in the simulation mode ncCNCSSYS or ncCNCSSYS+ncDRIVE as well as drives on a virtual interface.

ID#102542 : Information valid since V0.322

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.546

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.150

1.3.3.3.391 NC Software – ARNC0 V0.321

ID#100837 : solved problem, solved since V0.321

Command Acceptance (only in Version 0.320)

If a drive that has been successfully initialized ("network.init==ncTRUE"), it is possible that service commands (ncSERVICE,ncSET/ncREAD) are not accepted and error 1220 "Command not accepted network not ready" is given. The same could also occur when downloading ACOPOS parameter table (via service interface) (ncACP_PAR+ncSERVICE, ncDOWNLOAD).

ID#100857 : Information valid since V0.321

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.546

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.144

1.3.3.3.392 NC Software – ARNC0 V0.320

ID#100677 : solved problem, solved since V0.320

After stopping an NC program, the CNC system sometimes gets stuck.

If an NC program is stopped shortly before a G170, it is possible that the axes stopped but the number of active NC programs gets stuck at 1. Then no other NC programs can be started.

ID#100672 : solved problem, solved since V0.320

Path speed too high, if a G170 is moved over in the backwards direction.

If $v_{\text{jump}} > 0$ was configured and a short path section and a G170 follow after a contour corner, then braking does not occur before this contour corner when moving backwards.

ID#100627 : solved problem, solved since V0.320

Error when initializing the external encoder

When initializing an external encoder with the NC action "ncENCODER_IF, ncINIT", the count direction was not transferred to the drive correctly. The count direction of the motor encoder was transferred, which is incorrect.

ID#100557 : solved problem, solved since V0.320

Error when transferring parameters for controller initialization

During controller initialization (ncCONTROLLER,ncINIT or ncGLOBAL,ncINIT), the parameters PARID_SCTRL_TI_FIL (#283 – Speed Filter) and PARID_CONTROLLER_MODE (#328 – Controller Mode) were not transferred under the following circumstances:

1. ncSIMULATION,ncON (ncCNCSYS mode)
2. ncGLOBAL,ncINIT => Parameters not transferred to drive (because of simulation mode "ncCNCSYS")
3. ncSIMULATION,ncOFF
4. ncGLOBAL,ncINIT => The two parameters are not transferred to the drive!

ID#100547 : solved problem, solved since V0.320

G92 + G170, Decoder stopped a movement block too early.

If a G170 block immediately followed G92 with a transition block without traverse path, then the decoder stopped a movement block too early. (Starting with ARNC0 0.310, transition blocks without traverse paths are automatically inserted after G92, G54–59 and G159.)

ID#100357 : solved problem, solved since V0.320

Position jump when network communication drops out

If communication dropped out during cam profile coupling on a slave axis, then a jump in speed could occur. In this case, the internal deceleration ramp uses the speed resulting from this jump, which is incorrect (the data is no longer transferred to the drive because of the communication failure).

ID#100217 : solved problem, solved since V0.320

Position latch function

A position latch function activated with the NC action "ncLATCH1(2), ncSW_ON" was not completely deactivated with the NC action "ncLATCH1(2), ncSW_OFF". Then it was not

possible to activate the other respective position latch function.

ID#100712 : new function since V0.320

New NC structure component "network.nc_sys_restart"

ID#100707 : Information valid since V0.320

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.546

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.140

1.3.3.3.393 NC Software – ARNC0 V0.312

ID#99422 : solved problem, solved since V0.312

ACOPOS CAN synchronization

If systematic deviations occurred between the system time and CAN time (different timers), ACOPOS sometimes reported the error 106002:"Sync Controller: Error tolerance of system time difference exceeded". Starting now, only the timer from the corresponding CAN interface is used for CAN synchronization.

ID#98927 : solved problem, solved since V0.312

Position error at the end of a program without first deactivating an automatic tangential axis:

If an NC program with active automatic tangential axis (G141) is ended without first deactivating the tangential axis (G140) and if the last NC block is a rapid feed block (G00), the tangential axis in this block will travel to the position it had before the activation (G141).

ID#98730 : solved problem, solved since V0.312

Automatic transfer of motor and encoder parameters during ACOPOS startup:

In the past, encoder parameters for ACOPOS (AC122, AC123) were not automatically transferred to the drive via ETHERNET Powerlink upon drive startup. This problem occurred for CAN starting in version V0.240.

ID#98657 : solved problem, solved since V0.312

No compensation movement at NC blocks with tool data number or tool orientation:

The tool compensation (tool offset or tool length) is not taken into consideration if a block without programmed traverse path (e.g.: only M-functions or only G91) immediately follows an NC block with a tool data number (Dxx) or G16. This error only occurs during relative programming.
(since V0.270)

ID#97352 : solved problem, solved since V0.312

Change of CAN response timeout

During the start up of an ACOPOS with AC140 the error 14112:"Timeout for parameter ID" could be output. The extended CAN response timeout only works in ARNC0 V0.292, but not in

V0.300 – V0.311.

ID#100702 : Information valid since V0.312

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.546

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.131

1.3.3.3.394 NC Software – ARNC0 V0.300

ID#97362 : new function since V0.300

ACOPOS Parameter Tables: Disabling parameter records

Parameter records in an ACOPOS parameter table can now be disabled using the XML data "Disabled='TRUE'".

In the editor for ACOPOS parameter tables disabling parameters is possible starting with V2.4.0.1106.

ID#97357 : new function since V0.300

NC Deployment Tables: Disabling NC object blocks

NC object blocks in a NC deployment table can now be disabled using the XML data "Disabled='TRUE'".

With Automation Studio V2.x this data can only be entered in the editor for NC deployment tables in the "Additional Data" column.

ID#95737 : new function since V0.300

NC Configuration for Virtual Interface

The data structure of the NC configuration for the virtual interface was extended with "pv_name".

ID#97582 : Information valid since V0.300

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.546

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.131

1.3.3.3.395 NC Software – ARNC0 V0.292

ID#97577 : Information valid since V0.292

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.130

1.3.3.3.396 NC Software – ARNC0 V0.291

ID#94157 : solved problem, solved since V0.291

CNC program aborted at circle–circle transitions if tool radius nearly equal to programmed radius

If the tool radius used was equal to the programmed radius of circle segments, the CNC program could have been aborted at circle–circle transitions with error 9221:"Excentric Circles".

ID#93927 : solved problem, solved since V0.291

NC program freezes. 'Illegal float value' is displayed in the CNC monitor as position, remaining distance and speed.

If circle programming in the NC program is inaccurate, NaN or –NaN could occur as result of an internal angle calculation. This would then also cause the target position of the NC block to be NaN or –NaN.

ID#93902 : new function since V0.291

G90/G91 with G16, G53 up to G59, G92, G159 and Dxx allowed in an NC block.

ID#94162 : Information valid since V0.291

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.130

1.3.3.3.397 NC Software – ARNC0 V0.290

ID#93692 : new function since V0.290

New NC structure component "limit.parameter.a_stop"

ID#93687 : new function since V0.290

New NC structure component "controller.uf" for controller mode "U/f Control"

ID#78992 : new function since V0.290

New NC structure component "controller.mode" for parameter CONTROLLER_MODE

Up to now, the parameter CONTROLLER_MODE could only be transferred to an ACOPOS via service interface. Therefore due to compatibility reasons, after call of NC action "ncCONTROLLER,ncINIT" this parameter is only transferred to the ACOPOS, if the value of "controller.mode" was changed.

ID#93682 : Information valid since V0.290

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.130

1.3.3.3.398 NC Software – ARNC0 V0.280

ID#91887 : new function since V0.280

'External encoder' as coupling master:

Starting now, 'ncEXTENCOD' NC objects can be used as master for cam profile couplings. The slave is not compensated for a master position jump (e.g. after referencing the external encoder).

ID#91712 : new function since V0.280

New NC structure component "controller.speed.t_filter" for parameter SCTRL_TI_FIL

Up to now, the parameter SCTRL_TI_FIL could be transferred to an ACOPOS via service interface only. Therefore due to compatibility reasons, after call of NC action "ncCONTROLLER,ncINIT" this parameter is transferred only, if the value of "controller.speed.t_filter" was changed.

ID#91707 : new function since V0.280

New status "ok" for download of ACOPOS Parameter data

If processing of NC action "ncACP_PAR,ncSERVICE+ncDOWNLOAD" has been successfully completed, from now on additionally "status.ok=ncTRUE" is set after successful completion of operation, because ACOPOS Parameter data without any parameter to be transferred do not cause an error and after successful completion of operation "status.daten_len=0" is displayed as well as "status.error=ncFALSE".

ID#91567 : new function since V0.280

ACOPOS startup synchronization between ACP10 and ARNC0

If the same ETHERNET Powerlink interface is used to operate ACOPOS modules simultaneously from the ACP10 software and the ARNC0 software, then within the basis initialization the network initialization (ACOPOS startup) is executed synchronized between the ACP10 software (from V1.120 on) and the ARNC0 software. This now makes it possible to alternately connect ACOPOS modules for ACP10 software and ARNC0 software within one Powerlink line. Up to now, using a common Powerlink interface could lead to errors, whereby an unsynchronized ACOPOS reset command triggered by one of the NC software programs interrupted the network communication of the other NC software program.

ID#92062 : Information valid since V0.280

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.120

1.3.3.399 NC Software – ARNC0 V0.273

ID#91992 : solved problem, solved since V0.273

Position of the automatic tangential axis after deactivation (G140)

When deactivating the automatic tangential axis (G140), the axis was moved to the position, which it had upon activation (G141). This could cause large traverse paths for 'non periodic' tangential axes.

ID#91987 : solved problem, solved since V0.273

Position error when restarting an NC program with automatic tangential axis.

Error 5152: "Position out of 'In-Position-Tolerance' at START/RESTART of CNC move" could occur while restarting an NC program with an automatic tangential axis. Requirements:
Activation of the automatic tangential axis before the first movement block in the NC program
Another NC program must be executed between the abort and the restart.

ID#92057 : Information valid since V0.273

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.543
For ACOPOS 8V1xxx.00-2: ACP10SYS V1.106

1.3.3.3.400 NC Software – ARNC0 V0.272

ID#91562 : solved problem, solved since V0.272

Drive start up after change of simulation mode.

If the start up of an ACOPOS was interrupted by switching on the ncCNCSYS simulation mode, the start up could not be completed after switching off the simulation mode.

ID#91582 : new function since V0.272

Extended possible combination for S- and T-function.

S and T functions are allowed in NC blocks with G16, G53-G59, G92, G159 or tool data number.

ID#92052 : Information valid since V0.272

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.543
For ACOPOS 8V1xxx.00-2: ACP10SYS V1.106

1.3.3.3.401 NC Software – ARNC0 V0.271

ID#91552 : solved problem, solved since V0.271

NC operating system download

If a drive had no NC operating system, the startup of this drive was aborted and an NC operating system download could not be executed.

ID#91522 : solved problem, solved since V0.271

ACOPOS operating system start abort.

In certain ACOPOS firmware versions (Boot loader), the operating system start was aborted with the error 100018: "The Data segment at data block read is not yet the last".

ID#91497 : solved problem, solved since V0.271

Contour violation at circular-linear transitions when CDC is active.

A contour violation sometimes occurs at circular–linear transitions with 360° or 0° when the CDC is active.

ID#91662 : Information valid since V0.271

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.106

1.3.3.3.402 NC Software – ARNC0 V0.270

ID#91242 : new function since V0.270

Selection of CNC after transition block

It is possible to select the CDC (G41, G42) after a transition block (G16, G53–G59, G92, G159, Dxx).

ID#91012 : new function since V0.270

Function expansion of Stop / E–Stop.

Using two new parameters in the user data structure ARNC0CNC_typ cnc_obj.move.stop and cnc_obj.move.e_stop, the behaviour of stopping and emergency stopping of NC programmes can be defined.

ID#90852 : new function since V0.270

Function expansion of the tool compensation (G16 and G130/G131)

Orientation of the tool length correction can be selected using G16.

The tool length correction and the tool offset are taken into consideration in the machine coordinate system (G130) or in the programmed coordinate system (G131).

ID#84922 : new function since V0.270

NC deployment table for ARNC0

An NC deployment table can be evaluated for ARNC0. Version 2.4.0 with upgrade 1105 or higher is required to support this function. ATTENTION: If the Upgrade was not installed, the new data structure element cnc_obj.axes.axis[.].nc_object_name must be set to an empty string ("")!

ID#90412 : Information valid since V0.270

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.106

1.3.3.3.403 NC Software – ARNC0 V0.260

ID#89117 : new function since V0.260

Behavior of non–programmed axes with G92

The behavior of non-programmed axes in the transition block after G92 has been changed. See "ARNC0: CNC Programming Instructions, G-Functions, G92".

ID#89272 : Information valid since V0.260

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.105

1.3.3.3.404 NC Software – ARNC0 V0.250

ID#87812 : solved problem, solved since V0.250

Position jump after G92 during reverse movement

If another block with G92 immediately follows a transition block (G92) during reverse movement, then a position jump occurs.

ID#87647 : solved problem, solved since V0.250

NC program aborted at G92 + G141

If the automatic tangential axis (G141) was used together with the coordinate system shift (G92), the NC program was aborted with error 10368:"G141 Automatic tangential axis cannot be programmed" (starting with V0.240).

ID#86467 : solved problem, solved since V0.250

Wrong transition block at G92 + G141

Wrong position of the automatic tangential axis in the transition block (G92).

ID#86462 : solved problem, solved since V0.250

Error changing the parameter "limit.block_buffer".

If the value of the "limit.block_buffer" parameter was changed, then the next following NC program started remained inactive (not started) (starting with V0.208).

ID#86457 : solved problem, solved since V0.250

Error using \$LIN with G126

If G126 with \$LIN was activated between two straight lines, \$LIN first takes effect starting at the second rounding path section. If G126 with active \$LIN was deactivated in a straight line, \$LIN is only effective until the second-to-last rounding path section. As a result, both cases resulted in an axis jump and path speed jump which further caused a violation of the axis and path acceleration limits.

ID#87642 : new function since V0.250

Mirroring allowed in combination with G92

The coordinate system can be shifted using G92 during active mirroring (G21, G22, G23).

However, a change in angle is not allowed during active mirroring.

ID#82222 : new function since V0.250

CNC program restart: Saving of decoder synchronous parameters for restart

Decoder synchronous parameters (R, P, EX parameter and cutter diameter at \$RAD_IDX) can be saved during the processing of an NC program.

When a restart is executed, the saved parameters are used up to the restart point. This guarantees that the desired restart point is reached even if the parameters from the application have been changed.

ID#87677 : Information valid since V0.250

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.102

1.3.3.3.405 NC Software – ARNC0 V0.243

ID#86092 : solved problem, solved since V0.243

CDC: incorrect 0/360° distinction at circle/circle transitions

At circle–circle transitions with interior contact and opposite direction of rotation, the distinction between the transition angles 0° and 360° was made incorrectly.

ID#86082 : solved problem, solved since V0.243

Incorrect CDC calculation at circle/circle transitions with transition angle near 180°

At a transition angle equal to 180°, the circle intersections were calculated correctly, but the wrong intersection was selected.

ID#86097 : new function since V0.243

CAN drive startup

During drive startup on the CAN bus, a delay for checking the boot status (2 or 3 seconds) was added after Phase 20: "BsLoader start after SW reset" and Phase 50: "ACOPOS operating system start".

ID#86087 : Information valid since V0.243

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.069

1.3.3.3.406 NC Software – ARNC0 V0.242

ID#84947 : solved problem, solved since V0.242

Abort of an CNC programm at the end of a path section not possible.

Abort of an CNC programm at the end of a path section not possible.

ID#85407 : Information valid since V0.242

Included drive operating systems

For ACOPOS 8V1xxx.00-1: ACP10SYS V0.543

For ACOPOS 8V1xxx.00-2: ACP10SYS V1.069

1.3.3.3.407 NC Software – ARNC0 V0.241

ID#84402 : solved problem, solved since V0.241

System blocked at blocks with G126

At blocks with G126, the ARNC0 system can become blocked when there are low values for speed or acceleration.

ID#83882 : solved problem, solved since V0.241

Error rotating the coordinate system (G92)

A position jump occurs in the transition block if a block only with commentary follows immediately after G92.

ID#83877 : solved problem, solved since V0.241

Error accepting the CDC selection from the Init parameter module

If "CDC selection = ncBLOCK" (G137) is set in the Init parameter module, the decoder initialization is aborted with the error 10105:"Incorrect Parameter ". CDC selection "ncDIRECT" and "ncINDIRECT" both function.

ID#83797 : solved problem, solved since V0.241

Incorrect monitor data for the current actual position of an axis

When using an external encoder, sometimes the actual position of an axis was displayed incorrectly in the monitor data. This problem only occurred on axes connected with ETHERNET Powerlink.

ID#83382 : solved problem, solved since V0.241

Reverse movement in NC programs with G92

In the first movement block (transition block) after G92, sometimes the axis positions jump during the reverse movement.

ID#83377 : solved problem, solved since V0.241

G92 with rotation of the coordinate system

If all axes used in the system are not programmed after G92 in the first movement block (transition block), sometimes the target position of the transition block is calculated incorrectly.

ID#81692 : solved problem, solved since V0.241

Incorrect transfer of ACOPOS parameters

Parameter values, which were only valid in ACP10sys – versions 1.xxx, were not correctly transferred to the ACOPOS with the NC action "ncSERVICE, ncSET+ncDATA_TEXT". Instead of sending an error message, the last value transferred was used for the new parameter. Starting now, when a parameter ID is defined which is not contained in the ACOPOS operating system version being used, error 14187 (CAN) or 15187 (Powerlink) is output: "Invalid parameter ID for the ACOPOS operating system version being used".

ID#78932 : solved problem, solved since V0.241

Dip in the path speed when using the G170

If a G170 was used in a CNC program, the path speed was reduced at the corresponding transitions, even though the decoder was synchronized in time. This problem only occurred when the deceleration distance before the G170 was longer than the path section before the G170.

ID#84927 : Information valid since V0.241

Included drive operating systems

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.069

1.3.3.3.408 NC Software – ARNC0 V0.240

ID#83357 : solved problem, solved since V0.240

Error when restarting an NC program

If the axes were positioned to the restart point using a positioning command, the saved restart information was sometimes overwritten.

ID#82310 : solved problem, solved since V0.240

NC program cannot be resumed after G170

If an NC program was interrupted with movement HALT when the axes arrived at a G170, the NC program could no longer be resumed.

ID#81180 : solved problem, solved since V0.240

CNC parameter 'limit.elements'

As of now, the CNC parameter 'limit.elements' is being evaluated again. It was not being evaluated after version V0.132.

ID#78607 : solved problem, solved since V0.240

Dip in the path speed when feed override >100%

If a feed override "F_override" >100% was used, the path speed was reduced to the programmed feed at the transition between two NC blocks. The new operating mode G112

makes it possible to prevent the path speed from reducing at block transitions.

ID#82217 : new function since V0.240

Restart function update

- Restart of CNC programs started with offset
- Restart point at preset path position or at preset block number
- Restart point can lie anywhere before or after the stop point

ID#82207 : new function since V0.240

Starting CNC programs at preset block number "Nxxxx"

The start position for a NC program can be defined in bytes as file offset or as block number.

ID#82202 : new function since V0.240

Extended value range for "F_override"

The value range for "F_override" has been extended and is now 0 to 42,949,672.95%. The data type of the corresponding structure components was increased from UINT to UDINT. This makes it possible to implement a 'fast mode' for CNC systems. However, the maximum possible feed rate is limited by the preset axis limit value.

ID#80107 : new function since V0.240

Maximum number of CNC channels is now 8

AutomationStudio 2.4.0 with Upgrade V2.4.0.1103 or higher is required.

ID#83362 : Information valid since V0.240

Included drive operating systems

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.068

1.3.3.3.409 NC Software – ARNC0 V0.235

ID#81622 : solved problem, solved since V0.235

Error when switching on the controller

Sometimes the controller was switched off by the ARNC0 without an error message immediately after being switched on. This was a very rare error.

ID#81452 : Information valid since V0.235

Included drive operating systems

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.543

Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.066

1.3.3.3.410 NC Software – ARNC0 V0.234

ID#81447 : Information valid since V0.234

Included drive operating systems

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.543
Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.066

1.3.3.3.411 NC Software – ARNC0 V0.233

ID#80922 : solved problem, solved since V0.233

Incorrect assignment of error and NC action (command)

A JobID for the NC action "ncCONTROLLER, ncSWITCH_ON"" was acknowledged immediately after the command was accepted. If an error then occurred on the drive (e.g. due to activation of the quickstop input), the reported errors were entered with this JobID. Because this JobID was already acknowledged, it was possible that it was already occupied by another command. As a result, the reported errors would be transferred to the wrong command. If positioning was active, the "move.basis.status.in_pos" would not be set to "ncWAHR" after the movement was successfully completed.

ID#80952 : Information valid since V0.233

Included drive operating systems

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.543
Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.066

1.3.3.3.412 NC Software – ARNC0 V0.232

ID#80215 : new function since V0.232

Additional information was added to the individual error texts using the block number.

ID#80170 : new function since V0.232

Function expansion G126

- \$LIN is used so that the rounding radius is traversed at constant path speed.
 - The entrance speed to the rounding radius can be increased using \$VE <factor>.
- This functions can cause the axis acceleration limits to be exceeded.

ID#80927 : Information valid since V0.232

Included drive operating systems

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.543
Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.066

1.3.3.3.413 NC Software – ARNC0 V0.231

ID#80917 : Information valid since V0.231

Included drive operating systems

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.543
Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.066

1.3.3.3.414 NC Software – ARNC0 V0.230

ID#80225 : solved problem, solved since V0.230

Full circle when radius programming

When a very small arc was programmed using radius programming (dx and dy smaller than 0.001 CNC units), a full circle was traversed instead of the arc.

ID#80067 : solved problem, solved since V0.230

Unwarranted message 8154:"NC block with distance equal to 0.0" at short path sections

If several path sections with the length 0.001 CNC units were traversed consecutively, the message 8154:"NC block with distance equal to 0.0" was output.

ID#80002 : solved problem, solved since V0.230

Movement reversal on the circle when CDC is active

When there was a full circle made up of several circle segments, a straight line was inserted as segment counter to the circular direction.

ID#80007 : new function since V0.230

CNC System: Initialization subprogram

Starting now, the name of a CNC program which is called each time the program starts, can be specified in the CNC data structure "cnc_object.bewegung.ncprogramm.init_prg" (German) or "cnc_object.move.ncprogram.init_prg" (English). When a CNC program is started using the NC action "ncPROGRAM, ncSTART" the CNC program specified in the data structure is first executed as global subprogram.

ID#80435 : Information valid since V0.230

Included drive operating systems:

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.541
Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.066

1.3.3.3.415 NC Software – ARNC0 V0.228

ID#80430 : Information valid since V0.228

Included drive operating systems:

Für ACOPOS 8V1xxx.00–1: ACP10SYS V0.541
Für ACOPOS 8V1xxx.00–2: ACP10SYS V1.066

1.3.3.3.416 NC Software – ARNC0 V0.227

ID#80072 : solved problem, solved since V0.227

Insert intersection path (G135):

If circles lying within another were programmed inaccurately, sometimes intersection paths could not be created. The program was aborted by error 9221:"Excentric Circles".

ID#80425 : Information valid since V0.227

Included drive operating systems:

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.541

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.062

1.3.3.3.417 NC Software – ARNC0 V0.226

ID#80092 : solved problem, solved since V0.226

Unsteadiness in the path speed:

If Cartesian axes were programmed together with linear axes in a block, unsteadiness could occur in the path speed at a path section transition (spikes with the length of a scanning cycle).

ID#80087 : solved problem, solved since V0.226

Adjust v_jump, a_jump parameters (G105 / G106):

In certain circumstances, the parameters v_jump and a_jump, programmed with G105/G106, were assigned to the wrong axis.

ID#80082 : solved problem, solved since V0.226

Select/deselect CDC with transition block (G137):

If the CDC is selected and deselected in one block, the CNC program is not always completed. The error could also occur when a change is made to the selected side right after being selected.

ID#80420 : Information valid since V0.226

Included drive operating systems:

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.541

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.062

1.3.3.3.418 NC Software – ARNC0 V0.225

ID#80415 : Information valid since V0.225

Included drive operating systems:

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.541

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.062

1.3.3.3.419 NC Software – ARNC0 V0.224

ID#78437 : solved problem, solved since V0.224

Dip in the path speed after G170 + unsync. M-function

If a combination of G170 and an unsynchronized M-function was used in a CNC program, undesired path speed reductions could occur at tangential transitions in the subsequent path sections.

ID#76215 : solved problem, solved since V0.224

System crash when updating the NC block monitor

If an NC program which calls global NC subprograms was moved backwards with a turned-on NC block monitor, the CNC crashed upon entry into the global NC subprogram (page fault).

ID#80102 : new function since V0.224

CNC monitor update:

The name of the active NC program or global NC subprogram is displayed in the CNC monitor.

ID#80097 : new function since V0.224

Updates to the cutter diameter compensation

The following new functions have been added to the mode "Activate/Deactivate CDC Indirectly with Entry or Exit Block" (G137):

- Deactivate CDC with exit block
- Activate CDC in the circular block
- Deactivate CDC in the circular block
- Change editing side in the circular block
- Change editing side with transition block

ID#80410 : Information valid since V0.224

Included drive operating systems:

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.541

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.062

1.3.3.3.420 NC Software – ARNC0 V0.223

ID#78015 : solved problem, solved since V0.223

Path speed reduction after G92+rotation

After a block with G92+rotation and the parameter v_jump = 0, a stop was always made at tangential path section transitions.

ID#77710 : solved problem, solved since V0.223

Motor parameters not transferred for resolver motors to the drive

The motor parameters from resolver motors were no longer transferred automatically from the NC configuration object to the drive (starting with V0.220).

ID#77685 : solved problem, solved since V0.223

Syntax error at G200 / G201

If G200/G201 <axis><edge> was followed immediately by 'End of Line', error 10200:"Unknown or missing letter in the NC program" was output (starting with V0.205).

ID#80437 : Information valid since V0.223

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.541

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.062

1.3.3.3.421 NC Software – ARNC0 V0.222

ID#77330 : solved problem, solved since V0.222

CNC System: Path speed interruption at circle–circle transitions ($r=const$)

An undesired reduction in path speed can occur at tangential transitions between circle segments with the same radius.

ID#80405 : Information valid since V0.222

Included drive operating systems:

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.541

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.062

1.3.3.3.422 NC Software – ARNC0 V0.221

ID#80210 : solved problem, solved since V0.221

Full circle with cutter diameter compensation (CDC)

If a full circle was traversed with active CDC, a position jump could occur on the circle axes at the end of the circle (starting with V0.220).

ID#80205 : new function since V0.221

CNC System: Software connection of trigger sources

Any axis within the ARNC0 can be defined as trigger source for a CNC axis. To do this, the reference to the axis object with the desired (HW) trigger inputs must be specified in the data structure "cnc_object.achse.achse[].trg_quelle.nc_object" (German) or "cnc_object.axis.axis[].trg_source.nc_object" (English). The defined trigger source is transferred using the NC action "ncAXIS, ncINIT".

ID#80400 : Information valid since V0.221

Included drive operating systems:

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.541

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.062

1.3.3.3.423 NC Software – ARNC0 V0.220

ID#80200 : solved problem, solved since V0.220

Error message for G201 together with tangential axis:

If G201 was used together with the tangential axis, error 10106:"Event not allowed at current module state
" occurred on an axis.

ID#80195 : solved problem, solved since V0.220

CNC program blocked with M0/M1:

The processing of a CNC program was blocked if a synchronous M–function and M0 or M1 occurred together in an NC block (starting with V0.202).

ID#80190 : solved problem, solved since V0.220

Position jump during reverse movement of a CNC program

During reverse movement of a CNC program, a position jump could occur on all axes when entering a path section.

ID#80185 : solved problem, solved since V0.220

CNC System: Reverse movement of CNC program not possible with G92+rotation

CNC programs in which the coordinate system rotates, could not be moved backwards (starting with V0.208).

ID#80180 : solved problem, solved since V0.220

CNC program cannot be resumed after restart.

The CNC program was unable to be resumed following a CNC program restart (starting with V0.208).

ID#80165 : solved problem, solved since V0.220

SW limit monitor:

A rounding error sometimes caused the values for the SW limits to differ from the default values in the axis structures. The values could deviate in the positive direction by a maximum of the unit factor of the corresponding axis ("cnc_object.axis.axis[].unitfactor").

ID#80160 : solved problem, solved since V0.220

Straight–circle transitions with cutter diameter compensation

At straight segments which are almost perpendicular, sometimes the intersection between straight segment and circle were not calculated correctly. The CNC program was aborted with Error 8134 or 8136: "Radius difference between start and end ".

ID#80155 : solved problem, solved since V0.220

Full circle with cutter diameter compensation (CDC)

If the path section transition in a full circle is not exactly tangential, sometimes the full circle is not traversed when CDC is active.

ID#76802 : solved problem, solved since V0.220

CNC System: CNC program is blocked with G201

The processing of a CNC program was blocked using G201 (starting with 0.208).

ID#80150 : new function since V0.220

The dependent libraries "ncda_lib" and "nccnccom" transferred to "ncglobal"

The functions from the libraries "ncda_lib" and "nccnccom" were transferred to "ncglobal" (starting with V0.300).

NOTE: These libraries must first be removed from the current project using the Library Manager before updating to ARNC0 0.220.

ID#80145 : new function since V0.220

Download of ACOPOS parameter data:

New NC actions "ncSERVICE+ncACP_PAR, ncDOWNLOAD" for transferring the parameters contained in the ACOPOS parameter data (XML data with the format used for ACOPOS parameter tables) to the ACOPOS.

ID#80140 : new function since V0.220

Loading the INIT parameter module:

Update to the data structure in the NC objects ncAXIS and ncCNCSYS (German/English): "global.init_par". The data from the specified INIT parameter module can be loaded to the corresponding user data structure of the NC object using the new NC action "ncGLOBAL, ncLOAD" or "ncGLOBAL, ncLOAD+ncINIT". If the option "+ncINIT" is set, the NC action "ncGLOBAL, ncINIT" is then automatically executed.

ID#80135 : new function since V0.220

CNC System: Updated monitor data structure

In the CNC monitor data structure "cnc_object.monitor", the currently processed NC block number (N....)

"satz_ncprog" (German) or "block_ncprog" (English) are displayed.

ID#80130 : new function since V0.220

Change of CNC movement parameter

The maximum size of an NC block was increased from 36 to 52:

German: "cnc_object.bewegung.ncsatz[52]"

English: "cnc_object.move.ncblock[52]"

ID#80125 : new function since V0.220

CNC decoder parameter update

Update to CNC data structure with initialization variables for CNC special functions:

German:: "cnc_object.decoder.parameter.wrk"

- "kreisersatz" (für G37)

- "konturverletzung" (für G39)

- "schnittpunktsatz" (für G134)

English: "cnc_object.decoder.parameter.cdc"

- "circ_replace" (für G37)

- "contour_violation" (für G39)

- "intersection_path" (für G134)

The element entries are transferred by calling the NC action "ncDECODER, ncINIT".

ID#80337 : Information valid since V0.220

Included drive operating systems

For ACOPOS 8V1xxx.00–1: ACP10SYS V0.541

For ACOPOS 8V1xxx.00–2: ACP10SYS V1.062

1.3.3.3.424 NC Software – ARNC0 ARNC0 V1.021

ID#209685 : solved problem, known since V3.00.80.18, solved since V3.00.80.27 SP01

ARNC0 V1.02.1 (and higher) with SDC can run on ARsim (AR000)

Starting with ARNC0 V1.02.1, the ARNC0 supports the simulation ACOPOS on the PC based runtime simulation ARsim (AR000). Error 14126: "No cyclic positions from drive" does not occur anymore.

1.3.3.4 1A4000.02 Visual Components

1.3.3.4.1 HW/SW Config

ID#400054708 : solved problem, known since V3.00.81.18, solved since V3.00.81.23 SP02

Node numbers of VC Windows targets can't be changed after they are set

1.3.3.4.2 Libraries

ID#400060097 : solved problem, known since VC 3.64.4, solved since VC 3.91.6

VCDP_Utf8Set() – Parameter 'pv-userid' not present in event

If a variable is written with the function VCDP_Utf8Set(), then the parameter 'pv-userid' will not be present in the event. The function VCEV_I32Get() returns the error code ERROR_VCEV_PARAM_ERROR.

ID#400054569 : solved problem, known since VC 3.64.2, solved since VC 3.64.6

VA_DelAlarmHistory returns Status 7180 if list is empty

If the VISAPI function VA_DelAlarmHistory(...) is called and the historical alarm list is empty, the function returns the value 7180 instead of 0.

ID#400049586 : solved problem, known since VC 3.64.2, solved since VC 3.92.8

Rounding error in the function VCDP_Utf8Set(...)

If the function VCDP_Utf8Set is called up with the flag "VCDP_UNIT_TYPE_INTERNAL" and "VCDP_AUTO_LIMIT_VALUE", then the value will be written to the PV without decimal places.

ID#400049123 : solved problem, known since VC 3.64.2, solved since VC 3.72.6

VA_GetTouchAction doesn't function properly with VNC client

If the position on the display is changed while holding down a key or pressing a touch button, then the action is not sent and it can't be evaluated with VA_GetTouchAction(...).

ID#400044645 : solved problem, known since VC 3.64.0, solved since VC 3.90.2

Watchdog (9206) when the function ScreenShot() from the ScreenShot library is executed when no storage device is connected.

ID#400037800 : solved problem, known since V3.00.80.25, solved since VC 3.64.0

The function VCDP_Utf8Get returns incorrect scaling if the scaled value is outside the limit.

ID#252053 : new function since VC 3.73.4

New Visapi function: VA_GetAlarmCount

The function VA_GetAlarmCount() can be used with filters to read active, inactive, acknowledged, unacknowledged, bypassed and not bypassed alarms.

ID#400061454 : new function since V3.00.90.08

Output number of acknowledged alarms.

A new VISAPI function VA_GetAlarmCount(...) can be used to read out the number of alarms that have been acknowledged.

ID#400031087 : new function since V3.00.81.08

Optimization of VA_BlItBitmap function

1.3.3.4.3 SG3 Common

ID# 400037741, 400038214, 400038396, 400038621, 400037585 : known problem since V3.00.80.25, correction planned for VC 3.64.0

VA_SetupX returns 7030 in a VC3 application.

1.3.3.4.4 SG3 Compiler

ID#400060889 : solved problem, known since V3.00.71.32 SP06, solved since V3.00.90.11

VC3 visualization application always transferred

ID#400073633 : solved problem, known since V3.00.80.09, solved since V3.00.81.20 SP01

Problem compiling constants in VC3

Array member variables that are defined with a constant and used in VC3 can't be compiled.

1.3.3.4.5 SG3 Editor

ID# 400053896, 400057381, 400061062 : solved problem, known since V3.00.81.18, solved since V3.00.81.25 SP04

Error: PLC variable not defined

If the function keys are assigned to SetUSINT/SetUDINT or toggle, an error message appears during compilation:

... (PicFunction 'F1' [Toggle USINT]) : Error : PicFunction 'F1' [Toggle USINT]: PLC variable not defined

The data type was not saved correctly and therefore caused a build error.

ID# 400045173, 400045985 : solved problem, known since V3.00.80.25, solved since V3.00.80.34 SP02

Exporting text from VC3 editor in WIN7 causes an error

When text is exported from the VC3 editor when using Win7, an error occurs. The occur occurs in the 32 bit and 64 bit version.

ID#400036265 : solved problem, known since V3.00.80.25, solved since V3.00.81.20 SP01

Incorrect configuration of alarm system can now be corrected using the Edit function.

ID#400033965 : solved problem, known since V2.7.0.0018 SP11, solved since V3.00.81.15

VC3 editor discards a variable only connected to one key

ID#400032081 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.80.31 SP01

FB instances can't be used as variable objects.

ID# 400029808, 400037590 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.80.29 SP01

A VC3 visualization application cannot be created for the panel 5E9000.18

1.3.3.4.6 SG3 Runtime

ID#400050107 : solved problem, known since VC 3.64.2, solved since VC 3.90.6

PW35 with same node number not working on different X2X buses

ID#400046352 : solved problem, known since VC 3.64.2, solved since VC 3.64.6

VA_Line doesn't function properly on PW35

1.3.3.4.7 SG4 – Common

ID#400044630 : solved problem, known since V3.00.71.26 SP04, solved since V3.00.80.29 SP01

Strings from UINT arrays can't be configured

An error occurs when connecting strings from UINT arrays

ID#210850 : solved problem, known since V3.00.80.19, solved since V3.00.81.07

Multidimensional arrays can not be used in visualizations

It is currently not possible to use multidimensional arrays in visualizations.
Multidimensional arrays and multidimensional structure elements are not available as data sources.

ID# 400008201, 400006669, 400009276, 400009917, 400013774, 400015386, 400015877, 400016146, 400018752, 400044279, 400053932, 400060613 : new function since V3.00.90.06

The number of key levels has been increased to six

The possible number of KeyLevels was increased to six in order to ensure consistent hardware/software key configurations.

1.3.3.4.8 SG4 Compiler

ID#400068118 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.12

Compiler output improved for Error 7164.

ID# 400061529, 400065695 : solved problem, known since V3.00.81.24 SP03, solved since VC 3.92.4

Incorrect status for VA_wcGetActAlarmList on VC Windows terminals

ID#400055896 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.08

The structure of a reference is displayed incorrectly in the cross reference in VC.

ID#400060300 : solved problem, known since V3.00.81.23 SP02, solved since V3.00.90.09

Layout of the listbox during runtime depends on the text size in Windows 7

If the text size in Windows 7 is changed (Control Panel → Display → Make it easier to read what's on your screen), this affects the layout of the listbox control.

ID#400055896 : solved problem, known since V3.00.81.18, solved since V3.00.81.24 SP02

VC objects were sometimes ignored in "Build Cross Reference"

ID#400058284 : solved problem, known since V3.00.81.18, solved since V3.00.90.09

Absolute path in the *.mak file in VC3 visualization

ID#400055896 : solved problem, known since V3.00.81.18, solved since V3.00.90.06

After a "Build all", visualization objects ignored in "Build Cross Reference"

ID#244258 : solved problem, known since VC 3.72.8, solved since V3.00.90.08

ReplaceColor doesn't work correctly for 32-bit bitmaps.

ID#400055155 : solved problem, known since V3.00.81.18, solved since V3.00.81.22 SP01

Compiler error when a configuration name contains "temp"

ID#400055155 : solved problem, known since V3.00.81.18, solved since V3.00.90.06

Build error when config name contains "Temp"

ID#400052054 : solved problem, known since V3.00.81.18, solved since V3.00.90.06

Incorrect error message when multiple KeyMapping files are mapped

ID#400037771 : solved problem, known since V3.00.80.25, solved since V3.00.80.29 SP01

VC4 Compiler doesn't show error 7066.

If a toggle key action is configured with equal set and reset values, no error is displayed.

ID#400037239 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.80.29 SP01

If a project is built on another computer, it must be rebuilt

ID#400035702 : solved problem, known since V3.00.80.25, solved since V3.00.80.29 SP01

Error 7164 occurs during compilation due to faulty hardware configuration.

ID#400034625 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.80.27 SP01

Very slow page change to terminal targets.

If 32-bit bitmaps are used in an 8-bit visualization, Automation Runtime has to convert them to 8-bit during runtime. This makes changing pages very slow. The compiler now generates an error if 32-bit bitmaps are used in an 8-bit visualization application.

ID#400029530 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.81.04

Compressed 8-bit bitmaps cause a PageFault if the file has 1BPP color depth

ID#400028848 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.81.08

When cross referencing is enabled, VC3 visualizations are regenerated with every build

ID# 400014062, 400033456 : solved problem, known since V2.7.0.0015 SP08, solved since V3.00.81.08

ANSL reacts more slowly than INA to pressed keys

In projects with a large number of data points, the visualization on the terminal reacts more

slowly to value changes and operations.

ID#228710 : known problem since V3.00.81.14, correction planned for V3.00.90

A build with GCC 2.95.3 doesn't work if the installation path contains parentheses ()

If the installation path for Automation Studio contains parentheses, the build won't work if GCC Version is set to 2.95.3.

The problem occurs especially on Windows 7 64-bit installations, because the default installation path there is "c:\program files (x86)".

1.3.3.4.9 SG4 Editor – Common

ID#400064647 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

Changes to the name of the visualization are not saved in the project file.

ID#400064754 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

Variables are not deleted from the data source file when the last active reference is deleted.

ID# 400052964, 400060332 : solved problem, known since VC 3.72.6, solved since V3.00.90.10

When opened, the visualization application is always marked as having been changed

ID#400062105 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.10

VC Editor crashes if a CPU name with more than 20 characters is used in a project.

ID# 400063838, 400062713, 400062960 : solved problem, known since V3.00.81.18, solved since V3.00.90.09

Data points are decoupled during import

If resources are imported from a different project, the data points will be decoupled from the control elements if the name of the data source is not the same in the source and target project.

ID# 400061451, 400062661 : solved problem, known since V3.00.81.23 SP02, solved since V3.00.81.26 SP0x

Refactored variable not being saved

If a variable is refactored (e.g. because it has been renamed in the task) and the visualization application saved and then re-opened, then the data point will be set to <None>.

ID#400061451 : solved problem, known since V3.00.81.23 SP02, solved since V3.00.90.09

Refactored variable not being saved

If a variable is refactored (e.g. because it has been renamed in the task) and the visualization application saved and then re-opened, then the data point will be set to <None>.

ID#400060674 : solved problem, known since V3.00.81.23 SP02, solved since V3.00.90.11

With more than 10 key levels, switching displayed level in VC editor doesn't work correctly

ID#400059732 : solved problem, known since V3.00.81.23 SP02, solved since V3.00.90.09

Refactored variable not being saved

If a variable is refactored (e.g. because it has been renamed in the task) and the visualization application saved and then re-opened, then the data point will be set to <None>.

ID# 400053127, 400054470, 400055288 : solved problem, known since V3.00.81.18, solved since V3.00.80.35 SP03

Text from text groups with a start index <> 0 is not displayed correctly.

ID#400055285 : solved problem, known since V3.00.81.18, solved since V3.00.90.07

Incorrect handling of data source in source control

As a result, changes can't be saved and are lost.

ID#400058347 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.25 SP04

Changing the property "Apperance.ColorDatapoint" in the style sheet causes an error

With the text "TextDateTime" for the data point Appereance.ColorDatapoint, if a variable is linked or changed and then the visualization application is closed and saved, an error occurs.

ID#400057285 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.09

TextIndexOffset -1 not being saved

If the value 1 is set as the TextIndexOffset for a text, then this value will not be saved. Other values work correctly.

ID#400055336 : solved problem, known since V3.00.81.18, solved since V3.00.90.06

GDI resources are lost when switching between two trend windows

Each time you switch between two trend windows approximately 100 GDI resources get lost. This, in turn, can lead to the error "Incorrect argument found".

ID#400055285 : solved problem, known since V3.00.81.18, solved since V3.00.81.26 SP0x

Incorrect handling of data source in source control

As a result, changes can't be saved and are lost.

ID#400054482 : solved problem, known since VC 3.64.2, solved since V3.00.90.08

ReplaceColor doesn't work correctly for 32-bit bitmaps.

ID#400053770 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.12

Element of a structure can't be displayed during runtime

After a functioning project is converted, an element of a structure is no longer displayed.

ID#400051448 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.80.34 SP02

Variable is not found if a data type is defined twice.

If a data type is defined the same in two programs, variables with this type are not recognized in Visual Components.

ID#400050839 : solved problem, known since V3.00.81.18, solved since V3.00.81.20 SP01

After converting from AS3.00.80 to AS3.00.81 the wrong value is used for ReplaceColor.

After the conversion a 32-bit value is used with a different color value for the ReplaceColor.

ID# 400049724, 400052262 : solved problem, known since VC 3.64.2, solved since V3.00.90.06

When a visualization page is copied, the tab order of the controls is lost

If multiple controls are copied from one page to another, the tab settings are not retained.

ID#400046081 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.13

Layer copied from a page to the common layers keeps the property "hidden"

ID#400048945 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.80.33 SP02

When fonts are imported from another project, the font settings in the controls are changed.

ID#400048943 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.80.33 SP02

When virtual keys are imported from another project, keys are disconnected.

ID#400044512 : solved problem, known since V3.00.80.25, solved since V3.00.80.29 SP01

"Import object from another project" doesn't list the visualization application

ID#400043778 : solved problem, known since V3.00.80.25, solved since V3.00.80.30 SP01

Page.ColorDatapoint is always overwritten with the value from the style class when the visualization application is opened

ID#400041383 : solved problem, known since V3.00.80.27 SP01, solved since V3.00.80.29 SP01

AS crashes when a text in a text group contains more than 256 characters

ID#400038552 : solved problem, known since V3.00.80.25, solved since V3.00.81.12

VC4 editor freezes when opening the visualization application

ID#400034476 : solved problem, known since V3.00.80.25, solved since V3.00.90.11

Grid settings in VC editor disappear if window too small

ID#400035081 : solved problem, known since V3.00.80.25, solved since V3.00.80.27 SP01

UID property in the data source is disconnected after a quick reassign.

If a task is moved into a package and then reconnected to the visualization, the UID parameter is disconnected from the respective data points.

ID# 400033455, 400035400, 400036877, 400038287, 400040387 : solved problem, known since V3.00.80.24, solved since V3.00.81.08

Instances of FB arrays can't be used in VC

ID# 400033381, 400032830 : solved problem, known since V3.00.80.24, solved since V3.00.81.07

Structure arrays with length 1 are displayed incorrectly

ID#400034391 : solved problem, known since V3.0.71.10, solved since V3.00.81.12

Build error when using Chinese fonts

In Windows (English, German or Chinese), if the language is set to "Chinese" for non-Unicode programs, then using a Chinese font will cause a build error in Visual Components, since the Chinese name is used instead of the English one.

ID# 400029645, 400030450 : solved problem, known since V3.00.80.21, solved since V3.00.81.08

Opening certain visualizations – depending on their size and structure – may result in a memory exception or a disproportionately high memory usage by Automation Studio.

This error is seen especially when there is a large number of PLC variables configured for the project.

It is recommended to keep visualizations open during an Automation Studio session.

If this is not possible because multiple visualizations are configured, Automation Studio should be restarted each time a new visualization is opened.

ID#400030011 : solved problem, known since V3.00.80.21, solved since V3.00.80.27 SP01

"Quick Reassign" reassigns the data point, but doesn't link it to the control.

ID#400029414 : solved problem, known since V3.00.80.21, solved since V3.00.81.09

Setting data point to <NONE> for multiple Numeric controls does not take effect

If multiple Numeric controls are selected and the Value data point is set to <NONE>, this setting is not applied. The original data points are retained.

ID#400028825 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.81.09

Inline editing for text groups doesn't allow copying and pasting.

ID# 400026964, 400049218 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.90.07

ShowConnections function doesn't work on text groups when pages are closed

ID#400026930 : solved problem, known since V3.0.71.30 SP05, solved since V3.00.81.09

CommonLayer key actions don't work under some circumstances

ID# 400026458, 400027870 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.81.08

Some PV information in the data sources is not refreshed

ID#400025820 : solved problem, known since V3.0.71.27 SP04, solved since V3.00.81.10

Visualization is not opened if key mapping is open, and no message appears

If an instance of the VC4 editor is already open in the form of a key mapping, attempting to open the visualization doesn't work.

ID#400024059 : solved problem, known since V2.7.0.0016 SP09, solved since V3.00.80.29 SP01

BidiMode only works when the index of the language is == 2.

ID#400021541 : solved problem, known since V3.0.71.24 SP03, solved since V3.00.81.09

VC editor loses data points after DP update

ID#400017189 : solved problem, known since V3.0.71.24 SP03, solved since V3.00.81.13

Key mapping retains reference to previously opened project, and therefore modifies the incorrect *.dis file

If a project is closed without closing Automation Studio and then another project is opened that contains the same hardware then any changes to the key mapping are made to the *.dis file from the first project.

ID# 400014970, 400029783 : solved problem, known since V3.0.71.20 SP02, solved since V3.00.81.09

TextIndexOffset changes from 0 to 3 when text entry made in a text group.

When a text entry is copied from one text group to another, the TextIndexOffset changes from 0 to 3 in the visualization page where the changed text group is used.

ID#193788 : solved problem, known since V3.0.71.22 SP03, solved since V3.00.81.09

Renaming the visualization causes a build error

After a visualization project is renamed, it must also be changed in the mapping, otherwise there will be an error during the build.

The editor must be closed at the time in order for all parts of the project to be renamed. If the editor was open, an error will occur during the build.

ID# 400012421, 400020746 : solved problem, known since V3.0.71.9, solved since VC 3.72.2

Double-clicking on an entry in the cross-reference window in VC doesn't position the cursor correctly

ID# 400062342, 400062713, 400062960 : new function since V3.00.90.10

Merging data sources when importing resources

ID#400054507 : new function since V3.00.90.10

For the Toggle and Momentary DP key actions, the default setting for "pressed" status has been changed to 1.

1.3.3.4.10 SG4 Editor – Controls

ID#400000595 : solved problem, known since V3.00.90.14, solved since V3.00.90.16

Crash when VC objects are opened in a specific project

ID#400055386 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.23 SP02

When a text group entry is selected in VC, it is sometimes displayed incorrectly.

ID#400040465 : solved problem, known since VC 3.35.4, solved since V3.00.81.11

The spacing between the value and the units in a Numeric control is too small.

ID# 400037920, 400041371, 400045431 : solved problem, known since V3.00.90.11, solved since V3.00.90.13

Display error in the bitmap 'zuneAlphaPadQvga'

ID#400056208 : known problem since V3.00.81.14, correction planned for V3.00.90.04

Incorrect display of control element "Numeric" in the editor

If the alignment for a "Numeric" control element is set to Center/Center and the Border to "none", then there is no value displayed in the editor.

1.3.3.4.11 SG4 Editor – Help

ID#400043304 : solved problem, known since V3.00.81.19, solved since V3.00.90.16

Incorrect display of arrays with many elements (80000 or more)

1.3.3.4.12 SG4 Editor – PageDesigner

ID#400062424 : solved problem, known since V3.00.90.05, solved since V3.00.90.10

Importing a 32-bit PNG inserts it as an 8-bit bitmap

ID# 400052261, 400056975 : solved problem, known since V3.00.81.18, solved since V3.00.81.20 SP01

When opening a VC project, the tab order was read incorrectly.

ID# 400050882, 400055585, 400060760 : solved problem, known since VC 3.72.6, solved since V3.00.90.06

Variable and units overlap in the editor.

1.3.3.4.13 SG4 Editor – Palette/VisualizationBrowser

ID#400022633 : new function since V3.00.81.09

Bitmap converter with command line interface

The bitmap converter can now also be operated from the command line.
This allows batch conversion of graphics.

1.3.3.4.14 SG4 Editor – Resources

ID#400065760 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.12

Using multiple VC data sources causes a page fault.

ID#400064577 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

Limit for the expand function increased from 255 to 10000 elements.

ID#400064021 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

Incorrect error message when the wrong directory is specified in the VC Import Wizard.

ID#400063338 : solved problem, known since VC 3.73.0, solved since V3.00.90.11

Display of import log file doesn't work. The file is created in the wrong folder.

ID#400062865 : solved problem, known since V3.00.81.24 SP03, solved since V3.00.90.09

The variable that is used exclusively for Fill Areas is decoupled from the property by VC

ID#400062173 : solved problem, known since V3.00.81.24 SP03, solved since V3.00.90.12

Switching from 8-bit to 32-bit isn't applied to all graphics.

ID# 400052336, 400061114 : solved problem, known since V3.00.81.23 SP02, solved since V3.00.90.09

Array elements not being linked to the task during import

If controls with array elements are imported as data points via the VC Import Wizard, then the link to the task is lost even though these links appear to still be there.

ID# 400059383, 400061465, 400063019, 400064576 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.09

Unit groups can no longer be connected to arrays

ID# 400057211, 400060560, 400062831, 400070847 : solved problem, known since V3.00.81.18, solved since V3.00.90.11

It was no longer possible to create an internal data source.

ID# 400056974, 400059791 : solved problem, known since V3.00.81.18, solved since V3.00.90.09

Members of FUB arrays not displayed correctly in the VC data source

ID#400055909 : solved problem, known since VC 3.72.6, solved since V3.00.90.07

Data points linked to vKeys are sometimes disconnected if the project contains more than one visualization

ID#400055909 : solved problem, known since VC 3.72.6, solved since V3.00.81.24 SP02

Data points linked to vKeys are sometimes disconnected if the project contains more than one visualization

ID#400051758 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.80.34 SP02

Structures that are found in multiple programs with the same title are displayed as faulty in VC.

ID#400046570 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.81.20 SP01

Error that led to sporadic crashes when importing VC resources has been corrected.

ID#400051047 : solved problem, known since V3.00.81.18, solved since V3.00.90.06

Problem replacing data points in VC

ID#400050913 : solved problem, known since V3.00.81.18, solved since V3.00.90.06

Additional nodes in structures in the data source view

An extra node is shown for structures in the data source view, which allows additional elements to be shown for arrays with more than 10 entries.

ID#400043491 : solved problem, known since VC 3.64.0, solved since V3.00.81.12

Copying doesn't apply style sheet settings

ID#400039405 : solved problem, known since V2.7.0.0019 SP12, solved since V3.00.81.09

Data type changes are not detected if the visualization application is closed

ID#400038779 : solved problem, known since V3.00.80.25, solved since V3.00.81.08

Multidimensional arrays can not be used in VC

ID#400035848 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.81.20 SP01

Focus placed incorrectly when performing "Replace" in VC

ID#400028068 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.81.07

String with length of 1,000,000 displayed in the data sources as having a length of 16960.

ID#400025144 : solved problem, known since V3.0.71.29 SP05, solved since V3.00.81.12

Style sheet property "Touchpad" not applied properly.

Style sheet property "Touchpad" not applied properly. When the editor is opened, the change is lost.

ID#400022167 : solved problem, known since V3.0.71.27 SP04, solved since V3.00.81.09

With color maps, sometimes not all indexes are shown after a copy/paste operation

ID# 400015211, 400016915 : solved problem, known since V2.7.0.0013 SP06, solved since V3.00.81.09

Alarms are not displayed right away in the editor

If a new alarm is inserted when no line is selected and the index of the new alarm is lower than 100, then the new alarm is not shown until the editor is closed and reopened.

ID#400014273 : solved problem, known since V3.0.71.20 SP02, solved since V3.00.81.09

Data types in VC are not shown if the declaration is split between multiple files

ID#400046571 : new function since V3.00.80.33 SP02

Import from other projects → Merge bitmap groups

When importing resources, it is now possible to merge bitmap groups.

1.3.3.4.15 SG4 Runtime – Alarmsystem

ID#400057953 : solved problem, known since V3.00.80.31 SP01, solved since VC 3.64.6

Focus colors of the Alarm control displayed incorrectly

The focus colors of the Alarm control are displayed incorrectly.

ID# 400054669, 400055052 : solved problem, known since VC 3.72.6, solved since VC 3.91.0

VC4 alarms are displayed with the wrong forecolor.

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ID#400044564 : solved problem, known since VC 3.64.2, solved since VC 3.71.6

Persistent alarm snippets are not saved

ID#400043532 : solved problem, known since VC 3.64.0, solved since ARSG4_3.06.5_E03.06

On ARsim, after approx. 2000 calls, VA_GetAlarmList only returns BUSY 247

ID#400040466 : solved problem, known since V3.00.80.25, solved since VC 3.71.2

Page fault when transferring visualization application after editing texts.

ID#400040233 : solved problem, known since V3.00.80.25, solved since VC 3.64.2

Alarm sorting according to group in the configuration alarm control is incorrect.

1.3.3.4.16 SG4 Runtime – Common

ID#267408 : solved problem, known since VC 3.92.8, solved since VC 3.93.2

If all of a project's languages aren't transferred to the target, an error occurs when loading the text resources.

ID#400069356 : solved problem, known since VC 3.73.0, solved since VC 3.92.6

PieChart control not refreshed when the sum of the values remains the same.

ID#400064836 : solved problem, known since VC 3.73.0, solved since VC 3.73.4

Invalid layer reference on a page causes a crash

If the description of the page contains a reference to a layer with <none>, an error occurs on the target.

ID#400064836 : solved problem, known since VC 3.73.0, solved since VC 3.91.8

Invalid layer reference on a page causes a crash

If the description of the page contains a reference to a layer with <none>, an error occurs on the target.

ID# 400059292, 400065022, 400055401 : solved problem, known since ARSG4_3.08.7_G03.08, solved since VC 3.93.0

SDM2: Can't access AR000 SDM via VC control

ID#248485 : solved problem, known since V3.00.81.22 SP01, solved since VC 3.91.0

The internal data point "IP address" doesn't work for the X20CP1483–1.

ID# 400054186, 400055491, 400059875, 400061184 : solved problem, known since VC 3.72.6, solved since VC 3.91.0

Calibration data points don't work

ID#400046353 : solved problem, known since VC 3.64.2, solved since VC 3.64.6

Trend causes a pagefault in some projects

ID# 400045199, 400073707 : solved problem, known since VC 3.64.2, solved since VC 3.72.0

VCDP_Utf8Get on terminal targets causes cycle time violation.

ID#400045261 : solved problem, known since VC 3.64.2, solved since VC 3.90.2

ARsim crashes if the True Type font "CIHLVB.TTF" is used.

Also applies for italic and bold variants.

ID#400039299 : solved problem, known since VC 3.63.8, solved since VC 3.71.2

Page fault caused by memory leak during permanent change to alarm page in specific application.

ID#400039580 : solved problem, known since VC 3.63.2, solved since VC 3.64.2

If a listbox contains more entries than can fit in the display window, the visualization application freezes sporadically.

ID#222955 : solved problem, known since V3.00.80.25, solved since VC 3.64.0

Values of enumerations are not shown on the display.

ID#400035530 : solved problem, known since V3.00.80.25, solved since VC 3.64.0

The command line interface in the Edit control doesn't work.

ID#400034681 : solved problem, known since V3.00.80.25, solved since VC 3.64.0

Custom visualization doesn't start after upgrading from 3.0.71 to 3.0.80.

Custom visualization doesn't start after upgrading from 3.0.71 to 3.0.80, because the page name and layer name add up to more than 49 characters.

ID#400032649 : solved problem, known since V3.0.71.31 SP05, solved since VC 3.64.0

Screensaver page is not entered in the history.

The screensaver page is not included in the history. If a "normal" page change is used to switch to the screensaver page, the "ChangeBack" key action doesn't work.

ID#400027752 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.81.08

Input Confirm = LostFocus briefly shows the old value

ID# 400007262, 400033959, 400033868 : solved problem, known since V3.0.71.14 SP01, solved since V3.00.81.09

Arabic characters are not combined into words

ID#400044702 : new function since VC 3.91.6

In a user trend, the sample rate can be defined by a data point.

ID# 400012126, 400012124 : new function since V3.00.81.09

TouchpadMinMax: Multiline output

In order to provide informative descriptions using TouchpadMinMax, it is sometimes necessary to enter multiple lines of text.

1.3.3.4.17 SG4 Runtime – Controls

ID#400063188 : solved problem, known since V3.00.90.01, solved since VC 3.91.6

Setting the property Format\PitchLines\MajorDevisions for the control element "Sale" to 0 pushes the CPU load to 100%

ID#400063188 : solved problem, known since V3.00.81.24 SP0x, solved since VC 3.73.4

Setting the property Format\PitchLines\MajorDevisions for the control element "Sale" to 0 pushes the CPU load to 100%

ID#400058612 : solved problem, known since VC 3.73.0, solved since VC 3.73.2

Trend time scale incorrect after changing the system time.

If the system time is changed, then there is an error when displaying a trend because the time change is not applied.

ID#400056229 : solved problem, known since V3.00.81.23 SP02, solved since VC 3.73.2

A TrendScaleContainer with a width of <= 16 pixels causes a page fault in VC

ID#400056229 : solved problem, known since V3.00.81.23 SP02, solved since VC 3.91.4

A TrendScaleContainer with a width of <= 16 pixels causes a page fault in VC

ID#400058121 : solved problem, known since V3.00.81.18, solved since VC 3.91.4

Defining a SampleCount of 2147483647 (approx 2GB) in the TrendControl causes a PageFault

Defining a value for the SampleCount that is too high causes a PageFault and the system will no longer boot. The problem occurs immediately when booting.

ID#400058612 : solved problem, known since VC 3.73.0, solved since VC 3.91.4

Trend time scale incorrect after changing the system time.

If the system time is changed, then there is an error when displaying a trend because the time change is not applied.

ID# 400057460, 400059634 : solved problem, known since VC 3.72.6, solved since VC 3.91.4

Trend time drifts away from the system time

After approximately 2 weeks, the time of the X axis of an online trend is no longer synchronized with the system time.

ID#400058121 : solved problem, known since V3.00.81.18, solved since VC 3.73.2

Defining a SampleCount of 2147483647 (approx 2GB) in the TrendControl causes a PageFault

Defining a value for the SampleCount that is too high causes a PageFault and the system will no longer boot. The problem occurs immediately when booting.

ID#400043306 : solved problem, known since VC 3.72.6, solved since VC 3.91.6

Pressing a key causes a page fault if the index in a drop-down control is outside the min/max range

ID#400054540 : solved problem, known since VC 3.72.6, solved since VC 3.73.2

When all items are locked, pressing the down arrow in a DropDown control causes a page fault.

In a DropDown control where all the entries are locked via the data point, using the down arrow to select an element causes a page fault.

ID#400054540 : solved problem, known since VC 3.90.2, solved since VC 3.91.6

When all items are locked, pressing the down arrow in a DropDown control causes a page fault.

In a DropDown control where all the entries are locked via the data point, using the down arrow to select an element causes a page fault.

ID#400054540 : solved problem, known since VC 3.64.2, solved since VC 3.64.6

When all items are locked, pressing the down arrow in a DropDown control causes a page fault.

In a DropDown control where all the entries are locked via the data point, using the down arrow to select an element causes a page fault.

ID#400053535 : solved problem, known since VC 3.72.6, solved since VC 3.73.2

The password characters are only shown in the open touchpad, but not in the control itself.

ID#400051722 : solved problem, known since VC 3.64.2, solved since VC 3.90.2

Page fault when the focus is placed on a drop-down control that has no text group.

ID#400051227 : solved problem, known since VC 3.64.2, solved since VC 3.90.2

If the listbox receives a Lock event while scrolling, the visualization application freezes.

ID# –, 400058133, 400065180 : solved problem, known since VC 3.64.2, solved since VC 3.90.2

Page fault in the listbox control when the Options data point is used

ID# 400051271, 400050884, 400052430 : solved problem, known since VC 3.72.6, solved since VC 3.90.2

Bitmaps can't be displayed on touchpads.

ID# 400051252 400052285, 400052430, 400053060, 400056401 : solved problem, known since VC 3.72.6, solved since VC 3.72.8

Error corrected that caused display errors on touchpads

ID#400049974 : solved problem, known since V3.00.80.31 SP01, solved since VC 3.90.2

Entering a certain Zoom factor for the Zoom data point freezes the visualization application.

ID#400049447 : solved problem, known since V3.00.80.25, solved since VC 3.90.2

EDIT control can't load a 16 kB file.

When a larger file (~16 kB) is loaded, the edit control shows error number 28710.

ID# 400045952, 400038410 : solved problem, known since VC 3.35.4, solved since VC 3.72.4

Trend line disappears from trend control after some time.

ID#400045700 : solved problem, known since VC 3.64.2, solved since VC 3.72.2

The dropdown control doesn't update a text with an IndexText snippet.

ID# 400043546, 400045730, 400028969 : solved problem, known since VC 3.35.4, solved since VC 3.72.2

Trend curves are not shown anymore after a longer period.

Due to an internal datapoint overflow trend curves are not displayed anymore after a longer running time.

ID#400044898 : solved problem, known since VC 3.64.2, solved since VC 3.71.8

If the property Value.Datapoint is not set (<none>) in a trend configuration, a page fault will occur in the Trend control

ID#400043851 : solved problem, known since VC 3.64.0, solved since VC 3.71.4

Incorrect behavior of vertical spacing in drop-down box

In a dropdown control, when Format -> Spacing is used to set a value (e.g. 50) that allows the box to be operated easily with a finger, the wrong value is selected.

ID#400042828 : solved problem, known since V2.7.0.0019 SP12, solved since VC 3.71.8

ValueScale scroll data point is reset when the page is changed

If the scroll data point of the trend curve is shifted, and the zoom factor is changed via the zoom data point,
and then the page is changed, the data point is reset to 0 when the page is opened again.

ID#400042921 : solved problem, known since VC 3.35.4, solved since VC 3.71.6

Error behavior with EnableDatapoint with the control element "Trend"

ID#400042457 : solved problem, known since V3.00.80.25, solved since VC 3.71.4

Hiding the trend value scale containers causes a page fault in VC

ID#400040641 : solved problem, known since V3.00.80.25, solved since VC 3.71.2

Trend control: Changing the zoom on the time axis shows and hides the curve.

ID#400039048 : solved problem, known since V3.00.80.25, solved since VC 3.64.2

StartTimeDatapoint for Trend control is overwritten by VC runtime.

ID#400036758 : solved problem, known since V3.00.80.25, solved since VC 3.64.0

"Out of Memory" when loading a text file, although the target has sufficient memory.

The escape character '\r' in a text file is mistakenly interpreted as "Out of Memory" when loading.

ID#400029462 : solved problem, known since VC 3.35.0, solved since V3.00.81.08

Touch events are forwarded to controls below a touchpad

ID#213003 : solved problem, known since V2.7.0.0017 SP10, solved since VC 3.64.2

Trend control: Data points Cursor(x) ValueDatapoint and Cursor(x) TimeDatapoint aren't triggered when the cursor is shown.

ID#400026159 : solved problem, known since VC 3.35.0, solved since V3.00.81.08

Different display of Trend scale in the editor and in the visualization on the device.

Y axis labeled in increments of 100, instead of 20 as configured in the editor.

ID# 400061514, 400059292, 400063539, 400065022 : solved problem, known since VC 3.62.2, solved since V3.00.81.10

SDM on HTML control on ARsim doesn't work

The combination SDM + HTML control doesn't work.

ID#400028089 : new function since VC 3.71.4

When the filter function is turned on (Type=BOOL[0..9]), variables of the type ARRAY [m..n] OF BOOL are not available, even though the data type is correct.

The "delete" command can be used to delete a whole line. The lines below the deleted one are shifted up.

ID#400039233 : known problem since V3.00.80.25, correction planned for VC 3.64.2

Page fault caused by MultipleTexts <None> when TextIndexDP is connected to the button control.

1.3.3.4.18 SG4 Runtime – Keyhandling

ID#400060084 : solved problem, known since VC 3.73.0, solved since VC 3.92.0

Error in LED and key handling on VC Windows terminals.

ID#400038617 : solved problem, known since VC 3.63.2, solved since VC 3.71.6

Key matrix data point remains set

If the layer of a pressed button is switched off, the key matrix data point still remains set.

ID# 400026501, 400028134, 400032681, 400060358 : solved problem, known since V2.7.0.0017 SP10, solved since VC 3.73.2

Touchpad key stays pressed

If two identical keys are mapped next to each other on a touchpad, one of the keys may get stuck pressed if they are both pressed at the same time by accident.

1.3.3.4.19 SG4 Runtime – TerminalMode

ID#400067118 : solved problem, known since VC 3.73.0, solved since V3.00.90.13

When VC Windows terminal is restarted, a running ARwin is not closed

ID# 400052164, 400056905 : solved problem, known since V3.00.81.18, solved since VC 3.73.4

Page fault when starting a Windows terminal

When starting a Windows terminal, a page fault occurs when loading the visualization application if the alarm system is used.

ID#246165 : solved problem, known since VC 3.73.0, solved since VC 3.73.2

Error starting terminal when AR J3.01 and VC3.73.0 are used.

When operating a terminal on an Automation Runtime target with AR Version J03.01 as well as VC Version 3.73.0, an error occurs when the terminal is started. There is no workaround for this error, the versions are incompatible.

ID# 400054303, 400054764 : solved problem, known since VC 3.72.6, solved since VC 3.73.0

Crash of VC Windows Runtime, when a page change is executed during loading the html control.

ID#400054078 : solved problem, known since VC 3.72.6, solved since VC 3.91.8

The visualization application stops responding after the function VA_SetVisualizationZOrder is called.

If the function VA_SetVisualizationZOrder(...) is called shortly after switching pages, and the flag SWP_ASYNCWINDOWPOS is not set, then the visualization application stops responding. This prevents the calling thread from blocking its execution while other threads process the request.

When this happens, the task manager shows that it is "not responding".

ValueMeaning

SWP_ASYNCWINDOWPOS (0x4000)

If the calling thread and the thread that owns the window are attached to different input queues, the system posts the request to the thread that owns the window.

ID#400053165 : solved problem, known since VC 3.72.6, solved since V3.00.90.11

If an incorrect administrator password is entered, the VC Windows terminal won't boot automatically anymore.

ID# 400052164, 400056905 : solved problem, known since V3.00.81.18, solved since VC 3.73.4

Page fault when starting a Windows terminal

When starting a Windows terminal, a page fault occurs when loading the visualization application if the alarm system is used.

ID#400041900 : solved problem, known since VC 3.64.0, solved since VC 3.71.4

vcboot is started, even though the server CPU is in service mode.

ID#400037532 : solved problem, known since V3.00.80.25, solved since V3.00.80.29 SP01

After downloading the program for a specific project, the panel crashes with a page fault.

ID#400036573 : solved problem, known since V2.7.0.0019 SP12, solved since VC 3.71.6

Key action locking doesn't work on a terminal if the locking variable isn't used on the page.

ID#400036104 : solved problem, known since ARSG4_3.00.22_V03.00, solved since VC 3.64.0

The terminal visualization starts considerably slower after switching from AS2.7.0 to AS3.0.80

ID#400030493 : solved problem, known since V3.00.80.22, solved since VC 3.64.0

LifeSignDatapoint stops incrementing

After reaching 32768, the LifeSign data point stops being incremented in the visualization. A larger data point has been used internally.

1.3.3.4.20 SG4 Runtime – VNC

ID#400041732 : solved problem, known since VC 3.35.4, solved since VC 3.91.4

VNC clients with different encoding cause display errors

ID#400034837 : solved problem, known since V3.00.80.25, solved since VC 3.64.0

Memory leak when using the Ultra VNC Viewer with a 32-bit visualization application.

ID# 400027965, 400029109, 400028111, 400015407, 400029650, 400029849, 400036331 : solved problem, known since V2.7.0.0016 SP09, solved since VC 3.64.0

PageFault caused by incorrect VNC authentication – Remote maintenance via Internet.

ID#263545 : known problem since VC 3.92.0, correction planned for V3.00.90.13

The font "Small Font" is not displayed correctly

Because of errors in the font "Small Font", Visual Components Runtime doesn't display it correctly.

1.3.3.5 1A4000.02 Automation Help

1.3.3.5.1 General

ID#400049392 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.12

Additional information 0x80004008 E_EXISTS is not described in error description 28700.

ID#180720 : new function since V3.00.80.25

Help has been created for simulation modules

Hardware Help documentation has been created for simulation modules SimDI, SimDO, SimAI, SimAO, SimDM and SimAM.

1.3.3.5.2 Motion – ACP10_MC

ID#400068552 : solved problem, known since V3.00.81.28 SP0x, solved since V3.00.90.12

Motion Samples: All errors have been acknowledged at once.

Under the following circumstances it was possible, that the error handling in the Motion Samples LibACP10MC_SingleAx_XX, LibACP10MC_Gear_XX, LibACP10MC_Cam_XX and LibACP10MC_Automat_XX was not correct, and all errors were acknowledged at once:

1. The switch-on command for the controller (XxxxControl.Command.Power = 1) is not set yet.
2. There are several errors active (e.g. due to a temporary network failure) on the respective axis.
3. The command for acknowledging (XxxControl.Command.ErrorAcknowledge) is given for once.

1.3.3.6 1A4000.02 (2.0 Automation Runtime SG4)

1.3.3.6.1 AR – ARemb

ID#400053201 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.2_B03.07

Automation Runtime boots cyclically or crashes addresses in the same subnet are assigned on both Ethernet interfaces

ID#400036153 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.2_B03.01

Using three 5LS182.6–1 in an APC results in the error 32173 "POWERLINK V2: Bind failed".

1.3.3.6.2 AR – ARsim

ID#400062877 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.9_I03.08

Remanent/permanent variables not saved when exiting ARsim

ID#400062877 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.10_J04.00

Remanent/permanent variables not saved when exiting ARsim

ID#400045929 : solved problem, known since ARSG4_3.06.2_B03.06, solved since ARSG4_3.01.6_F03.01

ARsim doesn't work on Windows XP Embedded

ID#400044495 : solved problem, known since ARSG4_3.06.1_A03.06, solved since ARSG4_3.06.2_B03.06

Logbook entry 33300 when ARsim is started in Windows 7 64-bit

ID#400042627 : solved problem, known since ARSG4_3.04.5_E03.04, solved since ARSG4_3.01.6_F03.01

Debugging in ARsim causes memory leak

ID#400039214 : solved problem, known since ARSG4_3.01.1_A03.01, solved since ARSG4_3.01.3_C03.01

Because of an internal timing error, the system clock is executed too often, which causes the ARsim to run "too fast"

ID#400030026 : solved problem, known since ARSG4_2.95.21_U02.95, solved since ARSG4_2.96.2_B02.96

Because of a system stack that is configured too small, error 9101 can occur on the ARsim

ID#400055446 : known problem since V2.7.0.0015 SP08, correction planned for ARSG4_3.07.3_C03.07

Address error occurs when a breakpoint is reached on a command that is 1 byte long

ID#400055446 : known problem since V2.7.0.0015 SP08, correction planned for ARSG4_3.08.4_D03.08

Address error occurs when a breakpoint is reached on a command that is 1 byte long

ID#400055446 : known problem since V2.7.0.0015 SP08, correction planned for ARSG4_4.00.4_D04.00

Address error occurs when a breakpoint is reached on a command that is 1 byte long

1.3.3.6.3 AR – ARwin

ID#400065938 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.08.15_O03.08

–c command line argument in the ARwin configuration disables not only the COM2 interface but also COM1.

ID#400065938 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_4.00.15_O04.00

–c command line argument in the ARwin configuration disables not only the COM2 interface but also COM1.

ID#400065540 : solved problem, known since V3.00.81.24 SP0x, solved since ARSG4_3.08.12_L03.08

ARwin shows incorrect amount of available DRAM memory in SDM

ID#400065540 : solved problem, known since V3.00.81.24 SP0x, solved since ARSG4_4.00.12_L04.00

ARwin shows incorrect amount of available DRAM memory in SDM

ID#400066313 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.8_H03.07

If, for example, the X2X timer is used as the system clock, then remanent variables aren't saved when there is a power failure

ID#400066313 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.11_K03.08

If, for example, the X2X timer is used as the system clock, then remanent variables aren't saved when there is a power failure

ID#400066313 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.11_K04.00

If, for example, the X2X timer is used as the system clock, then remanent variables aren't saved when there is a power failure

ID#400057456 : solved problem, known since ARSG4_3.01.7_G03.01, solved since ARSG4_3.07.8_H03.07

Update to ARwin configurator

It is now possible to set the broadcast address and the subnet mask.

ID#400057456 : solved problem, known since ARSG4_3.01.7_G03.01, solved since ARSG4_4.00.8_H04.00

Update to ARwin configurator

It is now possible to set the broadcast address and the subnet mask.

ID#400058774 : solved problem, known since ARSG4_3.08.4_D03.08, solved since ARSG4_3.08.8_H03.08

Incorrect version of rtosdrv.dll

If an APC with 16 interrupts (PIC types) is used as the target platform, e.g. an APC620 with an E855 board, there are problems with setup and when upgrading via AS. This is caused by incorrect versions of the dlls and driver involved.

ID#400058774 : solved problem, known since ARSG4_3.08.4_D03.08, solved since ARSG4_3.08.7_G03.08

Incorrect version of rtosdrv.dll

If an APC with 16 interrupts (PIC types) is used as the target platform, e.g. an APC620 with an E855 board, there are problems with setup and when upgrading via AS. This is caused by incorrect versions of the dlls and driver involved.

ID#400058774 : solved problem, known since ARSG4_3.08.4_D03.08, solved since ARSG4_3.08.6_F03.08

Incorrect version of rtosdrv.dll

If an APC with 16 interrupts (PIC types) is used as the target platform, e.g. an APC620 with an E855 board, there are problems with setup and when upgrading via AS. This is caused by incorrect versions of the dlls and driver involved.

ID#400057456 : solved problem, known since ARSG4_3.01.7_G03.01, solved since ARSG4_4.00.12_L04.00

Update to ARwin configurator

It is now possible to set the broadcast address and the subnet mask.

ID# 400052797, 400048509 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.10_J03.01

After changing the ARwin IP address using the configurator, the online connection can no longer be established.

ID#400051561 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.01.10_J03.01

Querying whether hyperthreading is active does not work reliably

ID#400049163 : solved problem, known since ARSG4_2.95.18_R02.95, solved since ARSG4_2.96.12_L02.96

PnP resources are sometimes not recognized during startup

ID#400046272 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.8_H03.01

Hyperthreading disturbs real-time behavior

ID#400042036 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.06.1_A03.06

When the connection to the terminal interface IP fails, the ARwin doesn't start

ID#400041999 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.4_D03.01

Running a DEVLink() or DEVUnlink() from ARwin on a directory shared in Windows (CIFS) can take up to 30 seconds

ID#400032621 : solved problem, known since ARSG4_2.95.19_S02.95, solved since ARSG4_3.04.4_D03.04

In PIC mode, programs that change the resolution of the NT timer can reduce the network performance of the ARwin ETH interface.

ID# 400033779, 400048786 : solved problem, known since ARSG4_2.95.22_V02.95, solved since ARSG4_2.96.9_I02.96

ARwin Setup doesn't update the interface driver for APC820

ID#400031784 : solved problem, known since ARSG4_2.96.1_A02.96, solved since ARSG4_2.96.3_C02.96

Sometimes the ARwin takes a long time to boot

ID#400031340 : solved problem, known since unbekannt, solved since ARSG4_2.96.3_C02.96

ARwin boot not complete

Due to a problem in the socket connection between the ARwin and the loader, the ARwin doesn't finish booting.

ID#400021790 : solved problem, known since unbekannt, solved since ARSG4_2.96.3_C02.96

Commands are lost due to faulty socket connection

If the ARwin is closed using the tool ar010end.exe, the APC sometimes reboots. The reason for this is that the command for shutting down doesn't reach the ARwin due to a damaged socket connection.

ID#400046704 : new function since ARSG4_3.01.6_F03.01

After updating ARwin from < V3.00 to V3.00 or higher, the following error appears when the ARwin is started: "bradi.dll fehlt"

ID#400039697 : new function since ARSG4_3.05.2_B03.05

New functions in ARwin console

The ARwin console now also provides the switches ""Warmstart", "Coldstart" and "Service".

ID# 400031454, 400030919 : new function since ARSG4_2.96.3_C02.96

Changes to the ARwin installation procedure

Prevention of sporadic errors (e.g. missing drivers) during installation by changing the order of installation.

ID#268630 : known problem since ARSG4_4.00.17_Q04.00, correction planned for ARSG4_4.00.18_R04.00

ARwin on Windows 7 doesn't work in Shared mode (when using more than 2GB DRAM)

ID#268405 : known problem since ARSG4_4.00.16_P04.00, correction planned for ARSG4_4.02.1_A04.02

Problems with ARwin in Windows 7 when firewall is on

In order to avoid ARwin communication problems in Windows 7, the Windows Firewall must be disabled for the "Realtime OS Virtual Network interface.

ID#400069705 : known problem since ARSG4_3.07.5_E03.07, correction planned for ARSG4_3.07.11_K03.07

Backup of remanent data to SRAM doesn't complete if ARwin is operated in Shared mode.

Solution: Use Exclusive mode

ID#400069705 : known problem since ARSG4_3.07.5_E03.07, correction planned for ARSG4_3.09.1_A03.09

Backup of remanent data to SRAM doesn't complete if ARwin is operated in Shared mode.

Solution: Use Exclusive mode

ID#400065938 : known problem since ARSG4_3.07.4_D03.07, correction planned for ARSG4_4.02.1_A04.02

-c command line argument in the ARwin configuration disables not only the COM2 interface but also COM1.

1.3.3.6.4 AR – General SG4

ID#400062576 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.07.7_G03.07

Error handling SYSCONF module in SYSROM

ID#400062152 : solved problem, known since V3.00.81.24 SP0x, solved since ARSG4_3.08.4_D03.08

Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem

ID#400062576 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.08.10_J03.08

Error handling SYSCONF module in SYSROM

ID#400062576 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_4.00.10_J04.00

Error handling SYSCONF module in SYSROM

ID#400054674 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.08.9_I03.08

Module transfer to target not saved if there is not sufficient memory in the back-up partition.

If storage space runs out while writing the back-up copy of a .br module (to the back-up partition), then both files (original and back-up copy) will remain on the CF, but the module in the back-up copy will be incomplete. An error will not be reported in this case. This doesn't cause any problems until the "healthy" file in the first partition is restored using the incomplete module from the second partition. A checksum error for the .br module will now be detected.

ID#400054674 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_4.00.9_I04.00

Module transfer to target not saved if there is not sufficient memory in the back-up partition.

If storage space runs out while writing the back-up copy of a .br module (to the back-up partition), then both files (original and back-up copy) will remain on the CF, but the module in the back-up copy will be incomplete. An error will not be reported in this case. This doesn't cause any problems until the "healthy" file in the first partition is restored using the incomplete module from the second partition. A checksum error for the .br module will now be detected.

ID#400056892 : solved problem, known since V3.00.81.22 SP01, solved since ARSG4_3.08.6_F03.08

If the requested bur_heap_size (C++) is too large, the installation error ERR_LOADER_USERHEAP (5150) is now triggered

ID#400056892 : solved problem, known since V3.00.81.22 SP01, solved since ARSG4_4.00.6_F04.00

If the requested bur_heap_size (C++) is too large, the installation error ERR_LOADER_USERHEAP (5150) is now triggered

ID#400056515 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_3.07.4_D03.07

Watchdog after CanWrite() on IF060 with IF621

Initialization problems in the CAN IRQ routine can prevent IRQs from being acknowledged and trigger a watchdog error.

ID#400056515 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_3.08.6_F03.08

Watchdog after CanWrite() on IF060 with IF621

Initialization problems in the CAN IRQ routine can prevent IRQs from being acknowledged and trigger a watchdog error.

ID#400056515 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_4.00.6_F04.00

Watchdog after CanWrite() on IF060 with IF621

Initialization problems in the CAN IRQ routine can prevent IRQs from being acknowledged and trigger a watchdog error.

ID# 400054123, 400055855 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.3_C03.07

When downloading in one cycle mode, an interrupt block can cause an I/O cycle time violation (27306)

ID# 400054123, 400055855 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.6_F03.08

When downloading in one cycle mode, an interrupt block can cause an I/O cycle time violation (27306)

ID#400055674 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.4_D03.08

Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem

ID#400055674 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.3_C03.07

Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem

ID#400055674 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.5_E04.00

Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem

ID# 400046190, 400041900 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.4_D04.00

Upgrade to AR Version E3.01 can cause the CPU to continuously reboot

ID# 400046190, 400041900 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.01.9_I03.01

Upgrade to AR Version E3.01 can cause the CPU to continuously reboot

ID# 400054123, 400055855 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.6_F04.00

When downloading in one cycle mode, an interrupt block can cause an I/O cycle time violation (27306)

ID#400051241 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.2_B03.07

Remanent variables are not initialized with their INIT values when the CF is regenerated and a warm restart is performed.

ID# 400046190, 400041900 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.6_F03.08

Upgrade to AR Version E3.01 can cause the CPU to continuously reboot

ID#400043785 : solved problem, known since ARSG4_2.95.20_T02.95, solved since ARSG4_3.07.1_A03.07

No clear text in the error logbook when data in the SRAM is lost while shutting down

ID# 400041949, 400043852 : solved problem, known since ARSG4_3.00.1_A03.00, solved since ARSG4_3.01.5_E03.01

When there is a task overload, CANrwtab() doesn't work anymore

ID# 400041502, 400042654, 400043447 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.6_F03.01

Due to an internal AR management problem, the warning "Mutex Table Overflow" is sometimes entered in the logbook. The application program is not affected by this.

ID#400037264 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.2_B03.01

Task overload causes memory leak

If a task is overloaded, an incorrect implementation in the variable check results in a memory leak.

ID#400031184 : solved problem, known since V3.0.71.32 SP06, solved since ARSG4_3.04.5_E03.04

Memory requirements of local remanent variables when copying the PV values in Copy Mode

Twice as much PV memory is required to copy the variable values of remanent local PVs in Copy Mode because the old and the new memory areas are in use during the copy procedure.

ID#400029925 : solved problem, known since ARSG4_2.95.21_U02.95, solved since ARSG4_2.96.2_B02.96

The exception routine is not called correctly if multiple cycle time violations occur

If multiple cycle time violations occur in quick succession, it's possible that the corresponding exception routine is not called as often as the cycle time violations occur.

ID#400028102 : solved problem, known since ARSG4_2.95.19_S02.95, solved since ARSG4_2.96.6_F02.96

Higher priority for AsUDP

To reduce interruptions in the handling of UDP packages, the priority has been increased for the AsUDP library.

ID#400019086 : solved problem, known since V2.7.0.0015 SP08, solved since ARSG4_3.04.5_E03.04

Newly created global variables are always initialized with 0 during download in Copy Mode

instead of with the corresponding initialization value

ID# 400019096 : solved problem, known since V2.6.0.0012 SP02, solved since ARSG4_3.04.5_E03.04

Copy Mode supports the acceptance of structure elements starting with AR E3.04

ID# 400002467, 400058853, 400058855 : new function since ARSG4_3.08.7_G03.08

Task class stack can only be configured up to a size of 1MB.

ID#400048512 : new function since ARSG4_4.00.9_I04.00

It is not possible to use C variables larger than 16 MB.

If variables larger than 16 MB are declared in C programs, Error 4522 will be generated when the project is built.

ID# 400002467, 400058853, 400058855 : new function since ARSG4_4.00.7_G04.00

Task class stack can only be configured up to a size of 1MB.

ID#400066308 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_3.07.10_J03.07

Error copying CAN CMS objects

Data is copied byte-wise from the CMS object to the PVs, although the target PVs may have data types larger than one byte.

ID#400066308 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_4.02.1_A04.02

Error copying CAN CMS objects

Data is copied byte-wise from the CMS object to the PVs, although the target PVs may have data types larger than one byte.

ID#400055674 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_3.08.4_D03.08

Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem

ID# 400046190, 400041900 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_3.07.11_K03.07

Upgrade to AR Version E3.01 can cause the CPU to continuously reboot

ID#400005281 : known problem since ARSG4_2.94.22_V02.94, correction planned for ARSG4_3.08.2_B03.08

INA online connection to X20CS1020 stops working when the modem configuration is also activated

1.3.3.6.5 AR – PP45

ID#400055836 : new function since ARSG4_3.07.6_F03.07

PP45 could fail at low temperatures

Low temperatures can cause a timer on the CPU to stop running. This problem can only be corrected by resetting the timer.

ID#400055836 : new function since ARSG4_3.08.8_H03.08

PP45 could fail at low temperatures

Low temperatures can cause a timer on the CPU to stop running. This problem can only be corrected by resetting the timer.

ID#400055836 : new function planned for ARSG4_2.96.13_M02.96

PP45 could fail at low temperatures

Low temperatures can cause a timer on the CPU to stop running. This problem can only be corrected by resetting the timer.

ID#400055836 : new function planned for ARSG4_3.01.11_K03.01

PP45 could fail at low temperatures

Low temperatures can cause a timer on the CPU to stop running. This problem can only be corrected by resetting the timer.

ID#400055836 : new function planned for ARSG4_4.00.8_H04.00

PP45 could fail at low temperatures

Low temperatures can cause a timer on the CPU to stop running. This problem can only be corrected by resetting the timer.

1.3.3.6.6 Diagnose – Debugger

ID#400053447 : solved problem, known since V3.00.81.20 SP01, solved since ARSG4_3.07.6_F03.07

In some circumstances, the watchdog may be triggered during debugging because a required system resource (Mutex) is not available

ID#400053447 : solved problem, known since V3.00.81.20 SP01, solved since ARSG4_3.01.11_K03.01

In some circumstances, the watchdog may be triggered during debugging because a required system resource (Mutex) is not available

ID# 400035047, 400036404 : solved problem, known since ARSG4_3.08.25_Y03.08, solved since ARSG4_4.00.11_K04.00

If a breakpoint is reached in the INIT SP, then it is no longer possible to leave the breakpoint. Execute (F5), Step Over (F10) or Step Into (F11) do not have an affect.

ID#400037524 : solved problem, known since V3.00.80.25, solved since ARSG4_3.08.3_C03.08

Error "9098 – System I/O cross-link task cycle time violation" is generated when a a SafePLC and standard PLC are linked and a breakpoint is set on the standard PLC.

ID# 400035047, 400036404 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.2_B03.01

If a breakpoint is reached in the INIT SP, then it is no longer possible to leave the breakpoint. Execute (F5), Step Over (F10) or Step Into (F11) do not have an affect.

ID#400033130 : solved problem, known since ARSG4_2.96.3_C02.96, solved since ARSG4_2.96.8_H02.96

Using the debugger can cause cycle time violations

Nested calls (e.g. calling the function CANexcep() to start an exception task) causes a cycle time violation due to an error in the handling of cycle time monitoring.

ID#400054111 : known problem since ARSG4_3.01.9_I03.01, correction planned for ARSG4_3.01.11_K03.01

Debugger terminates online connection

If application data is being exchanged with a target system via Ethernet, and a breakpoint is reached, all Ethernet buffers are used up (since the data is no longer picked up) and Ethernet communication is terminated. It is also no longer possible to establish an online connection.

ID#400054111 : known problem since ARSG4_3.01.9_I03.01, correction planned for ARSG4_3.07.4_D03.07

Debugger terminates online connection

If application data is being exchanged with a target system via Ethernet, and a breakpoint is reached, all Ethernet buffers are used up (since the data is no longer picked up) and Ethernet communication is terminated. It is also no longer possible to establish an online connection.

ID#400054111 : known problem since ARSG4_3.01.9_I03.01, correction planned for ARSG4_3.08.5_E03.08

Debugger terminates online connection

If application data is being exchanged with a target system via Ethernet, and a breakpoint is reached, all Ethernet buffers are used up (since the data is no longer picked up) and Ethernet communication is terminated. It is also no longer possible to establish an online connection.

ID#400054111 : known problem since ARSG4_3.01.9_I03.01, correction planned for ARSG4_4.00.4_D04.00

Debugger terminates online connection

If application data is being exchanged with a target system via Ethernet, and a breakpoint is reached, all Ethernet buffers are used up (since the data is no longer picked up) and Ethernet communication is terminated. It is also no longer possible to establish an online connection.

1.3.3.6.7 Diagnose – Logger

ID#400057809 : solved problem, known since , solved since ARSG4_3.08.6_F03.08

Using logger functions in fast task classes can lead to cycle time violations

Due to the copying required, using logger functions in fast task classes can lead to cycle time violations.

ID#400057809 : solved problem, known since ARSG4_3.01.8_H03.01, solved since ARSG4_4.00.7_G04.00

Using logger functions in fast task classes can lead to cycle time violations

Due to the copying required, using logger functions in fast task classes can lead to cycle time violations.

1.3.3.6.8 Diagnose – SDM

ID#400065562 : solved problem, known since ARSG4_3.07.6_F03.07, solved since ARSG4_3.07.7_G03.07

SDM 1 (Automation Studio 3.0.80) doesn't work with Firefox 4.0 and higher

The first version of the System Diagnostics Manager (SDM), delivered with Automation Studio 3.00.80 / 3.00.81 doesn't work correctly with Firefox version 4.0 or higher. Customers who use Firefox 4.0 or higher need to switch to SDM 2, provided with Automation Studio 3.00.90.

ID#400053957 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.4_D03.07

Time calculation incorrect for logger entries in SDM

When time zones were used, calculation of the local time for logger entries in SDM was incorrect. This has been corrected.

ID#400053957 : solved problem, known since unbekannt, solved since ARSG4_3.08.5_E03.08

Time calculation incorrect for logger entries in SDM

When time zones were used, calculation of the local time for logger entries in SDM was incorrect. This has been corrected.

ID#208190 : solved problem, known since ARSG4_3.00.12_L03.00, solved since ARSG4_3.06.4_D03.06

Size limit in the System Diagnostics Manager hardware display

With bigger systems (over 1000 nodes), the hardware tree in the browser doesn't work. In this case, the contents of the XML file, which can be loaded from the SDM using the browser are incorrect.

ID#400013287 : new function since ARSG4_3.08.9_I03.08

Use the Diagnostics System Manager to list modules' diagnostics data points

The System Diagnostics Manager can be used to save all of a module's diagnostic data points in a system dump.

1.3.3.6.9 Diagnose – Tracer

ID# 400053004, 400052525 : solved problem, known since V3.00.81.18, solved since ARSG4_3.07.6_F03.07

Trigger condition not working

If a trace with trigger condition is installed in the trace editor, then the trace will begin after the defined trigger event and automatically stop as soon as the buffer is full. If the trace is started again using the "Trace / Start" option in the main menu, the Start option in the shortcut menu or the "green traffic light" button, then the trace will be extremely slow or will not be started correctly.

ID# 400053004, 400052525 : solved problem, known since V3.00.81.18, solved since ARSG4_3.08.8_H03.08

Trigger condition not working

If a trace with trigger condition is installed in the trace editor, then the trace will begin after the defined trigger event and automatically stop as soon as the buffer is full. If the trace is started again using the "Trace / Start" option in the main menu, the Start option in the shortcut menu or the "green traffic light" button, then the trace will be extremely slow or will not be started correctly.

ID# 400053004, 400052525 : solved problem, known since V3.00.81.18, solved since ARSG4_4.00.8_H04.00

Trigger condition not working

If a trace with trigger condition is installed in the trace editor, then the trace will begin after the defined trigger event and automatically stop as soon as the buffer is full. If the trace is started again using the "Trace / Start" option in the main menu, the Start option in the shortcut menu or the "green traffic light" button, then the trace will be extremely slow or will not be started correctly.

ID#400041569 : solved problem, known since ARSG4_3.01.2_B03.01, solved since ARSG4_3.01.4_D03.01

Trace is stopped when the configuration is changed or if the AS connection is lost

1.3.3.6.10 IO System – 2003 Backplane

ID#400066089 : known problem since V2.7.0.4102 [V2.94], correction planned for ARSG4_2.96.16_P02.96

30479, 27306 when starting 7CP570.60–1 with four AF modules

When a fourth 7AF101.7 module with some free connections and five 7DM465.7 modules were connected to a 7AF101.7 module with three 7AF101.7 modules with no free connections, then turning on the analog module connected to the fourth 7AF101.7 caused a timeout, and Error 30479 was entered in the logbook. Then the AR resets the firmware of the 2003 backplane, and there is an I/O cycle time violation (27306). The timeout was set to low for this configuration and has been increased accordingly in the current version of AR.

ID#400066089 : known problem since V2.7.0.4102 [V2.94], correction planned for ARSG4_3.01.13_M03.01

30479, 27306 when starting 7CP570.60–1 with four AF modules

When a fourth 7AF101.7 module with some free connections and five 7DM465.7 modules were connected to a 7AF101.7 module with three 7AF101.7 modules with no free connections, then turning on the analog module connected to the fourth 7AF101.7 caused a timeout, and Error 30479 was entered in the logbook. Then the AR resets the firmware of the 2003 backplane, and there is an I/O cycle time violation (27306). The timeout was set to low for this configuration and has been increased accordingly in the current version of AR.

ID#400066089 : known problem since V2.7.0.4102 [V2.94], correction planned for ARSG4_3.07.11_K03.07

30479, 27306 when starting 7CP570.60–1 with four AF modules

When a fourth 7AF101.7 module with some free connections and five 7DM465.7 modules were connected to a 7AF101.7 module with three 7AF101.7 modules with no free connections, then turning on the analog module connected to the fourth 7AF101.7 caused a timeout, and Error 30479 was entered in the logbook. Then the AR resets the firmware of the 2003 backplane, and there is an I/O cycle time violation (27306). The timeout was set to low for this configuration and has been increased accordingly in the current version of AR.

ID#400066089 : known problem since V2.7.0.4102 [V2.94], correction planned for ARSG4_3.09.1_A03.09

30479, 27306 when starting 7CP570.60–1 with four AF modules

When a fourth 7AF101.7 module with some free connections and five 7DM465.7 modules were connected to a 7AF101.7 module with three 7AF101.7 modules with no free connections, then turning on the analog module connected to the fourth 7AF101.7 caused a timeout, and Error 30479 was entered in the logbook. Then the AR resets the firmware of the 2003 backplane, and there is an I/O cycle time violation (27306). The timeout was set to low for this configuration and has been increased accordingly in the current version of AR.

1.3.3.6.11 IO System – 2005 Backplane

ID#400046213 : solved problem, known since ARSG4_3.06.3_C03.06, solved since ARSG4_3.06.5_E03.06

EX350 modules that are configured but not connected hinder other 2005 system modules

If a 2005 project has a 3EX350.6 module configured but not connected, certain timing can result in other system modules (EX450, IP) being detected incorrectly or as having failed. Slave modules downstream from the EX450 module are detected as having failed although they are still running. This behavior no longer occurs with the current version.

1.3.3.6.12 IO System – CANIO

ID#400039937 : solved problem, known since V3.00.80.25, solved since ARSG4_3.07.6_F03.07

CANIO slaves are not always found after startup

ID#400039937 : solved problem, known since V3.00.80.25, solved since ARSG4_3.08.8_H03.08

CANIO slaves are not always found after startup

ID#400048831 : solved problem, known since ARSG4_3.01.4_D03.01, solved since ARSG4_2.96.11_K02.96

System clock doubled when using the LS172 as a timer device

When the 5LS172 is used as the system timer, the system clock ran at half the configured time.

ID#400039937 : solved problem, known since V3.00.80.25, solved since ARSG4_4.00.8_H04.00

CANIO slaves are not always found after startup

1.3.3.6.13 IO System – CANopen

ID#400060887 : solved problem, known since V3.00.81.22 SP01, solved since ARSG4_3.07.6_F03.07

CANopen slave not started by the master if it sends only an emergency telegram with data =0 instead of a Boot-Up message

ID#400060887 : solved problem, known since V3.00.81.22 SP01, solved since ARSG4_3.08.8_H03.08

CANopen slave not started by the master if it sends only an emergency telegram with data =0 instead of a Boot-Up message

ID#400056381 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.4_D03.07

Priority of CANopen master can be configured

The user can configure the priority of the CANopen master in order to adjust the system load for a particular application.

ID#400056381 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.5_E03.08

Priority of CANopen master can be configured

The user can configure the priority of the CANopen master in order to adjust the system load for a particular application.

ID#400056272 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.5_E04.00

Priority of CANopen master can be configured

The user can configure the priority of the CANopen master in order to adjust the system load for a particular application.

ID#400046758 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.7_G03.01

CANopen master sends incorrect PDO

With more than 64 mapping entries, the CANopen master sends an incorrect PDO.

ID#400046901 : solved problem, known since ARSG4_3.01.3_C03.01, solved since ARSG4_3.01.7_G03.01

CANopen system task can cause a cycle time violation, among other things

If the CANopen system task writes messages to the fieldbus logbook, it's possible that this leads to a cycle time violation.

ID# 400045867, 400045710 : solved problem, known since ARSG4_3.01.4_D03.01, solved since ARSG4_2.96.10_J02.96

CANopen master sporadically returns incorrect slave node status or incorrect ModuleOK status

ID# 400032504, 400033988 : solved problem, known since unbekannt, solved since ARSG4_2.96.4_D02.96

High resource load for CANopen system task

Due to a locking problem, a high priority CANopen system task (with a higher priority than the cyclic task class) can result in long runtimes. In some circumstances this can lead to a cycle time violation in a cyclic task class.

ID#400032367 : solved problem, known since ARSG4_2.96.2_B02.96, solved since ARSG4_2.96.4_D02.96

Node guarding fails temporarily

A high load on the CANopen stack, can result in insufficient resources being available for the node guarding process temporarily.

ID#400031607 : solved problem, known since ARSG4_3.06.1_A03.06, solved since ARSG4_3.06.4_D03.06

Index of Emergency COB IDs can't be overwritten

ID#400031304 : solved problem, known since unbekannt, solved since ARSG4_2.96.4_D02.96

Error during slave configuration

After a slave has been configured, additional (not necessary) configuration commands are sent.

ID# 400022378, 400024266, 400024392, 400024391, 400024462, 400025270, 400026541, 400031748, 400032414, 400034127 : solved problem, known since V3.0.71.28 SP05, solved since ARSG4_2.96.4_D02.96

ACOPOSinverter X64 frequency inverter is sometimes not started correctly when turned off and turned back on. The CANopen slave doesn't go into operational mode.

ID#400060887 : new function since ARSG4_4.00.8_H04.00

CANopen slave not started by the master if it sends only an emergency telegram with data =0 instead of a Boot-Up message

1.3.3.6.14 IO System – General

ID#400064601 : solved problem, known since ARSG4_3.08.8_H03.08, solved since ARSG4_3.08.10_J03.08

Insufficient logbook entry when ArConfig has double channels/QLinks.

If the ArConfig contains double channels or QLinks, then Error 30965 "No name specification" appears, which hardly explains the actual cause of the error.

ID#400064601 : solved problem, known since ARSG4_3.08.8_H03.08, solved since ARSG4_4.00.10_J04.00

Insufficient logbook entry when ArConfig has double channels/QLinks.

If the ArConfig contains double channels or QLinks, then Error 30965 "No name specification" appears, which hardly explains the actual cause of the error.

ID#400028352 : solved problem, known since ARSG4_3.00.15_O03.00, solved since ARSG4_3.08.9_I03.08

If global variables mapped to I/O points receive new addresses due to a change to the project, it is possible that the variable values are no longer transferred to the I/O points.

ID#400058109 : solved problem, known since V3.00.81.22 SP01, solved since ARSG4_3.07.6_F03.07

It can take very long to install I/O mappings, which can result in the connection being terminated due to a time violation.

ID#400058109 : solved problem, known since V3.00.81.22 SP01, solved since ARSG4_3.08.7_G03.08

It can take very long to install I/O mappings, which can result in the connection being terminated due to a time violation.

ID#400058109 : solved problem, known since V3.00.81.22 SP01, solved since ARSG4_4.00.7_G04.00

It can take very long to install I/O mappings, which can result in the connection being terminated due to a time violation.

ID#400057340 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_4.00.6_F04.00

POWERLINK reports error 27306 when starting a visualization application

When initializing the graphics card, the SOC interrupt is delayed, which causes an I/O cycle time violation to be reported. Since cyclic data is not transferred in this early boot phase, I/O cycle time violations are now only evaluated after the beginning of cyclic data transfer.

ID#400057340 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_3.08.6_F03.08

POWERLINK reports error 27306 when starting a visualization application

When initializing the graphics card, the SOC interrupt is delayed, which causes an I/O cycle time violation to be reported. Since cyclic data is not transferred in this early boot phase, I/O cycle time violations are now only evaluated after the beginning of cyclic data transfer.

ID#400057340 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_3.07.4_D03.07

POWERLINK reports error 27306 when starting a visualization application

When initializing the graphics card, the SOC interrupt is delayed, which causes an I/O cycle time violation to be reported. Since cyclic data is not transferred in this early boot phase, I/O cycle time violations are now only evaluated after the beginning of cyclic data transfer.

ID#400057827 : solved problem, known since ARSG4_3.07.1_A03.07, solved since ARSG4_3.07.4_D03.07

Maximum number of device handles exceeded with approx. 400 safety modules

A setup with approx. 400 safety modules and an X20CP1485 ran out of device handles, which is indicated in the logbook by Error 26003 "AR-DevMan: no free admin entry". The maximum number of device instances has been increased and is now 2.5 times higher

ID# 400053665, 400054105, 400055244 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.2_B03.07

I/O cycle time violation during startup due to initialization of graphic card

During the startup of the CPU with a highly utilized PCI bus a IO cycle time violation 27306 could be triggered by the initialization of the visualization tasks. IO cycle time violations in early startup phases are now caught by the system.

ID#225792 : solved problem, known since ARSG4_2.96.7_G02.96, solved since ARSG4_2.96.9_I02.96

Variables with data types other than SINT and USINT can now be connected to OCTET data points

Previously, only variables with data types SINT and USINT or ARRAY OF SINT and ARRAY OF USINT could be connected to IO data points with data type OCTET.

When trying to connect other data types, error message 26603 was entered in the logbook. Now only a check is carried out to ensure that the total size matches.

ID#225099 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.3_C03.01

Mapping PVs to I/O is not updated during task overload

Downloading a task, both in Copy and Overload mode, cause local variables in the respective task to be moved to new addresses. Because of an error in the install routine, the mapping tables of the shoveler are not updated, and incorrect addresses are used for further processing.

ID# 400028352, 400065604 : solved problem, known since ARSG4_3.00.15_O03.00, solved since ARSG4_3.08.9_I03.08

If global variables mapped to I/O points receive new addresses due to a change to the project, it is possible that the variable values are no longer transferred to the I/O points.

1.3.3.6.15 IO System – HWD

ID#235290 : solved problem, known since ARSG4_3.01.6_F03.01, solved since ARSG4_3.01.7_G03.01

Error 32244 when using 8AC114.60–2 only in NC Mapping table

If the module 8AC114.60–2 is configured , then with AR version F3.01 the following error can wrongly be indicated by the NC software (ACP10 or ARNC0):

– 32244: No PDO defined in the cyclic frame for this channel: NC object is disabled

If this error occurs with AR version F3.01, then another AR version must be used.

1.3.3.6.16 IO System – ModbusRTU

ID#400051798 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.10_J03.01

ModuleOk detections sometimes takes very long for S44

ID# 400045626, 400046770 : solved problem, known since ARSG4_3.01.4_D03.01, solved since ARSG4_3.01.6_F03.01

ModbusRTU only works for one interface – simultaneous use of multiple interfaces not possible

1.3.3.6.17 IO System – ModbusTCP

ID#400060899 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.01.11_K03.01

Due to an error in the task queue of the Modbus driver, packages that are received may no longer be allocated to the sent queries, thereby causing a connection timeout.

ID#400060899 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.07.6_F03.07

Due to an error in the task queue of the Modbus driver, packages that are received may no longer be allocated to the sent queries, thereby causing a connection timeout.

ID#400060899 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.08.8_H03.08

Due to an error in the task queue of the Modbus driver, packages that are received may no longer be allocated to the sent queries, thereby causing a connection timeout.

ID#400060899 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_4.00.8_H04.00

Due to an error in the task queue of the Modbus driver, packages that are received may no longer be allocated to the sent queries, thereby causing a connection timeout.

ID#400048959 : solved problem, known since ARSG4_2.96.10_J02.96, solved since ARSG4_2.96.13_M02.96

ModbusTCP master doesn't work on AC141

ID#400051942 : solved problem, known since unbekannt, solved since ARSG4_3.01.11_K03.01

ModbusTCP doesn't start all slaves

The problem is caused when there are no sockets available when establishing the connection. The ModbusTCP driver doesn't finish the initialization.

ID#400051942 : solved problem, known since unbekannt, solved since ARSG4_3.07.5_E03.07

ModbusTCP doesn't start all slaves

The problem is caused when there are no sockets available when establishing the connection. The ModbusTCP driver doesn't finish the initialization.

ID#400051942 : solved problem, known since unbekannt, solved since ARSG4_4.00.7_G04.00

ModbusTCP doesn't start all slaves

The problem is caused when there are no sockets available when establishing the connection. The ModbusTCP driver doesn't finish the initialization.

ID#400048959 : solved problem, known since ARSG4_2.96.10_J02.96, solved since ARSG4_3.01.11_K03.01

ModbusTCP master doesn't work on AC141

ID#400051942 : solved problem, known since unbekannt, solved since ARSG4_3.08.6_F03.08

ModbusTCP doesn't start all slaves

The problem is caused when there are no sockets available when establishing the connection. The ModbusTCP driver doesn't finish the initialization.

ID#400048959 : solved problem, known since ARSG4_2.96.10_J02.96, solved since ARSG4_3.07.5_E03.07

ModbusTCP master doesn't work on AC141

1.3.3.6.18 IO System – netX

ID#400069009 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.08.15_O03.08

VC application blocks netX data communication

A priority problem interrupts netX data collection in the rhythm of the default update time of the data source.

ID#400069009 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_4.00.15_O04.00

VC application blocks netX data communication

A priority problem interrupts netX data collection in the rhythm of the default update time of the data source.

ID#400065361 : solved problem, known since ARSG4_3.07.3_C03.07, solved since ARSG4_3.07.7_G03.07

IF1063–1 doesn't work on the BC1083

1.3.3.6.19 IO System – Powerlink

ID#265455 : solved problem, known since V3.00.90.12, solved since V3.00.90.14

POWERLINK: Default value for asynchronous timeout changed from 25 s to 50 s

Default value for asynchronous timeout increased from 25 s to 50 s.

As a result, even relatively slow POWERLINK stations with a response time higher than 25 s are detected with the default setting.

ID#400068763 : solved problem, known since ARSG4_3.08.11_K03.08, solved since ARSG4_4.00.16_P04.00

Naming of POWERLINK devices from other vendors in AsIODiag

The function blocks of the Library AsIODiag returned "plk_any" or "epl_any" for POWERLINK–Devices from other vendors than B&R in former versions.

The current Automation Runtime returns device names in the format "u%xV%x–unknown" where the first %x is replaced with the device identifier and the second %x is replaced by the vendor identifier.

Only if the option "Verify Device Type" is switched off, devices configured by XDD–Import will return "epl_any".

ID#400068763 : solved problem, known since ARSG4_3.08.11_K03.08, solved since ARSG4_3.08.14_N03.08

Naming of POWERLINK devices from other vendors in AsIODiag

The function blocks of the Library AsIODiag returned "plk_any" or "epl_any" for POWERLINK–Devices from other vendors than B&R in former versions.

The current Automation Runtime returns device names in the format "u%xV%x–unknown"

where the first %x is replaced with the device identifier and the second %x is replaced by the vendor identifier.

Only if the option "Verify Device Type" is switched off, devices configured by XDD-Import will return "epl_any".

ID#400060016 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_4.00.16_P04.00

Error 26051 in logbook when X20CS2770 after X20BCx083 on APC or Power Panel

If CANIO is enabled on both CAN interfaces of an X20CS2770 device being operated downstream from an X20BCx083 device, which itself is downstream from an APC or Power Panel, the error message "26051 AR-DD: xDeviceInit() error" is entered in the logbook.

Starting with AR K4.00, CANIO can be run on both CAN interfaces.

ID#258192 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_4.00.11_K04.00

Firmware Update for SafeMC did not complete.

Due to a change in A4.00, the firmware update for SafeMC modules doesn't complete. The R/E LED for SafeMC modules continues to double-blink green.

Starting with J4.00, the firmware update for SafeMC modules functions correctly again.

ID#258187 : solved problem, known since ARSG4_3.07.2_B03.07, solved since V3.00.90.11

Firmware Update for SafeMC did not complete.

Due to a change in A3.08, the firmware update for SafeMC modules doesn't complete. The R/E LED for SafeMC modules continues to double-blink green.

Starting with J3.08, the firmware update for SafeMC modules functions correctly again.

ID#400065239 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_3.07.7_G03.07

Firmware Update for SafeMC did not complete.

Due to a change in B3.07, the firmware update for SafeMC modules doesn't complete. The R/E LED for SafeMC modules continues to double-blink green.

Starting with G3.07, the firmware update for SafeMC modules functions correctly again.

ID#400061758 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.14_N03.08

ACOPOS synchronization problem 6002 in cascading POWERLINK networks when POWERLINK cycle time > 2ms

If a CPU with a system cycle time >2ms is synchronized as iCN with a higher level POWERLINK network, and ACOPOS stations with a POWERLINK cycle time >2ms are operated on a second POWERLINK interface, then the error 6002 can occur on the ACOPOS if the MN of the higher level POWERLINK network is still not active when the controller is started up.

Starting with AR version H3.08, the algorithm for starting synchronization upon startup has been improved so that the ACOPOS firmware can also be synchronized at startup even when there are very long cycle times and the MN has not been activated.

ID#251322 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.9_I04.00

POWERLINK: ACOPOSMulti with SafeMC as chained station

ACOPOSMulti with SafeMC didn't work as a chained station.

ID#251317 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.5_E03.07

POWERLINK: ACOPOSMulti with SafeMC as chained station

ACOPOSMulti with SafeMC didn't work as a chained station.

ID#400060965 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.5_E03.07

POWERLINK: ACOPOSMulti with SafeMC as chained station

ACOPOSMulti with SafeMC didn't work as a chained station.

ID#400060016 : solved problem, known since ARSG4_3.07.2_B03.07, solved since ARSG4_3.08.12_L03.08

Error 26051 in logbook when X20CS2770 after X20BCx083 on APC or Power Panel

If CANIO is enabled on both CAN interfaces of an X20CS2770 device being operated downstream from an X20BCx083 device, which itself is downstream from an APC or Power Panel, the error message "26051 AR-DD: xDeviceInit() error" is entered in the logbook. Starting with AR K3.08, CANIO can be run on both CAN interfaces.

ID#400042474 : solved problem, known since ARSG4_3.01.2_B03.01, solved since ARSG4_3.01.5_E03.01

Depending on the selected timer device, hardware detection may not be completed

ID#229222 : solved problem, known since ARSG4_3.05.2_B03.05, solved since ARSG4_3.06.1_A03.06

Logbook entry ERR_DDIOPLK_WRITEPARAM 30296 showed value 0 at Offset 8 in binary data

For the logbook entry ERR_DDIOPLK_WRITEPARAM 30296, the value 0 was always entered at Offset 8 instead of the value of the write command.

ID#400039303 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.3_C03.01

POWERLINK: SDO communication interrupted

During SDO communication from different tasks, it was possible for SDO communication to fail because of a locking problem.

ID#400068762 : new function since ARSG4_3.08.12_L03.08

Read ACOPOS device type using AslODiag function block

Starting with ACOPOS OS 2.28.0, the ACOPOS device type can be read using the function

blocks of the AsIODiag library.

ID#237362 : new function since ARSG4_3.08.2_B03.08

Logbook entry for firmware update now contains old and new version

When the firmware for POWERLINK stations is updated, both the old and new version numbers are noted in the logbook

ID#400040758 : new function since ARSG4_3.08.2_B03.08

Old and new firmware version entered in logbook

If the firmware on a POWERLINK V2 station is updated, the old and new firmware versions are now entered in the logbook, like they are for POWERLINK V1.

ID# 400034964, 400034661 : new function since ARSG4_2.96.10_J02.96

Modules that are configured downstream from the POWERLINK X2X controller but not physically present make the controller take longer to boot.

ID# 400009063, 400065339 : new function since ARSG4_3.07.8_H03.07

Find unconfigured POWERLINK stations with ASIODiag

Unconfigured POWERLINK stations can now be found using the ASIODiag library.

1.3.3.6.20 IO System – Profibus

ID#400053732 : solved problem, known since V3.00.81.18, solved since ARSG4_3.07.4_D03.07

Priority of Profibus master can be configured

The user can configure the priority of the Profibus master in order to adjust the system load for a particular application.

ID#400053732 : solved problem, known since V3.00.81.18, solved since ARSG4_3.08.5_E03.08

Priority of Profibus master can be configured

The user can configure the priority of the Profibus master in order to adjust the system load for a particular application.

ID#400053732 : solved problem, known since V3.00.81.18, solved since ARSG4_4.00.5_E04.00

Priority of Profibus master can be configured

The user can configure the priority of the Profibus master in order to adjust the system load for a particular application.

ID#400036980 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.2_B03.01

Due to an error calculating the offset, I/O channels are not applied with the setting "Mapping = Channels"

ID#400027276 : solved problem, known since ARSG4_2.95.19_S02.95, solved since ARSG4_2.96.2_B02.96

Profibus master sends the wrong ident in the config frame

ID#206455 : solved problem, known since ARSG4_3.00.11_K03.00, solved since ARSG4_2.96.7_G02.96

EX450 modules sporadically won't start – "No ReadyFlag from Interface"

ID# 400020057 : solved problem, known since ARSG4_2.95.12_L02.95, solved since ARSG4_2.96.4_D02.96

Activating "Module monitoring" when using an X20BC0063 causes the controller to go into Service mode when booting

1.3.3.6.21 IO System – X2X

ID#400044951 : solved problem, known since ARSG4_3.01.1_A03.01, solved since ARSG4_3.01.1_A03.01

Page fault caused by AsIOAccWrite on local X2X bus

If an AsIOAccWrite is performed on an X2X module on the local X2X interface, certain timing between the response of the module and the next call of the FB may result in a page fault in the task DdX2XAcc.<interface>, in the function "_trspMuxHandlerResp". This timing problem has been corrected.

ID#216445 : solved problem, known since ARSG4_2.96.1_A02.96, solved since ARSG4_2.96.4_D02.96

Not enough time between frames on the X2X Link bus

When there is not enough time between frames on the X2X Link bus, the combination of certain quartz tolerances and a high bus load can result in the failure of some X2X frames.

The time has been increased according to the worst-case tolerances. However, as a result there are fewer bytes of cyclic data available. Normally this is automatically compensated by a shortening of the acyclic frames.

For configurations where the cyclic data is at the limit, it may be necessary to split the input and output data asymmetrically: Warning 30334

ERR_DDIOX2X_ASYMMETRIC in the logbook.

For configurations that are at the absolute limit for cyclic data, the result may be that the configuration is no longer possible. Error message 30333 ERR_DDIOX2X_ASYNSIZE in the logbook.

ID#400028038 : solved problem, known since V2.7.0.0017 SP10, solved since ARSG4_2.96.5_E02.96

29-bit CAN ID when using the X20CS1070 causes an error when calling CANopen()

ID# 400034627, 400034661 : new function since ARSG4_2.96.4_D02.96

Long boot time when many modules are configured that are not connected

Due to the timeout mechanism, the PLC may take a long time to boot if a large number of modules are configured and only a small percentage of them are actually connected.

ID#238445 : known problem since ARSG4_3.08.1_A03.08, correction planned for ARSG4_3.08.2_B03.08

StaleData on local X2X Link interface when X2X cycle > system cycle

If the X2X cycle time was longer than the system cycle time, the StaleData flag has been set during system cycles in which no new data was received on the X2X Link. This behaviour was inconsistent to X2X Link modules which were connected to a X2X Link/POWERLINK buscontroller. Now the StaleData flag is only set, if no data was received from the module during the X2X Link cycle. The Nettime of the X2X Link interface can be used to determine if new X2X Link data was received during the latest system cycle.

ID#400042900 : known problem since ARSG4_3.00.22_V03.00, correction planned for ARSG4_3.01.6_F03.01

ModuleOK status for screw-in modules is not determined correctly in some cases

ID#400008018 : known problem since V2.7.0.0010 SP03, correction planned for ARSG4_2.96.10_J02.96

If a 7XX408.50-1 module is operated using an X20BC0083 and a BT9100, the PWM outputs do not function properly

1.3.3.6.22 Library – AsARCfg

ID#400047724 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.07.5_E03.07

When multiple Ethernet interfaces are used, interference in the routing table causes Error 29004 when the function block CfgSetDefaultGateway() is called

ID#400047724 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.08.6_F03.08

When multiple Ethernet interfaces are used, interference in the routing table causes Error 29004 when the function block CfgSetDefaultGateway() is called

ID# –, 400047408, 400049937 : solved problem, known since V3.00.81.12, solved since ARSG4_3.07.5_E03.07

Error 29009 occurs when reading the default gateway

ID# –, 400047408, 400049937 : solved problem, known since V3.00.81.12, solved since ARSG4_3.08.6_F03.08

Error 29009 occurs when reading the default gateway

ID#400047724 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_4.00.6_F04.00

When multiple Ethernet interfaces are used, interference in the routing table causes Error 29004 when the function block CfgSetDefaultGateway() is called

ID#400057746 : solved problem, known since ARSG4_3.06.4_D03.06, solved since ARSG4_3.07.5_E03.07

Calling the function block CfgSetEthConfigMode() with the same mode that is already in use triggers Error 29003

ID#400057746 : solved problem, known since ARSG4_3.06.4_D03.06, solved since ARSG4_3.08.6_F03.08

Calling the function block CfgSetEthConfigMode() with the same mode that is already in use triggers Error 29003

ID#400057746 : solved problem, known since ARSG4_3.06.4_D03.06, solved since ARSG4_3.07.5_E03.07

Calling the function block CfgSetEthConfigMode() with the same mode that is already in use triggers Error 29003

ID# –, 400047408, 400049937 : solved problem, known since V3.00.81.12, solved since ARSG4_3.07.5_E03.07

Error 29009 occurs when reading the default gateway

ID#400029507 : solved problem, known since V3.00.80.20, solved since ARSG4_2.96.4_D02.96

NonVolatile option doesn't work with CfgSetEthConfigMode() function block

1.3.3.6.23 Library – AsARLog

ID#400059082 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.6_F03.08

Creating a new logger module using AsArLogCreate() deletes any existing tasks with the same name

ID#400059082 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.6_F04.00

Creating a new logger module using AsArLogCreate() deletes any existing tasks with the same name

ID# 400031906, 400022988, 400026463 : solved problem, known since V3.0.71.31 SP05, solved since ARSG4_2.96.3_C02.96

AsArLogRead() provides incorrect time

Due to an error in calculating the time zone, the AsArLogRead() function block provides the incorrect time.

ID#400031708 : new function since ARSG4_3.05.2_B03.05

AsArRead() supports 0 for the parameter lenBin, memBin, lenAscii and memAscii – when 0 is transferred, the respective data isn't copied

ID#400072106 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_3.09.1_A03.09

Accessing the "Safety" and "Fieldbus" logbooks via library (with an index) causes a PageFault. The problem can be avoided by specifying the names "\$safety" or "\$fieldbus."

ID#400072106 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_4.01.1_A04.01

Accessing the "Safety" and "Fieldbus" logbooks via library (with an index) causes a PageFault. The problem can be avoided by specifying the names "\$safety" or "\$fieldbus."

ID#400072106 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_4.02.1_A04.02

Accessing the "Safety" and "Fieldbus" logbooks via library (with an index) causes a PageFault. The problem can be avoided by specifying the names "\$safety" or "\$fieldbus."

1.3.3.6.24 Library – AsCANopen

ID#400064575 : solved problem, known since ARSG4_3.07.3_C03.07, solved since ARSG4_3.07.7_G03.07

Attempt to download AsCANopen library to ARsim rejected with error 9650 "Library function not available"

ID#400064575 : solved problem, known since ARSG4_3.07.3_C03.07, solved since ARSG4_3.08.10_J03.08

Attempt to download AsCANopen library to ARsim rejected with error 9650 "Library function not available"

ID#400064575 : solved problem, known since ARSG4_3.07.3_C03.07, solved since ARSG4_4.00.10_J04.00

Attempt to download AsCANopen library to ARsim rejected with error 9650 "Library function not available"

ID#400055214 : solved problem, known since ARSG4_3.01.8_H03.01, solved since ARSG4_3.07.4_D03.07

Using CANopenNMT() can prevent a task download from completing

As a result the section of code for releasing the semaphore is not executed. The second time this function is called it is blocked by the semaphore and the task can't be completely transferred.

ID#400055214 : solved problem, known since ARSG4_3.01.8_H03.01, solved since ARSG4_3.08.4_D03.08

Using CANopenNMT() can prevent a task download from completing

As a result the section of code for releasing the semaphore is not executed. The second time this function is called it is blocked by the semaphore and the task can't be completely transferred.

ID#400055214 : solved problem, known since ARSG4_3.01.8_H03.01, solved since ARSG4_4.00.4_D04.00

Using CANopenNMT() can prevent a task download from completing

As a result the section of code for releasing the semaphore is not executed. The second time this function is called it is blocked by the semaphore and the task can't be completely transferred.

ID#400054457 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.3_C03.07

CANopenSDOWriteData() terminates after downloading several hundred bytes due to a full CAN buffer

ID#400054457 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.4_D03.08

CANopenSDOWriteData() terminates after downloading several hundred bytes due to a full CAN buffer

ID#400054457 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.4_D04.00

CANopenSDOWriteData() terminates after downloading several hundred bytes due to a full CAN buffer

ID#400055463 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.01.10_J03.01

CANopenSDOWrite8() only sends every second SDO

ID#400055463 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.07.3_C03.07

CANopenSDOWrite8() only sends every second SDO

ID#400055463 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.08.4_D03.08

CANopenSDOWrite8() only sends every second SDO

ID#400055463 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_4.00.3_C04.00

CANopenSDOWrite8() only sends every second SDO

ID#400054360 : solved problem, known since V3.00.81.20 SP01, solved since ARSG4_3.07.2_B03.07

With the function block CanOpenGetState(), when enable=FALSE the function block freezes during execution

ID#400054360 : solved problem, known since V3.00.81.20 SP01, solved since ARSG4_3.08.3_C03.08

With the function block CanOpenGetState(), when enable=FALSE the function block freezes during execution

ID#400054360 : solved problem, known since V3.00.81.20 SP01, solved since ARSG4_4.00.3_C04.00

With the function block CanOpenGetState(), when enable=FALSE the function block freezes during execution

ID# 400048365, 400048594 : solved problem, known since V3.00.80.31 SP01, solved since ARSG4_3.01.8_H03.01

When using the function blocks CANopenSDORead8(), CANopenSDOWrite8(), CANopenSDOReadData() and CANopenSDOWriteData() a watchdog error occurs after running for a longer period of time.

ID#400041410 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.3_C03.01

PDOs and SDOs get lost when using the AsCANopen library and when there is a heavy load on the CPU

ID#400035631 : new function since ARSG4_3.01.6_F03.01

New function blocks CANopenSDOReadData() and CANopenSDOWriteData()

ID#400012433 : new function since ARSG4_3.04.4_D03.04

New function blocks: CANopenSDOReadData(), CANopenSDOWriteData()

1.3.3.6.25 Library – AsEPL

ID#400055409 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.08.12_L03.08

EpISDORead() stays in the status "Busy" after the enable FB is set to FALSE

ID#400055409 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.08.14_N03.08

EpISDORead() stays in the status "Busy" after the enable FB is set to FALSE

1.3.3.6.26 Library – AsIMA

ID#400050977 : solved problem, known since unbekannt, solved since ARSG4_3.08.8_H03.08

AsIMA doesn't adjust for daylight savings time when reading the time from a peer station

ID#400050977 : solved problem, known since unbekannt, solved since ARSG4_4.00.8_H04.00

AsIMA doesn't adjust for daylight savings time when reading the time from a peer station

ID#400040658 : solved problem, known since ARSG4_3.01.2_B03.01, solved since ARSG4_3.01.3_C03.01

When connecting from the server to the client, the client freezes in the step "IMA_CONNECTING"

ID# 400039483, 400040973 : solved problem, known since ARSG4_2.96.6_F02.96, solved since ARSG4_2.96.9_I02.96

When connecting from the server to the client, the client freezes in the step "IMA_CONNECTING"

ID#400039843 : known problem since ARSG4_3.01.1_A03.01, correction planned for ARSG4_3.07.9_I03.07

Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC

ID#400039843 : known problem since ARSG4_3.01.1_A03.01, correction planned for ARSG4_3.08.14_N03.08

Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC

ID# 400035792, 400020837 : known problem since ARSG4_3.00.22_V03.00, correction planned for ARSG4_3.07.9_I03.07

Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC

ID# 400035792, 400020837 : known problem since ARSG4_3.00.22_V03.00, correction planned for ARSG4_3.08.14_N03.08

Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC

ID#400039843 : known problem since ARSG4_3.01.1_A03.01, correction planned for ARSG4_4.00.14_N04.00

Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC

ID#400007523 : known problem since V3.0.71.16 SP01, correction planned for ARSG4_3.08.10_J03.08

AsIMA ignores time zone information

ID# 400035792, 400020837 : known problem since ARSG4_3.00.22_V03.00, correction planned for ARSG4_4.00.14_N04.00

Under certain circumstances (INAaction with multiple PV objects) AR version 3.06/3.07 for SG4 is no longer compatible with older versions of AR or with SG3 / SGC

ID#400007523 : known problem since V3.0.71.16 SP01, correction planned for ARSG4_4.00.10_J04.00

AsIMA ignores time zone information

1.3.3.6.27 Library – AsIOAcc

ID#400040238 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.3_C03.01

AsIOAccWrite() doesn't work for ACOPOSinverter modules on the Modbus (call BUSY)

1.3.3.6.28 Library – AsIODiag

ID#257265 : new function since ARSG4_3.08.16_P03.08

Detection of POWERLINK hardware using AS–IO–Diag

In the past, when POWERLINK devices from other manufacturers were detected, the function block DiagGetStrInfo with infoCode asdiagPLUGGED_MODULE returned the string "epl_any". Starting with AR N3.08, devices from other manufacturers will return a string with the format "u% xV% x–PL–unknown", where the first %x represents the hexadecimal product code and the second %x represents the hexadecimal vendor ID.

If the function for checking the vendor ID and product code is enabled and these codes match the detected POWERLINK device, then the model number of the configured device is applied so that the strings returned with the infoCodes asdiagCONFIG_MODULE and asdiagPLUGGED_MODULE match.

ID#253632 : new function since ARSG4_4.00.16_P04.00

Detection of POWERLINK hardware using AS–IO–Diag

In the past, when POWERLINK devices from other manufacturers were detected, the function block DiagGetStrInfo with infoCode asdiagPLUGGED_MODULE returned the string "epl_any". Starting with AR N4.00, devices from other manufacturers will return a string with the format "u% xV% x–PL–unknown", where the first %x represents the hexadecimal product code and the second %x represents the hexadecimal vendor ID.

If the function for checking the vendor ID and product code is enabled and these codes match the detected POWERLINK device, then the model number of the configured device is applied so that the strings returned with the infoCodes asdiagCONFIG_MODULE and asdiagPLUGGED_MODULE match.

1.3.3.6.29 Library – AsL2DP

ID#400042115 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.5_E03.01

Error 28826 when calling the AsL2DP function block with Max_Module > 10 and S7 Profibus

ID#400030702 : new function since ARSG4_4.00.11_K04.00

New function block L2DPGetNode() for reading Profibus station number

ID#400030702 : new function since ARSG4_4.00.11_K04.00

New function block L2DPGetNode() for reading Profibus station number

1.3.3.6.30 Library – AsMem

ID# 400007099, 400044198 : solved problem, known since V2.7.0.0010 SP03, solved since ARSG4_3.08.6_F03.08

AsMemPartFree returned –8 byte free memory size

The function block AsMemPartFree for requesting the free memory size of a memory partition created with AsMemPartFree returned the value numByteFree = 4294967288 (= 16#FFFFFFF8 = –8), if the whole memory was allocated.

ID# 400007099, 400044198 : solved problem, known since V2.7.0.0010 SP03, solved since ARSG4_4.00.6_F04.00

AsMemPartFree returned –8 byte free memory size

The function block AsMemPartFree for requesting the free memory size of a memory partition created with AsMemPartFree returned the value numByteFree = 4294967288 (= 16#FFFFFFF8 = –8), if the whole memory was allocated.

ID#245157 : new function since ARSG4_4.00.6_F04.00

The value specified for AsMemPartCreate now corresponds to the largest allocated block

The value entered for AsMemPartCreate is rounded up to the closest multiple of 8, and then matches the largest allocated block. In older versions of AR, the management overhead of up to 112 bytes was also taken from the created partition.

1.3.3.6.31 Library – AsNxCoM

ID#400062449 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.07.7_G03.07

When using multiple netX CANopen master modules, a different handle is used for each module, which speeds up asynchronous function block processing.

ID#400062449 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_3.08.10_J03.08

When using multiple netX CANopen master modules, a different handle is used for each module, which speeds up asynchronous function block processing.

ID#400062449 : solved problem, known since ARSG4_3.07.4_D03.07, solved since ARSG4_4.00.10_J04.00

When using multiple netX CANopen master modules, a different handle is used for each module, which speeds up asynchronous function block processing.

1.3.3.6.32 Library – AsSem

ID#400026881 : solved problem, known since ARSG4_3.00.13_M03.00, solved since ARSG4_3.04.2_B03.04

When the SemCreate() function block from the AsSem library is called with the parameter values initCount = maxCount, the function block reports the Status 33320 (semaphore could not be generated).

1.3.3.6.33 Library – AsSNMP

ID#400045366 : new function since ARSG4_3.01.6_F03.01

New AsSNMP library

ID#400038170 : new function since ARSG4_3.05.1_A03.05

New AsSNMP library

Library for sending and receiving SNMP packages.

1.3.3.6.34 Library – AsTcp

ID#400043972 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.6_F03.01

The maximum number of parallel asynchronous function block calls is limited to 15

1.3.3.6.35 Library – AsUSB

ID#400051015 : solved problem, known since ARSG4_3.07.1_A03.07, solved since ARSG4_3.07.3_C03.07

Support for Cino F788–G barcode scanner

ID#400051015 : solved problem, known since ARSG4_3.07.1_A03.07, solved since ARSG4_3.08.4_D03.08

Support for Cino F788–G barcode scanner

ID#400051015 : solved problem, known since ARSG4_3.07.1_A03.07, solved since ARSG4_4.00.6_F04.00

Support for barcode scanner Cino F788–G

1.3.3.6.36 Library – AsXML

ID#400054911 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.07.2_B03.07

Function blocks from AsXML library ignore enable input

ID#400054911 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.3_C03.08

Function blocks from AsXML library ignore enable input

ID#400054911 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.4_D04.00

Function blocks from AsXML library ignore enable input

ID#400047305 : solved problem, known since ARSG4_3.01.5_E03.01, solved since ARSG4_3.01.7_G03.01

Empty string not permitted as attribute value

1.3.3.6.37 Library – CAN_lib

ID#400060652 : solved problem, known since ARSG4_3.07.3_C03.07, solved since ARSG4_3.07.5_E03.07

CANrwtab() returns invalid data

When CAN telegrams with fewer than 8 bytes are received, 8 are always written to the receive buffer (unused bytes are not written with 0).

ID#400060652 : solved problem, known since ARSG4_3.07.3_C03.07, solved since ARSG4_3.08.7_G03.08

CANrwtab() returns invalid data

When CAN telegrams with fewer than 8 bytes are received, 8 are always written to the receive buffer (unused bytes are not written with 0).

ID#400060652 : solved problem, known since ARSG4_3.07.3_C03.07, solved since ARSG4_4.00.7_G04.00

CANrwtab() returns invalid data

When CAN telegrams with fewer than 8 bytes are received, 8 are always written to the receive buffer (unused bytes are not written with 0).

ID#400047219 : solved problem, known since V3.00.80.29 SP01, solved since ARSG4_3.01.7_G03.01

CAN exception not executed after calling CANwrite.enable = 0

ID# 400041692, 400043900 : solved problem, known since ARSG4_2.96.6_F02.96, solved since V3.00.81.17

When using the X20CS1070, CANDftab() returns Status 26061 when the task containing CAN operation is overloaded

ID#400030593 : solved problem, known since ARSG4_2.95.22_V02.95, solved since ARSG4_2.96.2_B02.96

Cycle time violation caused by CANwrite()

When using the CANwrite() function block, a cycle time violation can occur in cyclic tasks if multiple CAN interfaces were opened previously with the CANMulOpen() function block. The error is caused by allocation of management memory (SM_malloc) using the CANwrite() function block.

ID#400028109 : solved problem, known since ARSG4_2.95.20_T02.95, solved since ARSG4_2.96.1_A02.96

CanQurw() sporadically delivers status 8810

When using two CAN interfaces at the same time, it's possible that the CANquwr() function block delivers the status 8810 resulting in telegrams being missed.

1.3.3.6.38 Library – FileIO

ID#400069276 : solved problem, known since ARSG4_3.08.10_J03.08, solved since ARSG4_3.07.9_I03.07

Using a handle that has already been closed can cause a page fault (read, write, or close on a handle)

ID#400069276 : solved problem, known since ARSG4_3.08.10_J03.08, solved since ARSG4_3.08.14_N03.08

Using a handle that has already been closed can cause a page fault (read, write, or close on a handle)

ID#400069276 : solved problem, known since ARSG4_3.08.10_J03.08, solved since ARSG4_4.00.14_N04.00

Using a handle that has already been closed can cause a page fault (read, write, or close on a handle)

ID#400060157 : solved problem, known since ARSG4_2.96.12_L02.96, solved since ARSG4_2.96.13_M02.96

The status BUSY can remain set for up to 120 minutes if the connection is lost when using the function block DirInfo() over a network

ID#400060157 : solved problem, known since ARSG4_2.96.12_L02.96, solved since ARSG4_3.07.6_F03.07

The status BUSY can remain set for up to 120 minutes if the connection is lost when using the function block DirInfo() over a network

ID#400060157 : solved problem, known since ARSG4_2.96.12_L02.96, solved since ARSG4_3.08.9_I03.08

The status BUSY can remain set for up to 120 minutes if the connection is lost when using the function block DirInfo() over a network

ID#400053325 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.10_J03.01

The maximum length for the device name when calling DevLink() on ARsim targets has been increased from 128 characters to 256 characters.

ID#400051743 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.2_B03.08

If no destination directory is specified for DirCopy(), copying to ARsim doesn't work.

ID#400041545 : solved problem, known since ARSG4_3.01.2_B03.01, solved since ARSG4_3.01.4_D03.01

On ARsim, calling DirCreate() a second time with the same directory name does not report status 20725, but rather 20709

ID#400033999 : solved problem, known since V2.7.0.0019 SP12, solved since ARSG4_3.01.4_D03.01

Memory leak due to cyclic DevLink() / DevUnlink()

ID#400027971 : solved problem, known since V3.0.71.31 SP05, solved since ARSG4_3.04.2_B03.04

DirRead() reads the wrong time – local time is not considered

ID#400024449 : solved problem, known since ARSG4_3.04.2_B03.04, solved since ARSG4_3.05.1_A03.05

Attempting to copy a directory to a subordinate directory is no longer permitted, and generates the error fiERR_INVALID_PATH

ID#400048318 : new function since ARSG4_3.08.11_K03.08

New function blocks FileWriteEx() and FileTruncate()

ID#400063458 : new function since ARSG4_3.08.10_J03.08

DevLink() blocks other file actions for a relatively long time

ID#400038864 : new function since ARSG4_3.08.9_I03.08

Function blocks now return the error 20709 (fiERR_FILE_DEVICE) if a device is not present

ID#400063458 : new function since ARSG4_4.00.10_J04.00

DevLink() blocks other file actions for a relatively long time

ID#400048318 : new function since ARSG4_4.00.11_K04.00

New function blocks FileWriteEx() and FileTruncate()

ID#400038864 : new function since ARSG4_4.00.10_J04.00

Function blocks now return the error 20709 (fiERR_FILE_DEVICE) if a device is not present

ID#400028201 : new function since ARSG4_3.01.4_D03.01

Running a DEVLink() or DEVUnlink() from ARwin on a directory shared in Windows (CIFS) can take up to 30 seconds

1.3.3.6.39 Library – INAcient

ID#400030615 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.1_A03.01

Client doesn't read all PVs, reads incorrect values or no values at all.

1.3.3.6.40 Library – LoopConR

ID#400067831 : known problem since unbekannt, correction planned for ARSG4_4.02.1_A04.02

Memory management problem with task overload corrected with library version V2.80.1 and up

1.3.3.6.41 Library – LoopConR V2.72.3

ID#400042434 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.8_H03.01

If Mode = 0 or the constant LCRPID_MODE_OFF is transferred in the function block LCRPID, the status 31553 is returned.

1.3.3.6.42 Library – SYS_lib

ID#400011003 : solved problem, known since ARSG4_4.00.3_C04.00, solved since ARSG4_4.00.6_F04.00

TIM_musec returns incorrect time when the system tick isn't a whole number multiple or factor of 10 milliseconds

If the system tick is not a real factor or whole number multiple of 10 milliseconds, then the microsecond counter is not reset after exactly 10 milliseconds as specified. For example, with a system tick of 1600µs it is reset after 9600µs (6x1600) or 11200µs (7x1600).

The AsIOTimeStamp() function from the AsIOTime library is better suited for time

measurements.

ID#400011003 : solved problem, known since ARSG4_3.08.4_D03.08, solved since ARSG4_3.08.6_F03.08

TIM_musec returns incorrect time when the system tick isn't a whole number multiple or factor of 10 milliseconds

If the system tick is not a real factor or whole number multiple of 10 milliseconds, then the microsecond counter is not reset after exactly 10 milliseconds as specified.
For example, with a system tick of 1600µs it is reset after 9600µs (6x1600) or 11200µs (7x1600).

The AslOTimeStamp() function from the AslOTime library is better suited for time measurements.

ID# 400028877, 400038632 : solved problem, known since ARSG4_2.95.5_E02.95, solved since ARSG4_2.96.11_K02.96

ST_name() doesn't return task names in the EXIT

1.3.3.6.43 System – ANSL

ID#400055699 : solved problem, known since V3.00.81.22 SP01, solved since ARSG4_4.00.8_H04.00

VC Windows Terminal: Changes to Enum variables are not updated on the terminal, but changes from the terminal are updated on the CPU

ID#400049393 : solved problem, known since ARSG4_3.01.7_G03.01, solved since ARSG4_3.01.9_I03.01

Communication places heavy load on the Terminal CPU

The problem occurs when dynamic PVs are not assigned a valid pointer (0). The recurring search for the PV overloads the system.

ID#400047610 : solved problem, known since ARSG4_3.01.5_E03.01, solved since ARSG4_3.01.7_G03.01

Terminal variables are not updated when they are initialized after startup.

ID#400036104 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.2_B03.01

VC4 > Terminal Mode > Operating the visualization with AS3.00.80 considerably slower than in earlier versions

ID#400033456 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.2_B03.01

Value changes to enumerations are not displayed on the terminal

ID#400023079 : solved problem, known since ARSG4_2.95.19_S02.95, solved since ARSG4_2.96.2_B02.96

Terminal mode: With a string length of 1024 or larger, the string is no longer transferred correctly

1.3.3.6.44 System – DHCP

ID# 400051264 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.01.9_I03.01

Static routing doesn't work with DHCP

ID#400037131 : solved problem, known since ARSG4_3.01.2_B03.01, solved since ARSG4_3.01.4_D03.01

Receiving a DHCP offer package with the option 81 causes page fault

ID# 400021425 : solved problem, known since ARSG4_2.95.2_B02.95, solved since ARSG4_2.96.5_E02.96

Stack overflow on the DHCP server causes PageFault

1.3.3.6.45 System – Firmware

ID#257680 : solved problem, known since ARSG4_3.01.11_K03.01, solved since ARSG4_2.96.14_N02.96

PP065 in combination with a 4PP065.IF23–1 no longer booting due to a faulty flash access after a firmware update

ID#257435 : solved problem, known since ARSG4_3.01.11_K03.01, solved since ARSG4_3.01.12_L03.01

PP065 in combination with a 4PP065.IF23–1 no longer booting due to a faulty flash access after a firmware update

ID#257430 : solved problem, known since ARSG4_3.01.11_K03.01, solved since ARSG4_3.07.6_F03.07

PP065 in combination with a 4PP065.IF23–1 no longer booting due to a faulty flash access after a firmware update

ID#257375 : solved problem, known since ARSG4_3.01.11_K03.01, solved since ARSG4_3.08.10_J03.08

PP065 in combination with a 4PP065.IF23–1 no longer booting due to a faulty flash access after a firmware update

ID#400059335 : solved problem, known since unbekannt, solved since ARSG4_2.96.13_M02.96

Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly

ID#400059335 : solved problem, known since unbekannt, solved since ARSG4_3.01.11_K03.01

Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly

ID#400059335 : solved problem, known since unbekannt, solved since ARSG4_3.07.6_F03.07

Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly

ID#400059335 : solved problem, known since unbekannt, solved since ARSG4_3.08.10_J03.08

Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly

ID#400054833 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_3.08.4_D03.08

PP065: Warning "26061 Cannot configure minimum reduced cycle time due to old firmware" because of different drivers or POWERLINK firmware

ID#400048657 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.3_C04.00

PP045 with IF24 (L2DP) returns incorrect data when odd addresses are read in the Profibus image

ID#400045098 : solved problem, known since ARSG4_2.96.9_I02.96, solved since ARSG4_2.96.9_I02.96

PP065: If a device is operated at low temperatures, the background lighting remains dark.

ID# 400038343, 400039888, 400040075 : solved problem, known since ARSG4_2.96.1_A02.96, solved since ARSG4_2.96.8_H02.96

PP45 reports the wrong Module ID

ID#400037284 : new function since ARSG4_3.08.10_J03.08

Improved response time for PP065 touch screen

ID#400037284 : new function planned for ARSG4_2.96.12_L02.96

Improved response time for PP065 touch screen

ID#400037284 : new function planned for ARSG4_3.07.2_B03.07

Improved response time for PP065 touch screen

ID#400059335 : known problem since unbekannt, correction planned for ARSG4_4.00.7_G04.00

Correction of the error in which very short and light pressure on the touch screen can cause the position to be evaluated incorrectly

ID#400054833 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_3.07.2_B03.07

PP065: Warning "26061 Cannot configure minimum reduced cycle time due to old firmware" because of different drivers or POWERLINK firmware

ID#400048657 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_3.07.2_B03.07

PP045 with IF24 (L2DP) returns incorrect data when odd addresses are read in the Profibus image

ID#400054833 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_4.00.3_C04.00

PP065: Warning "26061 Cannot configure minimum reduced cycle time due to old firmware" because of different drivers or POWERLINK firmware

1.3.3.6.46 System – Firmware

ID#400037284 : new function since ARSG4_3.07.2_B03.07

Improved response time for PP065 touch screen

ID#400048657 : known problem since ARSG4_3.06.22_V03.06, correction planned for ARSG4_3.08.4_D03.08

PP045 with IF24 (L2DP) returns incorrect data when odd addresses are read in the Profibus image

1.3.3.6.47 System – FTP Server

ID#400055971 : solved problem, known since ARSG4_3.06.22_V03.06, solved since ARSG4_4.00.9_I04.00

ARemb terminates INA connection if an attempt is made to access a non-existing partition via FTP

1.3.3.6.48 System – INA

ID#400041484 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.4_D03.01

INA routing via POWERLINK doesn't work

ID#400039603 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.4_D03.01

INA routing via POWERLINK doesn't work

ID#218739 : solved problem, known since ARSG4_2.96.3_C02.96, solved since ARSG4_2.96.5_E02.96

High resource load for INA Client connection with no peer station (server)

If there is an attempt to establish a client connection and the corresponding peer station is not available, the resource requirement for the INA Ethernet task may become very high.

1.3.3.6.49 System – Netboot

ID#400044001 : new function since ARSG4_2.96.12_L02.96

Remote install causes Warning 27058 "NV memory block cannot be backed up"

If a restart is triggered during a remote install, a missing uninstallation results in Warning 27058 "NV memory block cannot be backed up".

1.3.3.6.50 System – OPC

ID#400055614 : solved problem, known since PVI3.00.00.3119, solved since ARSG4_3.08.8_H03.08

"VT_DATE local" wrong for DCOM routines – in leap years the date is offset by one day

ID#400055610 : solved problem, known since ARSG4_3.07.1_A03.07, solved since ARSG4_3.08.8_H03.08

DT and DATE_AND _TIME variables are converted incorrectly by VT_DATE when they are written.

ID#400055610 : solved problem, known since ARSG4_3.07.1_A03.07, solved since ARSG4_4.00.8_H04.00

DT and DATE_AND _TIME variables are converted incorrectly by VT_DATE when they are written.

ID#400055614 : solved problem, known since PVI3.00.00.3119, solved since ARSG4_4.00.8_H04.00

"VT_DATE local" wrong for DCOM routines – in leap years the date is offset by one day

ID#400046414 : solved problem, known since ARSG4_3.06.3_C03.06, solved since ARSG4_3.07.1_A03.07

Pagefault / Memory not in heap

Incorrect handling of strings leads to page fault or "Memory not in heap" errors.

ID#400036902 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.05.2_B03.05

If an empty string is written to the AR OPC server, a page fault occurs

ID#400032324 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.2_B03.01

The AR OPC server can only be accessed via the first Ethernet interface on the target system.

If the target system has multiple Ethernet interfaces, the OPC server can only be accessed via the first one.

ID# 400038150, 400037974 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.01.3_C03.01

AR OPC server doesn't work on ARwin

1.3.3.6.51 System – USB Support

ID# 400040510, 400040224 400040220 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_2.96.8_H02.96

Some USB flash drives don't work in Automation Runtime

Due to a timing change, some USB flash drives don't work in Automation Runtime.

1.3.3.6.52 System – WebServer

ID#400057308 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.07.5_E03.07

Target crashes with page fault in the web server module when an ASP write command is run from a website with more than 9 variables.

ID#400052213 : solved problem, known since V3.00.80.31 SP01, solved since ARSG4_3.08.11_K03.08

ENUM data types in ASP functions

With the current version of AR, it is now possible to use ENUM data types in HTML pages via ASP functions.

ID#400057308 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_3.08.11_K03.08

Target crashes with page fault in the web server module when an ASP write command is run from a website with more than 9 variables.

ID#400053444 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.07.3_C03.07

Variable values sometimes displayed incorrectly on ASP pages

On large ASP pages, some PV values are not evaluated correctly by the respective ASP function.

As a result, the HTML page displays illegible special characters instead of the actual PV value. This error has been corrected.

ID#400053444 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.08.8_H03.08

Variable values sometimes displayed incorrectly on ASP pages

On large ASP pages, some PV values are not evaluated correctly by the respective ASP function.

As a result, the HTML page displays illegible special characters instead of the actual PV value. This error has been corrected.

ID#400057308 : solved problem, known since , solved since ARSG4_3.08.8_H03.08

Target crashes with page fault in the web server module when an ASP write command is run from a website with more than 9 variables.

ID#400057308 : solved problem, known since ARSG4_3.01.9_I03.01, solved since ARSG4_4.00.8_H04.00

Target crashes with page fault in the web server module when an ASP write command is run from a website with more than 9 variables.

ID#400053444 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_3.08.8_H03.08

Variable values sometimes displayed incorrectly on ASP pages

On large ASP pages, some PV values are not evaluated correctly by the respective ASP function.

As a result, the HTML page displays illegible special characters instead of the actual PV value. This error has been corrected.

ID#400049979 : solved problem, known since ARSG4_3.01.7_G03.01, solved since ARSG4_3.07.4_D03.07

SDM – Update problems with dynamic page content

If a PC has multiple connections to the SDM (via multiple browser windows or multiple tabs within one browser), then dynamic SVG pages (CPU temperature, CPU load) are not updated continuously. This problem has been corrected.

ID#400053444 : solved problem, known since ARSG4_3.00.22_V03.00, solved since ARSG4_4.00.8_H04.00

Variable values sometimes displayed incorrectly on ASP pages

On large ASP pages, ASP functions are not evaluated correctly.

As a result, the HTML page displays illegible special characters instead of the actual PV value. This error has been corrected.

ID#400052213 : solved problem, known since V3.00.80.31 SP01, solved since ARSG4_4.00.11_K04.00

ENUM data types in ASP functions

With the current version of AR, it is now possible to use ENUM data types in HTML pages via ASP functions.

ID#400049979 : solved problem, known since ARSG4_3.01.7_G03.01, solved since ARSG4_3.08.5_E03.08

SDM – Update problems with dynamic page content

If a PC has multiple connections to the SDM (via multiple browser windows or multiple tabs within one browser), then dynamic SVG pages (CPU temperature, CPU load) are not updated continuously.

This problem has been corrected.

ID#400043289 : solved problem, known since ARSG4_3.01.3_C03.01, solved since ARSG4_3.01.5_E03.01

The webserver cache mechanism doesn't test the file date – as a result, changed data isn't displayed

ID#400041193 : solved problem, known since ARSG4_3.01.1_A03.01, solved since ARSG4_3.01.4_D03.01

As soon as a website is accessed that is either write-protected itself or that is inside a write-protected folder, the CPU crashes with a page fault.

ID#400041072 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.5_E03.01

ReadPlc only reads the top two values of 4-byte values.

ID#400038693 : solved problem, known since V3.00.80.25, solved since ARSG4_3.01.3_C03.01

Parameter transfer for "webprint" function doesn't work with AR 3.00 and up. String cut off after "="

ID# 400029923, 400037586 : solved problem, known since ARSG4_3.00.14_N03.00, solved since ARSG4_3.01.2_B03.01

Web server doesn't work on User Partition (F:)

1.3.3.7 1A4000.02 (2.1 Automation Runtime SGC)

1.3.3.7.1 AR – General SGC

ID#400068517 : solved problem, known since ARSGC_2.31.6.F02.31, solved since ARSGC_2.32.6.F02.32

Changing the number of configured task classes can cause an error when booting the system (27352 – Error generating a task class)

ID#400060158 : solved problem, known since ARSGC_2.31.5.E02.31, solved since ARSGC_2.31.6.F02.31

I/O outputs are set although the target is in service mode

ID#400060158 : solved problem, known since ARSGC_2.31.5.E02.31, solved since ARSGC_2.32.2.B02.32

I/O outputs are set although the target is in service mode

ID#400038869 : solved problem, known since V3.00.80.25, solved since ARSGC_2.31.2.B02.31

The PLC can crash because of faulty handling when deleting tasks in Service Mode (different error types: address error, illegal instruction, etc.)

ID#400037132 : solved problem, known since ARSGC_2.00.5.E02.00, solved since ARSGC_2.31.2.B02.31

Starting with AR SGC V2.30, data modules in UserRam are deleted during a warm restart

ID#400034088 : solved problem, known since V2.7.0.0018 SP11, solved since ARSGC_2.01.9.I02.01

Operations on the Flash memory block RTC

Calls that write–access the Flash memory, such as function blocks from the DM_lib, block the RTC and stop the time for the duration of the Flash access.

ID#400032237 : solved problem, known since ARSGC_2.01.7.G02.01, solved since ARSGC_2.31.4.D02.31

The function block FRM_xopen() causes a memory leak of 64 bytes each time it's called

ID#400030033 : solved problem, known since ARSGC_2.01.7.G02.01, solved since ARSGC_2.01.8.H02.01

RTC_gettime() takes a second before returning valid data

ID#400023939 : solved problem, known since ARSG3_2.50.2_X08.07, solved since ARSGC_2.01.8.H02.01

Error initializing STRING variables

A STRING variable with a length of 255 bytes causes an endless loop when a task is installed on the target.

ID#400020761 : solved problem, known since ARSGC_2.01.6.F02.01, solved since ARSGC_2.01.10.J02.01

DMxclear() doesn't clear individual blocks

When DMxclear() is used on SGC targets with a bootloader Version D3.7 more than one 64 KB block is always deleted. For each specified block, it tries to clear 8 blocks.

ID#400020558 : solved problem, known since V3.0.71.24 SP03, solved since ARSGC_2.30.10.J02.30

SGC target doesn't send an event when the task status changes

SGC target doesn't send an event when the task status changes – this can cause a task to be displayed as "running" although it has ended.

ID# 400020551, 400022857 : solved problem, known since V3.0.71.27 SP04, solved since ARSGC_2.01.8.H02.01

RTC_gettime() takes a second before returning valid data

ID#189076 : solved problem, known since V2.7.0.0011 SP04, solved since ARSGC_2.01.6.F02.01

Jitter reduced (from 500 ms to 10 ms) when the RealTimeClock is set

ID#185255 : solved problem, known since ARSGC_2.01.2.B02.01, solved since ARSGC_2.01.3.C02.01

Init SPs of tasks are also executed when downloaded in service mode

ID#400006105 : solved problem, known since V2.7.0.0008 SP01, solved since ARSGC_2.01.3.C02.01

When tasks are transferred to the USERRAM, memory is not freed up again

If a task is transferred to the target memory USERRAM, the memory previously used by the task is not released, which means that much less memory available on the system.

ID# 400006073, 400012639, 400013482, 400014253 : solved problem, known since V2.7.0.0008 SP01, solved since ARSGC_2.01.3.C02.01

ModuleOK of X20PS9500 has "Physical Value = TRUE" and "PV Value = FALSE"

Problem is caused by an error separating the bits within a byte.

ID#167895 : solved problem, known since ARSGC_2.00.5.E02.00, solved since ARSGC_2.01.2.B02.01

B127 not recognized when disconnected and reconnected

ID#164165 : solved problem, known since V2.5.3.0028.SP03 [R2.90], solved since ARSGC_2.01.2.B02.01

DMxclear() only deletes the first 8K of a 64K block on SGC targets

Due to this error, there are problems using additional calls from the DM_lib, such as error 13 when using DM_store().

1.3.3.7.2 Diagnose – Debugger

ID#400011868 : solved problem, known since V2.7.0.0011 SP04, solved since ARSGC_2.01.4.D02.01

X20CP0292 goes into service mode with error 9100 (bus error), when a line coverage is used in a C task

An unresolved error situation when using C variables can result in memory being overwritten and cause a bus error.

1.3.3.7.3 Diagnose – Logger

ID#400017777 : solved problem, known since V2.7.0.0017 SP10, solved since ARSGC_2.31.5.E02.31

With a modem connection, an insufficient receive timeout results in "invisible" entries being made in the logbook, which in turn causes visible entries to "disappear"

1.3.3.7.4 Diagnose – Tracer

ID#400027397 : solved problem, known since V3.0.71.31 SP05, solved since ARSGC_2.01.8.H02.01

Sometimes no data is shown in the variable trace

1.3.3.7.5 Firmware

ID#265150 : known problem since ARSGC_2.31.5.E02.31, correction planned for ARSGC_2.31.8.H02.31

X20XC0292: new firmware V43

- solved problem that occurred in projects that have no X2X modules but a long X2X cycle time (A&P 181220)
- UdpSend error number if port number = 0 (A&P 246075)
- ip address has been used even after the DHCP lease has been expired (A&P 257895)
- using default host name for DHCP ("BR006065xxxxxx", where xxxxxx = the last 6 digits of the MAC address)

ID#265145 : known problem since ARSGC_2.31.5.E02.31, correction planned for ARSGC_2.31.8.H02.31

X20CP0292: new firmware V43

- solved problem that occurred in projects that have no X2X modules but a long X2X cycle time (A&P 181220)
- UdpSend error number if port number = 0 (A&P 246075)
- ip address has been used even after the DHCP lease has been expired (A&P 257895)
- using default host name for DHCP ("BR006065xxxxxx", where xxxxxx = the last 6 digits of the MAC address)

ID#265140 : known problem since ARSGC_2.31.5.E02.31, correction planned for ARSGC_2.31.8.H02.31

X20CP0291: new firmware V43

- solved problem that occurred in projects that have no X2X modules but a long X2X cycle time (A&P 181220)
- UdpSend error number if port number = 0 (A&P 246075)
- ip address has been used even after the DHCP lease has been expired (A&P 257895)
- using default host name for DHCP ("BR006065xxxxxx", where xxxxxx = the last 6 digits of the MAC address)

ID#264890 : known problem since ARSGC_2.31.5.E02.31, correction planned for ARSGC_2.32.6.F02.32

X20CP0291: new firmware V43

- solved problem that occurred in projects that have no X2X modules but a long X2X cycle time (A&P 181220)
- UdpSend error number if port number = 0 (A&P 246075)
- ip address has been used even after the DHCP lease has been expired (A&P 257895)
- using default host name for DHCP ("BR006065xxxxxx", where xxxxxx = the last 6 digits of the MAC address)

ID#264885 : known problem since ARSGC_2.31.5.E02.31, correction planned for ARSGC_2.32.6.F02.32

X20CP0292: new firmware V43

- solved problem that occurred in projects that have no X2X modules but a long X2X cycle time (A&P 181220)
- UdpSend error number if port number = 0 (A&P 246075)
- ip address has been used even after the DHCP lease has been expired (A&P 257895)
- using default host name for DHCP ("BR006065xxxxxx", where xxxxxx = the last 6 digits of the MAC address)

ID#264880 : known problem since ARSGC_2.31.5.E02.31, correction planned for ARSGC_2.32.6.F02.32

X20XC0292: new firmware V43

- solved problem that occurred in projects that have no X2X modules but a long X2X cycle time (A&P 181220)
- UdpSend error number if port number = 0 (A&P 246075)
- ip address has been used even after the DHCP lease has been expired (A&P 257895)
- using default host name for DHCP ("BR006065xxxxxx", where xxxxxx = the last 6 digits of the MAC address)

ID#243130 : known problem since ARSGC_2.31.4.D02.31, correction planned for ARSGC_2.31.5.E02.31

X20XC0292: new firmware

X2X modules with invalid firmware were not updated under special circumstances (A&P 243000).

A "Watchdog (AR)" could have happened if too much ARP- and/or ICMP-requests were received.

A "Watchdog (FW)" could have happened because of too high ethernet traffic (A&P 242005).

The time for cyclic ARP requests to the ethernet gateway has been changed from 1 minute to 10 minutes (A&P 242155).

ID#243125 : known problem since ARSGC_2.31.4.D02.31, correction planned for ARSGC_2.31.5.E02.31

X20CP0292: new firmware

X2X modules with invalid firmware were not updated under special circumstances (A&P 243000).

A "Watchdog (AR)" could have happened if too much ARP- and/or ICMP-requests were received.

A "Watchdog (FW)" could have happened because of too high ethernet traffic (A&P 242005).

The time for cyclic ARP requests to the ethernet gateway has been changed from 1 minute to 10 minutes (A&P 242155).

ID#243120 : known problem since ARSGC_2.31.4.D02.31, correction planned for ARSGC_2.31.5.E02.31

X20CP0291: new firmware

X2X modules with invalid firmware were not updated under special circumstances (A&P 243000).

A "Watchdog (AR)" could have happened if too much ARP- and/or ICMP-requests were received.

A "Watchdog (FW)" could have happened because of too high ethernet traffic (A&P 242005).

The time for cyclic ARP requests to the ethernet gateway has been changed from 1 minute to 10 minutes (A&P 242155).

ID#243115 : known problem since ARSGC_2.31.4.D02.31, correction planned for ARSGC_2.31.5.E02.31

X20CP0201: new firmware

X2X modules with invalid firmware were not updated under special circumstances (A&P 243000)

ID#243105 : known problem since ARSGC_2.31.4.D02.31, correction planned for

ARSGC_2.31.5.E02.31

X20XC0201: new firmware

X2X modules with invalid firmware where not updated under special circumstances (A&P 243000)

ID#243100 : known problem since ARSGC_2.31.4.D02.31, correction planned for ARSGC_2.31.5.E02.31

X20XC0202: new firmware

X2X modules with invalid firmware where not updated under special circumstances (A&P 243000)

ID#229850 : known problem since ARSGC_2.00.5.E02.00, correction planned for ARSGC_2.01.10.J02.01

X20XC0202: new firmware

Switch new ASICS down to 3mA (A&P 182905)

ID#229845 : known problem since ARSGC_2.00.5.E02.00, correction planned for ARSGC_2.01.10.J02.01

X20XC0201: new firmware

Switch new ASICS down to 3mA (A&P 182905)

ID#229840 : known problem since ARSGC_2.00.5.E02.00, correction planned for ARSGC_2.01.10.J02.01

X20CP0201: new firmware

Switch new ASICS down to 3mA (A&P 182905)

ID#229795 : known problem since ARSGC_2.00.5.E02.00, correction planned for ARSGC_2.01.10.J02.01

X20XC0292: new firmware

Switch new ASICS down to 3mA (A&P 182905)

After 20 minutes of communicating over an ethernet gateway, an ARP request has been neccessary (which resulted in loosing 1 TCP packet) (A&P 229645)

ID#229790 : known problem since ARSGC_2.00.5.E02.00, correction planned for ARSGC_2.01.10.J02.01

X20CP0292: new firmware

Switch new ASICS down to 3mA (A&P 182905)

After 20 minutes of communicating over an ethernet gateway, an ARP request has been neccessary (which resulted in loosing 1 TCP packet) (A&P 229645)

ID#229775 : known problem since ARSGC_2.00.5.E02.00, correction planned for

ARSGC_2.01.10.J02.01

X20CP0291: new firmware

Switch new ASICS down to 3mA (A&P 182905)

After 20 minutes of communicating over an ethernet gateway, an ARP request has been necessary (which resulted in losing 1 TCP packet) (A&P 229645)

1.3.3.7.6 Library – AsHW

ID# 400030790, 400041335 : solved problem, known since ARSGC_2.30.15.O02.30, solved since ARSGC_2.31.3.C02.31

HwGetTemperature() doesn't work for X20CP0292

1.3.3.7.7 Library – CAN_lib

ID#400046371 : solved problem, known since ARSGC_2.31.3.C02.31, solved since ARSGC_2.31.4.D02.31

CAN COB can't be cleared by calling CANread.enable=0

ID#400015010 : solved problem, known since ARSGC_2.01.4.D02.01, solved since ARSGC_2.01.5.E02.01

SGC: "CanQueue full" although telegram has been sent

If the Candftab() is used on an SGC CPU, the EventPV "64" returns "CanQueue full", although the telegram has been sent.

ID# 400011356, 400018001, 400018050 : solved problem, known since ARSGC_2.01.2.B02.01, solved since ARSGC_2.01.5.E02.01

CANrwtab() doesn't reset event variable to 0

On an SGC CPU, CAN telegrams are sent using CANDftab() and CANrwtab(). If this telegram ID is 0, the event variable is set to 0x40 (64), but CANrwtab() doesn't reset it to 0.

1.3.3.7.8 Library – DataObject

ID# 400059520 : solved problem, known since ARSGC_2.31.4.D02.31, solved since ARSGC_2.31.6.F02.31

When generating data objects in the target memories USRRROM and SYSROM using the function blocks DataObjCopy() and DataObjMove(), Error 20604 "Error installing data object" is returned.

ID#400056097 : solved problem, known since ARSGC_2.31.4.D02.31, solved since ARSGC_2.32.2.B02.32

When generating data objects in the target memories USRRROM and SYSROM using the function blocks DataObjCopy() and DataObjMove(), Error 20604 "Error installing data object" is returned.

1.3.3.7.9 Library – DM_lib

ID#400063995 : solved problem, known since ARSGC_2.31.6.F02.31, solved since ARSGC_2.32.5.E02.32

If DM_Lib function blocks are used to write to the user flash of the SGC CPU, after some time a locking problem results in Error 6025 – "Checksum of system management table destroyed".

ID#400063995 : known problem since ARSGC_2.31.6.F02.31, correction planned for ARSGC_2.31.8.H02.31

If DM_Lib function blocks are used to write to the user flash of the SGC CPU, after some time a locking problem results in Error 6025 – "Checksum of system management table destroyed".

1.3.3.7.10 Library – DVFrame

ID#400049191 : solved problem, known since ARSGC_2.01.9.I02.01, solved since ARSGC_2.01.10.J02.01

Parameter "/TEMPTS=1" available in SGC like in SG4

1.3.3.7.11 Library – Standard

ID#400039589 : solved problem, known since ARSGC_2.01.7.G02.01, solved since ARSGC_2.32.5.E02.32

Sporadic error with TON_10ms

The elapsed time of the FUBs can sometimes sporadically jump to PT, causing the FUB output to be set.

1.3.3.8 1A4000.02 (2.2 Automation Runtime SG3)

1.3.3.8.1 AR – General SG3

ID#400023939 : solved problem, known since ARSGC_2.01.7.G02.01, solved since ARSG3_2.51.1_X08.08

Error initializing STRING variables

A STRING variable with a length of 255 bytes causes an endless loop when a task is installed on the target.

ID# 400009610, 400014796 400019936, 400019723 : solved problem, known since V3.0.71.16 SP01, solved since ARSG3_2.50.22_V02.50

ASima library doesn't work under AS3.0 on SG3

1.3.3.8.2 AR – PPxx

ID#141145 : new function since ARSG3_2.49.1_X08.04

Support of 4MB Flash components for the 4PP015.xxx-xx and 4PP035.xxx-xx CPU groups

1.3.3.8.3 Diagnose – Debugger

ID#179231 : solved problem, known since ARSG3_2.49.1_X08.04, solved since ARSG3_2.50.1_X08.06

Error using the GDB for tasks with a name longer than 10 characters

If the GDB (debugger) is used for tasks whose name is longer than 10 characters, a breakpoint causes an error since the stack pointer is destroyed. The problem occurs on targets from the generations SGC and SG3.

1.3.3.8.4 Library – DataObject

ID# 400056019, 400059564 : solved problem, known since V3.00.81.18, solved since ARSG3_2.52.3_X08.13

In AR version D2.31 and higher, DatObjCreate() sends the status 0xFFFE even though Enable = TRUE

1.3.3.8.5 Library – IOConfig

ID#400029636 : solved problem, known since V2.7.0.0017 SP10, solved since ARSG3_2.51.2_X08.09

IOC2003() delivers status 5556 if local variables are saved in user RAM

1.3.3.8.6 Library – PPDPR

ID#400027625 : solved problem, known since V3.0.71.31 SP05, solved since ARSG3_2.51.2_X08.09

Functions from PPDPR library not found

Due to an error during export of the functions from the PPDPR library, they cannot be found when installing a task – Error 9513.

1.3.3.8.7 Library – SYS_lib

ID# 400035331, 400036518 : solved problem, known since ARSG3_2.50.1_X08.06, solved since ARSG3_2.51.3_X08.10

PV_xgetadr() always returns Status 3092

1.3.3.8.8 System Modules – tcpipdrv

ID#145955 : solved problem, known since ARSG3_2.49.22_V02.49, solved since ARSG3_2.50.1_X08.06

IP address conflict

Since there is no lock, the IP address or MAC ID can be changed when the Ethernet controller is accessed.

1.3.3.9 1A4000.02 Automation Net/PVI

1.3.3.9.1 ICOMM

ID#400053882 : known problem since PVI3.00.00.3119, correction planned for PVI3.00.00.3121

PVI crash when deregistering variables in Windows CE

Deregistering Event variables or switching them to passive can cause the PVI component ICOMM to crash. The problem only occurs in Windows CE. No other platforms are affected.

1.3.3.9.2 Linie – INA2000

ID#400052878 : solved problem, known since PVI3.00.00.3121, solved since PVI3.00.02.3107

Structure data with FBK elements and BOOLEAN variables is displayed incorrectly in the PVI

If a structure variable contains at least one FBK element with at least one BOOLEAN variable, then the subsequent array elements will be incorrectly displayed in the PVI. This causes incorrect data to be provided during read access.

ID#400042314 : solved problem, known since PVI3.00.00.3117, solved since PVI3.00.02.3107

Error 4820 after multiple restarts of client and CPU

ID#400044791 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.08

Error 4813 when transferring project after "Rebuild All"

Transferring certain projects terminates with Error 4813 if a "Rebuild All" is performed first.

ID#400039954 : solved problem, known since PVI3.00.00.3017, solved since PVI3.00.00.3119

It is not possible to set up two CPU connections with the same IP address and different port numbers

If a second CPU connection is set up with the same IP address as the first but with a different port number, the second connection is routed via the first one instead of being set up as a separate connection.

ID#400061601 : new function planned for PVI3.00.02.3106

Global setting for the index type of array variables from the INA2000 line.

Currently, the index type (flat or dimensional indexing) can only be defined on the variable object (Parameter "/ROI"). However, it should be possible to specify the index type globally on the CPU object. This setting should then work for all connected variable objects.

ID#400059678 : known problem since PVI3.00.00.3121, correction planned for PVI3.00.02.3108

The data pointer in the PVI callback is not ZERO for a Write-Response.

The data pointer in the PVI callback of the user message "PVICALLBACK_DATA" is not ZERO if response data is not present (e.g.: for a Write-Response). However, the value in the argument data length is correct.

ID#400057808 : known problem since PVI3.00.00.3021, correction planned for PVI3.00.02.3103

PVI crashes when writing a CPU status string with the length 0

If a status string with the length 0 (zero) is written to the CPU object, then the PVI component INA2000 line crashes.

ID#400022943 : known problem since unbekannt, correction planned for PVI3.00.00.3119

PVI events for displaying download/upload progress are not triggered correctly.

No PVI event for 100% is triggered for very small modules. It is also possible that an event for 101% is triggered.

1.3.3.9.3 PVI DataLogger

ID#400048851 : new function since PVI3.00.02.3107

PVI doesn't generate any logger files if the specified directory doesn't exist.

The path specified in the PVI monitor for logger files is not checked. If the path doesn't exist, no PVI logger files are generated.

1.3.3.9.4 PVI General

ID#400051824 : new function since PVI3.00.00.3121

Support for PG2000 projects

ID#400043745 : new function since PVI3.00.02.3104

Support for 64-bit PVI Client applications

ID#400060259 : known problem since PVI3.00.00.3121, correction planned for PVI3.00.02.3106

TC global variables from PG2000 programs are read incorrectly.

Global task class variables that are still contained in programs that were originally written using PG2000 cannot be correctly read using PVI 3.0.

1.3.3.9.5 PVI Manager

ID#242102 : solved problem, known since PVI3.00.02.3101, solved since PVI3.00.02.3107

PVI error when there are two process objects with the same name

An error is not generated when creating process objects with the same name according to the naming convention "unique object names". Having multiple process objects with the same name does make it impossible to map the objects correctly.

Example: A global variable object and a task object with the same name are created on the same level in the hierarchy. Then the user tries to map local variable objects to the task object. Due to the double names, sometimes the task object and sometimes the global variable object can be mapped. The last case results in Error 12009 (illegal object hierarchy).

1.3.3.9.6 PVI Monitor

ID#400057533 : solved problem, known since PVI3.00.00.3019, solved since PVI3.00.02.3105

In Windows 7 an error is generated when applying the PVI diagnostics settings.

If you are not logged on to Windows 7 as the administrator, then system error 5 appears when you apply the PVI diagnostics settings.

1.3.3.9.7 PVI OPC Monitor

ID# 400048361, 400071881 : solved problem, known since PVI3.00.00.3117, solved since PVI3.00.00.3022

If started in a 64-bit environment (e.g. Windows 7 x64), the OPC Monitor crashes with an error message and cannot be used.

ID# 400048361, 400068942, 400074073 : solved problem, known since PVI3.00.00.3117, solved since PVI3.00.02.3007

If started in a 64-bit environment (e.g. Windows 7 x64), the OPC Monitor crashes with an error message and cannot be used.

ID#400040592 : solved problem, known since PVI3.00.00.3116, solved since PVI3.00.02.3007

OPC monitor stops responding on Windows 7 – 64 bit

The OPC monitor stops responding on Windows 7 – 64 bit after it is started

1.3.3.9.8 PVI OPC Server DA 3.0

ID#400061893 : solved problem, known since PVI3.00.00.3121, solved since PVI3.00.00.3022

OPC server – continuous RAM consumption

Each time a value changes on an item, the OPC server consumes an additional 30MB of RAM

ID#400061893 : solved problem, known since PVI3.00.00.3121, solved since PVI3.00.02.3007

OPC server – continuous RAM consumption

Each time a value changes on an item, the OPC server consumes an additional 30MB of RAM

ID# 400059786, 400071010, 400071856 : solved problem, known since PVI3.00.00.3021, solved since PVI3.00.02.3105

OPC server DA 3.0 doesn't return DataChanged events in Windows Vista / 7

If the PVI OPC server DA 3.0 is running under Windows Vista or Windows 7, clients connected to the server don't receive any DataChanged events.

ID#400047822 : solved problem, known since PVI3.00.00.3017, solved since PVI3.00.00.3020

After a synchronous read request to inactive tags, link objects are not released

After a synchronous read request to inactive OPC Tags, the link objects are not released. After a while, this leads to unstable communication (Quality = Bad). So far this behavior has only been observed on an OPC client that executes all read requests via synchronous calls.

ID# 400047558, 400054453, 400061539 : solved problem, known since PVI3.00.00.3118, solved since PVI3.00.02.3008

Windows OPC server handles BOOL arrays incorrectly

Two elements from the variable array with the type BOOL are linked by an OR operator to an element from the OPC array.

ID#400045215 : solved problem, known since PVI3.00.00.3117, solved since PVI3.00.02.3005

Minimum subscription refresh rate for OPC server DA 3.0 is 200ms

The minimum refresh rate for OPC subscriptions is limited to 200ms. This can be too slow for high-speed applications.

ID# 400045783, 400061055 : known problem since PVI3.00.00.3119, correction planned for PVI3.00.02.3005

OPC server DA 3.0 doesn't return DataChanged events in Windows Vista / 7

If the PVI OPC server DA 3.0 is running under Windows Vista or Windows 7, clients connected

to the server don't receive any DataChanged events.

ID#400045640 : known problem since PVI3.00.00.3117, correction planned for PVI3.00.02.3005

OPC server freezes when a client creates multiple subscriptions simultaneously

If an OPC client creates multiple subscriptions on the PVI OPC server DA 3.0 simultaneously without waiting for the corresponding responses from the server, the server can become deadlocked.

ID#400039677 : known problem since PVI3.00.00.3117, correction planned for PVI3.00.02.3007

Behavior of limit alarms not completely correct on the B&R PVI OPC server DA 3.0

An active alarm will not be reset with some combinations of activated and deactivated alarms. For example, if the hi and lo alarm is deactivated within a limit alarm, then the alarm will not be reset in the area between LoLo and HiHi.

1.3.3.9.9 PVI OPC Server DA 3.0 1.1.0.13

ID# 400036653, 400038689, 400049329 : solved problem, known since V3.00.00.3116, solved since PVI3.00.00.3019

Problems converting from OPC DA2.0 MDB to OPC DA3.0 OPCS

1.3.3.9.10 PVI OPC Server DA 3.0 1.14.3

ID#400052337 : solved problem, known since unbekannt, solved since PVI3.00.00.3020

Memory leak in B&R Windows OPC Server

1.3.3.9.11 PVI Services .NET

ID#400058543 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.27 SP0x

AS crashes when monitor mode is activated

If an element or variable with the type ARRAY[0..n] OF TIME is linked to a function block input, AS crashes when monitor mode is started.

ID#400058555 : solved problem, known since PVI3.00.00.3021, solved since PVI3.00.02.3007

BR.AN.PviServices.Value cannot be assigned directly to the System.DateTime.

If the value class is assigned directly to a System.DateTime variable, then an InvalidCastException is thrown.

Workaround:

Assign the System.DateTime variable to Value.ToDateTime().

ID#400058083 : solved problem, known since PVI3.00.00.3119, solved since PVI3.00.02.3007

CPU object causes Error event with the error number 0 instead of the Connected event.

This behavior can be reproduced as follows:

- 1) Establish a connection with a CPU and wait for the Connected event.
 - 2) Disconnect the cable from the CPU, which triggers the error and the Disconnected event for the CPU.
- (The error number is 4808)

3) Reconnect the cable. Now an Error event is triggered, but there is no Connected event. From this point on, the order of events is incorrect.

ID#400054659 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.24 SP02

When editing structures with more than 10000 elements in the Ladder Diagram, switching to monitor mode is very slow.

If you create a project with very complex structures, as can be the case with MOTION projects, the performance of monitor mode for Ladder Diagram decreases as the size of the structure increases.

Depending on the particular hardware, structures with 10000 elements can take several minutes.

ID#400056765 : solved problem, known since PVI3.00.00.3121, solved since PVI3.00.02.3007

Events are no longer triggered

The following events are no longer triggered:

- Task and variable collection connected event is not triggered. (not even the first time)
- Variable connected event is not triggered after restarting.

ID#400050940 : solved problem, known since V3.00.81.18, solved since V3.00.81.19 SP01

Crash in monitor mode on an SFC task when data types with an empty structure definition are used.

e.g.

```
GI_DataIN_Type : STRUCT
END_STRUCT;
```

```
GI_Type : STRUCT
Cmd : GI_Cmd_Type;
Ack : GI_Ack_Type;
Event : GI_Event_Type;
DataIN : GI_DataIN_Type;
DataOUT : GI_DataOut_Type;
END_STRUCT;
```

ID#400040218 : new function planned for PVI3.00.00.3018

PVI-internal PVs can't be accessed.

If an application based on PviCom.DLL is used to create a PVI-internal variable, this variable can't be accessed using PviServices.

ID#400029100 : new function planned for PVI3.00.00.3020

PviServices with automatic enabling of "Child" objects with "Dispose"

ID#400060390 : known problem since PVI3.00.00.3121, correction planned for PVI3.00.02.3007

The online connection cannot be changed if there is no connection with the CPU.

If a connection is made to a CPU that is not accessible (e.g.: cable unplugged), then the connection cannot be changed to another CPU.

Changing the connection only works if the initial CPU is accessible.

The programming reason for this is that, when calling `BR.AN.PviServices.Cpu.ChangeConnection()`, the event "ConnectionChanged" is not called if a connection to a CPU was not able to be established beforehand.

ID#400059234 : known problem since PVI3.00.00.3021, correction planned for PVI3.00.02.3108

Starting with Version 4.0.1.1, Error 12020 is triggered when connecting variables via the MODBUS line.

If PviServices is used to establish a MODBUS connection and read variables, the connection fails with PVI Error 12020.

The error states that the syntax of the variable description is not correct.

The end user can only work around this error by using an earlier version of PviServices.

ID# 400053905, 400053092 : known problem since PVI3.00.00.3119, correction planned for PVI3.00.00.3021

Variables are not exchanged after the connection is lost

A PVI client program establishes a remote connection to a PVI server on a second computer. From this PVI server, another connection is made to a PLC CPU. If the network connection between the two computers is lost and reestablished, variables are no longer exchanged.

ID#400051707 : known problem since PVI3.00.00.3119, correction planned for PVI3.00.00.3021

TCP connections with the same IP address and different source stations and different local ports are established via the same connection object.

The error can be reproduced as follows:

- 1) Establish a TCP connection via IP address `aaa.bbb.ccc.ddd` with source station 5.
- 2) Establish a second connection with the same IP address, but with source station 9.
- 3) Disconnect the second connection. The result is that the first connection is also terminated (Disconnected event)

This happens because PVI handles the two connections via the same communication object.

ID#400041443 : known problem since PVI3.00.00.3119, correction planned for PVI3.00.02.3013

In the Connected event of a structure variable, the members are not yet initialized.

If you try to access the members of a structure variable directly in the Connected event, the members are not yet initialized.

Workaround:

Access them from outside the event and the members are initialized.

ID#400051340 : known problem since V3.00.81.18, correction planned for PVI3.00.02.3013

Memory lost when writing variables in Windows CE 6.0

Memory lost when writing variables in Windows CE 6.0

ID#400046703 : known problem since PVI3.00.00.3117, correction planned for PVI3.00.02.3013

The class `BR.AN.PviServices.Value` throws an exception if the constructor for an array is used with values

If the Value class for an array is initialized with values, a NullReferenceException is thrown.

The following constructs result in an exception:

Case a)

```
ulong[] aaa2 = new ulong[] { 22, 33, 44, 55, 66 };
```

```
Value v4 = new Value(aaa2);
```

Case b)

```
Value v = new Value(new int[] { 1, 2, 3 });
```

ID#400051329 : known problem since PVI3.00.00.3118, correction planned for PVI3.00.00.3020

PVI events are sometimes triggered twice

ID#400039702 : known problem since PVI3.00.00.3117, correction planned for PVI3.00.02.3013

Task collection can't be changed in a "Task Connected" event.

Creating a new task object in a "Task Connected" event causes an invalid operation exception.

Creating a new task implicitly changes the TaskCollection, thereby causing this error.

Workaround:

Don't create the task directly inside the event function.

1.3.3.9.12 Security Library

ID#400023802 : solved problem, known since V2.6.0.3012, solved since PVI3.00.02.3001

PVI security dongle not detected by PVI when using Windows 2003 Server x64

1.3.3.9.13 Tools – PVITransfer

ID#400073009 : solved problem, known since PVI3.00.02.3013, solved since PVI3.00.02.3114

"Compare" followed by IF command does not work

Using an IF command following a "Compare" command results in the IF condition not reacting correctly to the return value from the "Compare" command.

ID#400071802 : solved problem, known since PVI3.00.02.3112, solved since PVI3.00.02.3114

"Include" command doesn't work with relative paths

When executing a .pil file, relative paths are not evaluated correctly when used with an "Include" command.

ID#400069860 : solved problem, known since PVI3.00.02.3112, solved since PVI3.00.02.3114

Problems restoring CF image on BIOS devices with CFs >= 2GB

Restoring a CF image that was originally created on a smaller card (e.g. 512MB) on a larger card (>=2GB) can lead to problems under certain conditions:

- Using a BIOS device (e.g. PP400, APC620, etc.)
- CF has only one partition

The problem is that the device freezes during startup.

ID#400070663 : solved problem, known since PVI3.00.02.3012, solved since PVI3.00.02.3112

When a negative TIME variable is read, a "_" character is inserted in the result

When a TIME variable read, a "_" character is inserted in the result if the time value is negative.
Example: T#_-3h

ID#400063663 : solved problem, known since PVI3.00.02.3106, solved since PVI3.00.02.3107

CD creation: Error message with command "CFRestore"

If the command "CFRestore" is used in a PIL file, then the CD creation process is aborted with an error message. The CD will not function afterward because it is missing the respective image file (.zp2).

ID#400063228 : solved problem, known since PVI3.00.00.3021, solved since PVI3.00.02.3107

String variables cannot be used as default values for input dialog boxes.

It is not possible to use the contents of a string variable as the default value for an input dialog box (command "InputDialog"). The contents of the string variable will be ignored and the default value provided will always be just an empty string.

ID#400063068 : solved problem, known since PVI3.00.00.3121, solved since PVI3.00.02.3106

"CFService" command does not function

ID#400062699 : solved problem, known since V3.00.81.16, solved since PVI3.00.02.3106

Input box for command "WriteVariableUser" appears in background

The corresponding input window for the command "WriteVariableUser" only appears in the background and is therefore not easy for the user to see.

ID# 400062071, 400062540 : solved problem, known since PVI3.00.00.3121, solved since PVI3.00.02.3106

CD creation: File "PviLog.dll" not copied

When creating a CD, the file "PviLog.dll" is not copied over. As a result, the created CD will not run on a PC without installed PVI.

ID#400057670 : solved problem, known since PVI3.00.00.3021, solved since PVI3.00.02.3106

Not all modules added to the CF image if it is created right from the project

In certain projects, not all data (modules) will be added to the CF image (.zp2) if it is created directly from an AS project. As a result, some of the required data will be missing on the CF when restoring this image to a CF.

This problem does not occur if the CF is created directly from the corresponding AS project.

ID# 400059159, 400059487 : solved problem, known since PVI3.00.00.3121, solved since PVI3.00.02.3105

CF creation: Size of the SYSTEM partition calculated incorrectly for an ARNC0 project

If you create a CF of a project that uses ARNC0, the size of the SYSTEM partition is calculated incorrectly.

The minimum size calculated for the SYSTEM partition is too high.

ID#400060431 : solved problem, known since PVI3.00.00.3120, solved since PVI3.00.02.3105

In Windows 7, no USB devices are listed for performing a USB remote install

When attempting to generate a USB remote install structure, in some Windows 7 systems the list of available USB devices is empty.

ID#400054444 : solved problem, known since PVI3.00.00.3119, solved since PVI3.00.02.3105

Created CD freezes when executed in service mode

When a PIL file generated while creating a CD is executed in service mode, PVI Transfer freezes at the end of the process.

ID#400051755 : solved problem, known since PVI3.00.00.3109, solved since PVI3.00.00.3120

CF creation terminates when directory with the SVN files is copied to the User partition

If a directory that contains SVN files is copied to the USER partition while creating the CF card, creation of the CF card terminates with an error.

ID# 400049628, 400052330, 400062112 : solved problem, known since PVI3.00.00.3119, solved since PVI3.00.02.3105

CF images (.zp2) can no longer be opened with older versions of PVI Transfer

With the current version, CF images can be created in either the old (.zp) or the new (.zp2) format. If a CF image is created in the old format, it can be opened with an older version of PVI Transfer.

ID# 400044321, 400049176 : solved problem, known since PVI3.00.00.3117, solved since PVI3.00.02.3105

When individual files are restored, not all files are copied to the CF card.

When the function "Restore files to Compact Flash" is used to copy individual files to the CF card, in certain constellations not all of the files are copied to the CF.

ID#400041925 : solved problem, known since PVI3.00.00.3117, solved since PVI3.00.00.3119

"VariableListAll" command causes crash when lots of variables

Using the "VariableListAll" command to read a list of variables can cause the PVI Transfer tool to crash if the list is extremely large (around 20,000 variables or more). The problem usually occurs with large structures, since each component of the structure is read separately. This quickly increases the number of variables in the list and results in this error.

ID#400026013 : solved problem, known since V3.00.00.3013, solved since PVI3.00.02.3105

"VariableList" command doesn't terminate when connection to PLC is lost

If the connection to the PLC is lost while reading a variable list, PVI Transfer ignores this and continues the process.

ID#154042 : new function since PVI3.00.00.3119

CF creation accelerated

The addition of the new "Enable quick format" option significantly speeds up the process of creating a CF. When this option is enabled, only the sectors of the CF that are used are formatted, and not the whole thing. The effect is especially noticeable on large CFs (>128MB).

ID#136355 : new function since PVI3.00.00.3119

New option for "DeleteMemory" command to delete non-volatile system settings

A new option, NONVOLATILE, has been added for the "DeleteMemory" command. This option allows you to delete the non-volatile system settings on the PLC (created with the AsARCfg library).

1.3.3.9.14 Tools – PVITransfer PVITransfer 3.6.9.41

ID# 400049629, 400048097 : solved problem, known since PVI3.00.00.3120, solved since PVI3.00.02.3102

Remote install: New option for deleting only AR or application

The remote install mechanism provides a new option for deleting either AR or the application individually. This new option makes it possible to perform any type of remote update without having to format a partition.

ID#400053520 : solved problem, known since PVI3.00.00.3119, solved since PVI3.00.02.3102

"Logger" command: Entries with the label "Info" are displayed as "Fatal"

When a logger module is converted with the command "Logger", the converted entries are displayed with an incorrect label. Entries with the label "Info" are incorrectly displayed as "Fatal".

1.3.3.9.15 Tools – PVITransfer PVITransfer 3.6.6.38

ID#400047720 : solved problem, known since PVI3.00.00.3119, solved since PVI3.00.00.3120

64 MB SiliconSystems CF card won't boot with special card reader

If a 64 MB SiliconSystems CF is created using a special card reader, then the corresponding device (e.g. PP400) won't boot with this CF.

ID#400048414 : solved problem, known since unbekannt, solved since PVI3.00.00.3120

Application no longer available after a USB Remote Install

In certain constellations, the application is no longer available after a successful USB Remote Install. The problem only occurs when using the safe B&R module system (3 or more partitions).

1.3.3.9.16 Tools – PVITransfer PVITransfer 3.5.2.27

ID#400039911 : solved problem, known since unbekannt, solved since PVI3.00.00.3118

PVI transfer crashes if a "<" or ">" character is in the command line

If the characters "<" or ">" in a command (e.g. Message ">>> The process was successful<<<"), the PVI Transfer Tool stops working at this command.

ID#400039554 : solved problem, known since PVI3.00.00.3017, solved since PVI3.00.00.3118

The "ARUpdateFileGenerate" command does not function for SGC

If you use the "ARUpdateFileGenerate" command together with an SGC project, you'll get an error message when creating the corresponding BR update module.

ID#400038172 : solved problem, known since PVI3.00.00.3113, solved since PVI3.00.00.3118

CD creation: The PVI Manager from the CD is not started

When a CD is created, the PVI Manager from the CD is not started when starting the CD if a PVI version is installed on the corresponding PC. The installed PVI version is always started, which is not what is wanted in this case.

1.3.3.9.17 Tools – PVITransfer PVITransfer 3.5.0.25

ID#400038859 : solved problem, known since , solved since PVI3.00.00.3117

AsIOMMCreate() function block creates arconfig incorrectly

Creating a CF card with the current version of the PVI Transfer Tool (3.4.5.22) results in problems when using the AsIOMMCreate() function block. The arconfig is created by the function block, but the new arconfig is not used after restarting the CPU.

Workaround:

Use an older version of the PVI Transfer Tool to create the CF card. Use PVI Transfer 3.3.3.15 (or older).

1.3.3.9.18 WinNT CAN Treiber

ID#400064771 : solved problem, known since PVI3.00.00.3021, solved since PVI3.00.02.3009

INACAN returns error 13076 for 5AC600.CANI-00

In the INF file, the StartType is 2 (SERVICE_AUTO_START). With 5AC600.CANI-00 devices, this setting can cause problems.

ID#400033399 : solved problem, known since V2.5.3.3009, solved since PVI3.00.00.3118

CAN driver freezes in the initialization phase.

Under Windows XP, LS172 cards can cause the CAN driver (InaCan.sys) to freeze in the initialization phase. As a result, the Windows desktop is not displayed.

1.3.3.10 1A4000.02 Automation Tools

1.3.3.10.1 I/O Switchboard

ID#400030828 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.81.19 SP01

I/O switchboard project can't be opened again after it's closed

If an I/O switchboard project is closed, the error message "Error during loading project" is output when the project is opened.

1.3.3.11 1A4300.02 Automation Studio 3.x

1.3.3.11.1 AS Internals – Object Model

ID#400066847 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.11

After axis mappings are converted from 2.x to 3.0, not all axis mappings are displayed.

After converting a project, if the axis mapping is opened "hardware oriented", then not all mappings are shown

1.3.3.11.2 Build

ID#400069448 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.81.30 SP0x

Memory overwritten when two local function blocks with the same name are used

Using two local function blocks with the same name and different structures results in memory being overwritten, because the wrong block description is used to calculate the memory required for an instance.

ID#400069448 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.90.14

Memory overwritten when two local function blocks with the same name are used

Using two local function blocks with the same name and different structures results in memory being overwritten, because the wrong block description is used to calculate the memory required for an instance.

ID#400070129 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.14

"Undefined reference" when generating C++ task

If multiple interdependent static C++ libraries are used in a project, then when you generate the task you get an error regarding undefined references.

The problem can be solved by

a) arranging the libraries in the logical view from top to bottom so that the base libraries come before the derived libraries (directory level doesn't matter).

b) entering the dependencies to other static libraries in the properties of the respective library in the logical view.

(e.g. "Inherit" Library -> Dependency on -> "Base" library).

ID#400068093 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.81.29 SP0x

Build terminates unexpectedly

With AS versions < 3.0.90, errors sometimes occur while saving symbol information during a build which can cause the next build to terminate unexpectedly.

In AS >= 3.00.90 this error has been identified and corrected. In these cases a rebuild is no longer necessary.

ID#400068093 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.12

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With AS versions < 3.0.90, errors sometimes occur while saving symbol information during a build which can cause the next build to terminate unexpectedly.

In AS >= 3.00.90 this error has been identified and corrected. In these cases a rebuild is no

longer necessary.

ID#400065675 : solved problem, known since V3.00.90.09, solved since V3.00.90.10

Using functions from <math.h> in a static C library causes build error with SG3/SGC

Using functions from <math.h> in a static C library causes build error with SG3/SGC

ID#400063546 400065518 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.09

Password protected data objects or tasks cannot be compiled on computers running Win7 64-bit

When compiling password protected objects, the message "Error 430: Unable to open file" is output

ID#400062823 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.09

Error(s) occurred while generating cross-reference data

The declarations from custom libraries are not found when generating the cross reference list.

ID#400060886 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.09

VAR CONSTANT of function blocks overwritten by initialization of instance variable

Constants that are declared for a function block could be overwritten by initialization of the instance variable.

ID#400051153 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.07

Error generating the header file for REAL constants < 1.0e-5

If a C/C++ library has a REAL constant with a value of 1.0e-5 or lower, then the constant is shown incorrectly in the header file.

ID#250531 : solved problem, known since V3.00.90.05, solved since V3.00.90.06

Error generating the header file for REAL constants >= 4e+15

If a C/C++ library has a REAL/LREAL constant with a value of 4e+15 or higher, then the constant is shown incorrectly in the header file.

ID#244595 : solved problem, known since V3.00.90.03, solved since V3.00.90.04

Static hybrid libraries can't be generated in projects that have a space in the path.

If static libraries are exported as hybrid libraries (sources of individual .c/.cpp files are excluded from the export), then using them in projects that have a space in their path results in an error during generation.

C:/Program Files/BrAutomation/AS30081/As/GnuInst/V4.1.2/bin/i386-elf-ar.exe : Error : <Path>/<File name>.o: No such file or directory

ID#244585 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.23 SP0x

Static hybrid libraries can't be generated in projects that have a space in the path.

If static libraries are exported as hybrid libraries (sources of individual .c/.cpp files are excluded from the export), then using them in projects that have a space in their path results in an error during generation.

C:/Program Files/BrAutomation/AS30081/As/GnuInst/V4.1.2/bin/i386-elf-ar.exe :

Error : <Path>/<File name>.o: No such file or directory

ID#400055093 : solved problem, known since V3.00.80.33 SP02, solved since V3.00.90.04

Undeclared structure element is not detected as an error.

If an undeclared structure element is addressed for a structure variable, (e.g. struVar.unknown = 1), the compiler doesn't detect this as an error and only outputs a warning.

ID#400051553 : solved problem, known since V3.00.81.19 SP01, solved since V3.00.90.05

Changing constants in ANSI C libraries results in the respective program not being generated

If the value of a constant in an ANSI C library is changed, the respective program won't be generated during the next build.

ID#234606 : solved problem, known since V3.00.81.09 (FR000488), solved since V3.00.90.14

New reserved names

With AS V3.0.90 and higher, the names BYTE, WORD, DWORD, DATE, TIME_OF_DAY, TOD, WSTRING are provided by the system as data types, and can therefore not be assigned by the user.

ID#400046363 : solved problem, known since V3.00.80.29 SP01, solved since V3.00.90.07

Declaration of arrays with sizeof incorrect

If a variable declaration is made in ANCI C and the sizeof operator is used, then the incorrect length is set for a PLC variable declared with this type.

```
typedef BOOL Option_fun[sizeof(option_store_typ)];
```

```
_GLOBAL option_store_typ OPT[S__MAX_OPTION_NUMBER] ;
_LOCAL Option_fun OptBitX;
```

Problem can be worked around by using literals or constants for the array length, e.g.

```
typedef BOOL Option_fun[16];
```

ID#400037337 : solved problem, known since V3.0.71.34 SP06, solved since V3.00.90.02

Error "error 9234: Error creating make" if the active configuration contains invalid .br modules

If the active configuration contains invalid .br modules (AsHwd.br, AsFw.br, ArConfig.br und IoMap.br), then an unclear error message "error 9234: Error creating make" is output.

The affected modules are therefore invalid because they are automatically transferred for each configuration,

In the future, error message "Error 9222: Software object <object name> is already defined through configuration file or data object <object path>\<object name>" will be output.

ID#209105 : solved problem, known since V3.00.80.18, solved since V3.00.81.07

ACOPOS doesn't work if certain file names are used for NC mapping files

If NC mapping files are given names that end with acp10map.ncm or arnc0map.ncm (case insensitive), the POWERLINK ACOPOS configured in these files are not detected by the operating system, and therefore can't be used.

Example of invalid file names:

myAcp10map.ncm
myarnc0map.ncm

Example of valid file names:

myAxis.ncm

1.3.3.11.3 Build – Backend

ID#400048512 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.07

It is not possible to use C variables larger than 16 MB.

If variables larger than 16 MB are declared in C programs, Error 4522 will be generated when the project is built.

1.3.3.11.4 Build – C Compiler GCC 2.95.3

ID#400058095 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.25 SP0x

Changing a header file doesn't cause library to be generated

Changing a header file in a library doesn't result in the library being regenerated during a build or transfer.

1.3.3.11.5 Build – ConfigurationBuilder

ID#400071495 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.90.15

Build error "Required white space was missing" when using regional and language settings for China

Using the regional and language settings for China may result in the build error "Required white space was missing." depending on the hardware used.

ID#400063018 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.09

MN cannot register data points on the iCN

A Managed Node cannot register its data points on the iCN due to a missing entry for safety channels on the iCN (although the entry is present on the MN).

ID#400063018 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.27 SP0x

Managed Node cannot register data points on the iCN

Managed Node cannot register its data points on the iCN due to a missing entry for safety channels on the iCN.

ID#400060785 : solved problem, known since , solved since V3.00.90.11

Cross-communication on the SL's BOOL channels is not recognized as an error.

Cross-communication is not permitted on the SL's BOOL channels, but if it is configured, Automation Studio doesn't recognize this as an error.

ID#400072324 : known problem since V3.00.81.27 SP0x, correction planned for V3.00.81.30 SP0x

NodeSwitch channel of CAN interfaces with disabled CAN I/O

The current value of the NodeSwitch channel of CAN interfaces on SG4 target systems is not displayed in the variable monitor or in monitor mode of the I/O mapping if CAN I/O communication is disabled.

ID#400072324 : known problem since V3.00.81.27 SP0x, correction planned for V3.00.90.19 SP0x

NodeSwitch channel of CAN interfaces with disabled CAN I/O

The current value of the NodeSwitch channel of CAN interfaces on SG4 target systems is not displayed in the variable monitor or in monitor mode of the I/O mapping if CAN I/O communication is disabled.

ID#400056193 : known problem since V3.00.81.18, correction planned for V3.00.90.07

Projects with hardware modules that contain μ in their channel descriptions can not be build in the Chinese version of Windows.

The following error is generated when building projects that contain μ in the channel descriptions:

Required white space was missing.

Error: on line 79, position 219 in "(null)".

ID#400054385 : known problem since V3.00.80.30 SP01, correction planned for V3.00.90

FW1.1.14.2 of the LS 182.6-1 tends to invalid Datapoints

ID#400054385 : known problem since V3.00.80.30 SP01, correction planned for V3.00.80.34 SP02

FW1.1.14.2 of the LS 182.6-1 tends to invalid Datapoints

Error in the .hwc

1.3.3.11.6 Build – IECCompiler

ID#400064208 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.28 SP0x

CheckDiv functions in the IEC Check library are called for MOD operators

The build option `-D _MODULO_CHECK_OFF` can be used to prevent calling the respective CheckDivXXX function from the IEC Check library when the MOD operator is used.

The command line option is documented on the Help page for the IEC Check library.

The result of an unmonitored MOD 0 operation is 0.

ID#400066787 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.81.28 SP0x

EDGE, EDGENEG, EDGEPOS cause Error 1179

Using one of the operators EDGE, EDGENEG or EDGEPOS in a program causes "Error 1179: EDGENEG variable not found", if an error occurred while building a function block before building the program.

ID# 400067530, 400067286 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.28 SP0x

Endless loop when using advanced MOV blocks

Using advanced MOV blocks can lead to endless loops during a build.

ID#400067530 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

Endless loop when using advanced MOV blocks

Using advanced MOV blocks can lead to endless loops during a build.

ID#400066294 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.81.28 SP0x

Incorrect code generation when accessing dynamic VAR_Input variables in a block's actions.

If an action is run in a function block, and that action accesses a dynamic VAR_INPUT variable in the function block, then incorrect code is generated. When the variable is accessed, the dynamic variable is not dereferenced.

ID#400066294 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.90.11

Incorrect code generation when accessing dynamic VAR_Input variables in a block's actions.

If an action is run in a function block, and that action accesses a dynamic VAR_INPUT variable in the function block, then incorrect code is generated. When the variable is accessed, the dynamic variable is not dereferenced.

ID#400064561 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.27 SP0x

The required size of the memory area zzInternalMemory sometimes calculated incorrectly.

Depending on the alignment, the size of zzInternalMemory is sometimes calculated incorrectly.

ID#258775 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.81.27 SP0x

Projects with function blocks implemented in SFC can't be built.

These projects result in build error "Error 1225: Missing BOOL input variable 'SFCInit' or 'SFCReset' to initialize function block."

ID#400064561 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

The required size of the memory area `zzInternalMemory` sometimes calculated incorrectly.

Depending on the alignment, the size of `zzInternalMemory` is sometimes calculated incorrectly.

ID#400065482 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.10

Casting REAL or LREAL to whole number data type doesn't shorten to specified data width

When casting, the calculated result is increased or decreased to the specified data width.
`dint_result = INT (40 * 1000); => -25536`

When casting from REAL or LREAL to a whole number data type, the result is not shortened to the specified data width.
`dint_result = INT (40.0 * 1000); => 40000`

ID#400065147 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.27 SP0x

Warning 1289: Missing BOOL variable 'SFCInit' to initialize action

If an SFC action programmed in SFC is opened, it looks for one of the SFC system variables `SFCInit` or `SFCReset`. If they are not found, the SFC can't be initialized correctly and the warning is generated.

If the SFC action is not opened from an SFC program or an SFC function block, but instead from a ST program, then the SFC system variables are not found and a warning is generated.

ID#400065147 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

Warning 1289: Missing BOOL variable 'SFCInit' to initialize action

If an SFC action programmed in SFC is opened, it looks for one of the SFC system variables `SFCInit` or `SFCReset`. If they are not found, the SFC can't be initialized correctly and the warning is generated.

If the SFC action is not opened from an SFC program or an SFC function block, but instead from a ST program, then the SFC system variables are not found and a warning is generated.

ID#400064208 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

`CheckDiv` functions in the IEC Check library are called for MOD operators

The build option `-D _MODULO_CHECK_OFF` can be used to prevent calling the respective `CheckDivXXX` function from the IEC Check library when the MOD operator is used.
The command line option is documented on the Help page for the IEC Check library.

The result of an unmonitored MOD 0 operation is 0.

ID#400054562 : solved problem, known since V3.00.90.03, solved since V3.00.90.04

Malfunction of `CheckBounds`

If a function block receives a reference to an array and the lower or upper limit of the index range is a constant, then the value of the constant is incorrectly interpreted as 0. In order for the error to be corrected, the respective project must be recompiled.

ID#400054562 : solved problem, known since V3.00.81.20 SP01, solved since V3.00.81.22 SP01

Malfunction of `CheckBounds`

If a function block receives a reference to an array and the lower or upper limit of the index range is a constant, then the value of the constant is incorrectly interpreted as 0. In order for the error to be corrected, the respective project must be recompiled.

ID#239640 : solved problem, known since V3.00.71.34 SP06, solved since V3.00.80.34 SP02

Networks with multiple ENO outputs linked by OR operators to an EN input can't be compiled in some cases

ID#400051211 : solved problem, known since V3.00.71.34 SP06, solved since V3.00.81.19 SP01

Networks with multiple ENO outputs linked by OR operators to an EN input can't be compiled in some cases

ID# 400050529, 400058357 : solved problem, known since V3.00.81.18, solved since V3.00.81.19 SP01

Identical B&R Automation Basic code returns different results

Due to a code generation error for B&R Automation Basic, an expression in which more than two operators are compared incorrectly returns the value "true" if all the operators have the same value.

```
if (false = true AND false = false) then (* testvar1 incorrectly gets the value 1 *)
testvar1 = 1;
else
testvar1 = 0;
endif
```

```
if (false = true AND false = false) then (* testvar2 correctly gets the value 0 *)
testvar2 = 1;
else
testvar2 = 0;
endif
```

The correct result after the error correction is explained below:

In Automation Basic the AND operator has higher priority than the relational operator. So, the expression "false = true and false = false" is interpreted as shown by the parentheses "false = (true and false) = false". Since in Automation Basic operators with equal priority are evaluated from left to right, the expression can be further clarified by placing the left relational operation in parentheses (false = (true and false)) = false.

When the expression is evaluated step by step, the result is "false":
 "(false = (true and false)) = false" results in "(false = false) = false" which results in "true = false" which results in "false"

ID#205661 : solved problem, known since V3.00.80.15, solved since V3.00.81.04

Incorrect use of an ADR contact is not detected.

If an ADR contact is placed parallel to a boolean contact, it is not detected as an error during compilation.

The boolean contact and the boolean values of the boolean variables in the ADR contact are linked by an OR operation.

ID#400022860 : solved problem, known since V3.0.71.28 SP05, solved since V3.00.81.06

Misleading error message when an IL keyword is used in ST

If R is used as the name of a variable in an ST task, a misleading error message appears during compilation.

ID#400073915 : known problem since V3.00.81.27 SP0x, correction planned for V3.00.81.31 SP0x

Incorrect code generation when mapping an expression to a bit

If an expression that contains an equation is mapped to a bit, the generated code is incorrect. The faulty calculation only occurs when variables with a data width larger than 1 byte are used.

ID#400073915 : known problem since V3.00.81.27 SP0x, correction planned for V3.00.90.19 SP0x

Incorrect code generation when mapping an expression to a bit

If an expression that contains an equation is mapped to a bit, the generated code is incorrect. The faulty calculation only occurs when variables with a data width larger than 1 byte are used.

1.3.3.11.7 Build – IOMapBuilder

ID#208141 : solved problem, known since V3.00.80.17, solved since V3.00.81.04

Constant VARs from program-local blocks can be mapped to I/O channels.

If a constant VAR from a program-local block is mapped to an I/O channel, no error message is output during compilation of the I/O mapping, even though write-access from constants to I/O channels is not permitted.

1.3.3.11.8 Build – OPC

ID#400061893 : solved problem, known since V3.00.90.05, solved since V3.00.80.36 SP04

OPC server – continuous RAM consumption

Each time a value changes on an item, the OPC server consumes an additional 30MB of RAM

ID#400061893 : solved problem, known since V3.00.90.05, solved since V3.00.81.26 SP0x

OPC server – continuous RAM consumption

Each time a value changes on an item, the OPC server consumes an additional 30MB of RAM

ID#400061893 : solved problem, known since V3.00.90.05, solved since V3.00.90.09

OPC server – continuous RAM consumption

Each time a value changes on an item, the OPC server consumes an additional 30MB of RAM

ID#400056018 : solved problem, known since V3.00.81.19 SP01, solved since V3.00.90.08

Error message when an OPC tag isn't assigned to a variable

If an OPC tag is not assigned a variable (either in the tag editor or in a mapping editor), a warning is generated during a build instead of an error message.

1.3.3.11.9 Build – Taskbuilder

ID#400067024 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.28 SP0x

Initializing function block arrays causes build error 6024.

Initializing functions block arrays causes Error 6024 when built.

Example:

```
ton_arr : ARRAY[0..1] OF TON := [(IN:=FALSE)];
```

ID#400067024 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

Initializing function block arrays causes build error 6024.

Initializing functions block arrays causes Error 6024 when built.

Example:

```
ton_arr : ARRAY[0..1] OF TON := [(IN:=FALSE)];
```

ID#400055637 : solved problem, known since V3.00.90.05, solved since V3.00.90.06

Variable displayed with the wrong type.

Adding to a structure causes a variable to be shown with the wrong type.

Reason: Overflow of internal data structures.

In the future the error

<Taskname>:Error: 6473:Offset in information section for data types exceeds limit will be generated.

ID# 400059705, 400060245 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.06

Incorrect offsets sometimes generated for global variables

In projects with the following characteristics

- * Project contains ANSI-C tasks
 - * multiple tasks, at least one ANSI-C task, use the same global variables
 - * these variables have the type user data type (structure) or enumerator
 - * the data types are used in ANSI-C via variables using _GLOBAL
- the incorrect variable offsets may be assigned for global variables.

To fix this issue in affected projects, perform a Clean and a Rebuild All.

ID# 400059705, 400060245 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.81.25 SP0x

Incorrect offsets sometimes generated for global variables

In projects with the following characteristics

- * Project contains ANSI-C tasks
- * multiple tasks, at least one ANSI-C task, use the same global variables
- * these variables have the type user data type (structure) or enumerator
- * the data types are used in ANSI-C via variables using _GLOBAL

the incorrect variable offsets may be assigned for global variables.

To fix this issue in affected projects, perform a Clean and a Rebuild All.

ID#245325 : solved problem, known since V3.00.80.32 SP02, solved since V3.00.80.34 SP02

Build doesn't detect changed constant

If a globally declared constant

```
VAR CONSTANT
```

```
gconst1 :
```

```
USINT := 12;
```

```
END_VAR
```

is used in a local type declaration of a program

```
TYPE
```

```
task1Type1 :
```

```
STRUCT
```

```
ele1 : gType1;
```

```
ele2 : lib5Fub1;
```

```
ele3 :
```

```
ARRAY[0..gconst1] OF USINT;
```

```
END_STRUCT;
```

```
END_TYPE
```

then changing the constant doesn't causes the respective program to be rebuilt.

ID#245320 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.23 SP0x

Build doesn't detect changed constant

If a globally declared constant

```
VAR CONSTANT
```

```
gconst1 :
```

```
USINT := 12;
```

```
END_VAR
```

is used in a local type declaration of a program

```
TYPE
```

```
task1Type1 :
```

```
STRUCT
```

```
ele1 : gType1;
```

```
ele2 : lib5Fub1;
```

```
ele3 :
```

```
ARRAY[0..gconst1] OF USINT;
```

```
END_STRUCT;
```

```
END_TYPE
```

then changing the constant doesn't causes the respective program to be rebuilt.

ID#244671 : solved problem, known since V3.00.90.03, solved since V3.00.90.04

Build doesn't detect changed constant

If a globally declared constant

```
VAR CONSTANT
```

```
gconst1 :
```

```
USINT := 12;
```

END_VAR

is used in a local type declaration of a program

TYPE

task1Type1 :

STRUCT

ele1 : gType1;

ele2 : lib5Fub1;

ele3 :

ARRAY[0..gconst1] OF USINT;

END_STRUCT;

END_TYPE

then changing the constant doesn't causes the respective program to be rebuilt.

ID#400055457 : solved problem, known since V3.00.80.33 SP02, solved since V3.00.81.23 SP0x

Changing the prototyping of the function block doesn't cause the task to be recompiled

Changing the prototyping of the function block doesn't cause the task to be recompiled if only the block's instance variable and not the block itself is called in the respective program.

This can cause the application to malfunction or the CPU to crash.

ID#400055457 : solved problem, known since V3.00.80.33 SP02, solved since V3.00.80.34 SP02

Changing the prototyping of the function block doesn't cause the task to be recompiled

Changing the prototyping of the function block doesn't cause the task to be recompiled if only the block's instance variable and not the block itself is called in the respective program.

This can cause the application to malfunction or the CPU to crash.

ID#400055457 : solved problem, known since V3.00.80.33 SP02, solved since V3.00.90.04

Changing the prototyping of the function block doesn't cause the task to be recompiled

Changing the prototyping of the function block doesn't cause the task to be recompiled if only the block's instance variable and not the block itself is called in the respective program. This can cause the application to malfunction or the CPU to crash.

ID#400053842 : solved problem, known since V3.00.81.18, solved since V3.00.81.21 SP01

BR.AS.TaskBuilder.exe crashes when function blocks call each other recursively

When function blocks call each other recursively (A calls B, B calls A), BR.AS.TaskBuilder.exe crashes during a build.

ID#400051162 : solved problem, known since V3.00.81.18, solved since V3.00.81.20 SP01

Error 6009: Internal: Writing/calculating init entry, variable RootPV

When structures are declared whose size exceeds 64 MB, the following error is generated during a build "Error 6009: Internal: Writing/calculating init entry, variable RootPV".

The problem can be avoided by initializing the structure variable with 0.

e.g.

_GLOBAL struct TestRoot RootPV _VAR_INIT(0);

ID#208136 : solved problem, known since V3.00.80.17, solved since V3.00.81.04

Compiler error when VAR parameter of a program-local block is initialized with a constant

If a constant VAR of a program-local block is initialized with a constant that is local to another block, an error is output when the program is compiled.

ID#208116 : solved problem, known since V3.00.80.17, solved since V3.00.81.04

Compiler error when VAR parameter of a program-local block is initialized with a constant

If a constant VAR of a program-local block is initialized with a constant that is local to another block, an error is output when the program is compiled.

1.3.3.11.10 Build – Transfer To Target

ID#261315 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.81.28 SP0x

After the range limits of global array variables are changed, the new ranges aren't initialized

In "Copy" downloading mode, when the range limits of global array variables are changed (e.g. from [-2..2] to [0..4]) the array elements are not initialized.

ID#261036 : solved problem, known since V3.00.90.10, solved since V3.00.90.11

After the range limits of global array variables are changed, the new ranges aren't initialized

In "Copy" downloading mode, when the range limits of global array variables are changed (e.g. from [-2..2] to [0..4]) the array elements are not initialized.

ID#400065008 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

For arrays with only one element, the software mismatch dialog box always detects a change.

ID#400062152 : solved problem, known since V3.00.81.24 SP0x, solved since ARSG4_3.07.3_C03.07

Status indication of tasks (RUN, IDLE, etc.) read incorrectly due to synchronization problems in Automation Studio – display problem

ID#225956 : known problem since V3.00.80.28 (FR000531), correction planned for V3.00.90

Changing a PV or structure type member from value type to reference is not detected reliably in CopyMode.

If you change an existing PV from value type to reference or back, this change is not detected correctly by AS in CopyMode.

As a result, there is no (correct) user information regarding the pending initialization.

1.3.3.11.11 Diagnostics – Debugger

ID#400062774 : solved problem, known since V3.00.81.18, solved since V3.00.90.10

Didn't stop at breakpoints when CPU had insufficient RAM

During debugging, the required information is copied from the UserROM to the UserRAM. Depending on the hardware and the project structure the CPU may have insufficient RAM. When this was the case the debugger didn't stop at breakpoints in some tasks.

Now an error message is generated indicating this problem if there is insufficient RAM. To solve this problem for programs that don't need to be debugged, you can uncheck the "Debugging" checkbox in the software configuration under Properties / Compiler.

ID# –, 400068655 : solved problem, known since V3.00.80.32 SP02, solved since V3.00.80.37 SP05

Setting breakpoints by double-clicking in the editor gutter

When attempting to set a breakpoint by double-clicking in the editor gutter (left border), the breakpoint is set farther down and not in the correct line.

ID#400050702 : solved problem, known since V3.00.81.15, solved since V3.00.81.19 SP01

Setting breakpoints by double-clicking in the editor gutter

When attempting to set a breakpoint by double-clicking in the editor gutter (left border), the breakpoint is set farther down and not in the correct line.

ID# –, 400032582, 400040673 : solved problem, known since V3.00.81.15, solved since V3.00.81.17

Debugging an X20 CPU via remote PVI doesn't work

ID#400027683 : solved problem, known since V3.0.71.31 SP05, solved since V3.00.90.10

Debugger doesn't work via routed POWERLINK connection

ID#193190 : solved problem, known since V3.00.80.07, solved since V3.00.81.04

When debugging ANSI C programs, function block instances are not displayed in AutoWatch

1.3.3.11.12 Diagnostics – Logger

ID#400065517 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.12

Saved logger records could not be opened if the backtrace contained special characters.

If a logger record was saved with a backtrace that contained special characters, the file could no longer be opened in the Automation Studio Logger.
The error message "The file [filename] could not be loaded." was generated.

After this correction it is now possible to open these files.

ID#400059910 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.07

The "Modules" window in the logger was not hidden automatically

When the focus is inside the "Modules" window, it is not automatically hidden when the mouse is moved away from it.
This error has been corrected.

ID#244250 : solved problem, known since V3.00.90.03, solved since V3.00.90.04

After performing "Clear Data", the logger data is deleted, but not refreshed

You have to close and reopen the logger in order to refresh the data.

ID#243065 : solved problem, known since V3.00.80.33 SP02, solved since V3.00.81.23 SP0x

After performing "Clear Data", the logger data is deleted, but not refreshed

You have to close and reopen the logger in order to refresh the data.

ID#400009868 : solved problem, known since V3.0.71.16 SP01, solved since V3.00.90.02

Sorting order cleared when a new entry appears in the logger or when the logger is reopened.

When entries in the logger are sorted by time and a new logger entry is added, the chronological order is lost.

When entries in the logger are sorted by time and the logger is closed and reopened, the previous sorting order is lost.

1.3.3.11.13 Diagnostics – Motion – NC Test

ID#400063869 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

"Window -> Close All" only closes NC Test window

When multiple windows are open and one of them is an NC Test window with an active online connection, then "Window -> Close All" only closes the NC Test window.

ID#400054338 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.05

NC Test can't be opened

NC Test can't be opened for axes that have the same name as the project.

ID#400024602 : solved problem, known since V3.0.71.27 UP04, solved since V3.00.81.13

Timeout error when test window is closed

When the NC test is closed, a timeout error message appears.

ID#204660 : solved problem, known since V3.00.80.14, solved since V3.00.81.10

"Save INIT-Parameters" message appears twice

When the NC test is closed, the message "Save INIT parameters" appears twice.

ID# 400022081, 400038267 : solved problem, known since V3.0.71.27 UP04, solved since V3.00.81.08

"Type of CPU could not be determined yet" message after warm restart in NC-Test

Changing this behaviour may causes un determined side effects. This will be solved when the diagnostics part in Automation Studio will be revised

ID# 400013860 : solved problem, known since V3.0.71.26 SP04, solved since V3.00.81.10

Saving the INIT parameter when closing the NC test

When closing the NC test, the question "Should the INIT parameters be saved to the project?" is shown so that all INIT parameters can be saved.

1.3.3.11.14 Diagnostics – Motion – NC Trace

ID#400072054 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.14

CNC Trace: Some NC object names in the NC Trace data points are incorrect

When a CNC trace was loaded, some of the NC object names in the NC Trace data points were switched, and some of the names were cryptic.

ID#400056878 : solved problem, known since V3.00.81.18, solved since V3.00.90.09

Wrong title when tracing multiple axes

When multiple axes are traced, the title of the first axis is always displayed. This causes axis labels to have the same name, and only the first diagram is shown.
The problem only occurs with ARNC0.

ID# 400058413, 400059749 : solved problem, known since V3.00.81.19 SP01, solved since V3.00.90.07

Network Command Trace shortcut menu displayed incorrectly

When the shortcut menu is opened in the Network Command Trace table, the context menu of the header appears.

ID# 400046834, 400050679, 400055914, 400053351 : solved problem, known since V3.00.80.28 SP01, solved since V3.00.90.07

Additional information isn't displayed in Windows 7 and Windows Vista

When using Windows 7 or Windows Vista, the additional information is not displayed in the Network Command Trace.

ID#400058791 : new function since V3.00.90.07

The measurement cursor is displayed by default.

The measurement cursor is displayed as soon as the trace is opened

ID#400072054 : known problem since V3.00.81.24 SP0x, correction planned for V3.00.81.31 SP0x

CNC Trace: Some NC object names in the NC Trace data points are incorrect

When a CNC trace was loaded, some of the NC object names in the NC Trace data points were switched, and some of the names were cryptic.

1.3.3.11.15 Diagnostics – Profiler

ID#400051044 : solved problem, known since V3.00.81.18, solved since V3.00.81.19 SP01

In the Profiler, tasks are suddenly shown as "UnknownCyclicTask" after being downloaded

If tasks are re-transferred after being edited, they are not shown if the parameter "Buffer for created task" equals 0.

ID#400032355 : new function since V3.00.90.10

Setting for the maximum number of profiler archive modules

The maximum number of archive modules can now be set in the profiler configuration. Once the configured maximum number of archive modules for the controller has been reached on the controller, the oldest one is automatically deleted before creating a new one.

1.3.3.11.16 Diagnostics – Trace

ID#400058178 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.26 SP0x

Arrays with a start index $\neq 0$ cause problems in the variable selection window for the variable trace.

Starting with this version of Automation Studio, arrays with a start index $\neq 0$ can be selected as expected in the variable selection window.

ID#400058178 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.07

Arrays with a start index $\neq 0$ cause problems in the variable selection window for the variable trace.

Starting with this version of Automation Studio, arrays with a start index $\neq 0$ can be selected as expected in the variable selection window.

1.3.3.11.17 Diagnostics – Watch

ID#400066230 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.28 SP0x

Some values of enum variables don't show up in AS Watch.

In certain cases (enum types written a certain way as a member of a structure type) the value of the variable is shown incorrectly or not at all in the Watch.
This has been corrected.

ID#400066151 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

In the Variable Watch, the list of inserted variables is lost

If the init subprogram and the cyclic section of a program were implemented in different files and both files were opened in monitor mode and variables were inserted in the Watch window, then under certain circumstances after monitor mode was turned off and back on the list of inserted variables was no longer shown in the Watch window. The variables then had to be inserted again manually.

After this correction, turning monitor mode off and back on does not affect the list of variables in the Watch window.

ID# 400066230, 400068267 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

Some values of enum variables don't show up in AS Watch.

In certain cases (enum types written a certain way as a member of a structure type) the value of the variable is shown incorrectly or not at all in the Watch.
This has been corrected.

ID#400057519 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.10

Variables can no longer be dragged into the Watch window.

If the "Watch" view of the text editor is disabled and the text editor is closed and reopened, it was no longer possible to insert variables in the Watch view. Dragging and dropping variables into the Watch window didn't insert them.

It was no longer possible to enable the "Watch" view.

After this correction, the "Watch" view can once again be opened from the main menu after it has been closed.

ID#400052334 : solved problem, known since V3.00.81.18, solved since V3.00.90.10

Variables can no longer be dragged into the Watch window.

If the "Watch" view of the text editor is disabled and the text editor is closed and reopened, it was no longer possible to insert variables in the Watch view. Dragging and dropping variables into the Watch window didn't insert them.

It was no longer possible to enable the "Watch" view.

After this correction, the "Watch" view can once again be opened from the main menu after it has been closed.

ID# 400045196, 400045567 : solved problem, known since V3.00.80.29 SP01, solved since V3.00.90.08

In the Watch window, sometimes only the numeric values of enumeration data types were shown.

Using an enumerated data type (Enum) that contains a large number of enumerators for a PV caused the PV to be displayed incorrectly in the Watch. "Large" values for PVs (project dependent) caused only the numerical value and not the name of the enumeration to be displayed in the Watch window. As a result, the value of this PV couldn't be set in the Watch window.

Error has been corrected.

ID#400042819 : solved problem, known since V3.00.80.25, solved since V3.00.90.08

Correction in Watch: Structure elements not inserted correctly with certain selections

In the Insert dialog of the Watch, if both a simple data type and individual elements of a structured data type were selected, these elements were sometimes not correctly inserted in the Watch. The items were inserted individually but at the highest level instead of being grouped under a common node for the structure.

The selected items are now displayed at the correct level.

ID#400006757 : solved problem, known since ARSG4_2.94.22_V02.94, solved since V3.00.90.12

Problems displaying variable values in the PV Watch window after using the library function DatObjMove

There were display problems in the Watch window when Automation Studio was connected to a target on which a task was running the library function "DatObjMove" cyclically with the PV Watch window open.

Variable values were no longer refreshed and it was sometimes not possible to insert any more PVs.

This error has been corrected.

1.3.3.11.18 IO Configuration – CANopen

ID#400068843 : solved problem, known since V3.00.81.28 SP0x, solved since V3.00.81.29 SP0x

Error with COB-ID calculation

If the COB-ID of a PDO has for example the value \$NODEID+0x40000200 than the COB ID calculated from the AS is wrongly entered in the arconfig.

ID#400056381 : solved problem, known since V3.00.81.25 SP0x, solved since V3.00.81.25 SP0x

Priority of CANopen master can be configured

The user can configure the priority of the CANopen master in order to adjust the system load for a particular application.

ID#400056569 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.25 SP0x

Bit 30 of a COB-ID was not properly handled by the CAN configuration editor

Regarding to DS301 specification bit 30 of a COB-ID shall be ignored. The CAN configuration editor treated this bit as a part of the COB-ID.
This resultet in multiple occurences of a COB-ID.

ID#400056381 : solved problem, known since V3.00.90.04, solved since V3.00.90.06

Priority of CANopen master can be configured

The user can configure the priority of the CANopen master in order to adjust the system load for a particular application.

ID#400056569 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.06

Bit 30 of a COB-ID was not properly handled by the CAN configuration editor

Regarding to DS301 specification bit 30 of a COB-ID shall be ignored. The CAN configuration editor treated this bit as a part of the COB-ID.
This resultet in multiple occurences of a COB-ID.

ID# 400050557, 400050603 : solved problem, known since V3.00.80.32 SP02, solved since V3.00.80.33 SP02

AccessType "rwr" incorrectly interpreted

Entries in the EDS file with AccessType=rwr are not interpreted correctly. As a result the parameter can't be written.

ID# 400030547 : new function since V3.00.81.09

Default configuration of the CANOpen master causes problems with CAN I/O

The default configuration of the CANOpen master has both Heartbeat and LifeGuarding enabled when CAN I/O is enabled. Since most slaves can perform LifeGuarding, and CAN I/O devices require the GuardTime, Heartbeat should be disabled in the default configuration of the CANOpen master.

1.3.3.11.19 IO Configuration – DTM

ID#400072895 : solved problem, known since V3.00.90.15, solved since V3.00.90.17

Festo Profinet device can not be inserted

ID#400070573 : solved problem, known since V3.00.90.12, solved since V3.00.90.14

CANopen Master DTM checks whether default values are defined in the EDS files for the COB-ID. If not, it tries to define default values that conform to the standards.

ID#400060207 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.81.26 SP0x

Export device description is not supported

GSD files cannot be exported using the current DTM Library

1.3.3.11.20 IO Configuration – Modbus TCP

ID# 400021642, 400022422, 400036543 : solved problem, known since V3.0.71.27 SP04, solved since V3.00.81.25 SP0x

Modbus TCP configuration has errors after upgrading AS

If an existing project is upgraded to Version 3.0.71.27 SP04 (or higher), there are errors in the Modbus TCP configuration for all blocks with writing functions (e.g. write multiple coils). For these blocks, the number of channels and the start address are incorrect.

ID# 400021642, 400022422, 400036543 : solved problem, known since V3.0.71.27 SP04, solved since V3.00.80.35 SP03

Modbus TCP configuration has errors after upgrading AS

If an existing project is upgraded to Version 3.0.71.27 SP04 (or higher), there are errors in the Modbus TCP configuration for all blocks with writing functions (e.g. write multiple coils). For these blocks, the number of channels and the start address are incorrect.

1.3.3.11.21 IO Configuration – Profibus

ID#400064590 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.27 SP0x

Invalid linefeed characters resulted in invalid import

Profibus device description files with invalid linefeed characters (0x0D, 0x0D, 0x0A sequence) resulted in invalid import. These linefeeds are now treated in a special manner.

ID#400064590 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

Invalid linefeed characters resulted in invalid import

Profibus device description files with invalid linefeed characters (0x0D, 0x0D, 0x0A sequence) resulted in invalid import. These linefeeds are now treated in a special manner.

ID#400058710 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.08

The I/O mapping does not support strings

String is not longer provided as data type for a Profibus channel because it is not supported by the I/O mapping.

For existing projects the concerned device has to be reimported to fix the issue.

ID#400053732 : solved problem, known since V3.00.90.04, solved since V3.00.90.06

Priority of Profibus master can be configured

The user can configure the priority of the Profibus master in order to adjust the system load for a particular application.

ID#400048726 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.80.33 SP02

AS crashes when headstation bytes are changed

AS crashes if the Profibus I/O configuration is changed in the headstation bytes.

1.3.3.11.22 Motion Components

ID#400062212 : solved problem, known since unbekannt, solved since V3.00.90.09

Not able to select insert cards correctly from the wizard in 8AC14xxx projects

If an ACOPOS was added to the CAN interface of a 8AC14xxx CPU, then only the insert card of the third slot was able to be selected from the insert wizard. Slots one and two were only able to added in the hardware tree afterward.

1.3.3.11.23 Online Services

ID#400054118 : solved problem, known since V3.00.90.03, solved since V3.00.90.06

With an existing online connection, fixed node numbers are detected incorrectly

For X2X configurations, fixed node numbers are entered, although the respective hardware modules don't have fixed node numbers configured.

ID#400050693 : solved problem, known since V3.00.81.18, solved since V3.00.90.09

Online connection incorrectly established after local interruption

If the PVI communication instance is terminated due to excessive load (Communication Timeout COMT) and the connection is then re-established, then the CPU object will be connected with the communication parameter CD="CPU" instead of the correct parameter.

ID#400050701 : solved problem, known since V3.00.81.18, solved since V3.00.81.19 SP01

Setting of 3 seconds for ConnectionTimeOut too small

The ConnectionTimeOut value has been increased to 300 seconds.

1.3.3.11.24 Online Settings Dialog

ID#400057092 : solved problem, known since V3.00.81.18, solved since V3.00.90.05

Crash when parameters are entered in extra device settings without separator

If the parameters are entered in the "Extra device settings" column without a space separating them (e.g. "/RS=0/RS=0"), then Automation Studio will crash when the online settings are saved.

ID#400057092 : solved problem, known since V3.00.81.18, solved since V3.00.81.23 SP0x

Crash when parameters are entered in extra device settings without separator

If the parameters are entered in the "Extra device settings" column without a space separating them (e.g. "/RS=0/RS=0"), then Automation Studio will crash when the online settings are saved.

ID#400056008 : solved problem, known since V3.00.81.18, solved since V3.00.90.04

Modem description string with single quote doesn't work

If a modem description string contains a single quotation mark, the string will not be forwarded properly.

ID#400056008 : solved problem, known since V3.00.81.18, solved since V3.00.81.23 SP0x

Modem description string with single quote doesn't work

If a modem description string contains a single quotation mark, the string will not be forwarded properly.

1.3.3.11.25 Programming – ANSI C

ID#400054197 : solved problem, known since V3.00.81.18, solved since V3.00.90.12

LineCoverage not working with high task class cycle times

If line coverage is activated for a task with a high cycle time ($\geq 1000\text{ms}$), then the error message "Error 6575: Unknown target error = 6575" is displayed.

ID#400041151 : solved problem, known since V3.00.80.28 SP01, solved since V3.00.81.10

Go To Bookmark changes the caret position if a text is selected.

A subsequent clipboard command then affects the selected position.

1.3.3.11.26 Programming – ANSI C++

ID#400056892 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.06

C++: Failed allocation of `bur_heap_size` memory gives no Warning/Error

ID#400055860 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.04

Error "illegal option -- O" when generating static C/C++ library

This error message may appear when generating C/C++ libraries if the command line for i386-elf-ar.exe is larger than 2048 bytes.

The error can be avoided by using shorter paths for projects (configuration name, name of the temp directory) shorter .cpp file names and a lower number of .cpp file names in each library.

ID#400055860 : solved problem, known since V3.00.81.18, solved since V3.00.81.24 SP0x

Error "illegal option -- O" when generating static C/C++ library

This error message may appear when generating C/C++ libraries if the command line for i386-elf-ar.exe is larger than 2048 bytes.

The error can be avoided by using shorter paths for projects (configuration name, name of the temp directory) shorter .cpp file names and a lower number of .cpp file names in each library.

ID#224820 : new function since V3.00.90.10

In the source files of static C/C++ libraries, breakpoint positions are not shown.

When debugging programs that with statically linked C/C++ libraries, no breakpoints are shown in the library source code.

1.3.3.11.27 Programming – Automation Basic

ID#400071333 : solved problem, known since V3.00.90.11, solved since V3.00.90.14

Autocomplete error with local function blocks

Autocomplete doesn't work for structured elements of a local function block.

ID#400064495 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.27 SP0x

VAR_IN_OUT parameters added in the wrong order

If a user function block containing a VAR_IN_OUT parameter is added using the "Insert Function block" option, then its parameters will be shown in the wrong order.

ID#400064495 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

VAR_IN_OUT parameters added in the wrong order

If a user function block containing a VAR_IN_OUT parameter is added using the "Insert Function block" option, then its parameters will be shown in the wrong order.

ID#400057426 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.09

Go to corresponding delimiter doesn't work if the instruction block contains ";" comments

For instruction blocks such as
if ((var1 = 1) and (Var2 = 2)) then ;test
var3 = 3
endif
"Go to matching delimiter" doesn't work.

ID#400050541 : solved problem, known since V3.00.81.18, solved since V3.00.81.19 SP01

"Next Bookmark" deletes selected text

If text is selected and copied with Ctrl+C, subsequently using "Next Bookmark" to jump to a bookmark deletes the selected text.

1.3.3.11.28 Programming – CFC

ID#209060 : known problem since V3.00.80.18, correction planned for V3.00.81.06

Sometimes not all variable values are displayed in monitor mode.

Sometimes not all variable values are displayed in monitor mode of CFC/FBD programs.

1.3.3.11.29 Programming – Cross Reference

ID#400066226 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

List Usage doesn't work for variables with the type ARRAY OF Structure

ID#400062521 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.08

Error message when double-clicking on cross references from the SFC program

An error message is generated if the editor for a SFC source file is opened the first time by double-clicking on a cross reference.

ID#400025028 : solved problem, known since V3.0.71.30 SP05, solved since V3.00.81.05

Cross-reference list incorrectly displayed as valid.

After a cancelled build, the cross-reference list is still shown as valid.

ID#205266 : solved problem, known since V3.00.80.15, solved since V3.00.81.06

"List Unused Actions" doesn't work

The cross-reference list function "Cross-reference/ List Unused Actions" doesn't work. Nothing is displayed in the "reference list" window, even though there are unused actions in the selected program.

ID#205256 : solved problem, known since V3.00.80.15, solved since V3.00.81.05

Cross-reference list is incorrectly shown as valid, although the global declaration files have been changed.

After a change to the global declaration files, the cross-reference list is still shown as valid.

1.3.3.11.30 Programming – Data Type Declaration Table Editor

ID#400061731 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.07

Poor system response times depending on the quality of the connection to the file server or VCS server

The table editor checks the file status each time a change is made (ReadOnly etc.). This causes poor response times when editing, depending on the quality of the connection to the server.

1.3.3.11.31 Programming – FBD

ID#400071811 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.81.30 SP0x

Incorrect handling of empty block connections in monitor mode

If a value is entered for empty block connections in monitor mode, then this value is always written to the last element of the block instance variable.

Entering a value for empty block connections is therefore no longer permitted.

ID#400062333 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.12

Crash when inserting blocks with a parameter type labeled as "FUNCTION" or "FUNCTION_BLOCK".

A block that contains parameters with the type name "FUNCTION" or "FUNCTION_BLOCK" can cause a crash when inserted.

From now on, using the type name "FUNCTION" or "FUNCTION_BLOCK" will cause an error message.

ID#400060330 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.09

Variable values only shown in monitor mode after scrolling.

ID#400047764 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.12

Vertical scroll bar disappears after "append column"

ID#177430 : solved problem, known since V3.0.71.5, solved since V3.00.81.10

Malfunction in Select Variable dialog box

When the filter function is turned on (Type=BOOL[0..9]), variables of the type ARRAY [m..n] OF BOOL are not available, even though the data type is correct.

ID#400071811 : known problem since V3.00.81.27 SP0x, correction planned for V3.00.90.19 SP0x

Incorrect handling of empty block connections in monitor mode

If a value is entered for empty block connections in monitor mode, then this value is always written to the last element of the block instance variable.

Entering a value for empty block connections is therefore no longer permitted.

1.3.3.11.32 Programming – Function Table Editor

ID#400053413 : solved problem, known since V3.00.81.18, solved since V3.00.90.10

Error 1144 during build due to changed transfer parameters in the *.fun file

If the scope of a function block parameter is changed, then the sequence of the parameters will be changed under certain circumstances because the sequence is determined by the scope (VAR_INPUT, VAR_OUTPUT, VAR_INOUT, VAR).

In this case, the parameter sequence must also be adjusted when called up.

In order to illustrate this, the new sequence will now be displayed automatically and immediately after saving the declaration file.

1.3.3.11.33 Programming – IO Mapping Table Editor

ID#400063292 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

Input channels that are mapped multiple times are not saved in the order shown.

A different order is shown after opening the editor again.

ID#400055024 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.06

Changing the node number of I/O modules results in incorrect mapping.

Moving I/O modules, e.g. an X20 CPU on the X2X bus can result in incorrect entries in the I/O mapping or in the physical view

ID#400055024 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.81.25 SP0x

Changing the node number of I/O modules results in incorrect mapping.

Moving I/O modules, e.g. an X20 CPU on the X2X bus can result in incorrect entries in the I/O mapping or in the physical view

ID#243470 : solved problem, known since V3.00.80.33 SP02, solved since V3.00.90.04

Malfunction in Select Variable window for making I/O assignments

The setting "Only not connected" is sometimes evaluated incorrectly.

ID#243455 : solved problem, known since V3.00.80.33 SP02, solved since V3.00.90.04

Array elements are shown multiple times

In the select variable window for making I/O assignments, array elements are sometimes listed twice.

ID#153671 : solved problem, known since V3.00.80.10, solved since V3.00.90.07

Forced variables not shown as forced after connection is interrupted

When the connection is lost on SG3 target systems, forced I/O variables are no longer identified as such.

1.3.3.11.34 Programming – LD

ID#400069458 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.81.30 SP0x

Incorrect code generated when a block instance with EN/ENO is used multiple times

If one instance of a block with EN/ENO connections is used multiple times in a Ladder Diagram, the code generated is incorrect.

ID#400069458 : solved problem, known since V3.00.81.27 SP0x, solved since V3.00.90.14

Incorrect code generated when a block instance with EN/ENO is used multiple times

If one instance of a block with EN/ENO connections is used multiple times in a Ladder Diagram, the code generated is incorrect.

ID#262205 : solved problem, known since V3.00.90.11, solved since V3.00.81.29 SP0x

Using MOV block with correct syntax causes build error.

If a MOVE block with EN/ENO and multiple inputs/outputs, any attempt to build will result in Error 1140: Data type mismatch: Cannot convert BOOL to ...

ID#400066267 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.29 SP0x

MOV block generates output even though EN = FALSE

ID#400067398 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.81.29 SP0x

Different values displayed in the Ladder Diagram monitor and in the PV watch

In some cases, the Ladder Diagram monitor and the PV watch show different values for the same variable.

ID#252645 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.26 SP0x

Incorrect code generation for "stretched" MOV blocks

If the input and output of a MOV block are not on the same line due to a preceding block, the generated code will be incorrect.

ID#252644 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.07

Incorrect code generation for "stretched" MOV blocks

If the input and output of a MOV block are not on the same line due to a preceding block, the generated code will be incorrect.

ID#400060503 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.80.35 SP03

Error message: Error 1352 : LD expected.

This error message sometimes occurs with complex networks.

ID#400060636 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.80.35 SP03

Incorrect code is sometimes generated for complex networks.

Complex links can result in incorrect or incomplete code (some paths are ignored), and as a result, output contacts can't be set or reset.

ID#400060636 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.81.25 SP0x

Incorrect code is sometimes generated for complex networks.

Complex links can result in incorrect or incomplete code (some paths are ignored), and as a result, output contacts can't be set or reset.

ID#400060636 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.07

Incorrect code is sometimes generated for complex networks.

Complex links can result in incorrect or incomplete code (some paths are ignored), and as a result, output contacts can't be set or reset.

ID#400060503 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.81.25 SP0x

Error message: Error 1352 : LD expected.

This error message sometimes occurs with complex networks.

ID#400060503 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.06

Incorrect code generation for "stretched" MOV blocks

If the input and output of a MOV block are not on the same line due to a preceding block, the generated code will be incorrect.

ID#400058543 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.05

AS crashes when monitor mode is activated

If an element or variable with the type ARRAY[0..n] OF TIME is linked to a function block input, AS crashes when monitor mode is started.

ID#400058543 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.24 SP0x

AS crashes when monitor mode is activated

If an element or variable with the type ARRAY[0..n] OF TIME is linked to a function block input, AS crashes when monitor mode is started.

ID#245425 : solved problem, known since V3.00.81.18, solved since V3.00.81.23 SP0x

Relaying contacts and coils to a MOVE output causes incorrect functionality.

If contacts or coils are relayed to a MOVE output, the editor indicates that this is invalid, but there is no error during compilation.

However, the code generated during compilation contains errors if multiple contacts are relayed together.

ID#245404 : solved problem, known since V3.00.81.18, solved since V3.00.90.04

Relaying contacts and coils to a MOVE output causes incorrect functionality.

If contacts or coils are relayed to a MOVE output, the editor indicates that this is invalid, but there is no error during compilation.

However, the code generated during compilation contains errors if multiple contacts are relayed together.

ID#400054923 : solved problem, known since V3.00.81.18, solved since V3.00.90.09

Replace Block sometimes causes display error

ID#400051093 : solved problem, known since V3.00.81.18, solved since V3.00.81.19 SP01

Crash after inserting a new network in front of an empty network

... and then clicking on the network.

ID#400040762 : solved problem, known since V3.00.80.25, solved since V3.00.90.09

Forced values are not specifically identified.

ID#212130 : solved problem, known since V3.00.80.20, solved since V3.00.81.04

Transitions implemented in Ladder Diagram are labeled as having syntax errors

SFC transitions implemented in Ladder Diagram are always labeled as having syntax errors (red bar on the left edge).

ID#211410 : solved problem, known since V3.00.80.19, solved since V3.00.81.06

Variable values not displayed correctly when the option "Activate Glowing" is changed

If the setting "Tools / Options / Ladder / Activate Glowing" is changed while in monitor mode, variable values and power flow are displayed incorrectly.

Error workaround: Only change "Activate Glowing" option when monitor mode is not active.

ID#209010 : solved problem, known since V3.00.80.18, solved since V3.00.81.04

Empty networks aren't normalized correctly.

Empty networks aren't normalized to the minimum number of columns.

ID#207900 : solved problem, known since V3.00.80.17, solved since V3.00.81.06

Initialization of a TIME variable with a numeric literal and MOVE block causes a compiler error

If the MOVE block is used to initialize a TIME variable, and a numeric literal ("0") is used as the input value, a compiler error occurs.

Solution: Use a TIME literal, e.g. "T#0s"

1.3.3.11.35 Programming – Motion – Acopos Parameter Table Editor

ID#400061752 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.09

ACOPOS parameter table: The motor wizard is started when trying to load data from a file

If the category "Motor" was selected in the ACOPOS parameter table dialog box for inserting new groups, then the option "Load Parameters from File" no longer had any effect and the motor wizard was started instead.

1.3.3.11.36 Programming – Motion – Cam Editor

ID#400047860 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.05

Cam profile editor remains locked after turning off monitor mode.

Turning off monitor mode doesn't remove the lock on any open cam profile editors. The lock remains until the editors are closed and reopened.

1.3.3.11.37 Programming – Motion – CNC Program Editor

ID#400061171 : new function since V3.00.90.10

Syntax highlighting in the CNC program editor not fully available

Syntax highlighting was not available for some of the CNC commands such as G172. A tool tip for this CNC command was not being displayed either.

ID#400043626 : new function since V3.00.81.12

Comments should only be colored to the end of the line

Multiple line comments are not permitted in ARNC0 and cause a syntax error. Comments should only be colored from the opening bracket to the end of the line

1.3.3.11.38 Programming – Motion – Motor Parameter Table Editor

ID#400059997 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.09

Not able to add a resolver motor to ACOPOSmulti

A resolver motor was not able to be added to the hardware tree in ACOPOSmulti, even though a resolver card was plugged into the ACOPOSmulti.

1.3.3.11.39 Programming – Motion – NC Mapping Table Editor

ID#400048396 : solved problem, known since V3.00.80.25, solved since V3.00.90.09

Interface names can't be corrected in the NC configuration.

Inserting an ACOPOS device module in the hardware tree automatically inserts the corresponding interface (e.g. "SL1.IF2") in the NC configuration. This interface was incorrectly changed to a different name (e.g. "SL2.IF2").

Closing and reopening the project results in the original interface name (e.g. "SL1.IF2") being recreated automatically in the internal structures, since ACOPOS modules are connected to it in the hardware.

The interface in the NC configuration (e.g. "SL2.IF2") can't be renamed to the original interface name (e.g. SL1.IF2), since this name is already used in the internal structures and is therefore no longer available.

1.3.3.11.40 Programming – Motion Components

ID#400064409 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

Empty task inserted when an ACOPOSmicro is inserted on an SGC CPU

When an ACOPOSmicro(80SD*) is inserted on an SGC CPU (X20CP02*), an empty task with the name "ncsdcctrl" is created in the logical view.

ID#400064311 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.10

Wrong Wizard opened for X20SM* and X67SM* modules with the function model "Ramp"

When inserting a stepper motor module (X20SM* or X67SM*), if the function model "Ramp" is selected in the wizard, then the wizard pages for SDC configuration are shown, which are not

required for the Ramp function model

ID#400061524 : solved problem, known since V3.00.81.24 SP02, solved since V3.00.81.26 SP0x

80VD100PD.C000-01 cannot be operated via NC Mapping Table

ACOPOS startup is interrupted with error 32225 (This ACOPOS POWERLINK node does not exist in the AR Configuration).

ID#400060362 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.08

Trace recording can't be opened in Windows7 64-bit

In Windows7 64-bit, a Net Trace recording can't be evaluated. The trace is saved as a *.bin file. An error message appears saying that the file can't be found.

ID#400060073 : solved problem, known since nicht relevant, solved since V3.00.90.09

The contents of the variable declaration file for the SDC controller task deleted

Adding an 8I64XXXXXXX.00X-1 ACOPOSinverter module caused the existing data in the variable declaration file for the SDC controller task (ncsdctrl.var) to be deleted.

ID#400056878 : solved problem, known since V3.00.81.18, solved since V3.00.81.24 SP0x

Wrong title when tracing multiple axes

When multiple axes are traced, the title of the first axis is always displayed. This causes axis labels to have the same name, and only the first diagram is shown.
The problem only occurs with ARNC0.

ID#400047089 : solved problem, known since V3.00.80.29 SP01, solved since V3.00.80.34 SP02

Wrong parameter configuration with "Use Motor Encoder = No"

If "Use Motor Encoder = No" is selected, than wrongly encoder parameter are inserted.

ID#400036316 : solved problem, known since V3.00.80.25, solved since V3.00.90.10

The DiagGetStrInfo function from the AsIODiag library only shows "PLKAny" for ACOPOSMulti

The DiagGetStrInfo() function shows the 8AC112 and 8AC114 correctly for ACOPOS, but for ACOPOSMulti only
"PLKAny" is returned.

ID# 400022586, 400030657 : solved problem, known since V3.0.71.27 UP04, solved since V3.00.90.05

Inserting an SI4100 changes arnc0cfg

If an X20SI4100 is inserted, the interface configuration of the ARNC0 is changed.

ID#400033662 : new function since V3.00.81.07

Improvement of error messages concerning simultaneous operations of drives types

In case ACOPOS drives on CAN will be mixed with SDC drives the following message will be generated:

Simultaneous operation of ACOPOS drives on CAN and SDC drives is not possible

In case ACOPOS drives on POWERLINK will be mixed with ACOPOS drives on CAN the following message will be generated:

Simultaneous operation of ACOPOS drives on POWERLINK and CAN is not possible

1.3.3.11.41 Programming – OPC Alarm Editor

ID#255560 : known problem since V3.00.80.19, correction planned for V3.00.90

Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor

A FindInFiles search for OPC tag names returns the correct results, and double clicking on a result in the output window opens the editor, but then a random tag is selected.

1.3.3.11.42 Programming – OPC Custom Properties Editor

ID#255565 : known problem since V3.00.80.19, correction planned for V3.00.90

Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor

A FindInFiles search for OPC tag names returns the correct results, and double clicking on a result in the output window opens the editor, but then a random tag is selected.

1.3.3.11.43 Programming – OPC Mapping Editor

ID#400060315 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.10

Linking identical OPC configurations

If a network contains multiple CPUs with the same project, it was previously not possible to link them simultaneously using B&R Windows OPC Server 3.0. The reason was that the OPC name space requires that each element is unique, and the OPC configuration editors in Automation Studio allow an additional hierarchical level to be created for this differentiation. A new option for inserting an additional structure level has been added in the WinOPC mapping editor.

ID#400044413 : solved problem, known since V3.00.80.28 SP01, solved since V3.00.90.10

When inserting OPC tags into the mapping using the Select Variable dialog box, other tag files are inserted

If a tag file is inserted in the mapping using the Select Variable dialog box, the tag declarations below it are inserted too.

ID#255575 : known problem since V3.00.80.19, correction planned for V3.00.90

Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor

A FindInFiles search for OPC tag names returns the correct results, and double clicking on a result in the output window opens the editor, but then a random tag is selected.

ID#255570 : known problem since V3.00.80.19, correction planned for V3.00.90

Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor

A FindInFiles search for OPC tag names returns the correct results, and double clicking on a result in the output window opens the editor, but then a random tag is selected.

1.3.3.11.44 Programming – OPC Tag Editor

ID#400057826 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.81.25 SP0x

OPC tag editor: Incorrect length calculation for structures of a function block instance

In the OPC tag editor, the length of a structure from a function block instance was calculated incorrectly.

ID#400057826 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.08

OPC tag editor: Incorrect length calculation for structures of a function block instance

In the OPC tag editor, the length of a structure from a function block instance was calculated incorrectly.

ID#400054966 : solved problem, known since V3.00.81.18, solved since V3.00.81.25 SP0x

"Singularize" generates incorrect array indexes when used in IEC

If an array with an index range unequal to zero is "singularized" in an IEC language, the elements are assigned an index that doesn't exist on the controller.

ID#400054966 : solved problem, known since V3.00.81.18, solved since V3.00.90.08

"Singularize" generates incorrect array indexes when used in IEC

If an array with an index range unequal to zero is "singularized" in an IEC language, the elements are assigned an index that doesn't exist on the controller.

ID#400051430 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.08

Exception in the OPC tag editor when the Singularize function is called

Calling the Singularize function again in the OPC tag editor after adding a structure array member caused an exception.

ID#210295 : solved problem, known since V3.00.80.19, solved since V3.00.90.10

Double clicking on a FindInFiles result selects a random tag in the OPC Tag Editor

A FindInFiles search for OPC tag names returns the correct results, and double clicking on a result in the output window opens the editor, but then a random tag is selected.

1.3.3.11.45 Programming – Permanent Variable Table Editor

ID#400051241 : new function since V3.00.90.06

No positive feedback for Check Offsets

There is no feedback message if the results for "Check Offsets" in the editor for permanent variables are positive.

1.3.3.11.46 Programming – Reference List

ID#400041448 : solved problem, known since V3.00.80.25, solved since V3.00.81.12

Memory lost when using the "List Usage" function

Using the function "List Usage" multiple times in large projects and with cross–referencing enabled results in a continuous loss of RAM.

1.3.3.11.47 Programming – Select Variable Dialog

ID#400056533 : solved problem, known since V3.00.80.20, solved since V3.00.90.09

Parameters from function blocks and functions not offered in the Select Variable dialog box.

When editing how a block is implemented, the parameters of the block are not offered in the Select Variable dialog box.

1.3.3.11.48 Programming – SFC

ID#400067925 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.12

For transitions that contain special characters ('\ : * <> |) it is then no longer possible to edit an action. The editor can't be opened.

ID#400058271 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.24 SP0x

No values are displayed in Ladder Diagram steps when in monitor mode

No values are displayed in Ladder Diagram steps when in monitor mode if the step is opened before monitor mode is activated

ID#400054836 : solved problem, known since V3.00.81.21 SP01, solved since V3.00.81.23 SP0x

Crash in monitor mode if no more memory available

ID#214531 : solved problem, known since V3.00.80.21, solved since V3.00.81.10

SFCErrPOU is not set for task names.

The SFC system variable SFCErrPOU is never set.

ID#400056134 : new function since V3.00.90.04

Errors should also be acknowledged with SFCQuitError when SFCPause = TRUE

If the define –D _SFCPause_NoQuitError exists, the system variables SFCErr, SFCErrStep and SFCErrPOU can be reset using the system variable SFCQuitError.

1.3.3.11.49 Programming – Software Configuration Editor

ID#400063244 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.27 SP0x

Open Cyclic/Init/Exit in the software configuration opens the wrong instance

The task context is not always defined for programs mapped multiple times when selecting Open Cyclic/Init/Exit.

ID#400063244 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.09

Open Cyclic/Init/Exit in the software configuration opens the wrong instance

The task context is not always defined for programs mapped multiple times when selecting Open Cyclic/Init/Exit.

ID#400055476 : solved problem, known since V3.00.81.18, solved since V3.00.90.05

Object names that contain a comma are not displayed in the software configuration monitor

ID#239225 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.81.19 SP01

Target system modules are not shown for the software configuration when in monitor mode.

If data modules that were created with the PG2000 are inserted in an Automation Studio project, the target modules are not shown if the version numbers of the respective br modules are outside the valid range (> 9999).

The PG2000 had a different valid range for version numbers.

ID#400048645 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.80.33 SP02

Target system modules are not shown for the software configuration when in monitor mode.

If data modules that were created with the PG2000 are inserted in an Automation Studio project, the target modules are not shown if the version numbers of the respective br modules are outside the valid range (> 9999).

The PG2000 had a different valid range for version numbers.

1.3.3.11.50 Programming – ST

ID#400068185 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.12

Go To Declaration is not offered for members of function blocks

ID#400063410 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.09

Double-clicking on error message sends cursor to wrong line

If a source file contains line-ending data in UNIX format (\n), then the cursor will not be sent to the error position in the source file when double-clicking on an error message.

ID#400062128 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.81.26 SP0x

SmartEdit does not work properly if the editor is opened by double-clicking on the cross reference list.

The SmartEdit functions are not available if an editor for a source file is opened the first time by double-clicking on a cross reference.

ID#400062128 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.08

SmartEdit does not work properly if the editor is opened by double-clicking on the cross reference list.

The SmartEdit functions are not available if an editor for a source file is opened the first time by double-clicking on a cross reference.

ID#400042618 : solved problem, known since V3.00.80.28 SP01, solved since V3.00.90.09

"Comment out" button stays grayed out

The "Comment out" button remains grayed out, even though there is no source code line being commented.

ID#400036275 : solved problem, known since V3.00.80.25, solved since V3.00.81.08

If arrays with enumerators are indexed, an incorrect array index is used in monitor mode.

If arrays with enumerators are indexed and don't have an initial value, the array index 0 is used in monitor mode.

1.3.3.11.51 Programming – System Configuration

ID#400068898 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.81.29 SP0x

No compile error when using retain variables

If there are retain variables declared in projects using PP100 or PP300 devices, no compile error occurs. For Powerpanels of this types no retain memory is available.

ID#400068898 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.12

No compile error when using retain variables

If there are retain variables declared in projects using PP100 or PP300 devices, no compile error occurs. For Powerpanels of this types no retain memory is available.

ID#400066525 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

Freezing 2003 backplane module causes build error.

If the 2003 backplane module is already frozen in a project, then in order to correct the build error you need to unfreeze it and freeze the module.

ID#400066205 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

No build error when more local remanent memory is used than was configured.

ID#400059327 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.06

For ARwin, the setting "Preserve permanent PV memory ..." is not preserved.

In the system configuration of an ARwin, the setting "Preserve permanent PV memory ..." is not preserved.

ID#400059327 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.24 SP0x

For ARwin, the setting "Preserve permanent PV memory ..." is not preserved.

In the system configuration of an ARwin, the setting "Preserve permanent PV memory ..." is not preserved.

ID# 400056776 400057107, 400059697 : new function since V3.00.90.07

The IP address of the ARsim can't be set to 0.0.0.0

If the ARsim's IP address is set to 127.0.0.1, then the ARsim can no longer be reached from another computer via the IP of the ARsim.

ID# 400056776 400057107, 400059697 : new function since V3.00.81.25 SP0x

The IP address of the ARsim can't be set to 0.0.0.0

If the ARsim's IP address is set to 127.0.0.1, then the ARsim can no longer be reached from another computer via the IP of the ARsim.

ID#400037077 : new function since V3.00.81.12

Size of the safety log book can't be set

The size of the safety log book can't be set.

1.3.3.11.52 Programming – Variable Declaration Table Editor

ID#208206 : solved problem, known since V3.00.80.17, solved since V3.00.81.05

Undo doesn't include input in the Value column

The input of an init value in the Value column, it cannot be removed using Undo.

ID#204136 : solved problem, known since V3.00.80.14, solved since V3.00.81.05

Description of incompatibility

For structure members, an array with a length of 1 is now always created
i.e. instead of

```
/* Datatypes and datatypes of function blocks */  
typedef struct typ1  
{ plcstring StringMitLng0;  
} typ1;
```

```
/* Datatypes and datatypes of function blocks */  
typedef struct typ1  
{ plcstring StringMitLng0[1];  
} typ1;
```

This means that any existing applications are no longer compatible with 3.00.81.

This incompatibility has been knowingly accepted, since it is highly unlikely to find applications with strings with a length of 0.

ID#160560 : solved problem, known since unbekannt, solved since V3.00.81.06

Some TIME literals can't be entered in the table editor.

Mixed TIME literals with and without underscores is not accepted.

Example:

T#1h_3m2s not accepted.

T#1h_3m_2s accepted,
 T#1h3m2s is accepted.
 Time literals without underscores (e.g. T#1m3s) are not accepted. T#1m_3s must be entered instead.

1.3.3.11.53 Programming – Variable Declaration Text Editor

ID#400052839 : solved problem, known since V3.00.81.18, solved since V3.00.90.10

Dragging and dropping a selected line sometimes removes a line too many

1.3.3.11.54 Tools – Generate Bus Navigator Source

ID#400058060 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.81.26 SP0x

The I/O mapping from the AS project is not applied to the safety project.

In the AS project, any channels with local or global PVs that are mapped to I/O modules are missing when the safety project is opened.

Effects on project development:

- 1) When the channels are dragged into the graphic workspace of the SafeDESIGNER, the names from the AS project are not suggested for the link.
- 2) In the SafeNAVIGATOR the PVs are missing from the "CPU Variable" column.

ID#400060397 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.11

During a BUILD in AS the SafeDESIGNER must not be opened.

If the SafeDESIGNER is opened while a BUILD is running, creation of the BNC may not be completed.

This should therefore be prevented in AS.

ID#400058060 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.09

The I/O mapping from the AS project is not applied to the safety project.

In the AS project, any channels with local or global PVs that are mapped to I/O modules are missing when the safety project is opened.

Effects on project development:

- 1) When the channels are dragged into the graphic workspace of the SafeDESIGNER, the names from the AS project are not suggested for the link.
- 2) In the SafeNAVIGATOR the PVs are missing from the "CPU Variable" column.

1.3.3.11.55 Tools – Import Fieldbus Device

ID#400063594 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.81.27 SP0x

Import could not handle tabulator characters

Tabulator characters at certain positions caused a wrong interpretation of the values in the affected line and this in turn led to a corrupt runtime configuration.

ID#400063594 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.09

Import could not handle tabulator characters

Tabulator characters at certain positions caused a wrong interpretation of the values in the affected line and this in turn led to a corrupt runtime configuration.

ID#400056310 : solved problem, known since V3.00.81.18, solved since V3.00.90.08

Incorrect channel address calculation for imported Powerlink devices with static mapping and user defined datatypes

The mapping offset of user defined datatypes has not been applied for user defined datatypes. Although the offset within the user defined datatypes was correct, the offset within the Powerlink frame was wrong.

ID#400051725 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.81.23 SP0x

I/O Mapping editor does not show any channels for imported CANopen device

PDO mapping entries for objects from 1400 through 1FFF have been excluded from being used as cyclic channels because we expected those objects not to be required as cyclic channels. After reviewing it turns out that there is no further reason why those objects should not be accessible as cyclic channels.

ID#223045 : solved problem, known since V3.00.80.27 SP01, solved since V3.00.81.10

GSD: SlotDefinition not applied completely

The SlotDefinition for EH3x152A.GSD is not applied completely.

ID#400056310 : known problem since V3.00.81.18, correction planned for V3.00.81.23 SP0x

Incorrect channel address calculation for imported Powerlink devices with static mapping and user defined datatypes

The mapping offset of user defined datatypes has not been applied for user defined datatypes. Although the offset within the user defined datatypes was correct, the offset within the Powerlink frame was wrong.

1.3.3.11.56 Tools – Trace

ID# 400034601, 400042798, 400048781, 400052626 : solved problem, known since V3.00.80.25, solved since V3.00.90.07

ENUM data types in trace

Starting with the current version of Automation Studio, the AS trace function will also support variables with the ENUM data type.

1.3.3.11.57 Workspace – Common

ID#400067673 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.12

Contents of the dialog box "Tools / Options / Editor" not shown correctly in Korean Windows 7.

ID#400068444 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.81.29 SP0x

With AS 3.00.81.26.SP0x, offsets are assigned incorrectly under some circumstances

In projects with the following characteristics

- * Project contains ANSI C tasks
 - * multiple tasks, at least one ANSI C task, use the same global variables
 - * these variables have the type user data type (structure) or enumerator
 - * the data types are used in ANSI C via variables using _GLOBAL
- the incorrect variable offsets may be assigned for global variables.

To fix this issue in affected projects, perform a Clean and a Rebuild All.

This entry is redundant, see 249785

ID#228861 : solved problem, known since V3.00.81.09, solved since V3.00.81.14

Choosing "Window/Close" all in the menu only closes the NC test if it is open

ID# 400042829, 400045254, 400045023 : solved problem, known since V3.00.80.25, solved since V3.00.90.09

Undocked watch window remains out of view.

ID#400039342 : solved problem, known since V3.00.80.25, solved since V3.00.90.07

The option "Store Nc Operating system on target" doesn't work for SG3 and SGC targets

ID#210305 : solved problem, known since V3.00.80.19, solved since V3.00.81.09

System resources are not released

The VC editor requires various Windows system resources (GDI objects, window handles) when opening a VC object.

These are not fully released when the VC editor is closed.

When the VC editor is opened and closed a number of times during an Automation Studio session this results in a resource bottleneck that can only be removed by restarting Automation Studio.

With a FindInFiles search, the VC editor is opened and closed implicitly, so frequent FindInFiles searches for VC objects should be avoided.

ID#400049975 : new function since V3.00.90.10

Automation Studio doesn't show a message when two controllers use the same IP address

If the same fixed IP address is assigned to two controller CPUs, then only one of them is randomly selected for the online connection; there is no message to inform the user of this situation.

ID# 400036315, 400039387 : new function since V3.00.81.08

When a window is closed, the previously opened window is activated

When a window is closed, the previously opened window is activated instead of the previously active window.

ID#400025794 : new function since V3.00.90.07

When Automation Studio starts, it always tries to open the last opened project

This behavior can now be configured under Tools / Options / General.

ID#400012098 : new function since V3.00.81.07

New Menu "Save Project As ..."

1.3.3.11.58 Workspace – Configuration View

ID#400066009 : new function since V3.00.90.11

After the upgrade dialog box is canceled no other configuration can be activated

If you're activating a configuration and the upgrade dialog box is opened to perform a required upgrade, if the upgrade is canceled then no other configuration can be activated.

1.3.3.11.59 Workspace – Export/Import

ID#400061566 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.07

Interface settings are set to defaults after hardware import.

If the hardware (incl. CPU) is exported, then the default values will be entered instead of the interface settings for the POWERLINK interface when importing.

This affects the following hardware modules: 4PP065.0351–P74, 4PP065.0571–P74, 4PP065.0571–K01.

ID#400059518 : solved problem, known since V3.00.81.23 SP0x, solved since V3.00.90.07

When importing/exporting hardware modules, the I/O mapping descriptions are lost.

When importing, the I/O mappings are missing.

ID#400058276 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.06

Special characters replaced by question marks during import

If a data object that contains special characters is exported from an AS V2.x project using File → Export... and then imported into an AS V3.0.81.x project using File → Import..., all special characters in the data object are replaced by question marks.

ID#400056949 : solved problem, known since V3.00.81.18, solved since V3.00.90.05

*.hpp files are not exported with "Export Source Library"

*.hpp files can't be selected for exporting.

ID#400056949 : solved problem, known since V3.00.81.18, solved since V3.00.81.23 SP0x

*.hpp files are not exported with "Export Source Library"

*.hpp files can't be selected for exporting.

ID#400040120 : solved problem, known since V3.00.80.25, solved since V3.00.90.03

When adding existing objects, the object description is not added

If objects (programs, data objects, packets) from other projects are added to an existing project using Add Object / Existing wizards, then their description is not added.

1.3.3.11.60 Workspace – Find/Replace

ID#400069438 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.12

Replace in "whole file"

In the Replace dialog box, even if "Whole file" is selected, any terms located before the cursor are not replaced.

WrapAround can't be enabled.

ID#400027127 : solved problem, known since V3.0.71.27 SP04, solved since V3.00.81.06

When the Find/Replace window is opened multiple times, umlauts are not detected in the find and replace string

If umlauts are entered in the Find/Replace window and the window is closed and reopened, these umlauts are no longer displayed correctly.

ID#400058790 : new function since V3.00.90.07

Find text or replace text displayed in the output window for FindInFiles/ReplaceInFiles

With FindInFiles/ReplaceInFiles, the text being searched for or replaced is not shown in the output window.

1.3.3.11.61 Workspace – Help Explorer

ID#400055263 : solved problem, known since V3.00.90.03, solved since V3.00.90.04

Sample files that are linked to on Help pages can't be saved.

There is no "Save as..." dialog box for the sample files that are linked to on the Help pages.

ID#400055263 : solved problem, known since V3.00.81.18, solved since V3.00.81.22 SP01

Sample files that are linked to on Help pages can't be saved.

There is no "Save as..." dialog box for the sample files that are linked to on the Help pages.

1.3.3.11.62 Workspace – Localization

ID#400058790 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.09

Find text or replace text displayed in the output window for FindInFiles/ReplaceInFiles

With FindInFiles/ReplaceInFiles, the text being searched for or replaced is not shown in the output window.

1.3.3.11.63 Workspace – Logical View

ID#400056231 : solved problem, known since V3.00.81.20 SP01, solved since V3.00.90.04

Cyclic program won't open

The command "Open cyclic program" doesn't work if the name of the file is written differently in the file system than it is in the AS project.

"vcFastBitProcessing.c" != "vcfastbitprocessing.c"

ID#400053822 : solved problem, known since V3.00.80.25, solved since V3.00.81.27 SP0x

It is possible to create tasks that have a comma in their name

In the software configuration, it is possible to create a task that has a comma in its name.

ID#400052527 : solved problem, known since V3.00.81.18, solved since V3.00.81.20 SP01

When the name of the library is changed, referenced files with the same name are also renamed.

ID#400063251 : new function since V3.00.90.09

Declaration files added to a library after it has been created cannot be renamed.

If additional declaration files with the extension .typ or .var are added to a library, then they cannot be renamed.

1.3.3.11.64 Workspace – Physical View

ID#400069234 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.81.29 SP0x

The Automation Runtime version can't be changed if safety hardware modules are frozen in the current configuration.

Trying to change the version of Automation Runtime in a configuration that contains safety hardware modules frozen at Version 1.2, when the installed version of the same safety hardware modules is ≥ 1.4 , results in an error message.

ID#400069234 : solved problem, known since V3.00.81.26 SP0x, solved since V3.00.90.12

The Automation Runtime version can't be changed if safety hardware modules are frozen in the current configuration.

Trying to change the version of Automation Runtime in a configuration that contains safety hardware modules frozen at Version 1.2, when the installed version of the same safety hardware modules is ≥ 1.4 , results in an error message.

ID# 400067241, 400068754 : solved problem, known since V3.00.80.34 SP02, solved since V3.00.81.29 SP0x

With an existing online connection, fixed node numbers are detected incorrectly

For X2X configurations, fixed node numbers are entered, although the respective hardware modules don't have fixed node numbers configured.

ID# 400067241, 400068754 : solved problem, known since V3.00.80.34 SP02, solved since V3.00.80.37 SP05

With an existing online connection, fixed node numbers are detected incorrectly

For X2X configurations, fixed node numbers are entered, although the respective hardware modules don't have fixed node numbers configured.

ID# 400067241, 400068754 : solved problem, known since V3.00.80.34 SP02, solved since V3.00.90.11

With an existing online connection, fixed node numbers are detected incorrectly

For X2X configurations, fixed node numbers are entered, although the respective hardware modules don't have fixed node numbers configured.

ID#400063350 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.09

Incorrect dialog box shown during hardware export in Windows 7.

ID#400055434 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.07

For ACOPOSmicro, not all hardware module description files are updated during an upgrade.

After upgrading the ACOPOSmicro, an error message is generated when the respective project is opened, indicating a missing hardware module "80VDxxxx.xx22-xx".

ID#400057278 : solved problem, known since V3.00.81.18, solved since V3.00.81.24 SP0x

Slow system response when opening the connection dialog box between Safety CPUs

It takes too long to open the dialog box for selecting connected SL modules.

ID#400057419 : solved problem, known since V3.00.81.22 SP01, solved since V3.00.90.05

If the configuration and the PLC have the same name, then modules can't be inserted.

If the configuration and the CPU it contains have the same name, then an IF module can't be inserted on the X20BC1083.

ID#400057278 : solved problem, known since V3.00.81.18, solved since V3.00.90.07

Slow system response when opening the connection dialog box between Safety CPUs

It takes too long to open the dialog box for selecting connected SL modules.

ID#400054960 : solved problem, known since V3.00.81.18, solved since V3.00.90.05

Project containing frozen fieldbus devices can't be built.

If "freeze all" is performed on a project containing fieldbus devices, a subsequent build will result in error messages.

ID#400056399 : solved problem, known since V3.00.81.18, solved since V3.00.90.05

Slow system response when opening the connection dialog box between Safety CPUs

It takes too long to open the dialog box for selecting connected SL modules.

ID#400054960 : solved problem, known since V3.00.81.18, solved since V3.00.81.23 SP0x

Project containing frozen fieldbus devices can't be built.

If "freeze all" is performed on a project containing fieldbus devices, a subsequent build will result in error messages.

ID#400055434 : solved problem, known since V3.00.81.18, solved since V3.00.81.23 SP0x

4PP035.E300 displayed incorrectly in the physical view in AS 3.0.81.18

4PP035.E300-01, 4PP035.E300-136 and 4PP035.E300-36 are shown incorrectly – with slots instead of display or I/O.

ID# 400042992, 400043877, 400048435 : solved problem, known since V3.00.80.25, solved since V3.00.90.05

USB device can't be deleted

On an APC, only a usbhubAP900 can be inserted at USB 1 or USB 4.
However, it is then no longer possible to delete this hub.

ID#400025764 : solved problem, known since unbekannt, solved since V3.00.81.03

Incorrect memory limit displayed for 5PC6000.SE00-00

If the REMMEM for a 5PC6000.SE00-00 is configured too high, when the configuration window is closed, a message window opens with an incorrect value for the maximum available amount of memory.

ID#139732 : solved problem, known since V3.00.80.18, solved since V3.00.81.15

The Limitation of node numbers to 32 on CNC virtual interface (ARNC0) was abolish

Starting with ARNC0 V0.460 it is possible have 253 nodes on the virtual interface.

ID#400042894 : new function since V3.00.90.14

With CPUs used as a POWERLINK V2 CN, it is now possible to configure a fixed InSize and OutSize for the POWERLINK data.

ID#400056817 : new function since V3.00.90.08

SafeDESIGNER cannot be opened after uploading hardware that contains safe modules.

If the SafeDESIGNER is activated via the SafeLOGIC, then it will not be loaded after uploading hardware configurations with safe modules.

1.3.3.11.65 Workspace – Project Converter

ID#400044280 : solved problem, known since V3.00.80.25, solved since V3.00.90.11

Motor parameters are converted incorrectly

When opening a 2.x project, the motor parameters for synchronous motors are entered incorrectly.

ID#400065402 : new function since V3.00.90.11

When a 2.x project is opened, the version info isn't set properly.

When a 2.x project is opened, the version info in the properties of the object in the software configuration is not set to "use default".

1.3.3.11.66 Workspace – Save Project As Zip

ID#400064521 : solved problem, known since V3.00.81.24 SP0x, solved since V3.00.90.12

"Save Project As" doesn't work if the VC editor is open for one of the project's objects

1.3.3.11.67 Workspace – Setup

ID#220870 : solved problem, known since V3.00.80.25, solved since V3.00.81.15

Suggested installation path is not accepted by setup

The suggested installation path on 64-bit systems causes an error during setup. Now c:\BrAutomation is suggested as the installation path on 64-bit systems.

1.3.3.11.68 Workspace – Source Control

ID#400068446 : solved problem, known since V3.00.80.31 SP01, solved since V3.00.90.12

Performance problem when using SVN

Using SVN can reduce performance of the AS editors, because they check the source control status with every operation.

ID#400059441 : solved problem, known since V3.00.81.25 SP0x, solved since V3.00.90.07

The entire project will not be retrieved during project update if one of the files is blocked.

1.3.3.12 1A4300.02 (1.3 Automation Help 3.x)**1.3.3.12.1 AS – Diagnostics**

ID#400028142 : new function since V3.00.90.10

Checklist for handling errors

The Automation Studio Help system doesn't have a chapter about I/O and network diagnostics

1.3.3.12.2 Diagnostics – Profiler

ID#400032355 : new function since V3.00.90.10

Setting for the maximum number of profiler archive modules

The maximum number of archive modules can now be set in the profiler configuration. Once the configured maximum number of archive modules for the controller has been reached on the controller, the oldest one is automatically deleted before creating a new one.

1.3.3.12.3 Hardware – Controls

ID#400054334 : known problem since V3.00.81.18

X20DI2653 E–LED description incorrect

1.3.3.12.4 Hardware – Motion

ID# 400052222, 400053742, 400054269, 400054445, 400056806 : known problem since V3.00.81.22 SP01, correction planned for V3.00.81.27 SP0x

Calculation of Speed/Torque Characteristics failed

Due to data type changes in the motor wizard, no more motor data is transferred to the calculation tool for Speed/Torque Characteristics.

The data query for the calculation tool was adapted appropriately.

1.3.3.12.5 Hardware – Motion ---

ID# 400052222, 400053742, 400054269, 400054445, 400056806, 400062716, 400063871 : solved problem, known since V3.00.81.28 SP0x, solved since V3.00.81.29 SP0x

Calculation of Speed/Torque Characteristics failed

Due to data type changes in the motor wizard, no more motor data is transferred to the calculation tool for Speed/Torque Characteristics.

The data query for the calculation tool was adapted appropriately.

1.3.3.12.6 Libraries – Common

ID#400010987 : new function since V3.00.81.10

The Help for the IF361 library doesn't describe the conditions where a global instance is required.

1.3.3.12.7 Libraries – Samples

ID#229820 : solved problem, known since V3.00.81.10, solved since V3.00.81.11

Executable samples for the DATAOBJ library

ID#227275 : new function since V3.00.81.11

Executable samples for the DVFrame library

ID#227260 : new function since V3.00.81.11

Executable samples for the DRV_mbus library

ID#226355 : new function since V3.00.81.11

Executable samples for the AsSnmp library

ID#227270 : new function planned for V3.00.90

Executable samples for the DRV_mn library

1.3.3.13 1A4600.10 Automation Runtime ARwin

1.3.3.13.1 Hardware

ID#180515 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New I/O channel "SystemTime"

1.3.3.14 1A4600.10–2 Automation Runtime ARwin, ARNC0

1.3.3.14.1 Hardware

ID#180535 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New I/O channel "SystemTime"

1.3.3.15 1A4603.00–2

1.3.3.15.1 Hardware

ID#193360 : known problem since 1.0.0.1, correction planned for 1.0.0.2

Support X20CP1483

ID#190240 : known problem since 1.0.0.0, correction planned for 1.0.0.1

Warning 30972 "No HWD information available" is written into the logbook during bootup of ARNC0

1.3.3.16 3AI350.6

1.3.3.16.1 Hardware

ID#400031958 : solved problem, known since V3.0.71.29 SP05, solved since 1.0.1.0

Problem on fourth 2005 expansion corrected

1.3.3.17 3AI780.6

1.3.3.17.1 Hardware

ID#216115 : new function since 1.0.1.0

Delay time during boot–up implemented

Delay time during boot–up implemented

1.3.3.18 3EX282.6

1.3.3.18.1 Hardware

ID#400012096 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New Firmware V33

For the 3EX282.6, faulty configurations of IO data points were not detected and could cause

undefined states for these data points. This problem can only occur if the data points are configured by the application. If the configuration is made using the hardware tree in Automation Studio, then this problem cannot occur.

1.3.3.19 3IF722.9

1.3.3.19.1 Hardware

ID#229005 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

CAN transmitter blockade after cable un-/plugged corrected

1.3.3.20 3IF762.9

1.3.3.20.1 Hardware 5745_0.pci

ID#245235 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

Error correction in the FPGA UART implementation

1.3.3.21 3IF771.9

1.3.3.21.1 Hardware

ID#229030 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

CAN transmitter blockade after cable un-/plugged corrected

1.3.3.22 3IF779.9

1.3.3.22.1 Hardware

ID#245365 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Error correction in the FPGA UART implementation

ID#229040 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

CAN transmitter blockade after cable un-/plugged corrected

1.3.3.23 3IF782.9

1.3.3.23.1 Hardware

ID#400035809 : solved problem, known since 1.0.2.0, solved since 1.0.4.0

Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

ID#400040011 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Correction of HWD description of RS485 for AS 3.0.80

ID#213695 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

ID#400018793 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

HWC corrected, only RS485 selectable

1.3.3.24 3IF782.9-1

1.3.3.24.1 Hardware

ID#245370 : solved problem, known since 1.1.12.0, solved since 1.1.12.0

Error correction in the FPGA UART implementation

ID#230815 : solved problem, known since 1.1.9.0, solved since 1.1.12.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220415 : solved problem, known since 1.1.8.0, solved since 1.1.9.0

POWERLINK V2: Boot behavior improved

ID#208465 : solved problem, known since 1.1.7.0, solved since 1.1.8.0

CN mode: Various error corrections made.

ID#206460 : solved problem, known since 1.1.6.0, solved since 1.1.7.0

New POWERLINK firmware V45 and basis firmware V10

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199505 : solved problem, known since 1.1.5.1, solved since 1.1.6.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191720 : solved problem, known since 1.1.4.0, solved since 1.1.5.1

New POWERLINK V1/V2 Firmware V42

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.

ID#185565 : solved problem, known since 1.1.3.0, solved since 1.1.4.0

New POWERLINK V1/V2 firmware V39 and basis firmware V9

- Error correction for POWERLINK V2: Certain configurations may cause multiplexed stations to fail.
- Error correction for POWERLINK V2: An error while switching the alternating buffer caused old input data to be resent. (This error only occurred with upgrade 1.1.3.0.)
- Error correction: In configurations with a large amount of I/O data, incorrect input data was sent.

ID#183645 : solved problem, known since 1.1.2.0, solved since 1.1.3.0

New POWERLINK V1/V2 firmware V38 and basis firmware V8

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.
- Improved stability for network disturbances.

ID#177980 : solved problem, known since 1.1.1.0, solved since 1.1.2.0

New POWERLINK V1/V2 firmware V37 and base firmware V7

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- Asynchronous scheduler: The host has only sent an asynchronous frame in max. every second cycle.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171865 : solved problem, known since 1.1.0.0, solved since 1.1.1.0

New POWERLINK firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.

Changes – POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- From now on, stations are addressed with poll requests starting in status "PreOperational 2".

ID#171110 : solved problem, known since 1.0.5.0, solved since 1.1.0.0

Performance improvement – POWERLINK manager

ID#165785 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165430 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164745 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160730 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#256970 : new function planned for 1.2.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256820 : new function planned for 1.2.0.2

POWERLINK: LinkOK data point added.

ID#265775 : known problem since 1.1.13.0, correction planned for 1.2.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265665 : known problem since 1.1.0.0, correction planned for 1.2.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#262397 : known problem since 1.1.13.0, correction planned for 1.2.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#400057319 : known problem since 1.1.12.0, correction planned for 1.2.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#243507 : known problem since 1.1.12.0, correction planned for 1.2.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#163840 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V5

Error correction: problems when booting

1.3.3.25 3IF786.9

1.3.3.25.1 Hardware

ID#229010 : solved problem, known since 1.0.2.0, solved since 1.0.4.0

Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

ID#213700 : solved problem, known since 1.0.0.0, solved since 1.0.2.0

Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

1.3.3.26 3IF786.9-1

1.3.3.26.1 Hardware

ID#245265 : solved problem, known since 1.1.12.0, solved since 1.1.12.0

Error correction in the FPGA UART implementation

ID#230820 : solved problem, known since 1.1.9.0, solved since 1.1.12.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220420 : solved problem, known since 1.1.8.0, solved since 1.1.9.0

POWERLINK V2: Boot behavior improved

ID#213005 : solved problem, known since 1.1.7.0, solved since 1.1.8.0

CN mode: Various error corrections made.

ID#206840 : solved problem, known since 1.1.6.1, solved since 1.1.7.0

New POWERLINK firmware V45 and basis firmware V10

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#400017474 : solved problem, known since 1.1.5.1, solved since 1.1.6.1

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191725 : solved problem, known since 1.1.4.0, solved since 1.1.5.1

New POWERLINK V1/V2 Firmware V42

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.

ID#185590 : solved problem, known since 1.1.3.0, solved since 1.1.4.0

New POWERLINK V1/V2 firmware V39 and basis firmware V9

- Error correction for POWERLINK V2: Certain configurations may cause multiplexed stations to fail.
- Error correction for POWERLINK V2: An error while switching the alternating buffer caused old input data to be resent. (This error only occurred with upgrade 1.1.3.0.)
- Error correction: In configurations with a large amount of I/O data, incorrect input data was sent.

ID#183625 : solved problem, known since 1.1.2.0, solved since 1.1.3.0

New POWERLINK V1/V2 firmware V38 and basis firmware V8

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.
- Improved stability for network disturbances.

ID#178005 : solved problem, known since 1.1.1.0, solved since 1.1.2.0

New POWERLINK V1/V2 firmware V37 and base firmware V7

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- Asynchronous scheduler: The host has only sent an asynchronous frame in max. every second cycle.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#173315 : solved problem, known since 1.1.0.0, solved since 1.1.1.0

New POWERLINK firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.

Changes – POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- From now on, stations are addressed with poll requests starting in status "PreOperational 2".

ID#170595 : solved problem, known since 1.0.5.0, solved since 1.1.0.0

Performance improvement – POWERLINK manager

ID#165795 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165790 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165435 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164750 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160735 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#256975 : new function planned for 1.2.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256825 : new function planned for 1.2.0.2

POWERLINK: LinkOK data point added.

ID#265875 : known problem since 1.1.13.0, correction planned for 1.2.0.2

POWERLINK V2: If the the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265670 : known problem since 1.1.0.0, correction planned for 1.2.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#256920 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#400057319 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163845 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V5

Error correction: problems when booting

1.3.3.27 3IF787.9

1.3.3.27.1 Hardware

ID#229160 : solved problem, known since 1.0.2.0, solved since 1.0.4.0

Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

ID#229045 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

CAN transmitter blockade after cable un-/plugged corrected

ID#224510 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

CAN TransmitQueue Reset command corrected

ID#213705 : solved problem, known since 1.0.0.0, solved since 1.0.2.0

Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

1.3.3.28 3IF787.9-1

1.3.3.28.1 Hardware

ID#230825 : solved problem, known since 1.1.9.0, solved since 1.1.12.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#229050 : solved problem, known since 1.1.10.0, solved since 1.1.10.0

CAN transmitter blockade after cable un-/plugged corrected

ID#224480 : solved problem, known since 1.1.9.0, solved since 1.1.9.0

CAN TransmitQueue Reset command corrected

ID#220425 : solved problem, known since 1.1.8.0, solved since 1.1.9.0

POWERLINK V2: Boot behavior improved

ID#213015 : solved problem, known since 1.1.7.0, solved since 1.1.8.0

CN mode: Various error corrections made.

ID#206845 : solved problem, known since 1.1.6.0, solved since 1.1.7.0

New POWERLINK firmware V45 and basis firmware V11

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199510 : solved problem, known since 1.1.5.1, solved since 1.1.6.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191730 : solved problem, known since 1.1.4.0, solved since 1.1.5.1

New POWERLINK V1/V2 Firmware V42

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.

ID#184925 : solved problem, known since 1.1.3.0, solved since 1.1.4.0

New POWERLINK V1/V2 firmware V39 and basis firmware V10

- Error correction for POWERLINK V2: Certain configurations may cause multiplexed stations to fail.
- Error correction for POWERLINK V2: An error while switching the alternating buffer caused old input data to be resent. (This error only occurred with upgrade 1.1.3.0.)
- Error correction: In configurations with a large amount of I/O data, incorrect input data was sent.

ID#183650 : solved problem, known since 1.1.2.0, solved since 1.1.3.0

New POWERLINK V1/V2 firmware V38 and basis firmware V9

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.
- Improved stability for network disturbances.

ID#178010 : solved problem, known since 1.1.1.0, solved since 1.1.2.0

New POWERLINK V1/V2 firmware V37 and base firmware V7

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- Asynchronous scheduler: The host has only sent an asynchronous frame in max. every second cycle.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#173320 : solved problem, known since 1.1.0.0, solved since 1.1.1.0

New POWERLINK firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.

Changes – POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- From now on, stations are addressed with poll requests starting in status "PreOperational 2".

ID#171120 : solved problem, known since 1.0.5.0, solved since 1.1.0.0

Performance improvement – POWERLINK manager

ID#165800 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165440 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164755 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160740 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#256980 : new function planned for 1.2.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256830 : new function planned for 1.2.0.2

POWERLINK: LinkOK data point added.

ID#265880 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265780 : known problem since 1.1.12.1, correction planned for 1.2.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265675 : known problem since 1.1.0.0, correction planned for 1.2.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#256925 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#400057319 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163850 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V5

Error correction: problems when booting

1.3.3.29 3IF789.9

1.3.3.29.1 Hardware

ID#229015 : solved problem, known since 1.0.2.0, solved since 1.0.4.0

Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

ID#213710 : solved problem, known since 1.0.0.0, solved since 1.0.2.0

Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

1.3.3.30 3IF789.9-1

1.3.3.30.1 Hardware

ID#230770 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220455 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#206850 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V9

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199535 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191765 : solved problem, known since 1.0.9.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V8

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#183670 : solved problem, known since 1.0.8.0, solved since 1.0.9.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178020 : solved problem, known since 1.0.7.0, solved since 1.0.8.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#173325 : solved problem, known since 1.0.6.0, solved since 1.0.7.0

New POWERLINK firmware V36 and Base-Firmware V7

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes – POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- From now on, stations are addressed with poll requests starting in status "PreOperational 2".

ID#171380 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

Stabilized and optimized.

ID#165805 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165445 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164760 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160745 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#256985 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256835 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265785 : known problem since 1.0.15.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265680 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#400057319 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163855 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V5

Error correction: problems when booting

1.3.3.31 3IF789.9–11

1.3.3.31.1 Hardware

ID#230830 : solved problem, known since 1.1.9.0, solved since 1.1.12.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220430 : solved problem, known since 1.1.8.0, solved since 1.1.9.0

POWERLINK V2: Boot behavior improved

ID#213020 : solved problem, known since 1.1.7.0, solved since 1.1.8.0

CN mode: Various error corrections made.

ID#206855 : solved problem, known since 1.1.6.0, solved since 1.1.7.0

New POWERLINK firmware V45 and basis firmware V5

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199515 : solved problem, known since 1.1.5.1, solved since 1.1.6.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191735 : solved problem, known since 1.0.3.0, solved since 1.1.5.1

New POWERLINK V1/V2 Firmware V42

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.

ID#185595 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 firmware V39 and basis firmware V4

- Error correction for POWERLINK V2: Certain configurations may cause multiplexed stations to fail.
- Error correction for POWERLINK V2: An error while switching the alternating buffer caused old input data to be resent. (This error only occurred with upgrade 1.0.2.0.)
- Error correction: In configurations with a large amount of I/O data, incorrect input data was sent.

ID#183655 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

New POWERLINK V1/V2 firmware V38 and basis firmware V3

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.
- Improved stability for network disturbances.

ID#178015 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 firmware V37 and base firmware V2

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- Asynchronous scheduler: The host has only sent an asynchronous frame in max. every second cycle.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#256990 : new function planned for 1.2.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256840 : new function planned for 1.2.0.2

POWERLINK: LinkOK data point added.

ID#265890 : known problem since 1.1.5.1, correction planned for 1.2.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265790 : known problem since 1.1.5.1, correction planned for 1.2.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265685 : known problem since 1.1.0.0, correction planned for 1.2.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#256930 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#400057319 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

1.3.3.32 3IF797.9-1

1.3.3.32.1 Hardware

ID#245210 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Error correction in the FPGA UART implementation

ID#229055 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

CAN transmitter blockade after cable un-/plugged corrected

1.3.3.33 3IF7E3.9

1.3.3.33.1 Hardware

ID#257470 : new function since 1.0.2.0

Vendor ID changed

Module identifies with B&R Vendor ID now

Caution! This upgrade requires changed settings on the master using the latest GSD file.

ID#240745 : new function since 1.0.1.0

Interface module PROFINET RT Slave, Configuration of netX cycle time

Interface module PROFINET RT Slave, Configuration of netX cycle time.

1.3.3.33.2 Hardware 1.0.0.1

ID#237710 : new function since 1.0.0.1

Interface module PROFINET RT Device, new online help

Interface module PROFINET RT Device, new online help

1.3.3.34 4D1164.00–590

1.3.3.34.1 Hardware

ID#245890 : new function planned for 1.0.1.0

Driver added to HWC

1.3.3.35 4D1166.00–490

1.3.3.35.1 Hardware

ID#245900 : new function planned for 1.0.1.0

Driver added to HWC

1.3.3.36 4PP045.0571–042

1.3.3.36.1 Hardware

ID#400045012 : new function planned for 1.0.4.0

Standard devices can be replaced by customised devices

ID#163655 : new function planned for 1.0.1.0

Datapoint SystemTime added

ID#232525 : known problem since unbekannt, correction planned for 1.0.4.0

With this upgrade the standard–PP45 can be replaced by an customised PP45

1.3.3.37 4PP045.0571–062**1.3.3.37.1 Hardware**

ID#164445 : new function planned for 1.0.1.0

Datapoint SystemTime added

ID#400043067 : known problem since unbekannt, correction planned for 1.0.5.0

With this upgrade the standard-PP45 can be replaced by an customised PP45

ID#400004870 : known problem since 1.0.3.2, correction planned for 1.0.4.0

Use of ModbusTCP leads to a configuration error

ID#170385 : known problem since V2.6.0.0009 SP01, correction planned for 1.0.3.2

CPU data points on PP45 faulty

On module 4PP045.571–042 an incorrect <Parameter ID="CompatibleCpuCode" Value="4PP045.0571–042"/> is entered.

1.3.3.38 4PP045.0571–L42**1.3.3.38.1 Hardware**

ID#400040875 : new function planned for 1.1.0.0

Support for terminal mode

1.3.3.39 4PP065.0351–P74**1.3.3.39.1 Hardware**

ID#261790 : new function planned for 1.0.2.0

POWERLINK: LinkOK data point added.

ID#236170 : new function planned for 1.0.0.3

Installation of the upgrade only possible from AS 3.0.80.25

ID#233500 : new function planned for 1.0.0.2

With this upgrade the device can be replaced by an customised panel

ID#400057947 : known problem since unbekannt, correction planned for 1.0.1.0

Keys work in terminal mode

1.3.3.40 4PP065.0351–X74**1.3.3.40.1 Hardware**

ID#233510 : new function planned for 1.0.3.0

With this upgrade the device can be replaced by an customised panel

ID#400057947 : known problem since unbekannt, correction planned for 1.0.5.0

Keys work in terminal mode

ID#236250 : known problem since V3.00.80.31 SP01, correction planned for 1.0.4.0

Error at terminal mode corrected

1.3.3.41 4PP065.0571–K01

1.3.3.41.1 Hardware

ID#240150 : known problem since unbekannt, correction planned for 1.0.1.0

4PP065.0571–K01 cannot be longer inserted in AS as standard panel

1.3.3.42 4PP065.0571–K05

1.3.3.42.1 Hardware

ID#240145 : known problem since unbekannt, correction planned for 1.0.2.0

4PP065.0571–K05 cannot be longer inserted in AS as standard panel

ID#236880 : known problem since V3.00.80.31 SP01, correction planned for 1.0.1.0

Error at terminal mode corrected

1.3.3.43 4PP065.0571–K07

1.3.3.43.1 Hardware

ID#240155 : known problem since unbekannt, correction planned for 1.0.1.0

4PP065.0571–K07 cannot be longer inserted in AS as standard panel

1.3.3.44 4PP065.0571–P74

1.3.3.44.1 Hardware

ID#262385 : new function planned for 1.0.1.0

POWERLINK: LinkOK data point added.

ID#236165 : new function planned for 1.0.0.3

Installation of the upgrade only possible from AS 3.0.80.25

ID#233520 : new function planned for 1.0.0.2

With this upgrade the device can be replaced by an customised panel

1.3.3.45 4PP065.0571–P74F

1.3.3.45.1 Hardware

ID#262405 : new function planned for 1.0.1.0

POWERLINK: LinkOK data point added.

1.3.3.46 4PP065.0571–X74

1.3.3.46.1 Hardware

ID#233515 : new function planned for 1.1.3.0

With this upgrade the device can be replaced by an customised panel

1.3.3.47 4PP065.IF23–1**1.3.3.47.1 Hardware**

ID#223390 : known problem since V3.00.80.25, correction planned for 1.0.2.0

ModbusRTU doesn't work with 4PP065.0351–X74 and 4PP065.IF23–1

1.3.3.48 4PP065.IF33–1**1.3.3.48.1 Hardware**

ID#240760 : new function planned for 1.0.0.1

Documentation added

1.3.3.49 4PP351.0571–01**1.3.3.49.1 Hardware**

ID#178875 : new function planned for 1.0.2.0

hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime

ID#179345 : known problem since unbekannt, correction planned for 1.0.3.0

HWD "Metafunc" for new AR added

1.3.3.50 4PP351.0571–35**1.3.3.50.1 Hardware**

ID#178830 : new function planned for 1.0.2.0

hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime

ID#179330 : known problem since unbekannt, correction planned for 1.0.3.0

HWD "Metafunc" for new AR added

ID#178250 : known problem since unbekannt, correction planned for 1.0.1.0

modul number changed

1.3.3.51 4PP352.0571–35**1.3.3.51.1 Hardware**

ID#178845 : new function planned for 1.0.2.0

hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime

ID#179335 : known problem since unbekannt, correction planned for 1.0.3.0

HWD "Metafunc" for new AR added

1.3.3.52 4PP381.1043–31

1.3.3.52.1 Hardware

ID#178890 : new function planned for 1.0.2.0

hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime

ID#178265 : Information valid since 1.0.1.0

modul number changed

ID#184655 : known problem since unbekannt, correction planned for 1.0.4.0

Hardwaredescription corrected

ID#179350 : known problem since unbekannt, correction planned for 1.0.3.0

HWD "Metafunc" for new AR added

1.3.3.53 4PP420.0571-85

1.3.3.53.1 Hardware

ID#178855 : new function planned for 1.0.2.0

hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added

ID#178285 : Information valid since 1.0.1.0

modul number changed

1.3.3.54 4PP451.0571-45

1.3.3.54.1 Hardware

ID#178870 : new function planned for 1.0.2.0

hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added

ID#178290 : Information valid since 1.0.1.0

modul number changed

ID#400008306 : known problem since unbekannt, correction planned for 1.0.4.0

VNC Viewer BugFix

ID#179730 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

1.3.3.55 4PP451.0571-65

1.3.3.55.1 Hardware

ID#187685 : known problem since unbekannt, correction planned for 1.0.1.0

VNC Viewer BugFix

1.3.3.56 4PP451.0571–85**1.3.3.56.1 Hardware**

ID#178300 : Information valid since 1.0.1.0

modul number changed

ID#179760 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

1.3.3.56.2 Hardware

ID#178950 : new function planned for 1.0.2.0

hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime — HWD "Metafunc" for new AR added

1.3.3.57 4PP451.0571–B5**1.3.3.57.1 Hardware**

ID#178885 : new function planned for 1.0.2.0

hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime — HWD "Metafunc" for new AR added

ID#187795 : known problem since unbekannt, correction planned for 1.0.4.0

VNC Viewer BugFix

ID#179735 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

ID#178305 : known problem since unbekannt, correction planned for 1.0.1.0

modul number changed

1.3.3.58 4PP451.1043–75**1.3.3.58.1 Hardware**

ID#178865 : new function planned for 1.0.2.0

hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime — HWD "Metafunc" for new AR added

ID#178310 : Information valid since 1.0.1.0

modul number changed

ID#179725 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

1.3.3.59 4PP451.1043–B5**1.3.3.59.1 Hardware**

ID#178940 : new function planned for 1.0.2.0

hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added

ID#178350 : Information valid since 1.0.1.0

modul number changed

ID#191825 : known problem since unbekannt, correction planned for 1.0.4.0

Only QVGA visualisation available

Because of wrong HWC entries only QVGA visualisation was available.

ID#187755 : known problem since unbekannt, correction planned for 1.0.4.0

VNC Viewer BugFix

ID#179755 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

1.3.3.59.2 Hardware

ID#400008306 : known problem since 1.0.0.0, correction planned for 1.0.4.0

VNC Viewer BugFix

1.3.3.60 4PP452.0571-45

1.3.3.60.1 Hardware

ID#178925 : new function planned for 1.0.2.0

hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added

ID#178355 : Information valid since 1.0.1.0

modul number changed

ID#179750 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

1.3.3.61 4PP452.0571-B5

1.3.3.61.1 Hardware

ID#178905 : new function planned for 1.0.2.0

hardware specific IO-Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime --- HWD "Metafunc" for new AR added

ID#178360 : Information valid since 1.0.1.0

modul number changed

ID#179740 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

1.3.3.62 4PP452.1043–75**1.3.3.62.1 Hardware**

ID#178920 : new function planned for 1.0.2.0

hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime — HWD "Metafunc" for new AR added

ID#178365 : Information valid since 1.0.1.0

modul number changed

ID#179745 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

1.3.3.63 4PP480.1043–75**1.3.3.63.1 Hardware**

ID#241265 : known problem since unbekannt, correction planned for 1.0.1.0

Changed HWC File

spelling failure in test
APROL function added

1.3.3.64 4PP480.1505–B5**1.3.3.64.1 Hardware**

ID#178820 : new function planned for 1.0.2.0

hardware specific IO–Mapping added: Modul ID / PowerOnCycles / OperatingHours / SystemTime — HWD "Metafunc" for new AR added

ID#178370 : Information valid since 1.0.1.0

modul number changed

ID#179715 : known problem since unbekannt, correction planned for 1.0.3.0

ETH5 address NodeNumber changed

1.3.3.65 4PP480.1505–K04**1.3.3.65.1 Hardware**

ID#213985 : new function planned for 1.0.1.0

HWCs were added to AS

1.3.3.66 4PW035.E300–01**1.3.3.66.1 Hardware**

ID#198185 : new function planned for 1.0.1.0

Failure correction:

attribut font has been removed

attribut cu has been removed

1.3.3.67 4PW035.E300-02

1.3.3.67.1 Hardware

ID#180015 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Firmware not available with AS setup

ID#198175 : new function planned for 1.0.4.0

Failure correction:

attribut font has been removed

ID#196440 : new function planned for 1.0.3.0

Failure correction

error in the keymatrix has been eliminated

ID#190285 : new function planned for 1.0.2.0

new FW V0009

Korrektion of the Backlight

ID#168860 : new function planned for 1.0.1.0

new FW V0008

higher nodenumbers did not work and correction of the X2X-Error LED and X2X-Run LED

1.3.3.68 4XP0000.00-K11

1.3.3.68.1 Hardware

ID#400007820 : new function planned for 1.0.1.0

Failure correction:

new FW V770

1.3.3.69 4XP0000.00-K38

1.3.3.69.1 Hardware

ID#213975 : new function planned for 1.0.1.0

HWCs were added to AS

1.3.3.70 4XP0000.00-K40

1.3.3.70.1 Hardware

ID#400044485 : new function planned for 1.0.1.0

SGC section was added to HWC

1.3.3.71 4XP0000.00–K41**1.3.3.71.1 Hardware**

ID#254370 : new function planned for 1.0.1.0

Support of SGC 4XP0000.00–K41

1.3.3.72 5AC600.CANI–00**1.3.3.72.1 Hardware**

ID#151335 : known problem since unbekannt, correction planned for 1.0.1.0

solved problem

"?" sign in hardwaretree in spite of correct CAN– connection.

1.3.3.73 5AC800.EXT1–00**1.3.3.73.1 Hardware**

ID#162950 : solved problem, known since unbekannt, solved since 1.0.0.1

Error correction 5AC800.EXT1–00

Correction: no LED for Print, Scroll, Pause keys

1.3.3.74 5AC800.EXT3–00**1.3.3.74.1 Hardware**

ID#178435 : known problem since unbekannt, correction planned for 1.0.3.0

correction of reset behaviour on X2X interface + entry for firmware

1.3.3.74.2 unbekannt

ID#162960 : known problem since unbekannt, correction planned for 1.0.1.0

Failure correction

Correction of LED– and Keypadmatrix.

1.3.3.75 5AC800.EXT3–01**1.3.3.75.1 Hardware**

ID#178440 : known problem since unbekannt, correction planned for 1.0.3.0

correction of reset behaviour on X2X interface + entry for firmware

1.3.3.75.2 unbekannt

ID#162965 : known problem since unbekannt, correction planned for 1.0.1.0

Failure correction

Correction of LED– and Keymatrix.

1.3.3.76 5AC800.EXT3–02

1.3.3.76.1 Hardware

ID#178445 : known problem since unbekannt, correction planned for 1.0.3.0

correction of reset behaviour on X2X interface + entry for firmware

1.3.3.76.2 unbekannt

ID#162970 : known problem since unbekannt, correction planned for 1.0.1.0

Failure correction

Correction of LED– and Keymatrix.

1.3.3.77 5AC800.EXT3–03

1.3.3.77.1 Hardware

ID#178450 : known problem since unbekannt, correction planned for 1.0.3.0

correction of reset behaviour on X2X interface + entry for firmware

1.3.3.77.2 unbekannt

ID#163130 : known problem since unbekannt, correction planned for 1.0.1.0

Failure correction

Correction of LED– and Keymatrix.

1.3.3.78 5AC800.EXT3–04

1.3.3.78.1 Hardware

ID#178460 : known problem since unbekannt, correction planned for 1.0.3.0

correction of reset behaviour on X2X interface + entry for firmware

1.3.3.78.2 unbekannt

ID#162975 : known problem since unbekannt, correction planned for 1.0.1.0

Failure correction

Correction of LED– and Keymatrix.

1.3.3.79 5AC800.EXT3–05

1.3.3.79.1 Hardware

ID#178465 : known problem since unbekannt, correction planned for 1.0.3.0

correction of reset behaviour on X2X interface + entry for firmware

ID#162980 : known problem since unbekannt, correction planned for 1.0.1.0

Failure correction

Correction of LED- and Keymatrix.

1.3.3.80 5ACPCC.MPL0-00**1.3.3.80.1 Hardware**

ID#253700 : known problem since unbekannt, correction planned for 1.0.1.1

Add-on "Modul-OK"

Add-on "Modul-OK" in I/O Mapping

1.3.3.80.2 unbekannt

ID#250445 : known problem since unbekannt, correction planned for 1.0.1.0

Add-on "Modul-OK"

Add-on "Modul-OK" in I/O Mapping

1.3.3.81 5ACPCI.XCOM-00**1.3.3.81.1 Hardware**

ID#270080 : known problem since unbekannt, correction planned for 1.1.0.0

CANopen master doesn't write output data to all slaves

When using a special configuration with several CANopen slaves the output data is only written to the first slave.

ID#240495 : known problem since unbekannt, correction planned for 1.0.1.2

Configuration of netX cycle time

The cycle time for data exchange between CPU and netX can be configured now.

1.3.3.82 5ACPCI.XCOS-00**1.3.3.82.1 Hardware**

ID#240505 : known problem since unbekannt, correction planned for 1.0.1.2

Configuration of netX cycle time

The cycle time for data exchange between CPU and netX can be configured now.

1.3.3.83 5ACPCI.XDNM-00

1.3.3.83.1 Hardware

ID#240510 : known problem since unbekannt, correction planned for 1.0.1.2

Configuration of netX cycle time

The cycle time for data exchange between CPU and netX can be configured now.

1.3.3.84 5ACPCI.XDNS-00

1.3.3.84.1 Hardware

ID#240515 : known problem since unbekannt, correction planned for 1.0.1.2

Configuration of netX cycle time

The cycle time for data exchange between CPU and netX can be configured now.

1.3.3.85 5ACPCI.XDPM-00

1.3.3.85.1 Hardware

ID#240460 : known problem since unbekannt, correction planned for 1.0.1.2

Configuration of netX cycle time

The cycle time for data exchange between CPU and netX can be configured now.

1.3.3.86 5ACPCI.XDPS-00

1.3.3.86.1 Hardware

ID#240465 : known problem since unbekannt, correction planned for 1.0.1.2

Configuration of netX cycle time

The cycle time for data exchange between CPU and netX can be configured now.

1.3.3.87 5ACPCI.XPNM-00

1.3.3.87.1 Hardware

ID#240475 : known problem since unbekannt, correction planned for 1.0.1.2

Configuration of netX cycle time

The cycle time for data exchange between CPU and netX can be configured now.

1.3.3.88 5ACPCI.XPNS-00

1.3.3.88.1 Hardware

ID#240485 : known problem since unbekannt, correction planned for 1.0.1.2

Configuration of netX cycle time

The cycle time for data exchange between CPU and netX can be configured now.

1.3.3.89 5AP951.1505–01

1.3.3.89.1 Hardware

ID#228520 : known problem since V3.00.80.25, correction planned for 1.0.0.1

AS requests a touch interface to be specified for an AP with no touch screen

1.3.3.90 5LS166.6

1.3.3.90.1 Hardware

ID#248345 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Error correction in the FPGA UART implementation

ID#173260 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

ID#208625 : new function since 1.0.1.0

New hardware variant

1.3.3.91 5LS172.6

1.3.3.91.1 Firmware

ID#159330 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New version V19

Correction of PCI bus Parity calculation

1.3.3.92 5LS172.61

1.3.3.92.1 Firmware

ID#165290 : known problem since unbekannt, correction planned for 1.0.1.0

New Firmware V19

Correction of PCI bus Parity calculation

1.3.3.93 5LS182.6–1

1.3.3.93.1 Hardware

ID#400054385 : solved problem, known since V3.00.80.30 SP01, solved since 1.1.16.0

FW1.1.14.2 of the LS 182.6–1 tends to invalid Datapoints

Error in the .hwc

ID#400046653 : solved problem, known since 1.1.12.0, solved since 1.1.13.1

Reset behavior improved and new data points created

Error correction: After a restart, the default firmware was loaded and then updated again.

New data points:

- SerialNumber
- ModuleID
- HardwareVariant
- FirmwareVersion

ID#230835 : solved problem, known since 1.1.9.0, solved since 1.1.12.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#400035362 : solved problem, known since 1.1.8.0, solved since 1.1.9.0

POWERLINK V2: Boot behavior improved

ID#213025 : solved problem, known since 1.1.7.0, solved since 1.1.8.0

CN mode: Various error corrections made.

ID#206905 : solved problem, known since 1.1.6.0, solved since 1.1.7.0

New POWERLINK firmware V45 and basis firmware V19

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199520 : solved problem, known since 1.1.5.1, solved since 1.1.6.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191740 : solved problem, known since 1.1.4.1, solved since 1.1.5.1

New POWERLINK V1/V2 Firmware V42

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.

ID#185045 : solved problem, known since 1.1.3.0, solved since 1.1.4.1

New POWERLINK V1/V2 firmware V39 and basis firmware V18

- Error correction for POWERLINK V2: Certain configurations may cause multiplexed stations to fail.
- Error correction for POWERLINK V2: An error while switching the alternating buffer caused old input data to be resent. (This error only occurred with upgrade 1.1.3.0.)
- Error correction: In configurations with a large amount of I/O data, incorrect input data was sent.

ID#183600 : solved problem, known since 1.1.2.0, solved since 1.1.3.0

New POWERLINK V1/V2 firmware V38 and basis firmware V16

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.
- Improved stability for network disturbances.

ID#173330 : solved problem, known since 1.1.0.0, solved since 1.1.1.0

New POWERLINK firmware V36

Error correction:

- When using an I/O prescaler > 1, in certain circumstances the old input data for the station is provided to the application.
- ISSI-RAMs are supported.

Changes – POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- From now on, stations are addressed with poll requests starting in status "PreOperational 2".

ID#170735 : solved problem, known since 1.0.6.0, solved since 1.1.0.0

Performance improvement – POWERLINK manager

ID#167140 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New base firmware V11

Collisions resulted in transmission of invalid frames.

ID#165810 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165450 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164765 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160750 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#243767 : new function since 1.1.16.0

Parameter "OutputDMAMargin" activated for B3.07

ID#241602 : new function since 1.1.14.2

PCI diagnosis and new data points added; + Synchronization problem in TK#1 fixed

In various projects, a cycle time violation occurred occasionally.

New data points:

- PCILoadPercentFirstHalf
- PCILoadPercentSecondHalf
- OutputDMAMargin

ID#256910 : new function planned for 1.2.0.2

POWERLINK: LinkOK data point added.

ID#265885 : known problem since 1.1.16.0, correction planned for 1.2.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265690 : known problem since 1.1.0.0, correction planned for 1.2.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#265360 : known problem since 1.1.16.0, correction planned for 1.2.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#256950 : known problem since 1.1.16.0, correction planned for 1.2.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#400057319 : known problem since 1.1.16.0, correction planned for 1.2.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#174655 : known problem since 1.1.1.0, correction planned for 1.1.2.0

New POWERLINK V1/V2 firmware V37 and base firmware V15

Error corrections:

- In large networks, ring redundancy may not work in some circumstances.
- POWERLINK V2 CN mode: Various error corrections made.
- Asynchronous scheduler: The host has only sent an asynchronous frame in max. every second cycle.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

1.3.3.94 5LS182.6-2

1.3.3.94.1 Hardware

ID#265650 : solved problem, known since 1.1.0.0, solved since 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#400054829 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

PCI diagnosis and new data points added; + Synchronization problem in TK#1 fixed

In various projects, a cycle time violation occurred occasionally.

New data points:

- OutputDMAMargin

ID#237685 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

Reset behavior improved and new data points created

Error correction: After a restart, the default firmware was loaded and then updated again.

New data points:

- SerialNumber
- ModuleID
- HardwareVariant
- FirmwareVersion

ID#234925 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

New POWERLINK firmware V106

POWERLINK V2 chained stations: Reconnecting failed stations improved.
LinkOK Datapoint in Operating Mode 'Ethernet' available.

ID#229420 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

POWERLINK V2 chained stations: When stations that have failed are added back into the POWERLINK cycle, active chained stations fail.

ID#265895 : known problem since 1.0.4.0, correction planned for 1.1.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265365 : known problem since 1.1.0.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#256955 : known problem since 1.0.4.0, correction planned for 1.1.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#400057319 : known problem since 1.0.4.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

1.3.3.95 5LS187.6

1.3.3.95.1 Hardware

ID#229165 : solved problem, known since 1.0.2.0, solved since 1.0.4.0

Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

ID#229060 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

CAN transmitter blockade after cable un-/plugged corrected

ID#228015 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

CAN TransmitQueue Reset command corrected

ID#400028607 : solved problem, known since 1.0.1.1, solved since 1.0.2.0

Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

ID#173235 : solved problem, known since 1.0.0.0, solved since 1.0.1.1

On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

1.3.3.96 5LS187.6-1

1.3.3.96.1 Hardware

ID#230840 : solved problem, known since 1.1.9.0, solved since 1.1.12.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#229065 : solved problem, known since 1.1.10.0, solved since 1.1.10.0

CAN transmitter blockade after cable un-/plugged corrected

ID#400041497 : solved problem, known since 1.1.12.0, solved since 1.1.12.0

Problems starting CAN-FW corrected

ID#224445 : solved problem, known since 1.1.9.0, solved since 1.1.9.0

CAN TransmitQueue Reset command corrected

ID#220435 : solved problem, known since 1.1.8.0, solved since 1.1.9.0

POWERLINK V2: Boot behavior improved

ID#213030 : solved problem, known since 1.1.7.0, solved since 1.1.8.0

CN mode: Various error corrections made.

ID#206910 : solved problem, known since 1.1.6.0, solved since 1.1.7.0

New POWERLINK firmware V45 and basis firmware V11

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199525 : solved problem, known since 1.1.5.1, solved since 1.1.6.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191750 : solved problem, known since 1.1.4.0, solved since 1.1.5.1

New POWERLINK V1/V2 Firmware V42 and basis firmware V10

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.

ID#185600 : solved problem, known since 1.1.3.0, solved since 1.1.4.0

New POWERLINK V1/V2 firmware V39 and basis firmware V9

- Error correction for POWERLINK V2: Certain configurations may cause multiplexed stations to fail.
- Error correction for POWERLINK V2: An error while switching the alternating buffer caused old input data to be resent. (This error only occurred with upgrade 1.1.3.0.)
- Error correction: In configurations with a large amount of I/O data, incorrect input data was sent.

ID#183640 : solved problem, known since 1.1.2.0, solved since 1.1.3.0

New POWERLINK V1/V2 firmware V38 and basis firmware V8

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.
- Improved stability for network disturbances.

ID#178025 : solved problem, known since 1.1.1.0, solved since 1.1.2.0

New POWERLINK V1/V2 firmware V37 and base firmware V6

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- Asynchronous scheduler: The host has only sent an asynchronous frame in max. every second cycle.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#173335 : solved problem, known since 1.1.0.0, solved since 1.1.1.0

New POWERLINK firmware V36

Error correction:

- When using an I/O prescaler > 1, in certain circumstances the old input data for the station is provided to the application.
- ISSI-RAMs are supported.

Changes – POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- From now on, stations are addressed with poll requests starting in status "PreOperational 2".

ID#171125 : solved problem, known since 1.0.6.0, solved since 1.1.0.0

Performance improvement – POWERLINK manager

ID#167200 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New base firmware V3

Collisions resulted in transmission of invalid frames.

ID#167027 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

5LS187.6–1 doesn't work with Automation Runtime >= 2.92

ID#165815 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165455 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164770 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160755 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#257050 : new function planned for 1.2.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256915 : new function planned for 1.2.0.2

POWERLINK: LinkOK data point added.

ID#265900 : known problem since 1.1.13.0, correction planned for 1.2.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265795 : known problem since 1.1.13.0, correction planned for 1.2.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265695 : known problem since 1.1.10.0, correction planned for 1.2.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#256960 : known problem since 1.1.13.0, correction planned for 1.2.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#400057319 : known problem since 1.1.13.0, correction planned for 1.2.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

1.3.3.97 5LS187.61

1.3.3.97.1 Hardware

ID#229170 : solved problem, known since 1.0.2.0, solved since 1.0.4.0

Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

ID#229070 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

CAN transmitter blockade after cable un-/plugged corrected

ID#224455 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

CAN TransmitQueue Reset command corrected

ID#213715 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

ID#173240 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

1.3.3.98 5LS189.6

1.3.3.98.1 Hardware

ID#229020 : solved problem, known since 1.0.2.0, solved since 1.0.4.0

Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

ID#213720 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

ID#173245 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

1.3.3.99 5LS189.6-1

1.3.3.99.1 Hardware

ID#400057319 : solved problem, known since 1.1.13.0, solved since 1.1.12.0

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#240320 : solved problem, known since 1.1.12.1, solved since 1.1.13.0

Reset behavior improved and new data points created

Error correction: After a restart, the default firmware was loaded and then updated again.

New data points:

- SerialNumber
- ModuleID
- HardwareVariant
- FirmwareVersion

ID#230845 : solved problem, known since 1.1.9.0, solved since 1.1.12.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220440 : solved problem, known since 1.1.8.0, solved since 1.1.9.0

POWERLINK V2: Boot behavior improved

ID#213035 : solved problem, known since 1.1.7.0, solved since 1.1.8.0

CN mode: Various error corrections made.

ID#206915 : solved problem, known since 1.1.6.0, solved since 1.1.7.0

New POWERLINK firmware V45 and basis firmware V9

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199530 : solved problem, known since 1.1.5.1, solved since 1.1.6.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191755 : solved problem, known since 1.1.4.0, solved since 1.1.5.1

New POWERLINK V1/V2 Firmware V42

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.

ID#400007329 : solved problem, known since 1.1.3.0, solved since 1.1.4.0

New POWERLINK V1/V2 firmware V39 and basis firmware V8

- Error correction for POWERLINK V2: Certain configurations may cause multiplexed stations to fail.
- Error correction for POWERLINK V2: An error while switching the alternating buffer caused old input data to be resent. (This error only occurred with upgrade 1.1.3.0.)
- Error correction: In configurations with a large amount of I/O data, incorrect input data was sent.

ID#183660 : solved problem, known since 1.1.2.0, solved since 1.1.3.0

New POWERLINK V1/V2 firmware V38 and basis firmware V7

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.
- Improved stability for network disturbances.

ID#178030 : solved problem, known since 1.1.1.0, solved since 1.1.2.0

New POWERLINK V1/V2 firmware V37 and base firmware V6

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- Asynchronous scheduler: The host has only sent an asynchronous frame in max. every second cycle.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#173340 : solved problem, known since 1.1.0.0, solved since 1.1.1.0

New POWERLINK firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- ISSI-RAMs are supported.

Changes – POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- From now on, stations are addressed with poll requests starting in status "PreOperational 2".

ID#171265 : solved problem, known since 1.0.6.0, solved since 1.1.0.0

Performance improvement – POWERLINK manager

ID#167195 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New base firmware V3

Collisions resulted in transmission of invalid frames.

ID#165820 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165460 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164775 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160760 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#235120 : new function since 1.1.12.1

LinkOK Datapoint available.

ID#257055 : new function planned for 1.2.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#265905 : known problem since 1.1.13.0, correction planned for 1.2.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265800 : known problem since 1.1.13.0, correction planned for 1.2.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265700 : known problem since 1.1.0.0, correction planned for 1.2.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#256965 : known problem since 1.1.13.0, correction planned for 1.2.0.2

POWERLINK: The net time is not always transferred correctly to the application.

1.3.3.100 5LS189.61**1.3.3.100.1 Hardware**

ID#229025 : solved problem, known since 1.0.2.0, solved since 1.0.4.0

Multiplexed stations don't work if the same value is set for the I/O and multiplexed prescalers.

ID#213725 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

Input data sometimes not completely transferred when using multiplexed stations and an I/O prescaler > 1.

ID#173250 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

1.3.3.101 5LS197.6**1.3.3.101.1 Hardware**

ID#229075 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

CAN transmitter blockade after cable un-/plugged corrected

ID#224450 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

CAN TransmitQueue Reset command corrected

ID#173255 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

On modules delivered between August 1, 2007 and January 24, 2008, this can result in read errors from the battery buffered SRAM.

1.3.3.102 5MP040.0381-01**1.3.3.102.1 Hardware**

ID#174760 : known problem since unbekannt, correction planned for 1.0.2.0

solved problem

implementation of "virtual interface" entries in HWC- Files.
Correction of the LED positions.

1.3.3.102.2 unbekannt

ID#166110 : known problem since unbekannt, correction planned for 1.0.1.0

solved problem

Correction of LEDposition.
Visuconnection only master.

1.3.3.103 5MP040.0381-02**1.3.3.103.1 Hardware**

ID#174765 : known problem since unbekannt, correction planned for 1.0.2.0

solved problem

implementation of "virtual interface" entries in HWC– Files.
Correction of the LED positions.

1.3.3.104 5MP050.0653–01

1.3.3.104.1 unbekannt

ID#174745 : known problem since unbekannt, correction planned for 1.0.2.0

solved problem

implementation of "virtual interface" entries in HWC– Files.

ID#164890 : known problem since unbekannt, correction planned for 1.0.1.0

solved problem

Correction of LED– and Keyposition.
The left upper position is a push button and not a key switch.
Visuconnection only master.

1.3.3.105 5MP050.0653–02

1.3.3.105.1 Hardware

ID#174750 : known problem since unbekannt, correction planned for 1.0.2.0

solved problem

implementation of "virtual interface" entries in HWC– Files.

1.3.3.105.2 unbekannt

ID#164920 : known problem since unbekannt, correction planned for 1.0.1.0

solved problem

Correction of LED– and Keyposition.
Visuconnection only master.

1.3.3.106 5MP050.0653–03

1.3.3.106.1 Hardware

ID#174755 : known problem since unbekannt, correction planned for 1.0.2.0

solved problem

implementation of "virtual interface" entries in HWC– Files.

1.3.3.106.2 unbekannt

ID#165225 : known problem since unbekannt, correction planned for 1.0.1.0

solved problem

Correction of LED- and Keyposition.
The left upper position is a overridepoti and not a key switch.
Visuconnection only master.

1.3.3.107 5MP050.0653-04

1.3.3.107.1 Hardware

ID#171580 : known problem since unbekannt, correction planned for 1.0.2.0

solved Problem

implementation of "virtual interface" entries in HWC- Files.

1.3.3.107.2 unbekannt

ID#165280 : known problem since unbekannt, correction planned for 1.0.1.0

solved problem

Correction of Keyposition.
Visuconnection only master.

1.3.3.108 5PC600.E855-01

1.3.3.108.1 Hardware

ID#246005 : new function planned for 2.0.0.0

Support 5PC600.E855-01

1.3.3.109 5PC600.E855-02

1.3.3.109.1 Hardware

ID#246050 : new function planned for 2.0.1.0

Support 5PC600.E855-02

1.3.3.110 5PC600.E855-03

1.3.3.110.1 Hardware

ID#246010 : new function planned for 2.0.0.0

Support 5PC600.E855-03

1.3.3.111 5PC600.E855-04

1.3.3.111.1 Hardware

ID#246015 : new function planned for 2.0.0.0

Support 5PC600.E855-04

1.3.3.112 5PC600.E855-05

1.3.3.112.1 Hardware

ID#246055 : new function planned for 2.0.1.0

Support 5PC600.E855–05

1.3.3.113 5PC600.SE00–00

1.3.3.113.1 Hardware

ID#267150 : new function planned for 2.0.0.3

Support for USB keyboards

USB keyboards can be projected.

ID#242900 : known problem since unbekannt, correction planned for 2.0.0.1

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

ID#223850 : known problem since unbekannt, correction planned for 1.0.7.0

New PLK and new CAN firmware

POWERLINK V2: Boot behavior improved
CAN: TransmitQueue Reset command corrected
CAN: Filter on CAN RX installed

ID#213100 : known problem since unbekannt, correction planned for 1.0.6.0

CN mode: Various error corrections made.

ID#185730 : known problem since unbekannt, correction planned for 1.0.3.0

APC620e project cannot be compiled if the hardware was loaded from the target system

1.3.3.113.2 Hardware Version 1.0.2.0

ID#180160 : known problem since unbekannt, correction planned for 1.0.2.0

Powerlink settings extended

1.3.3.113.3 Hardware Version 1.0.1.0

ID#179615 : known problem since unbekannt, correction planned for 1.0.1.0

AR106: USB extension for AP900

1.3.3.113.4 Hardware V1.0.4.0

ID#194830 : new function planned for 1.0.4.0

Problems wiht reading the CAN node–switches

After changing the SJA1000 IP the CAN node–switches were not readable. Also a new EPL IP and firmware has been integrated.

1.3.3.113.5 Hardware 1.0.8.0

ID#242550 : known problem since unbekannt, correction planned for 1.0.8.0

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

1.3.3.113.6 Hardware 1.0.5.0

ID#207530 : known problem since unbekannt, correction planned for 1.0.5.0

New POWERLINK firmware V45 and basis firmware V15

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

1.3.3.113.7 Hardware 1.0.4.1

ID#400019599 : new function planned for 1.0.4.1

New EPL Firmware (V44) integrated

CN mode: Various error corrections made.

1.3.3.113.8 Hardware 1.0.3.0

ID#189070 : new function planned for 1.0.3.0

New CAN IP for SJA1000 integrated

ID#400009944 : known problem since unbekannt, correction planned for 1.0.3.0

Powerlink BugFix (MII Communication Pull Up resistor)

1.3.3.114 5PC600.SE00–01**1.3.3.114.1 Hardware**

ID#267155 : new function planned for 2.0.0.3

Support for USB keyboards

USB keyboards can be projected.

ID#242920 : known problem since unbekannt, correction planned for 2.0.0.1

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

ID#224155 : known problem since unbekannt, correction planned for 1.0.7.0

New PLK and new CAN firmware

POWERLINK V2: Boot behavior improved
CAN: TransmitQueue Reset command corrected
CAN: Filter on CAN RX installed

ID#213105 : known problem since unbekannt, correction planned for 1.0.6.0

CN mode: Various error corrections made.

ID#188550 : known problem since V2.7.0.0010 SP03, correction planned for 1.0.3.0

APC620e project cannot be compiled if the hardware was loaded from the target system

1.3.3.114.2 Hardware Version 1.0.2.0

ID#180175 : known problem since unbekannt, correction planned for 1.0.2.0

Powerlink settings extended

1.3.3.114.3 Hardware Version 1.0.1.0

ID#179620 : known problem since unbekannt, correction planned for 1.0.1.0

AR106: USB extension for AP900

1.3.3.114.4 Hardware 1.0.8.0

ID#242580 : known problem since unbekannt, correction planned for 1.0.8.0

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

1.3.3.114.5 Hardware 1.0.5.0

ID#207920 : known problem since unbekannt, correction planned for 1.0.5.0

New POWERLINK firmware V45 and basis firmware V15

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

1.3.3.114.6 Hardware 1.0.4.0

ID#194835 : new function planned for 1.0.4.0

Problems wiht reading the CAN node–switches

After changing the SJA1000 IP the CAN node–switches were not readable. Also a new EPL IP and firmware has been integrated.

1.3.3.114.7 Hardware 1.0.3.0

ID#189310 : known problem since unbekannt, correction planned for 1.0.3.0

New CAN IP for SJA1000 integrated

ID#189305 : known problem since unbekannt, correction planned for 1.0.3.0

Powerlink BugFix (MII Communication Pull Up resistor)

1.3.3.115 5PC600.SE00-02**1.3.3.115.1 Hardware**

ID#267160 : new function planned for 2.0.0.3

Support for USB keyboards

USB keyboards can be projected.

ID#242925 : known problem since unbekannt, correction planned for 2.0.0.1

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

ID#224315 : known problem since unbekannt, correction planned for 1.0.7.0

New PLK and new CAN firmware

POWERLINK V2: Boot behavior improved
CAN: TransmitQueue Reset command corrected
CAN: Filter on CAN RX installed

Attention: Because of a bugfix in the device description file projects, that include a 5PC600.SE00-02 (version < 1.0.7.0), have to be recreated!

ID#213110 : known problem since unbekannt, correction planned for 1.0.6.0

CN mode: Various error corrections made.

ID#188555 : known problem since V2.7.0.0010 SP03, correction planned for 1.0.3.0

APC620e project cannot be compiled if the hardware was loaded from the target system

1.3.3.115.2 Hardware Version 1.0.2.0

ID#180180 : known problem since unbekannt, correction planned for 1.0.2.0

Powerlink settings extended

1.3.3.115.3 Hardware Version 1.0.1.0

ID#179625 : known problem since unbekannt, correction planned for 1.0.1.0

AR106: USB extension for AP900

1.3.3.115.4 Hardware 1.0.8.0

ID#242605 : known problem since unbekannt, correction planned for 1.0.8.0

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

1.3.3.115.5 Hardware 1.0.5.0

ID#207935 : known problem since unbekannt, correction planned for 1.0.5.0

New POWERLINK firmware V45 and basis firmware V15

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

1.3.3.115.6 Hardware 1.0.4.0

ID#194845 : new function planned for 1.0.4.0

Problems wiht reading the CAN node–switches

After changing the SJA1000 IP the CAN node–switches were not readable. Also a new EPL IP and firmware has been integrated.

1.3.3.115.7 Hardware 1.0.3.0

ID#189300 : known problem since unbekannt, correction planned for 1.0.3.0

New CAN IP for SJA1000 integrated

ID#189295 : known problem since unbekannt, correction planned for 1.0.3.0

Powerlink BugFix (MII Communication Pull Up resistor)

1.3.3.116 5PC600.SF03–00

1.3.3.116.1 Hardware

ID#267555 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.116.2 unbekannt

ID#168895 : known problem since unbekannt, correction planned for 1.0.1.1

solved problem

- correction of I/O mapping
- TemperatureIO

ID#168650 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power supply

Temperature I/O

SystemTime

1.3.3.117 5PC600.SX01-00

1.3.3.117.1 Hardware

ID#267180 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#226385 : known problem since unbekannt, correction planned for 1.0.2.0

One additonal PCI slot inserted

To be able to configure the maximum number of PCI devices and additionally to configure the SRAM module 5AC600.SRAM-00, it was neccassary, to add one more PCI slot in the device description file.

1.3.3.117.2 unbekannt

ID#168900 : known problem since unbekannt, correction planned for 1.0.1.1

solved problem

correction of I/O mapping

– TemperatureIO

ID#168655 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power supply

Temperature I/O

SystemTime

1.3.3.118 5PC600.SX02-00

1.3.3.118.1 Hardware

ID#267535 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#225950 : known problem since unbekannt, correction planned for 1.0.2.0

One additional PCI slot inserted

To be able to configure the maximum number of PCI devices and additionally to configure the SRAM module 5AC600.SRAM-00, it was necessary, to add one more PCI slot in the device description file.

1.3.3.118.2 unbekannt

ID#168905 : known problem since unbekannt, correction planned for 1.0.1.1

solved problem

correction of I/O mapping
– TemperatureIO

ID#168665 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:
BatteryStatus
Serialnumber
Temperature power supply
Temperature under add-on drive
SystemTime

1.3.3.119 5PC600.SX02-01

1.3.3.119.1 Hardware

ID#267540 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#225955 : known problem since unbekannt, correction planned for 1.0.2.0

One additional PCI slot inserted

To be able to configure the maximum number of PCI devices and additionally to configure the SRAM module 5AC600.SRAM-00, it was necessary, to add one more PCI slot in the device description file.

1.3.3.119.2 unbekannt

ID#168910 : known problem since unbekannt, correction planned for 1.0.1.1

solved problem

correction of I/O mapping
– TemperatureIO

ID#168670 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power supply

Temperature under add-on drive

SystemTime

1.3.3.120 5PC600.SX05-00

1.3.3.120.1 Hardware

ID#267545 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#226405 : known problem since unbekannt, correction planned for 1.0.2.0

One additonal PCI slot inserted

To be able to configure the maximum number of PCI devices and additionally to configure the SRAM module 5AC600.SRAM-00, it was neccassary, to add one more PCI slot in the device description file.

1.3.3.120.2 unbekannt

ID#168915 : known problem since unbekannt, correction planned for 1.0.1.1

solved problem

correction of I/O mapping

– TemperatureIO

ID#168675 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power supply

Temperature under add-on drive

SystemTime

1.3.3.121 5PC600.SX05-01

1.3.3.121.1 Hardware

ID#267550 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#226420 : known problem since unbekannt, correction planned for 1.0.2.0

One additional PCI slot inserted

To be able to configure the maximum number of PCI devices and additionally to configure the SRAM module 5AC600.SRAM-00, it was necessary, to add one more PCI slot in the device description file.

1.3.3.121.2 unbekannt

ID#168925 : known problem since unbekannt, correction planned for 1.0.1.1

solved problem

correction of I/O mapping
– TemperatureIO

ID#168680 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:
BatteryStatus
Serialnumber
Temperature power supply
Temperature under add-on drive
SystemTime

1.3.3.122 5PC720.1043-00

1.3.3.122.1 Hardware

ID#267630 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.122.2 unbekannt

ID#168685 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:
BatteryStatus
Serialnumber
Temperature power supply
Temperature under add-on drive
SystemTime

1.3.3.123 5PC720.1043-01

1.3.3.123.1 Hardware

ID#267635 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.123.2 unbekannt

ID#168710 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power supply

Temperature under add-on drive

SystemTime

1.3.3.124 5PC720.1214-00**1.3.3.124.1 Hardware**

ID#267640 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.124.2 unbekannt

ID#168720 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power supply

Temperature under add-on drive

SystemTime

1.3.3.125 5PC720.1214-01**1.3.3.125.1 Hardware**

ID#267645 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.125.2 unbekannt

ID#168725 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power suppl

Temperature under add-on drive

SystemTime

1.3.3.126 5PC720.1505-00

1.3.3.126.1 Hardware

ID#267650 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.126.2 unbekannt

ID#168840 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power supply

Temperature under add-on drive

SystemTime

1.3.3.127 5PC720.1505-01

1.3.3.127.1 Hardware

ID#267655 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.127.2 unbekannt

ID#168845 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power suppl

Temperature under add-on drive

SystemTime

1.3.3.128 5PC720.1505-02**1.3.3.128.1 Hardware**

ID#267660 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.128.2 unbekannt

ID#168850 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power suppl

Temperature under add-on drive

SystemTime

1.3.3.129 5PC720.1706-00**1.3.3.129.1 Hardware**

ID#267665 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.129.2 unbekannt

ID#168855 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power suppl

Temperature under add-on drive

SystemTime

1.3.3.130 5PC720.1906-00**1.3.3.130.1 Hardware**

ID#267670 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.130.2 unbekannt

ID#168865 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power suppl

Temperature under add-on drive

SystemTime

1.3.3.131 5PC781.1043-00

1.3.3.131.1 Hardware

ID#267675 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.131.2 unbekannt

ID#168870 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power supply

Temperature under add-on drive

SystemTime

1.3.3.132 5PC781.1505-00

1.3.3.132.1 Hardware

ID#267680 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.132.2 unbekannt

ID#168875 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power suppl

Temperature under add-on drive

SystemTime

1.3.3.133 5PC782.1043-00**1.3.3.133.1 Hardware**

ID#267685 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.133.2 unbekannt

ID#168885 : known problem since unbekannt, correction planned for 1.0.1.0

Enlargement

I/O Mapping extension:

BatteryStatus

Serialnumber

Temperature power suppl

Temperature under add-on drive

SystemTime

1.3.3.134 5PC800.B945-01**1.3.3.134.1 Hardware**

ID#246060 : new function planned for 2.0.0.0

Support 5PC800.B945-01

ID#400054707 : known problem since V3.00.81.19 SP01

Windows Terminal Funktion

5PC820.SX02-00 with Windows terminal function

1.3.3.135 5PC800.B945-02**1.3.3.135.1 Hardware**

ID#246065 : new function planned for 2.0.0.0

Support 5PC800.B945-02

1.3.3.136 5PC800.B945-03**1.3.3.136.1 Hardware**

ID#246130 : new function planned for 2.0.0.0

Support 5PC800.B945-03

1.3.3.137 5PC800.B945-04**1.3.3.137.1 Hardware**

ID#246170 : new function planned for 2.0.0.0

Support 5PC800.B945-04

1.3.3.138 5PC800.B945–10

1.3.3.138.1 Hardware

ID#251740 : new function planned for 2.0.0.0

Support 5PC800.B945–10

1.3.3.139 5PC800.B945–11

1.3.3.139.1 Hardware

ID#251745 : new function planned for 2.0.0.0

Support 5PC800.B945–11

1.3.3.140 5PC800.B945–13

1.3.3.140.1 Hardware

ID#251755 : new function planned for 2.0.0.0

Support 5PC800.B945–13

1.3.3.141 5PC800.B945–14

1.3.3.141.1 Hardware

ID#251765 : new function planned for 2.0.0.0

Support 5PC800.B945–14

1.3.3.142 5PC810.SX01–00

1.3.3.142.1 Hardware

ID#202840 : solved problem, known since 1.0.0.3, solved since 1.0.0.3

Support of 200µs cycle time with ARwin (from AR R2.95)

ID#267060 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#187945 : Information valid since 1.0.0.3

first official release (no changes)

1.3.3.143 5PC810.SX02–00

1.3.3.143.1 Hardware

ID#267115 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#187950 : Information valid since 1.0.0.3

first official release (no changes)

1.3.3.143.2 Hardware

ID#202845 : solved problem, known since 1.0.0.3, solved since 1.0.0.3

Support of 200µs cycle time with ARwin (from AR R2.95)

1.3.3.144 5PC810.SX03-00

1.3.3.144.1 Hardware

ID#267140 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

1.3.3.145 5PC810.SX05-00

1.3.3.145.1 Hardware

ID#202850 : solved problem, known since 1.0.0.3, solved since 1.0.0.3

Support of 200µs cycle time with ARwin (from AR R2.95)

ID#267145 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#187955 : Information valid since 1.0.0.3

first official release (no changes)

1.3.3.146 5PC820.1505-00

1.3.3.146.1 Hardware

ID#267025 : new function planned for 2.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#234390 : known problem since unbekannt, correction planned for 1.0.0.2

Standard PCI slots and PCI express compact slot separated

The standard PCI slots and the PCI express compact slot are now separated in the hardware tree. The PCI express compact slot is fixed on slot 3 (SL3).

ID#225210 : known problem since unbekannt, correction planned for 1.0.0.1

HWC Bugfix

SK slot for ARNC0 inserted

1.3.3.147 5PC820.1906–00

1.3.3.147.1 Hardware

ID#267020 : new function planned for 2.0.0.4

Support for USB keyboards

USB keyboards can be projected.

ID#264920 : new function planned for 2.0.0.3

Problems with I/O mapping with AR < A3.08

The I/O mapping for running Automation Runtime < A3.08 was corrected.

ID#262225 : new function planned for 2.0.0.1

Support for Windows terminal mode

The hardware description file for the support of the Windows terminal mode was added.

1.3.3.148 5PC820.SX01–00

1.3.3.148.1 Hardware

ID#267005 : new function planned for 2.0.0.3

Support for USB keyboards

USB keyboards can be projected.

ID#242935 : known problem since unbekannt, correction planned for 2.0.0.1

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

ID#220380 : known problem since unbekannt, correction planned for 1.0.0.4

HWC BugFix and new PLK firmware

Compatibility problem with interface numeration
Correction of alternating puffer handling
New powerlink firmware V103

ID#198525 : known problem since unbekannt, correction planned for 1.0.0.1

Now this system is hidden under AR106

HWC File has changed, all I/O entries are removed.

1.3.3.148.2 Hardware HWC Setup V1.0.1.0

ID#242725 : known problem since unbekannt, correction planned for 1.0.1.0

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

1.3.3.148.3 Hardware 1.0.0.2

ID#400021707 : known problem since 1.0.0.2

First official release

1.3.3.149 5PC820.SX01–01**1.3.3.149.1 Hardware**

ID#267010 : new function planned for 2.0.0.3

Support for USB keyboards

USB keyboards can be projected.

ID#242940 : known problem since unbekannt, correction planned for 2.0.0.1

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

ID#224525 : known problem since unbekannt, correction planned for 1.0.0.4

HWC BugFix and new PLK firmware

Compatibility problem with interface numeration
 Correction of alternating puffer handling
 New powerlink firmware V103
 Support from Automation Runtime version R3.00

ID#220385 : known problem since unbekannt, correction planned for 1.0.0.2

HWC BugFix

Compatibility problem with AR106

ID#219945 : known problem since unbekannt, correction planned for 1.0.0.1

Support 5PC820.SX01–01

1.3.3.149.2 Hardware HWC Setup V1.0.1.0

ID#242765 : known problem since unbekannt, correction planned for 1.0.1.0

POWERLINK Firmware and I/O Datapoint

- update POWERLINK Firmware V106
- Link OK status as I/O datapoint for Powerlink added

1.3.3.150 5PP520.0573–00

1.3.3.150.1 Hardware

ID#266825 : new function planned for 1.0.0.5

Error in the addressing

Because of collision of USB and COM interface, the USB is postponed to IF2 und IF3.

ID#266720 : new function planned for 1.0.0.4

Support for USB keyboards

USB keyboards can be projected.

ID#259035 : new function planned for 1.0.0.3

Problems with terminal modes

Problems, that have arisen in connection with the terminal modes, will be corrected with changes in the respective hardware description files.

1.3.3.151 5PP520.0702–00

1.3.3.151.1 Hardware

ID#266845 : new function planned for 1.0.0.6

Error in the addressing

Because of collision of USB and COM interface, the USB is postponed to IF2 und IF3.

ID#266761 : new function planned for 1.0.0.5

Support for USB keyboards

USB keyboards can be projected.

ID#259170 : new function planned for 1.0.0.3

Problems with terminal modes

Problems, that have arisen in connection with the terminal modes, will be corrected with changes in the respective hardware description files.

ID#260550 : known problem since unbekannt, correction planned for 1.0.0.4

Problem with windows terminal mode

A problem, that occurred in connection with the windows terminal mode, has been fixed.

1.3.3.152 5PP520.1043–00**1.3.3.152.1 Hardware**

ID#266865 : new function planned for 1.0.0.6

Error in the addressing

Because of collision of USB and COM interface, the USB is postponed to IF2 und IF3.

ID#266781 : new function planned for 1.0.0.5

Support for USB keyboards

USB keyboards can be projected.

ID#266595 : new function planned for 1.0.0.4

Support for customized devices

ID#260610 : new function planned for 1.0.0.3

Problems with terminal modes

Problems, that occurred in connection with the terminal modes, were corrected with changes in the respective hardware description files.

1.3.3.153 5PP520.1214–00**1.3.3.153.1 Hardware**

ID#266930 : new function planned for 1.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#260495 : new function planned for 1.0.0.1

Problems with terminal modes

Problems, that occurred in connection with the terminal modes, were corrected with changes in the respective hardware description files.

1.3.3.154 5PP520.1505–00**1.3.3.154.1 Hardware**

ID#266935 : new function planned for 1.0.0.3

Support for USB keyboards

USB keyboards can be projected.

ID#260665 : known problem since unbekannt, correction planned for 1.0.0.2

Problems with terminal modes

Problems, that occurred in connection with the terminal modes, were corrected with changes in the respective hardware description files.

1.3.3.155 5PP551.0573–00

1.3.3.155.1 Hardware

ID#266940 : new function planned for 1.0.0.4

Support for USB keyboards

USB keyboards can be projected.

ID#262255 : new function planned for 1.0.0.3

Correction of LED layout

The incorrect led layout was corrected in the corresponding hardware description file.

ID#261635 : new function planned for 1.0.0.2

Correction of incorrect key assignment

The incorrect key assignment was corrected in the corresponding hardware description file.

ID#261390 : new function planned for 1.0.0.1

Problems with terminal modes

Problems, that occurred in connection with the terminal modes, were corrected with changes in the respective hardware description files.

1.3.3.156 5PP552.0573–00

1.3.3.156.1 Hardware

ID#266945 : new function planned for 1.0.0.4

Support for USB keyboards

USB keyboards can be projected.

ID#262220 : new function planned for 1.0.0.3

Problem with ARwin & embedded terminal client

The operation of an embedded terminal client on 5PP552.0573–00 with operating Automation Runtime Windows (ARwin) caused a black screen on the terminal device. This malfunction was corrected.

ID#261645 : new function planned for 1.0.0.2

Correction of incorrect key assignment

The incorrect key assignment was corrected in the corresponding hardware description file.

ID#261240 : new function planned for 1.0.0.1

Problems with terminal modes

Problems, that occurred in connection with the terminal modes, were corrected with changes in the respective hardware description files.

1.3.3.157 5PP580.1043-00

1.3.3.157.1 Hardware

ID#266950 : new function planned for 1.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#263101 : new function planned for 1.0.0.1

Preview bitmaps corrected

The preview bitmaps in the corresponding hardware description file have been corrected.

1.3.3.158 5PP580.1505-00

1.3.3.158.1 Hardware

ID#266990 : new function planned for 1.0.0.4

Support for USB keyboards

USB keyboards can be projected.

ID#263096 : new function planned for 1.0.0.3

Preview bitmaps corrected

The preview bitmaps in the corresponding hardware description file have been corrected.

ID#262905 : new function planned for 1.0.0.2

Wrong bitmap is displayed

For the hardware description file of the terminal mode the wrong bitmap file is displayed. This has been corrected.

ID#261400 : new function planned for 1.0.0.1

Problems with terminal modes

Problems, that occurred in connection with the terminal modes, were corrected with changes in the respective hardware description files.

1.3.3.159 5PP581.1043–00

1.3.3.159.1 Hardware

ID#266955 : new function planned for 1.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#261245 : new function planned for 1.0.0.1

Problems with terminal modes

Problems, that occurred in connection with the terminal modes, were corrected with changes in the respective hardware description files.

1.3.3.160 5PP581.1505–00

1.3.3.160.1 Hardware

ID#266995 : new function planned for 1.0.0.4

Support for USB keyboards

USB keyboards can be projected.

ID#260440 : new function planned for 1.0.0.3

Problem with embedded terminal mode

A problem, that have arisen in connection with the embedded terminal mode, has been fixed.

ID#260330 : new function planned for 1.0.0.2

Problem with windows terminal mode

A problem, that have arisen in connection with the windows terminal mode, has been fixed.

ID#258955 : new function planned for 1.0.0.1

Problems with terminal modes

Problems, that have arisen in connection with the terminal modes, will be corrected with changes in the respective hardware description files.

1.3.3.161 5PP582.1043–00

1.3.3.161.1 Hardware

ID#266985 : new function planned for 1.0.0.2

Support for USB keyboards

USB keyboards can be projected.

ID#261255 : new function planned for 1.0.0.1

Problems with terminal modes

Problems, that occurred in connection with the terminal modes, were corrected with changes in the respective hardware description files.

1.3.3.162 5PP5CP.US15-00

1.3.3.162.1 Hardware

ID#267420 : new function planned for 1.0.0.3

Changed hardware description file and new firmware

Support for I/O board.

Support for 4-wire touch.

Preparation for soundsupport.

ID#258490 : new function planned for 1.0.0.2

Problems with LEDs of PP500 devices with keys

The new firmware version V0.25 fixes the problem with the LEDs of PP500 devices.

1.3.3.163 5PP5CP.US15-01

1.3.3.163.1 Hardware

ID#267425 : new function planned for 1.0.0.3

Changed hardware description file and new firmware

Support for I/O board.

Support for 4-wire touch.

Preparation for soundsupport.

ID#258485 : new function planned for 1.0.0.2

Problems with LEDs of PP500 devices with keys

The new firmware version V0.25 fixes the problem with the LEDs of PP500 devices.

1.3.3.164 5PP5CP.US15-02

1.3.3.164.1 Hardware

ID#267430 : new function planned for 1.0.0.3

Changed hardware description file and new firmware

Support for I/O board.

Support for 4-wire touch.

Preparation for soundsupport.

ID#258480 : new function planned for 1.0.0.1

Problems with LEDs of PP500 devices with keys

The new firmware version V0.25 fixes the problem with the LEDs of PP500 devices.

1.3.3.165 5PP5IF.FPLM-00

1.3.3.165.1 Hardware

ID#268145 : new function planned for 1.1.0.0

New FPGA firmware V05 and new POWERLINK firmware V112

FPGA firmware:

- FPGA: SRAM data were lost in the RemMem area after a power failure. This is fixed with the new firmware version.

POWERLINK firmwar:

- POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

- POWERLINK: The net time is not always transferred correctly to the application.

- POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

- Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

- POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

1.3.3.166 5PP5IF.FX2X-00

1.3.3.166.1 Hardware

ID#266260 : known problem since unbekannt, correction planned for 1.0.0.1

Problem with the SRAM

Problem with SRAM is solved.

1.3.3.167 7EC020.60-2

1.3.3.167.1 Hardware

ID#400052453 : known problem since V3.00.81.18, correction planned for 1.0.2.0

7EC020.60-2 can be changed against other CPU's

ID# 400009563, 400018914 : known problem since unbekannt, correction planned for 1.0.1.0

VNC works without problems

1.3.3.168 7EC020.61-2

1.3.3.168.1 Hardware

ID#400052453 : known problem since V3.00.81.18, correction planned for 1.0.1.0

7EC020.61-2 can be changed against other CPU's

1.3.3.169 7EC021.60–1**1.3.3.169.1 Hardware**

ID#400066092 : known problem since unbekannt, correction planned for 1.0.2.0

ModbusTCP Master works now with this module

ID#400052453 : known problem since V3.00.81.18, correction planned for 1.0.1.0

7EC021.60–1 can be changed against other CPU's

1.3.3.170 7EC021.61–2**1.3.3.170.1 Hardware**

ID#400052453 : known problem since V3.00.81.18, correction planned for 1.0.1.0

7EC021.61–2 can be changed against other CPU's

1.3.3.171 7EX481.50–1**1.3.3.171.1 Hardware**

ID#182125 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

Configurable tolerance for network disturbances.

1.3.3.172 7EX484.50–1**1.3.3.172.1 Hardware**

ID#182130 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

Configurable tolerance for network disturbances.

1.3.3.173 7XV124.50–61**1.3.3.173.1 Hardware**

ID#400031268 : known problem since unbekannt, correction planned for 1.0.1.0

The module can be inserted on SGC targets in 3.71

1.3.3.174 7XV124.50–62**1.3.3.174.1 Hardware**

ID#400065007 : new function planned for 1.1.0.0

Outputs can be transfered in "packed" mode

1.3.3.175 7XX419L.50–1**1.3.3.175.1 Hardware**

ID#233320 : new function planned for 1.1.0.0

Support for the module 7XX419L.50–1

1.3.3.176 80PS080X3.10–01

1.3.3.176.1 Hardware

ID#400060553 : known problem since unbekannt, correction planned for 1.0.1.0

80PS080X3 – Additional 24 VDC output problems

Output Voltage of 24 VDC not constant.

1.3.3.177 80SD100XD.C044–01

1.3.3.177.1 General

ID#243225 : known problem since unbekannt, correction planned for 1.5.2.1

Customer–specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.177.2 Hardware

ID#204430 : new function planned for 1.1.0.1

Support for buscontroller 80SD100XD.C044–01

ID#400046062 : known problem since unbekannt, correction planned for 1.5.2.0

Reference pulse on channel two doesn't work

Short circuit protection implemented

1.3.3.178 80SD100XD.C04X–13

1.3.3.178.1 General

ID#243230 : known problem since unbekannt, correction planned for 1.4.0.1

Customer–specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.178.2 Hardware

ID#205515 : new function planned for 1.1.0.0

Buscontroller support for the module 80SD100XD.C04X–13

ID#400056193 : known problem since V3.00.81.18, correction planned for 1.4.0.2

Special character were deleted in channel description

1.3.3.179 80SD100XD.C0XX–01

1.3.3.179.1 General

ID#243235 : known problem since unbekannt, correction planned for 1.5.1.1

Customer–specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.179.2 Hardware

ID#227695 : new function planned for 1.5.0.0

Fully support for SDC

ID#400033889 : known problem since unbekannt, correction planned for 1.4.1.0

Error when inserting the module on SGC CPU

ID#400019148 : known problem since , correction planned for 1.1.3.0

Brake output will be reset when X2X bus is not present

ID#400015253 : known problem since unbekannt, correction planned for 1.1.1.0

From the version 1.1.1.0 the Ramp–functionmodell works on SGC CPU's

ID#400013752 : known problem since 1.0.0.0, correction planned for 1.1.2.0

Overcuerror doesn't appear at very low current settings

ID#182205 : known problem since unbekannt, correction planned for 1.1.2.0

Error resetting works now without problems

1.3.3.180 80SD100XD.C0XX–21

1.3.3.180.1 General

ID#243310 : known problem since unbekannt, correction planned for 1.3.2.1

Customer–specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.180.2 Hardware

ID#245865 : known problem since unbekannt, correction planned for 1.3.2.2

Customer–specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

ID#400049657 : known problem since unbekannt, correction planned for 1.3.2.0

Current peaks at switch on of the controller at channel 2

ID#210950 : known problem since unbekannt, correction planned for 1.3.0.0

SDC support implemented

ID#400022021 : known problem since unbekannt, correction planned for 1.1.0.0

The upload of the buffer has now the same behaviour as the X20AI4632

1.3.3.181 80SD100XS.C04X-01

1.3.3.181.1 General

ID#243370 : known problem since unbekannt, correction planned for 1.4.1.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.181.2 Hardware

ID#245875 : known problem since unbekannt, correction planned for 1.4.1.2

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.182 80SD100XS.C04X-13

1.3.3.182.1 General

ID#243380 : known problem since unbekannt, correction planned for 1.3.0.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.182.2 Hardware

ID#230710 : new function planned for 1.2.0.0

SDC support for the module 80SD100XS.C04X-01

ID#245880 : known problem since unbekannt, correction planned for 1.3.0.2

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.183 80SD100XS.C0XX-01

1.3.3.183.1 General

ID#243385 : known problem since unbekannt, correction planned for 1.4.1.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.183.2 Hardware

ID#205090 : new function planned for 1.1.0.0

Support for the module 80SD100XS.C0XX-01 behind a buscontroller

ID#245885 : known problem since unbekannt, correction planned for 1.4.1.2

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.184 80VD100PD.C000-01**1.3.3.184.1 Hardware**

ID#259090 : new function planned for 1.0.1.0

Extensions for AS 3.0.90 for the module 80VD100PD.C000-01

1.3.3.184.2 Hardware

ID#263030 : known problem since unbekannt, correction planned for 1.0.2.0

Support for the ACP μ Servo at AS 3.0.81.x.

Reconstitute of the support for the 80VD100PD.C000-01 at AS 3.0.81.x.

1.3.3.185 80VD100PD.C022-01**1.3.3.185.1 Hardware**

ID#259085 : new function planned for 1.0.2.0

Extensions for AS 3.0.90 for the module 80VD100PD.C022-01

1.3.3.185.2 Hardware

ID#263025 : known problem since unbekannt, correction planned for 1.0.3.0

Support for the ACP μ Servo at AS 3.0.81.x.

Reconstitute of the support for the 80VD100PD.C022-01 at AS 3.0.81.x.

1.3.3.186 80VD100PS.C02X-01**1.3.3.186.1 Hardware**

ID#260260 : known problem since unbekannt, correction planned for 1.0.0.1

Support for the module 80VD100PS.C02X-01

1.3.3.186.2 Hardware

ID#263020 : known problem since unbekannt, correction planned for 1.0.1.0

Support for the ACP μ Servo at AS 3.0.81.x.

Reconstitute of the support for the 80VD100PS.C02X-01 at AS 3.0.81.x.

1.3.3.187 8AC112.60–1

1.3.3.187.1 Hardware

ID#400016061 : known problem since 1.0.0.1, correction planned for 1.0.0.2

The AsIODiag library detects a discrepancy (plugged/configured), although the configured module is physically connected. (AR 02.95 or higher required!)

1.3.3.188 8AC114.60–1

1.3.3.188.1 Hardware

ID#196270 : known problem since 1.0.0.0, correction planned for 1.0.0.1

The AsIODiag library detects a discrepancy (plugged/configured), although the configured module is physically connected. (AR 02.95 or higher required!)

1.3.3.189 8AC114.60–2

1.3.3.189.1 Hardware

ID#229330 : new function planned for 1.0.0.3

Extension of powerlink channels for frame reduction and poll response chaining

ID# 400048080, 400048192, 400048184 : known problem since ARSG4_3.01.6_F03.01, correction planned for 1.0.0.4

IOSuffix in HWC file added

<Parameter ID="IOSuffix" Value=":IO"/> has been added to the HWC file. If this entry does not exist, the NC manager reported the error 32244, followed by 64006.

ID#196275 : known problem since 1.0.0.1, correction planned for 1.0.0.2

The AsIODiag library detects a discrepancy (plugged/configured), although the configured module is physically connected. (AR 02.95 or higher required!)

1.3.3.190 8AC140.61–2

1.3.3.190.1 Hardware

ID#400048932 : known problem since unbekannt, correction planned for 1.0.1.0

INA node number can be set in Automation Studio

1.3.3.191 8AC140.61–3

1.3.3.191.1 Hardware

ID#400041328 : known problem since unbekannt, correction planned for 1.0.2.0

8AC140.61–3: After changing the CF card the CAN–Interface didn't work

ID#400041325 : known problem since V3.00.80.25, correction planned for 1.0.1.0

INA number can be set in the ethernet dialog

1.3.3.192 8AC141.60–2**1.3.3.192.1 Hardware Management**

ID# 400054584, 400054504 : known problem since unbekannt, correction planned for 1.0.1.0

INA node number can be set in automation studio

1.3.3.193 8AC141.61–3**1.3.3.193.1 Hardware**

ID#400013504 : known problem since V3.0.71.20 SP02, correction planned for 1.0.0.2

AS3.0: Ethernet INA Node number can be set

1.3.3.194 8BAC0124.000–1**1.3.3.194.1 Hardware**

ID#262910 : new function planned for 1.0.0.2

Extansion for ACOPOSMulti65

1.3.3.195 8BVS2SAFE1–1**1.3.3.195.1 Firmware**

ID#237625 : new function planned for 1.4.0.0

Shutdown delay in case of PLK network error

The SafeMC Module is kept in "Operational" state for the time configuerd in the parameter "Shut Down delay in us" in case of a PLK connection error.

This allows the functional application to implement a defines shut down of the axis!

ID#226485 : new function planned for 1.4.0.0

Changes/ Features in Motion Safety Release 1.4

– New Safety Functions:

* Safely Limited Position (SLP),

* Safe Maximum Position(SMP) and

* Safe Homing

– Support of EnDat22 Functional Safety linear encoders

– If SMP and/or SMS are used and "SetPos Alive testing" is activiated, the alive test must be done within 15min; othere the SafeMC Modul will change to Functional Fail Safe State!

– Warnings are only sent by µP1

– Logging entries got defined Levels

1.3.3.196 8CVE28000HC00.00–1**1.3.3.196.1 Hardware**

ID#264685 : new function planned for 1.0.0.2

8CVE28000HC00.00–1, new POWERLINK Stack

New POWERLINK Stack with correction of rare errors during boot and and poll response chaining.

ID#246072 : new function planned for 1.0.0.1

8CVE28000HC00.00–1, new POWERLINK Stack

New POWERLINK Stack with correction of rare errors during boot and and poll response chaining.

ID#268875 : known problem since unbekannt, correction planned for 1.0.0.3

Display the modul information unter I/O Mapping in the AS 3.0.90

The modul informations "Serial number, Module ID, Hardware variant and Firmware version" will displayed under I/O mapping in the AS 3.0.90

1.3.3.197 8I64XXXXXXX.00X–1

1.3.3.197.1 Hardware

ID#263585 : solved problem, known since unbekannt, solved since V3.00.90.12

Extensions for AS 3.0.9.0

ID#256660 : new function planned for 1.3.0.0

To save data on the X2X bus the I/O mapping can be configured

ID#263205 : known problem since unbekannt, correction planned for 1.3.1.0

"Relay 02" instead of "Relay 02 state" in IO Description

ID#400067044 : known problem since 1.0.0.0, correction planned for 1.3.1.0

X64 Inverter does sometimes not work after a powerlink BC

ID# 400065557, 400069029 : known problem since unbekannt, correction planned for 1.3.1.0

On 8I0IF109.200–1 with rev. B5 the relay does not work in standalone mode

ID#400057134 : known problem since unbekannt, correction planned for 1.2.0.0

The boottime of X64 takes 8–45 seconds

ID#245955 : known problem since unbekannt, correction planned for 1.1.0.2

Customer–specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.198 8V1010.00–2

1.3.3.198.1 Hardware

ID#239085 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.199 8V1010.50–2**1.3.3.199.1 Hardware**

ID#239090 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.200 8V1016.00–2**1.3.3.200.1 Hardware**

ID#239095 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.201 8V1016.50–2**1.3.3.201.1 Hardware**

ID#239100 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.202 8V1022.00–2**1.3.3.202.1 Hardware**

ID#239105 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.203 8V1045.00–2**1.3.3.203.1 Hardware**

ID#239110 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.204 8V1090.00–2**1.3.3.204.1 Hardware**

ID#239115 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.205 8V1180.00–2**1.3.3.205.1 Hardware**

ID#239120 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.206 8V128M.00–2**1.3.3.206.1 Hardware**

ID#239125 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.207 8V1320.00–2

1.3.3.207.1 Hardware

ID#239130 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.208 8V1640.00–2

1.3.3.208.1 Hardware

ID#239135 : known problem since unbekannt, correction planned for 1.0.0.2

Correction of the german translation for "NC Mapping"

1.3.3.209 FBE.EMF2191IB

1.3.3.209.1 Hardware

ID#179035 : new function since 1.0.1.1

Change of parameter C0017 for the POWERLINK Object Dictionary entry

ID#161200 : known problem since 1.0.0.0, correction planned for 1.0.1.0

Error correction in HWC for AS 3.0

Device did not work with AS 3.0 because of an error in the HWC file

1.3.3.210 FBE.KEB.COMBIVERT

1.3.3.210.1 Hardware

ID#253660 : solved problem, known since 1.0.6.0, solved since 1.0.6.2

Changes for firmware update

Changes according to the firmware update have been done. The CPU is now able to update the inverter at any time independent from the inverters configuration.

ID#212950 : solved problem, known since 1.0.5.0, solved since 1.0.5.0

New Powerlink Firmware for KEB Combivert

– Error correction: Mode POWERLINK–V1 did not work
Rarely it could happen that the Combivert Operator got stuck during startup

ID#181730 : solved problem, known since 1.0.0.2, solved since 1.0.1.0

Firmware changes

Change of Firmware for resetting Physical at power off

ID#175290 : solved problem, known since 1.0.0.1, solved since 1.0.0.2

New HWC File

Change of Parameter Strategy download

ID#220515 : new function since 1.0.6.0

Different OD-Entries are directly overtaken from the Host (DeviceType, VendorId, RevisionNumber and Serial Number)

ID#161050 : new function planned for 1.0.1.0

Error correction in HWC for AS 3.0

Device did not work with AS 3.0 because of an error in the HWC file

ID#400037610 : known problem since unbekannt, correction planned for 1.0.6.1

Neue Firmwar

The Index 1018/3h will not be readed from the Base device during init.

ID#174505 : known problem since 1.0.0.1

New HWC File

Change of Product Description for unique identification of the Product within Automtion Studio

1.3.3.211 X20AI1744

1.3.3.211.1 Hardware

ID#256635 : new function planned for 1.1.0.0

Extension of the gain-range: 2mV/V bis 256mV/V

ID#256630 : new function planned for 1.2.0.0

New function model (multisample)

ID#261660 : known problem since unbekannt, correction planned for 1.2.3.0

Changes for AS3.0.90

ID#256670 : known problem since unbekannt, correction planned for 1.2.2.0

Extensions for AS 3.0.90

ID#400055356 : known problem since unbekannt, correction planned for 1.2.1.0

High EMC influences could be the reason for module fail, EMC immunity increased

ID#400054723 : known problem since nicht relevant, correction planned for 1.2.1.0

Value of the X20AI1744 is oscillating if several X20AI1744 are plugged side by side

ID#400032817 : known problem since unbekannt, correction planned for 1.0.2.0

It last up to 40sec until the ADC is in synchronous mode

1.3.3.212 X20AI1744–3

1.3.3.212.1 Hardware

ID#400055356 : known problem since unbekannt, correction planned for 1.1.1.0

High EMC influences could be the reason for module fail, EMC immunity increased

ID#400054723 : known problem since nicht relevant, correction planned for 1.1.1.0

Value of the X20AI1744–3 is oscillating if several X20AI1744–3 are plugged side by side

ID#235630 : known problem since unbekannt, correction planned for 1.1.0.0

Improvement of the internal communication between ADC and I/O processor

1.3.3.213 X20AI2622

1.3.3.213.1 Hardware

ID#165120 : known problem since unbekannt, correction planned for 1.0.1.0

New Firmware V560

HWVar. 1 Support of upper-/lowerlimit register and 4–20 mA

1.3.3.213.2 Hardware 1.0.1.0

ID#400008033 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Correction of wrong calculated values with 4–20mA setting

Correction of wrong calculated values with 4–20mA setting

1.3.3.214 X20AI2632

1.3.3.214.1 Hardware

ID#211510 : solved problem, known since 1.1.2.0, solved since 1.1.2.0

Adjustment SGC section

ID#184305 : solved problem, known since 1.1.0.0, solved since 1.1.0.0

Optimizations for runtime and memory compatible Firmware

New FW V9 : optimizations for runtime and memory compatible Firmware (V4)

ID#193685 : new function since 1.1.1.0

Enhancement comparator for Tracetriggercondition

Enhancement comparator for Tracetriggercondition

ID#166030 : new function planned for 1.1.0.0

New FW V5 and HWC V1.1.0.0.

Addition synchronous mode, correction 50 µsec sample time

1.3.3.215 X20AI2632–1

1.3.3.215.1 Hardware

ID#211610 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

Adjustment SGC section

ID#184290 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Optimizations for runtime and memory compatible Firmware

New FW V9 : optimizations for runtime and memory compatible Firmware (V4)

ID#193690 : new function since 1.0.2.0

Enhancement comparator for Tracetriggercondition

Enhancement comparator for Tracetriggercondition

1.3.3.216 X20AI2636

1.3.3.216.1 Hardware

ID#262520 : new function since 1.0.0.1

Enhancement english online help

ID#229405 : new function planned for 1.0.0.1

Support X20AI2636

Support X20AI2636, first version

1.3.3.217 X20AI4622

1.3.3.217.1 AR – Firmware

ID#164635 : known problem since unbekannt, correction planned for 1.0.1.0

New FW V560

HW Var. 1 Support of upper-/lowerlimit register and 4–20 mA

1.3.3.217.2 Hardware 1.0.1.0

ID#188890 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Correction of wrong calculated values with 4–20mA setting

Correction of wrong calculated values with 4–20mA setting

1.3.3.218 X20AI4632

1.3.3.218.1 Hardware

ID#211515 : solved problem, known since 1.1.2.0, solved since 1.1.2.0

Adjustment SGC section

ID#184300 : solved problem, known since 1.1.0.0, solved since 1.1.0.0

Optimizations for runtime and memory compatible Firmware

New FW V9 : optimizations for runtime and memory compatible Firmware (V4)

ID#172225 : solved problem, known since 1.1.0.0, solved since 1.1.0.0

X20AI4632 no longer works when max. number of samples is set.

If the X20AI4632 module is used to record a trace and special trace settings are used, the module stops working, and ModuleOk changes to FALSE.

ID#193700 : new function since 1.1.1.0

Enhancement comparator for Tracetriggercondition

Enhancement comparator for Tracetriggercondition

ID#166035 : new function planned for 1.1.0.0

New FW V5 and HWC V1.1.0.0.

Addition synchronous mode, correction 50 µsec sample time

1.3.3.219 X20AI4632-1

1.3.3.219.1 Hardware

ID#211605 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

Adjustment SGC section

ID#184295 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Optimizations for runtime and memory compatible Firmware

New FW V9 : optimizations for runtime and memory compatible Firmware (V4)

ID#193695 : new function since 1.0.2.0

Enhancement comparator for Tracetriggercondition

Enhancement comparator for Tracetriggercondition

1.3.3.220 X20AI4636

1.3.3.220.1 Hardware

ID#262525 : new function since 1.0.0.1

Enhancement english online help

ID#229410 : new function planned for 1.0.0.1

Support X20AI4636

Support X20AI4636, first version

1.3.3.221 X20AO2622**1.3.3.221.1 Hardware**

ID#231390 : new function since 1.0.1.0

Enhancement 4 to 20 mA output mode

New FW : Enhancement 4 to 20 mA output mode

1.3.3.222 X20AO2632**1.3.3.222.1 Hardware**

ID#208740 : new function since 1.0.0.1

Enhancement data points SDC support, modified channel LEDs

New FW and HWC : Enhancement data points SDC support, modified channel LEDs

1.3.3.223 X20AO4622**1.3.3.223.1 Hardware**

ID#231395 : new function since 1.0.1.0

Enhancement 4 to 20 mA output mode

New FW : Enhancement 4 to 20 mA output mode

1.3.3.224 X20AO4632**1.3.3.224.1 Hardware**

ID#195930 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

Correction version limitation SGC

Correction version limitation SGC

1.3.3.225 X20AO4635**1.3.3.225.1 Hardware**

ID#225400 : solved problem, known since 1.0.0.0, solved since 1.0.0.1

Support for Fieldbusdesigner

1.3.3.226 X20AT2222

1.3.3.226.1 Hardware

ID#400063839 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Missing IO mapping using SG3 CANIO corrected

ID#218870 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Wrong value after bootup without sensor corrected

1.3.3.227 X20AT2311

1.3.3.227.1 Hardware

ID#225405 : solved problem, known since 1.0.0.1, solved since 1.0.0.2

Support for Fieldbusdesigner

1.3.3.228 X20AT2402

1.3.3.228.1 Hardware

ID#400067109 : new function since 1.0.2.0

Enhancement data point description

1.3.3.229 X20AT4222

1.3.3.229.1 Hardware

ID#400032494 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Wrong value after bootup without sensor corrected

ID#400027742 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Wrong value after bootup without sensor corrected

1.3.3.230 X20BB27

1.3.3.230.1 Hardware

ID#184755 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Correction Upgrade only from AS 2.7

Correction Upgrade only from AS 2.7

1.3.3.231 X20BB32

1.3.3.231.1 Hardware

ID#183490 : new function since 1.0.1.0

Text correction from "Compact" to "Fieldbus"

Text correction from "Compact" to "Fieldbus" in HWC for better understanding

1.3.3.232 X20BB37**1.3.3.232.1 Hardware**

ID#184760 : solved problem, known since 1.0.1.1, solved since 1.0.1.1

Correction Upgrade only from AS 2.7

Correction Upgrade only from AS 2.7

ID#183500 : new function since 1.0.1.0

Text correction from "Compact" to "Fieldbus"

Text correction from "Compact" to "Fieldbus" in HWC for better understanding

1.3.3.233 X20BB42**1.3.3.233.1 Hardware**

ID#183505 : new function since 1.0.1.0

Text correction from "Compact" to "Fieldbus"

Text correction from "Compact" to "Fieldbus" in HWC for better understanding

1.3.3.234 X20BB47**1.3.3.234.1 Hardware**

ID#184765 : solved problem, known since 1.0.1.1, solved since 1.0.1.1

Correction Upgrade only from AS 2.7

Correction Upgrade only from AS 2.7

ID#183510 : new function since 1.0.1.0

Text correction from "Compact" to "Fieldbus"

Text correction from "Compact" to "Fieldbus" in HWC for better understanding

1.3.3.235 X20BC0073**1.3.3.235.1 X20BC0073**

ID#209385 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

Correct bitmap

ID#400012524 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Correction – Emergency Handling

new FW V16, cyclic sending of emergency "supply voltage" corrected

ID#400011541 : solved problem, known since V2.7.0.0009 SP02, solved since 1.0.1.0

Correction – firmware update X2X modules

Firmware V16, correction – firmware update X2X modules

ID#215945 : new function since 1.0.3.0

AS help with F1

1.3.3.235.2 X20BC0073 1.0.3.0

ID#400024035 : known problem since 1.0.2.0, correction planned for 1.0.3.0

Correction – X20DC2395 firmware update with a defect firmware doesn't work on the BC0073

Correction – X20DC2395 firmware update with a defect firmware doesn't work on the BC0073

1.3.3.236 X20BC0083

1.3.3.236.1 Firmware

ID#247260 : solved problem, known since unbekannt, solved since 1.2.1.0

DNA runup upgraded

ID#245095 : solved problem, known since unbekannt, solved since 1.2.0.0

DNA support; Update behavior on X2X bus of the BC improved

- DNA support (Dynamic Node Allocation)
- faster updating of modules with big FW files on the X2X bus of the BC
- new objects: 20A3h and 2000h/9

1.3.3.236.2 Hardware

ID#216365 : solved problem, known since 1.0.7.0, solved since 1.0.7.0

Correct bitmap

ID#183285 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

New info–/diagnostic data points, new FW 1.39 for signal filter and corrections

New info–/diagnostic data points in HWC, new FW 1.39 for signal filter and corrections

ID#210215 : new function since 1.0.4.1

Extensions and Bugfixes

- New ASICS will be set to 3mA output current (A&P 182905)
- Optimization of SDO communication (unnecessary acknowledges removed)
- Support of commands ReadMultipleParameter / WriteMultipleParameter
- NodeID assignment by digital inputs supported (NodeID 241 and 242)
- Minor corrections certification
- ASnd frames with unknown ServiceID could disturb the BC (only possible with 3rd party MN)
- Access to not existing objects in OD could cause firmware crash
- When running X2X cycle times <200 us the X2X Bus was not working correctly (A&P 190630)
- When in state PREOP_2 no SoC is received for 10sec the BC will fall back in PREOP_1

ID#173310 : new function since 1.0.3.0

Extensions and Bugfixes

- Improvement of X2X Timings (Jitter reduced from 180ns to 20ns) (A&P 167857 und 171987)
- Optimizations for operation in 200us networks
- 2 nodes with the same node number generated disturbance on the network (A&P 166040)
- Functions for a new firmware download mechanism implemented (A&P 168537)

ID#164640 : new function planned for 1.0.2.0

Extensions

- Extensions for operation with Safety

1.3.3.237 X20BC1083

1.3.3.237.1 Firmware

ID#246445 : solved problem, known since unbekannt, solved since 1.2.0.0

DNA support; Update behavior on X2X bus of the BC improved

- DNA support (Dynamic Node Allocation)
- faster updating of modules with big FW files on the X2X bus of the BC
- new objects: 20A3h and 2000h/9

1.3.3.237.2 Hardware

ID#183380 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

New info-/diagnostic data points, new FW 1.39 for signal filter and corrections

New info-/diagnostic data points in HWC, new FW 1.39 for signal filter and corrections

ID#210965 : new function since 1.0.4.1

Extensions and Bugfixes

- New ASICS will be set to 3mA output current (A&P 182905)
- Optimization of SDO communication (unnecessary acknowledges removed)
- Support of commands ReadMultipleParameter / WriteMultipleParameter
- NodeID assignment by digital inputs supported (NodeID 241 and 242)
- Minor corrections certification
- ASnd frames with unknown ServiceID could disturb the BC (only possible with 3rd party MN)
- Access to not existing objects in OD could cause firmware crash
- When running X2X cycle times <200 us the X2X Bus was not working correctly (A&P 190630)
- When in state PREOP_2 no SoC is received for 10sec the BC will fall back in PREOP_1

ID#173360 : new function since 1.0.3.0

Extensions and Bugfixes

- Improvement of X2X Timings (Jitter reduced from 180ns to 20ns) (A&P 167857 und 171987)
- Optimizations for operation in 200us networks
- 2 nodes with the same node number generated disturbance on the network (A&P 166040)
- Functions for a new firmware download mechanism implemented (A&P 168537)

ID#160980 : new function since 1.0.4.0

Additional diagnostic data points

ID#164655 : new function planned for 1.0.2.0

Extensions

– Extensions for operation with Safety

ID#160935 : new function planned for 1.0.1.0

Error correction

IOs on X20IF1091–1 were not initialized correctly when running EPLV2

ID#268450 : known problem since 1.2.0.0, correction planned for 1.2.1.0

Netx and Powerlink error correction

–NetX correction of plug off/onf the Powerlinkwire by startup
–New hwc entries

ID#400072488 : known problem since 1.2.0.0, correction planned for 1.2.1.0

Profibus I/O data not transmitted when only output data is configured

If only output data is configured for a Profibus configuration (X20IF1061–1) then the I/O data is not transmitted on the bus. This problem only occurs when the Profibus master (X20IF1061–1) is connected to the X20BC1083.

ID#234115 : known problem since 1.0.6.0, correction planned for 1.1.0.0

X20 Bus Controller POWERLINK. 1xIF

X20 Bus Controller POWERLINK. 1xIF

1.3.3.237.3 Hardware 1.0.1.1

ID#236005 : solved problem, known since 1.1.0.0, solved since 1.1.0.1

X20 Bus Controller POWERLINK, 1x IF

X20 Bus Controller POWERLINK, 1x IF

1.3.3.238 X20BC8083

1.3.3.238.1 Firmware

ID#246550 : solved problem, known since unbekannt, solved since 1.2.0.0

DNA support; Update behavior on X2X bus of the BC improved

– DNA support (Dynamic Node Allocation)
– faster updating of modules with big FW files on the X2X bus of the BC
– new objects: 20A3h and 2000h/9

1.3.3.238.2 Hardware

ID#183385 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

New info--/diagnostic data points, new FW 1.39 for signal filter and corrections

New info--/diagnostic data points in HWC, new FW 1.39 for signal filter and corrections

ID#210975 : new function since 1.0.4.1

Extensions and Bugfixes

- New ASICS will be set to 3mA output current (A&P 182905)
- Optimization of SDO communication (unnecessary acknowledges removed)
- Support of commands ReadMultipleParameter / WriteMultipleParameter
- NodeID assignment by digital inputs supported (NodeID 241 and 242)
- Minor corrections certification
- ASnd frames with unknown ServiceID could disturb the BC (only possible with 3rd party MN)
- Access to not existing objects in OD could cause firmware crash
- When running X2X cycle times <200 us the X2X Bus was not working correctly (A&P 190630)
- When in state PREOP_2 no SoC is received for 10sec the BC will fall back in PREOP_1

ID#173305 : new function since 1.0.3.0

Extensions and Bugfixes

- Improvement of X2X Timings (Jitter reduced from 180ns to 20ns) (A&P 167857 und 171987)
- Optimizations for operation in 200us networks
- 2 nodes with the same node number generated disturbance on the network (A&P 166040)
- Functions for a new firmware download mechanism implemented (A&P 168537)

ID#160985 : new function since 1.0.4.0

Additional diagnostic data points

ID#164665 : new function planned for 1.0.2.0

Extensions

- Extensions for operation with Safety

1.3.3.239 X20BC8084**1.3.3.239.1 Firmware**

ID#265540 : solved problem, known since nicht relevant, solved since 1.2.0.0

Optimtion of Kabelredundancy (Link Selector) ; Update behavior on X2X bus improved

- optimtion of Kabelredundancy (Link Selector)
- faster updating of modules with big FW files on the X2X bus of the BC
- new objects: 20A3h, 2000h/9 and 20F0h/31

1.3.3.239.2 Hardware

ID#183390 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

New info--/diagnostic data points, new FW 1.39 for signal filter and corrections

New info-/diagnostic data points in HWC, new FW 1.39 for signal filter and corrections

ID#173290 : new function since 1.0.3.0

First version of the buscontroller with cable redundancy

1.3.3.240 X20BR9300

1.3.3.240.1 Hardware

ID#261385 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Spacer in I/O map display corrected

ID#260505 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Error correction in Channel description

Adverse Settings in the AS I/O configuration may cause an error on X2X

ID#228115 : new function since 1.0.0.1

Extension in IO-Mapping for SG3 CanIO

Datapoints for Bus current and Bus voltage added

1.3.3.241 X20BT9100

1.3.3.241.1 Hardware

ID#400061307 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Error correction in channel description

Adverse settings in the AS I/O configuration may cause an error on X2X

ID#203105 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

Correction HWC display of data point "SupplyVoltage" on Powerlink-BC

ID#260670 : new function since 1.0.2.0

Spacer in I/O map display corrected

1.3.3.242 X20CM0985

1.3.3.242.1 Hardware

ID#197065 : new function planned for 1.0.1.0

Buscontroller support for X20CM0985

1.3.3.243 X20CM1941

1.3.3.243.1 Hardware

ID#257105 : known problem since unbekannt, correction planned for 1.1.1.2

Serial number will be displayed correctly

ID#400052686 : known problem since unbekannt, correction planned for 1.1.0.0

Duty Cycle of AB signal sporadically not correct

Due to a faulty implementation of the ABR-simulation there is the possibility of invalid AB signals (depending on the velocity).

1.3.3.244 X20CM8281

1.3.3.244.1 Hardware

ID#400016246 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Erroneous text of data point description corrected

Erroneous text of data point description corrected

1.3.3.245 X20CM8323

1.3.3.245.1 Hardware

ID#400015080 : known problem since unbekannt, correction planned for 1.0.1.0

The Energizing Time is now always correct

1.3.3.246 X20CP0201

1.3.3.246.1 Hardware

ID#163770 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V21

1.3.3.247 X20CP0291

1.3.3.247.1 Hardware

ID#163775 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V21

1.3.3.248 X20CP0292

1.3.3.248.1 Hardware

ID#163780 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V21

1.3.3.249 X20CP1483

1.3.3.249.1 Hardware

ID#230775 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220465 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#213075 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID#199580 : solved problem, known since 1.0.1.0, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#400018078 : solved problem, known since 1.0.11.0, solved since 1.0.13.0

HW Revision B5 or higher necessary

ID#266100 : new function planned for 1.1.0.2

Enhancement status datapoint for I/O supply

ID#256995 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256850 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265805 : known problem since 1.0.16.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265705 : known problem since 1.0.16.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#400057319 : known problem since 1.0.16.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#240370 : known problem since 1.0.15.0, correction planned for 1.0.16.0

FPGA Fitter upgrade

1.3.3.250 X20CP1483–1

1.3.3.250.1 Hardware

ID#230780 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220470 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#257000 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256855 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#227235 : new function planned for 1.1.0.2

Enhancement status datapoint for I/O supply

ID#265810 : known problem since 1.0.16.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265710 : known problem since 1.0.16.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#400057319 : known problem since 1.0.16.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#240375 : known problem since 1.0.15.0, correction planned for 1.0.16.0

FPGA Fitter upgrade

1.3.3.251 X20CP1484

1.3.3.251.1 Hardware

ID#230785 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220480 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#400026084 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID#400019320 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V16

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.

- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199540 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191775 : solved problem, known since 1.0.8.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V15

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#182090 : solved problem, known since 1.0.7.0, solved since 1.0.8.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178040 : solved problem, known since 1.0.6.0, solved since 1.0.7.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171785 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New Base Firmware V14 and POWERLINK Firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes with POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- Stations are now addressed with poll requests starting in PreOperational 2 status.

ID#165825 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165465 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164780 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160770 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#257005 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256860 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265815 : known problem since 1.0.15.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265715 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260870 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163810 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V13

Error correction: problems when booting

1.3.3.252 X20CP1484–1**1.3.3.252.1 Hardware**

ID#230790 : solved problem, known since 1.0.14.0, solved since 1.0.15.1

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#400038795 : solved problem, known since 1.0.14.0, solved since 1.0.14.0

Version entry in HWC corrected from V2.94 to R2.95

ID#220485 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#257010 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256865 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265820 : known problem since 1.0.15.1, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265720 : known problem since 1.0.15.1, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260875 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.1, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

1.3.3.253 X20CP1485

1.3.3.253.1 Hardware

ID#229360 : solved problem, known since 1.0.15.0, solved since 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#228100 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220490 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#400027530 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID# 400020473, 400022125 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V16

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199550 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191780 : solved problem, known since 1.0.8.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V15

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#182095 : solved problem, known since 1.0.7.0, solved since 1.0.8.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178045 : solved problem, known since 1.0.6.0, solved since 1.0.7.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171820 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New Base Firmware V14 and POWERLINK Firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes with POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- Stations are now addressed with poll requests starting in PreOperational 2 status.

ID#165830 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165470 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164785 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160775 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#257015 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256870 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265825 : known problem since 1.0.15.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265725 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#400057319 : known problem since 1.1.13.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163805 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V13

Error correction: problems when booting

1.3.3.254 X20CP1485–1

1.3.3.254.1 Hardware

ID#234725 : solved problem, known since 1.0.15.0, solved since 1.0.15.1

LinkOK Datapoint available.

ID#228105 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220495 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#213040 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID#206925 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V16

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199555 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191785 : solved problem, known since 1.0.4.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V15

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#183740 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178070 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171825 : solved problem, known since 1.0.5.0, solved since 1.0.2.0

New Base Firmware V14 and POWERLINK Firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes with POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- Stations are now addressed with poll requests starting in PreOperational 2 status.

ID#171315 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

X20CP148x cannot be replaced by X20CP1485-1.

ID#168325 : new function since 1.0.1.0

VC support

ID#257020 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#265830 : known problem since 1.0.15.1, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265730 : known problem since 1.0.15.1, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260880 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.1, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

1.3.3.255 X20CP1486

1.3.3.255.1 Hardware

ID#230795 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220500 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#213045 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID#400020316 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V16

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199560 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191790 : solved problem, known since 1.0.8.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V15

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#183750 : solved problem, known since 1.0.7.0, solved since 1.0.8.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178050 : solved problem, known since 1.0.6.0, solved since 1.0.7.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171830 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New Base Firmware V14 and POWERLINK Firmware V36

Error correction:

- When using an I/O prescaler > 1, in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes with POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- Stations are now addressed with poll requests starting in PreOperational 2 status.

ID#165835 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165475 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164790 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160780 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#257025 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256875 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265835 : known problem since 1.0.15.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265735 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260885 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163815 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V13

Error correction: problems when booting

1.3.3.256 X20CP3484

1.3.3.256.1 Hardware

ID#230800 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220510 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#213055 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID#400020310 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V16

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199565 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191795 : solved problem, known since 1.0.8.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V15

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#182100 : solved problem, known since 1.0.7.0, solved since 1.0.8.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178055 : solved problem, known since 1.0.6.0, solved since 1.0.7.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171835 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New Base Firmware V14 and POWERLINK Firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes with POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- Stations are now addressed with poll requests starting in PreOperational 2 status.

ID#165840 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165480 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164795 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160785 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#257030 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256880 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265840 : known problem since 1.0.15.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265740 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260890 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163820 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V13

Error correction: problems when booting

1.3.3.257 X20CP3484–1

1.3.3.257.1 Hardware

ID#230805 : solved problem, known since 1.0.14.0, solved since 1.0.15.1

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#223950 : solved problem, known since 1.0.14.0, solved since 1.0.14.0

Version entry in HWC corrected from V2.94 to R2.95

ID#220520 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#257035 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256885 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265845 : known problem since 1.0.15.1, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.
The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265745 : known problem since 1.1.0.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260895 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.1, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

1.3.3.258 X20CP3485

1.3.3.258.1 Hardware

ID#228110 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220530 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#213060 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID#206945 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V16

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.
- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#199570 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191800 : solved problem, known since 1.0.8.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V15

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#182105 : solved problem, known since 1.0.7.0, solved since 1.0.8.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178060 : solved problem, known since 1.0.6.0, solved since 1.0.7.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171840 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New Base Firmware V14 and POWERLINK Firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes with POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- Stations are now addressed with poll requests starting in PreOperational 2 status.

ID#165845 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165485 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164800 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160790 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#257040 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256890 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265850 : known problem since 1.0.15.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265750 : known problem since 1.1.0.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260900 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163825 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V13

Error correction: problems when booting

1.3.3.259 X20CP3485–1

1.3.3.259.1 Hardware

ID#228530 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220540 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#213065 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID#206950 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V16

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.

- The PollResponse data from multiplexed stations are now updated in every POWERLINK

cycle.

ID#199575 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191805 : solved problem, known since 1.0.4.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V15

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#183745 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178075 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171845 : solved problem, known since 1.0.5.0, solved since 1.0.2.0

New Base Firmware V14 and POWERLINK Firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes with POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- Stations are now addressed with poll requests starting in PreOperational 2 status.

ID#170125 : new function since 1.0.1.0

VC support

ID#257045 : new function planned for 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256895 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265855 : known problem since 1.0.15.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265755 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260905 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

1.3.3.260 X20CP3486

1.3.3.260.1 Hardware

ID#230810 : solved problem, known since 1.0.14.0, solved since 1.0.15.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220545 : solved problem, known since 1.0.13.0, solved since 1.0.14.0

POWERLINK V2: Boot behavior improved

ID#213070 : solved problem, known since 1.0.12.0, solved since 1.0.13.0

CN mode: Various error corrections made.

ID#206955 : solved problem, known since 1.0.11.0, solved since 1.0.12.0

New POWERLINK firmware V45 and basis firmware V16

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.

- The PollResponse data from multiplexed stations are now updated in every POWERLINK cycle.

ID#400015777 : solved problem, known since 1.0.10.1, solved since 1.0.11.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191810 : solved problem, known since 1.0.8.0, solved since 1.0.10.1

New POWERLINK V1/V2 Firmware V42 and base firmware V15

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.
- Error correction: Configuring too small values for PollResponse timeouts caused manager to fail.

ID#183755 : solved problem, known since 1.0.7.0, solved since 1.0.8.0

New POWERLINK V1/V2 firmware V38

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.

ID#178065 : solved problem, known since 1.0.6.0, solved since 1.0.7.0

New POWERLINK V1/V2 firmware V37

Error corrections:

- POWERLINK V2 CN mode: Various error corrections made.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#171850 : solved problem, known since 1.0.5.0, solved since 1.0.6.0

New Base Firmware V14 and POWERLINK Firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.
- With the option 'Fast reaction' and multiplexed station the POWERLINK manager fails when there is a disturbance on the network.

Changes with POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- Stations are now addressed with poll requests starting in PreOperational 2 status.

ID#165850 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165490 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164805 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160795 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#240275 : new function since 1.1.0.2

POWERLINK: Support for 100 Mbit full duplex in Ethernet operating mode.

ID#256900 : new function planned for 1.1.0.2

POWERLINK: LinkOK data point added.

ID#265860 : known problem since 1.0.15.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chained Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265760 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#260910 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: L/A LED only shows Link and not Activity → corrected.

ID#400057319 : known problem since 1.0.15.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#163830 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V13

Error correction: problems when booting

1.3.3.261 X20CS1020

1.3.3.261.1 Hardware

ID#188120 : solved problem, known since 1.2.2.1, solved since 1.2.2.1

Error in Message FIFO and BC mode corrected

Error in Message FIFO and BC mode corrected, new FW V12

ID#182935 : solved problem, known since 1.2.2.0, solved since 1.2.2.0

Text corrections in HWC

Text corrections in HWC

ID#165880 : solved problem, known since unbekannt, solved since 1.1.1.0

New HWC File V1.1.1.0

Additions of HWC supporting INA–Modem parameters

ID#221140 : new function since 1.2.3.0

New configuration data point : BlockForwardDelay

ID#175075 : new function since 1.2.1.0

Enhancement mode SGC and correction of internal communication

Enhancement mode SGC and correction of internal communication; new FW V11

ID#169815 : new function since 1.1.1.0

Enhancement flat stream function model and Buscontroller mode

Enhancement flat stream function model und Buscontrollerbetrieb

ID#165300 : known problem since V2.6.0.0006, correction planned for 1.1.0.0

New Firmware V6 and HWC V1.1.0.0

Support Streamer and Powerlink BC Supervision channel

1.3.3.262 X20CS1030

1.3.3.262.1 Hardware

ID#188125 : solved problem, known since 1.2.2.1, solved since 1.2.2.1

Error in Message FIFO and BC mode corrected

Error in Message FIFO and BC mode corrected, new FW V12

ID#182940 : solved problem, known since 1.2.2.0, solved since 1.2.2.0

Text corrections in HWC

Text corrections in HWC

ID#221085 : new function since 1.2.3.0

New configuration data point : BlockForwardDelay

ID#175080 : new function since 1.2.1.0

Enhancement mode SGC and correction of internal communication

Enhancement mode SGC and correction of internal communication; new FW V11

ID#169820 : new function since 1.1.1.0

Enhancement flat stream function model and Buscontroller mode

Enhancement flat stream function model and Buscontroller mode

ID#222735 : known problem since 1.2.4.0, correction planned for 1.2.5.0

Support of ACOPOSinverter (Modbus) from AR version B3.01

ID#165980 : known problem since unbekannt, correction planned for 1.1.1.0

New HWC File V1.1.1.0

Additions of HWC supporting INA–Modem parameters

ID#165390 : known problem since V2.6.0.0006, correction planned for 1.1.0.0

New Firmware V6 and HWC V1.1.0.0

Support Streamer and Powerlink BC Supervision channel

1.3.3.263 X20CS1070

1.3.3.263.1 Hardware

ID#188130 : solved problem, known since 1.2.1.2, solved since 1.2.1.2

Error in Message FIFO and BC mode corrected

Error in Message FIFO and BC mode corrected, new FW V12

ID#182945 : solved problem, known since 1.2.1.1, solved since 1.2.1.1

Text corrections in HWC

Text corrections in HWC

ID#221145 : new function since 1.2.2.0

New configuration data point : BlockForwardDelay

ID#182550 : new function since 1.2.1.0

Enhancement mode SGC and correction of internal communication

Enhancement mode SGC and correction of internal communication; new FW V11, upgrade 1.2.1.0 caused exception on some PC's

ID#175085 : new function since 1.2.1.0

Enhancement mode SGC and correction of internal communication

Enhancement mode SGC and correction of internal communication; new FW V11

ID#169825 : new function planned for 1.2.0.0

Enhancement flat stream function model and Buscontroller mode

Enhancement flat stream function model and Buscontroller mode

ID#165535 : new function planned for 1.1.0.0

New Firmware V3 and HWC V1.1.0.0

Support Streamer and Powerlink BC Supervision channel

1.3.3.264 X20CS2770

1.3.3.264.1 Hardware

ID#400055350 : solved problem, known since 1.2.3.0, solved since 1.2.3.0

Enhancement length check of I/O block size during Build

ID#188145 : solved problem, known since 1.2.1.2, solved since 1.2.1.2

Error in Message FIFO and BC mode corrected

Error in Message FIFO and BC mode corrected, new FW V12

ID#182955 : solved problem, known since 1.2.1.1, solved since 1.2.1.1

Text corrections in HWC

Text corrections in HWC

ID#221150 : new function since 1.2.2.0

New configuration data point : BlockForwardDelay

ID#182555 : new function since 1.2.1.0

Enhancement mode SGC and correction of internal communication

Enhancement mode SGC and correction of internal communication; new FW V11, upgrade 1.2.1.0 caused exception on some PC's

ID#175095 : new function since 1.2.1.0

Enhancement mode SGC and correction of internal communication

Enhancement mode SGC and correction of internal communication; new FW V11

ID#169830 : new function planned for 1.2.0.0

Enhancement flat stream function model and Buscontroller mode

Enhancement flat stream function model and Buscontroller mode

ID#165540 : new function planned for 1.1.0.0

New Firmware V3 and HWC V1.1.0.0

Support Streamer and Powerlink BC Supervision channel

1.3.3.265 X20DC1196

1.3.3.265.1 Hardware

ID#251590 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Enhancement Online Help

1.3.3.266 X20DC2395

1.3.3.266.1 Hardware

ID#400055350 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Enhancement length check of I/O block size during Build

ID#400004703 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Comparator problem corrected. ATTENTION :: incompatibility at window margin

New FW V11 : comparator problem corrected.

1.3.3.267 X20DC4395

1.3.3.267.1 Hardware

ID#400055350 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Enhancement length check of I/O block size during Build

ID#197305 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Comparator problem corrected. ATTENTION :: incompatibility at window margin

New FW V11 : comparator problem corrected.

1.3.3.268 X20DI2377

1.3.3.268.1 Hardware

ID#188540 : new function since 1.1.0.0

Enhancement configuration of SW counter Reset data points

Enhancement configuration of SW counter Reset data points

ID#171425 : new function planned for 1.1.0.0

Enhancement SW counter function

Enhancement SW counter function with input filter

1.3.3.269 X20DI2653**1.3.3.269.1 Hardware**

ID#160640 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V771

Corrects continuous Firmware update problem with version V770

1.3.3.270 X20DI4375**1.3.3.270.1 Hardware**

ID#246260 : known problem since unbekannt, correction planned for 1.0.0.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.271 X20DI4653**1.3.3.271.1 Hardware**

ID#160645 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V771

Corrects continuous Firmware update problem with version V770

1.3.3.272 X20DI6373**1.3.3.272.1 Hardware**

ID#225410 : solved problem, known since 1.0.0.0, solved since 1.0.0.1

Support for Fieldbusdesigner

ID#243180 : known problem since unbekannt, correction planned for 1.0.0.2

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.273 X20DI6553**1.3.3.273.1 Hardware**

ID#160650 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V771

Corrects continuous Firmware update problem with version V770

1.3.3.274 X20DI9371

1.3.3.274.1 Hardware

ID#400054614 : new function since 1.0.1.0

Enhancement packed data point for inputs

1.3.3.275 X20DI9372

1.3.3.275.1 Hardware

ID#400054614 : new function since 1.0.1.0

Enhancement packed data point for inputs

1.3.3.276 X20DO2633

1.3.3.276.1 Hardware

ID#220755 : new function planned for 1.0.0.1

Support X20DO2633

1.3.3.277 X20DO4322

1.3.3.277.1 Hardware

ID#217455 : new function since 1.0.0.1

Adaptation UART Re-Init

1.3.3.278 X20DO4332

1.3.3.278.1 Hardware

ID#217465 : new function since 1.0.0.1

Adaptation UART Re-Init

1.3.3.279 X20DO4613

1.3.3.279.1 Hardware 1.0.0.3

ID#220745 : new function planned for 1.0.0.3

Support of X20DO4613

1.3.3.280 X20DO4633

1.3.3.280.1 Hardware

ID#220750 : new function planned for 1.0.0.1

Support X20DO4633

1.3.3.281 X20DO6321

1.3.3.281.1 Hardware

ID#217365 : new function since 1.0.0.1

Adaptation UART Re-Init

1.3.3.282 X20DO6322**1.3.3.282.1 Hardware**

ID#217470 : new function since 1.0.0.1

Adaptation UART Re-Init

1.3.3.283 X20DO6529**1.3.3.283.1 Hardware**

ID#400040788 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Possibility to set X2X station number in combination with X20BMx5 activated

1.3.3.284 X20DO8232**1.3.3.284.1 Hardware**

ID#256450 : solved problem, known since 1.0.1.1, solved since 1.0.1.1

Increase interference immunity of output status feedbacks

ID#215990 : new function since 1.0.1.0

Support of asynchronous module status data points

1.3.3.285 X20DO8331**1.3.3.285.1 Hardware**

ID#211575 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Display correction in IO-Map on SGC Targets

ID#216000 : new function since 1.0.1.1

Support of asynchronous module status data points, UART Re-Init

1.3.3.286 X20DO8332**1.3.3.286.1 Hardware**

ID#216005 : new function since 1.0.1.0

Support of asynchronous module status data points, UART Re-Init

1.3.3.287 X20DO9321**1.3.3.287.1 Hardware**

ID#217370 : new function since 1.0.0.1

Adaptation UART Re-Init

1.3.3.288 X20DO9322**1.3.3.288.1 Hardware**

ID#221375 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Increase interference immunity of output status feedbacks

1.3.3.289 X20DS1119

1.3.3.289.1 Hardware

ID#400055350 : solved problem, known since 1.1.2.2, solved since 1.1.2.2

Enhancement length check of I/O block size during Build

ID#251595 : solved problem, known since 1.1.2.1, solved since 1.1.2.1

Enhancement Online Help

ID#177460 : solved problem, known since unbekannt, solved since 1.0.0.1

Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication X2X Uart

Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication X2X Uart

ID#400027501 : new function since 1.1.2.0

Enhancement 255 Leading Edges possible

ID#206030 : new function since 1.1.1.0

Enhancement: new data point SDC LifeCount

HWC–Additions: new data point SDC LifeCount, text correction 32 bit Time stamps of counters

ID#198415 : new function since 1.1.0.0

Enhancement: new data points for internal power supplies diagnostic

HWC–Additions: new data points for internal power supplies diagnostic

ID#169835 : new function since 1.0.0.1

Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication X2X Uart

Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication X2X Uart

ID#160535 : new function planned for 1.0.0.1

Addition of counter functions and speed control

1.3.3.290 X20DS1319

1.3.3.290.1 Hardware

ID#400055350 : solved problem, known since 1.1.2.2, solved since 1.1.2.2

Enhancement length check of I/O block size during Build

ID#251605 : solved problem, known since 1.1.2.1, solved since 1.1.2.1

Enhancement Online Help

ID#400028405 : new function since 1.1.2.0

Enhancement 255 Leading Edges possible

ID#206035 : new function since 1.1.1.0

Enhancement: new data point SDC LifeCount

HWC–Additions: new data point SDC LifeCount, text correction 32 bit Time stamps of counters

ID#198420 : new function since 1.1.0.0

Enhancement: new data point for internal power supply diagnostic

HWC–Additions: new data point for internal power supply diagnostic

ID#169840 : new function since 1.0.0.1

Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication X2X Uart

Enhancement Oversampled IO and Edge time detection, corrections Movement Timestamp and internal communication X2X Uart

ID#160540 : new function planned for 1.0.0.1

Addition of counter functions and speed control

1.3.3.291 X20DS4387

1.3.3.291.1 General

ID#238970 : new function planned for 1.0.2.2

Customer–specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.291.2 Hardware

ID#269070 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

Extensions and Bugfixes

- When a channel was operated in SIO mode, the connected device couldn't be started properly.
- Error handling during boot configuration improved.

ID#217795 : solved problem, known since 1.0.1.1, solved since 1.0.2.1

4x IO–Link Interface, Optimisation master cycle time calculation and correction in register ParameterCtrlIn

4x IO–Link Interface, Optimisation master cycle time calculation and correction in register ParameterCtrlIn

ID#254320 : new function since 1.0.2.2

Optimizations and extensions

Synchronisation of IO–Link cycle to X2X cycle improved.
Mode "FAST OPERATE" implemented.

ID#203655 : new function planned for 1.0.1.0

4x IO–Link Interface, First version

4x IO–Link Interface, First version

1.3.3.291.3 Hardware 1.0.2.1

ID#400034176 : solved problem, known since 1.0.1.1, solved since 1.0.2.1

4x IO–Link Interface, Optimisation master cycle time calculation and correction in register
ParameterCtrlIn

4x IO–Link Interface, Optimisation master cycle time calculation and correction in register
ParameterCtrlIn

1.3.3.291.4 Hardware 1.0.1.1

ID#205510 : solved problem, known since 1.0.1.0, solved since 1.0.1.1

Selectionlock for SG3 CanIO

Selectionlock for SG3 CanIO

1.3.3.292 X20DS4389

1.3.3.292.1 Hardware

ID#400055350 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

Enhancement length check of I/O block size during Build

1.3.3.293 X20HB8815

1.3.3.293.1 Hardware

ID#231465 : new function since 1.0.0.2

First version.

1.3.3.294 X20IF1020

1.3.3.294.1 Hardware

ID#247755 : solved problem, known since 1.1.3.0, solved since 1.1.3.0

Error correction in the FPGA UART implementation

ID#191300 : new function since 1.1.1.0

Enhancement internal function reboot behaviour after FW update

Enhancement internal function reboot behaviour after FW update

ID#183675 : new function since 1.1.0.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

1.3.3.295 X20IF1030

1.3.3.295.1 Hardware

ID#247765 : solved problem, known since 1.1.3.0, solved since 1.1.3.0

Error correction in the FPGA UART implementation

ID#191305 : new function since 1.1.1.0

Enhancement internal function reboot behaviour after FW update

Enhancement internal function reboot behaviour after FW update

ID#183680 : new function since 1.1.0.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

1.3.3.296 X20IF1041-1

1.3.3.296.1 Hardware

ID#259320 : new function since 1.0.2.0

Vendor ID changed

Module identifies with B+R Vendor ID now

ID#240405 : new function since 1.0.3.0

X20 Interface CANopen Master, Configuration of netX cycle time

X20 Interface CANopen Master, Configuration of netX cycle time.

ID#400069675 : known problem since 1.1.0.1, correction planned for 1.1.0.3

CANopen master doesn't write output data to all slaves

When using a special configuration with several CANopen slaves the output data is only written to the first slave.

1.3.3.296.2 Hardware V2.4.5.1

ID#400051057 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

Interface module CANopen master: Output data not written by all CANopen slaves

Interface module CANopen master: Output data not written by all CANopen slaves

1.3.3.296.3 Hardware 1.0.1.0

ID#235825 : new function since 1.0.1.0

Interface module CANopen master, first version

Interface module CANopen master, first version

1.3.3.297 X20IF1043–1

1.3.3.297.1 Hardware

ID#257350 : new function since 1.0.2.0

Vendor ID changed

Module identifies with B&R Vendor ID now

Caution! This upgrade might require changed settings on the master using the latest EDS file.

ID#240710 : new function since 1.0.2.0

X20 Interface CANopen Slave, Configuration of netX cycle time

X20 Interface CANopen Slave, Configuration of netX cycle time.

1.3.3.297.2 Hardware 1.0.1.0

ID#235830 : new function since 1.0.1.0

Interface module CANopen slave, first version

Interface module CANopen slave, first version

1.3.3.298 X20IF1051–1

1.3.3.298.1 Hardware

ID#257360 : new function since 1.0.2.0

Vendor ID changed

Module notifies now with the B&R Vendor ID

ID#240715 : new function since 1.0.2.0

X20 Interface Device Net Master, Configuration of netX cycle time

X20 Interface Device Net Master, Configuration of netX cycle time.

1.3.3.298.2 Hardware 1.0.1.0

ID#235835 : new function since 1.0.1.0

Interface module DeviceNet master, first version

Interface module DeviceNet master, first version

1.3.3.299 X20IF1053–1

1.3.3.299.1 Hardware

ID#228290 : new function since 1.0.2.0

Vendor ID changed

Module identifies with B&R Vendor ID now

Caution! This upgrade might require changed settings on the master using the latest EDS file (electronic keying).

1.3.3.299.2 Hardware 1.0.2.0

ID#240720 : new function since 1.0.2.0

X20 Interface Device Net Slave, Configuration of netX cycle time

X20 Interface Device Net Slave, Configuration of netX cycle time.

1.3.3.299.3 Hardware 1.0.1.0

ID#235840 : new function since 1.0.1.0

Interface module DeviceNet slave, first version

Interface module DeviceNet slave, first version

1.3.3.300 X20IF1061

1.3.3.300.1 Firmware

ID#400028140 : solved problem, known since 1.1.2.0, solved since 1.1.2.0

Correct FW for HW variant 0 in upgrade

ID#180485 : solved problem, known since 1.0.0.0, solved since 1.1.1.0

Slave addresses are only allowed up to 32 and not to 126

ID#191310 : new function since 1.1.1.0

Enhancement internal function reboot behaviour after FW update

Enhancement internal function reboot behaviour after FW update

ID#166085 : new function planned for 1.0.0.1

New HWC File V1.0.0.1

Modul kann mit X20XC CPU's verwendet werden

1.3.3.300.2 Hardware

ID#183685 : new function since 1.1.0.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

ID#175530 : new function since 1.0.0.1

Two IF1061 modules supported on SGC targets

Two IF1061 modules supported on SGC targets, new HW variant 1

1.3.3.301 X20IF1061–1

1.3.3.301.1 Hardware

ID#257410 : new function since 1.0.2.0

Vendor ID changed

Module notifies now with the B&R Vendor ID

ID#240725 : new function since 1.0.2.0

X20 Interface PROFIBUS DP Master, Configuration of netX cycle time

X20 Interface PROFIBUS DP Master, Configuration of netX cycle time.

1.3.3.301.2 Hardware 1.0.1.1

ID#237600 : new function since 1.0.1.1

Interface module PROFIBUS DP Master, new online help

Interface module PROFIBUS DP Master, new online help

1.3.3.301.3 Hardware 1.0.1.0

ID#235845 : new function since 1.0.1.0

Interface module PROFIBUS Master, first version

Interface module PROFIBUS Master, first version

1.3.3.302 X20IF1063

1.3.3.302.1 Hardware

ID#400044244 : solved problem, known since 1.1.3.0, solved since 1.1.3.0

Wrong data caused by Long-access if odd address pointer

ID#191320 : new function since 1.1.2.0

Enhancement internal function reboot behaviour after FW update

Enhancement internal function reboot behaviour after FW update

ID#183690 : new function since 1.1.1.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

ID#175900 : new function since 1.1.0.0

Two IF1063 modules supported on SGC targets, corrected FW V3

Two IF1063 modules supported on SGC targets, new HW variant 2, corrected FW V3

ID#175535 : new function since 1.0.0.1

Two IF1063 modules supported on SGC targets

Two IF1063 modules supported on SGC targets, new HW variant 2

1.3.3.303 X20IF1063–1

1.3.3.303.1 Hardware

ID#257425 : new function since 1.0.2.0

Vendor ID changed

Module identifies with B&R Vendor ID now

Caution! This upgrade requires changed settings on the master using the latest GSD file.

ID#240730 : new function since 1.0.2.0

X20 Interface PROFIBUS DP Slave, Configuration of netX cycle time

X20 Interface PROFIBUS DP Slave, Configuration of netX cycle time.

1.3.3.303.2 Hardware 1.0.1.1

ID#237610 : new function since 1.0.1.1

Interface module PROFIBUS DP Slave, new online help

Interface module PROFIBUS DP Slave, new online help

1.3.3.303.3 Hardware 1.0.1.0

ID#235850 : new function since 1.0.1.0

Interface module PROFIBUS Slave, first version

Interface module PROFIBUS Slave, first version

1.3.3.304 X20IF1065

1.3.3.304.1 Hardware

ID#191315 : new function since 1.1.1.0

Enhancement internal function reboot behaviour after FW update

Enhancement internal function reboot behaviour after FW update

ID#183695 : new function since 1.1.0.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

ID#175540 : new function since 1.0.0.1

Two IF1065 modules supported on SGC targets

Two IF1065 modules supported on SGC targets, new FW V2

1.3.3.305 X20IF1072

1.3.3.305.1 Hardware

ID#229080 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

CAN transmitter blockade after cable un-/plugged corrected

ID#224475 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

CAN TransmitQueue Reset command corrected

ID#183700 : new function since 1.0.1.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

1.3.3.306 X20IF1082

1.3.3.306.1 Hardware

ID#230850 : solved problem, known since 1.1.9.0, solved since 1.1.12.0

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#220445 : solved problem, known since 1.1.8.0, solved since 1.1.9.0

POWERLINK V2: Boot behavior improved

ID#206920 : solved problem, known since 1.1.6.0, solved since 1.1.7.0

New POWERLINK firmware V45 and basis firmware V15

POWERLINK V2 CN mode:

- Frequent MN failures result in CPU going into Service mode.

- The PollResponse data from multiplexed stations are now updated in every POWERLINK

cycle.

ID#196605 : solved problem, known since 1.1.5.1, solved since 1.1.6.0

New POWERLINK V1/V2 firmware V44

CN mode: Various error corrections made.

ID#191760 : solved problem, known since 1.1.4.0, solved since 1.1.5.1

New POWERLINK V1/V2 Firmware V42

- Error correction for POWERLINK V2: After network disturbances, failed stations were left out of cyclic traffic.
- Error correction POWERLINK V2 CN mode: Failure of a SoC resulted immediately in incorrect failure detection by manager.

ID#185605 : solved problem, known since 1.1.3.0, solved since 1.1.4.0

New POWERLINK V1/V2 firmware V39 and basis firmware V14

- Error correction for POWERLINK V2: Certain configurations may cause multiplexed stations to fail.
- Error correction for POWERLINK V2: An error while switching the alternating buffer caused old input data to be resent. (This error only occurred with upgrade 1.1.3.0.)
- Error correction: In configurations with a large amount of I/O data, incorrect input data was sent.

ID#182080 : solved problem, known since 1.1.2.0, solved since 1.1.3.0

New POWERLINK V1/V2 firmware V38 and basis firmware V13

- Error correction for POWERLINK V2: Parameter "CycleIdleTime" was not calculated correctly.
- Error correction: ModbusTCP on POWERLINK interfaces was not working.
- Improved stability for network disturbances.

ID#178035 : solved problem, known since 1.1.1.0, solved since 1.1.2.0

New POWERLINK V1/V2 firmware V37 and base firmware V12

Error corrections:

- In large networks, ring redundancy may not work in some circumstances.
- POWERLINK V2 CN mode: Various error corrections made.
- Asynchronous scheduler: The host has only sent an asynchronous frame in max. every second cycle.
- POWERLINK V2: Asynchronous frames can now be received with the Powerlink library starting with channel $\geq 0x20$ (previously starting with $0xA0$).

ID#173345 : solved problem, known since 1.1.0.0, solved since 1.1.1.0

New POWERLINK firmware V36

Error correction:

- When using an I/O prescaler > 1 , in certain circumstances the old input data for the station is provided to the application.

Changes – POWERLINK V2:

- The poll response from the manager is now sent at the beginning of the POWERLINK cycle.
- From now on, stations are addressed with poll requests starting in status "PreOperational 2".

ID#170740 : solved problem, known since 1.0.5.0, solved since 1.1.0.0

Performance improvement – POWERLINK manager

ID#165855 : solved problem, known since 1.0.4.0, solved since 1.0.5.0

New POWERLINK V1/V2 Firmware V34

ID#165495 : solved problem, known since 1.0.3.0, solved since 1.0.4.0

New POWERLINK V1/V2 Firmware V33

ID#164810 : solved problem, known since 1.0.2.0, solved since 1.0.3.0

New POWERLINK V1/V2 Firmware V31

- Optimizations for EPL V2 startup carried out.
- Nettime IEEE 1588 for EPL V2 implemented.
- From now on, the asynchronous scheduler will handle asynchronous requests based on their priority.

ID#160765 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New POWERLINK V1/V2 Firmware V30

In "Controlled Node" mode, the following errors may occur:

- With heavy asynchronous loads, asynchronous TX packets may be lost.
- Collisions on the network can cause the station to stop receiving Ethernet packets.

ID#209995 : new function since 1.1.8.0

CN mode: Various error corrections made.

ID#205545 : new function since 1.2.0.2

POWERLINK: LinkOK data point added.

ID#182077 : new function since 1.1.2.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

ID#256905 : new function planned for 1.2.0.2

POWERLINK: LinkOK data point added.

ID#265910 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265865 : known problem since 1.1.12.1, correction planned for 1.2.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265765 : known problem since 1.1.0.0, correction planned for 1.2.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#256935 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#400057319 : known problem since 1.1.12.1, correction planned for 1.2.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

ID#400046576 : known problem since 1.1.9.0, correction planned for 1.1.12.1

Correction of interchanged LinkOK data points in AS IO mapping

ID#163835 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New Base Firmware V10

Error correction: problems when booting

1.3.3.307 X20IF1082-2

1.3.3.307.1 Hardware

ID#234660 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

New POWERLINK firmware V106

POWERLINK V2 chained stations: Reconnecting failed stations improved.
LinkOK Datapoint in Operating Mode 'Ethernet' available.

ID#233570 : solved problem, known since 1.0.1.0, solved since 1.0.2.0

Correction of interchanged LinkOK data points in AS IO mapping

ID#229290 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

POWERLINK V2 chained stations: When stations that have failed are added back into the POWERLINK cycle, active chained stations fail.

ID#265915 : known problem since 1.0.2.0, correction planned for 1.1.0.2

POWERLINK V2: If the Ready-Flag was canceled on the network, the ModuleOK was not cleared.

ID#265870 : known problem since 1.0.2.0, correction planned for 1.1.0.2

Warning 32168 "POWERLINK V2: Invalid frame format" on iCN with "Chaned Station" on the

same network

Error correction: When an iCN is used in the same POWERLINK network with a "Chained Station", there may be warnings 32168 in the logger.

The reason for this warning is that the sync response frames that are used to measure the timing of the "Chained Station" are not recognized by the iCN.

ID#265770 : known problem since 1.0.2.0, correction planned for 1.1.0.2

POWERLINK V2 CN mode: Frequent MN failures result in CPU going into Service mode.

ID#256945 : known problem since 1.0.2.0, correction planned for 1.1.0.2

POWERLINK: The net time is not always transferred correctly to the application.

ID#400057319 : known problem since 1.0.2.0, correction planned for 1.1.0.2

POWERLINK: In controlled node mode, the I/O mapping was not applied when the manager was restarted.

1.3.3.308 X20IF1091

1.3.3.308.1 Hardware

ID#240765 : new function since 1.0.4.0

Enhancement Nettime data point

ID#191250 : new function since 1.0.3.0

Operational in X20CP1483, new FW 7; error correction FW update

Operational in X20CP1483, new FW V7; error correction FW update in V6

ID#188500 : new function since 1.0.2.0

Operational in X20CP1483, new FW V6

Operational in X20CP1483, new FW V6

ID#183705 : new function since 1.0.1.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

ID#163860 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V4

Error correction: problems when booting

1.3.3.309 X20IF1091-1

1.3.3.309.1 Hardware

ID#268025 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Module not selectable as system timer

ID#240925 : new function since 1.0.1.0

Enhancement Nettime data point

ID#160900 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V32

1.3.3.310 X20IF10A1-1

1.3.3.310.1 Hardware

ID#250250 : new function since 1.0.1.0

Enhancement english online help for AS

1.3.3.311 X20IF10D1-1

1.3.3.311.1 Hardware

ID#257440 : new function since 1.0.2.0

Vendor ID changed

Module notifies now with the B&R Vendor ID

ID#268245 : known problem since 1.1.0.0, correction planned for 1.1.1.0

Input data of Ethernet/IP slaves is no longer being transferred

1.3.3.312 X20IF10D3-1

1.3.3.312.1 Hardware

ID#257455 : new function since 1.0.2.0

Vendor ID changed

Module identifies with B&R Vendor ID now

Caution! This upgrade might require changed settings on the master (electronic keying).

ID#400059600 : known problem since unbekannt, correction planned for 1.1.1.0

Ethernet IP communication doesn't work via explicit messaging

1.3.3.313 X20IF10E1-1

1.3.3.313.1 Hardware

ID#257460 : new function since 1.0.2.0

Vendor ID changed

Module notifies now with the B&R Vendor ID

ID#240735 : new function since 1.0.2.0

X20 Interface PROFINET RT Master, Configuration of netX cycle time

X20 Interface PROFINET RT Master, Configuration of netX cycle time.

1.3.3.313.2 Hardware 1.0.1.1

ID#237545 : new function since 1.0.1.1

Interface module PROFINET RT Controller, new online help

Interface module PROFINET RT Controller, new online help

1.3.3.313.3 Hardware 1.0.1.0

ID#235795 : new function since 1.0.1.0

Interface module PROFINET RT Controller, first version

Interface module PROFINET RT Controller, first version

1.3.3.314 X20IF10E3–1

1.3.3.314.1 Hardware

ID#257465 : new function since 1.0.2.0

Vendor ID changed

Module identifies with B&R Vendor ID now

Caution! This upgrade requires changed settings on the master using the latest GSD file.

ID#240740 : new function since 1.0.2.0

X20 Interface PROFINET RT Slave, Configuration of netX cycle time

X20 Interface PROFINET RT Slave, Configuration of netX cycle time.

1.3.3.314.2 Hardware 1.0.1.1

ID#237570 : new function since 1.0.1.1

Interface module PROFINET RT Device, new online help

Interface module PROFINET RT Device, new online help

1.3.3.314.3 Hardware 1.0.1.0

ID#235805 : new function since 1.0.1.0

Interface module PROFINET RT Device, first version

Interface module PROFINET RT Device, first version

1.3.3.315 X20IF2772

1.3.3.315.1 Hardware

ID#219740 : solved problem, known since 1.0.4.0, solved since 1.0.4.0

TransmitQueue Reset command corrected

ID#191330 : new function since 1.0.3.0

Enhancement internal function reboot behaviour after FW update / correction CP1483

Enhancement internal function reboot behaviour after FW update / correction CP1483

ID# 400011120, 400011629, 400017023 : new function since 1.0.3.0

Correction of the LED assignment

Correction of the LED assignment

ID#183710 : new function since 1.0.2.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

ID#164925 : known problem since 1.0.1.0, correction planned for 1.0.2.0

New CAN Firmware V3

No transmission possible after short circuit on CAN Bus

ID#163790 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V3

High Interrupt load when CAN–Bus error, watchdog possible

1.3.3.316 X20IF2792

1.3.3.316.1 Hardware

ID#229090 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

CAN transmitter blockade after cable un-/plugged corrected

ID#224465 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

CAN TransmitQueue Reset command corrected

ID#183715 : new function since 1.0.1.0

New diagnostic data points

New diagnostic data points : Serial number, Module ID, Hardware variant, Firmware version

ID#164885 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V6

Error correction: problems when booting

1.3.3.317 X20MM2436

1.3.3.317.1 Hardware

ID#400062572 : known problem since unbekannt, correction planned for 1.1.1.0

MM2436 Slow Decay mode switch off the outputs

ID#182305 : known problem since V2.7.0.0007, correction planned for 1.0.0.2

Module can be inserted on SGC CPU's

1.3.3.318 X20MM3332

1.3.3.318.1 Hardware

ID#243190 : known problem since unbekannt, correction planned for 1.0.0.2

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.319 X20MM4331

1.3.3.319.1 General

ID#243195 : known problem since unbekannt, correction planned for 1.0.1.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.320 X20MM4456

1.3.3.320.1 General

ID#243200 : known problem since unbekannt, correction planned for 1.0.2.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.320.2 Hardware

ID#400064834 : known problem since unbekannt, correction planned for 1.1.0.0

The incremental counters of X20MM4456 can be reset

The 4 incremental counters of X20MM4456 can be reset individually and synchronously to "0"

ID#400057091 : known problem since unbekannt, correction planned for 1.1.0.0

Support for operation with bus coupler

ID#245845 : known problem since unbekannt, correction planned for 1.0.2.2

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

ID#400049478 : known problem since unbekannt, correction planned for 1.0.2.0

The module doesn't report an overtemperature error at low ambient temperatures (7–10°C)

ID#233790 : known problem since unbekannt, correction planned for 1.0.2.0

Dither function works now also at lower frequencys and lower PWM duration without problems

ID#204675 : known problem since unbekannt, correction planned for 1.0.1.0

At modules with revision <=A6 the offset from the current measurement was corrected

1.3.3.321 X20PS2100

1.3.3.321.1 Hardware

ID#400061307 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Error correction in Channel description

Adverse Settings in the AS I/O configuration may cause an error on X2X

ID#227885 : new function planned for 1.0.2.0

Extension in IO-Mapping for SG3 CanIO

Datapoints for Bus current and Bus voltage added

1.3.3.322 X20PS2110

1.3.3.322.1 Hardware

ID#400061307 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Error correction in channel description

Adverse settings in the AS I/O configuration may cause an error on X2X

ID#176385 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

Correction HWC display of data point "SupplyVoltage" on Powerlink-BC

Correction HWC display of data point "SupplyVoltage" on Powerlink-BC

ID#227890 : new function planned for 1.0.2.0

Extension in IO-Mapping for SG3 CanIO

Datapoint for Bus voltage added

1.3.3.323 X20PS3300

1.3.3.323.1 Hardware

ID#400061307 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Error correction in channel description

Adverse settings in the AS I/O configuration may cause an error on X2X

1.3.3.324 X20PS4951

1.3.3.324.1 Hardware

ID#220565 : new function since 1.0.1.0

New HW-variant to inhibit downgrades

1.3.3.325 X20PS9400

1.3.3.325.1 Hardware

ID#400061307 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Error correction in channel description

Adverse settings in the AS I/O configuration may cause an error on X2X

1.3.3.326 X20SC2432

1.3.3.326.1 Firmware

ID#221540 : solved problem, known since 1.2.0.0, solved since 1.2.0.90

Pulse_Mode "external": automatic increment of "Filter_off_us"

For Pulse_Mode "external" the automatic increment of parameter "Filter_off_us" was less than the 5ms described in the documentation.

ID#219630 : solved problem, known since 1.2.0.0, solved since 1.2.0.90

erroneous discrepancy time error message

An erroneous discrepancy time error message could be generated at startup by the 2 channel evaluation if external devices are used that generate test pulses.

ID#213430 : solved problem, known since 1.2.0.0, solved since 1.2.0.3

changes in HWC

fixed typos of safety parameters
enabled for AR B2.96

ID#225435 : new function since 1.3.0.96

Safety Release 1.4

- SI: one can configure the channel that shall be used as pulse source for testpulse with mode "internal" (see manual)
- different levels for logger entries: "Info", "Warning" or "Error" (AR B3.05 required)
- logger entries with level "Info" or "Warning" are sent by only 1 of the 2 safety processors to reduce the number of messages
- X2X diagnostics data points (AR 3.08 required)

1.3.3.327 X20SI2100

1.3.3.327.1 Firmware

ID#180810 : new function planned for 1.4.0.0

see history of module X20SI4100

see history of module X20SI4100

ID#163785 : new function planned for 1.1.1.0

First official Release

First official Release

1.3.3.328 X20SI4100

1.3.3.328.1 Firmware

ID#400034966 : solved problem, known since 1.2.0.0, solved since 1.2.0.90

erroneous discrepancy time error message

An erroneous discrepancy time error message could be generated at startup by the 2 channel evaluation if external devices are used that generate test pulses.

ID#217720 : solved problem, known since 1.2.0.0, solved since 1.2.0.3

changes in HWC

fixed typos of safety parameters
enabled for AR B2.96

ID#210370 : solved problem, known since 1.1.96.0, solved since 1.2.0.90

Pulse_Mode "external": automatic increment of "Filter_off_us"

For Pulse_Mode "external" the automatic increment of parameter "Filter_off_us" was less than the 5ms described in the documentation.

ID#225420 : new function since 1.3.0.96

Safety Release 1.4

- one can configure the channel that shall be used as pulse source for testpulse with mode "internal" (see manual)
- different levels for logger entries: "Info", "Warning" or "Error" (AR B3.05 required)

- logger entries with level "Info" or "Warning" are sent by only 1 of the 2 safety processors to reduce the number of messages
- X2X diagnostics data points (AR 3.08 required)

ID#180045 : new function since 1.1.3.0

enhancements HWC

state information of 2-channel evaluation can be mapped
Aprol support

ID#163865 : new function planned for 1.1.1.0

first official release

first official release

1.3.3.328.2 Firmware V272

ID#199330 : solved problem, known since 1.1.4.0, solved since 1.1.96.0

operation in cold environment

problems when operating in cold environment (0 .. 10°C) solved (logger entries 99850 und 103946)

ID#194140 : new function since 1.1.96.0

increased maximum value of input filters

input filters can be parametrized up to 500ms (instead of 100ms)

ID#186455 : new function since 1.1.96.0

flashing of SE-LEDs

new states of SE-LEDs:

single flash: safety firmware is still in state PreOp (waiting for start command from SL)

double flash: safety firmware is in operational, but cyclic data connection to SL is not valid

ID#183260 : new function since 1.1.96.0

reduced async communication at boot time

parameters are stored locally and will only be transmitted in case of changes

1.3.3.328.3 Hardware

ID#168365 : solved problem, known since unbekannt, solved since 1.1.4.0

solved sporadic firmware update problems

solved sporadic firmware update problems

1.3.3.329 X20SI9100**1.3.3.329.1 Firmware**

ID#400056193 : solved problem, known since V3.00.81.18, solved since 1.4.0.0

Projects with hardware modules that contain μ in their channel descriptions can not be build in the Chinese version of Windows.

The following error is generated when building projects that contain μ in the channel descriptions:

Required white space was missing.

Error: on line 79, position 219 in "(null)".

1.3.3.330 X20SL8000**1.3.3.330.1 Firmware**

ID#180900 : new function planned for 1.1.2.0

first official release

first official release

1.3.3.331 X20SL8001**1.3.3.331.1 Firmware**

ID#251380 : solved problem, known since unbekannt, solved since 1.4.1.1

SL-to-SL connection

Is not limited to 8 SAFEBOOL anymore (requires AS V3.0.90 and AR V3.08)

ID#248160 : solved problem, known since 1.3.0.102, solved since 1.3.0.105

Problems when using new AR version in application with a lot of powerlink nodes.

One could face problems when using actual AR version (e.g. V3.06) in applications with a lot of powerlink nodes.

ID#245315 : solved problem, known since 1.3.0.97, solved since 1.4.0.1

sporadic reset problems

It happened sporadically that the SafeLOGIC didn't response after a reset.

It happended sporadically that the SafeLOGIC was resetted in case of an AR restart.

ID#240700 : solved problem, known since , solved since 1.3.0.105

Failsafe after reset

With some projects the SafeLOGIC sporadically didn't boot correctly after an automatic reset (after FW-ACK or application download).

ID# 400043442, 400041050 : solved problem, known since 1.3.0.0, solved since 1.3.0.106

Error "Unexpected FSM event (00) occurred."

Error "Unexpected FSM event (00) occurred." (108074/112170) could happen sporadically in case of AR warm restart.

ID#223460 : solved problem, known since 1.2.0.3, solved since 1.3.0.105

online communication through B&R-CPU

New parameters in I/O Configuration of SafeLOGIC: "SafeDESIGNER to SafeLOGIC communication"

Therefore the SafeLOGIC can be accessed over a TCP port of AR (no IP route required anymore).

(requires AR A3.04 or higher !)

ID#217100 : solved problem, known since 1.2.0.0, solved since 1.3.0.0

SafeKEY acknowledge after firmware update

After a firmware update (from Safety Release 1.1 to Safety Release 1.2) a SafeKEY acknowledgement was requested although the SafeKEY had not been changed.

ID#212694 : solved problem, known since V02.70.2.4.250, solved since 1.2.0.3

changes in HWC

fixed typos of safety parameters
enabled for AR B2.96

ID#400019724 : solved problem, known since 1.1.3.0, solved since 1.1.98.0

no connection to SafeLOGIC

If the SafeKEY contains corrupt data (might be caused by network failure during project download), it can happen that no connection between SafeDESIGNER and SafeLOGIC can be established.

ID# 400011831 : solved problem, known since unbekannt, solved since 1.1.98.0

error "number of erroneous modules becomes negative"

Internal error "number of erroneous modules becomes negative" could occur by mistake (error numbers 114691 and 118787)

ID#400012016 : solved problem, known since 1.1.2.0, solved since 1.1.98.0

enhanced boot behaviour of safety application

Boot behaviour of safety application has been enhanced.
Additional functionality for module parameter "Optional".
New datapoint "SafeModuleOk" for each module.
See documentation for details.

ID#181250 : solved problem, known since 1.1.2.0, solved since 1.1.98.0

logger entries 122896 and 122895

logger entries 122896 and 122895 had been generated though there was no error

ID#177345 : solved problem, known since unbekannt, solved since 1.2.0.3

'Authorisation' did not work

Parameter 'Authorisation' in I/O Configuration did not work (requires AR Q3.00 or higher!)

ID#176350 : solved problem, known since 1.0.1.0, solved since 1.1.98.0

improved diagnostics for connection problems

Statistic counters (Objekte 0x2001/0x05..0x07) and logger entries (110434/114530) for improved diagnostic of cyclic safety data communication problems.

ID#176055 : solved problem, known since 1.1.3.0, solved since 1.1.98.0

no logger entry if SafeKEY missing

a logger entry will be generated if the SafeKEY is missing

ID#226760 : new function since 1.3.0.106

operate SL via EPL and additional logger entries.

Possibility to operate the SafeLOGIC (e.g. FWACK) via EPL object dictionary (see manual).
Additional logger entries when pressing the SafeLOGIC ENTER button.

ID#400041388 : new function since 1.3.0.108

format SafeKEY via operating elements

Formatting the SafeKEY can be done via the operating elements of the SafeLOGIC.

ID#225445 : new function since 1.3.0.106

improvements logger entries

- different levels for logger entries: "Info", "Warning" or "Error" (AR B3.05 required)
- logger entries with level "Info" or "Warning" are sent by only 1 of the 2 safety processors to reduce the number of messages.

ID#219960 : new function since 1.3.0.106

external machine options

Possibility to define 512 additional machine options via a file.

ID#207515 : new function since 1.1.98.0

flashing of FAIL-LEDs in case of debug mode

Debug mode of the SafeLOGIC is displayed via alternating flashing of FAIL-LEDs.

ID#207505 : new function since 1.1.98.0

increased number of machine options

Number of SafeMachineOptions has been increased to 32.

ID#207500 : new function since 1.1.98.0

SL is not resetted anymore

For faster system bootup the SafeLOGIC is not resetted anymore in case of an EPL reset (what also means in case of an AR reboot).

ID#400013470 : new function since 1.1.98.0

additional channels to/from CPU

The max. number of BOOL-Channels to/from CPU has been increased.
Channels of type INT have been added.

ID#185125 : new function since 1.1.98.0

faster starting of safety modules

starting of safety modules by SL is done faster now

ID#182530 : new function since 1.1.3.0

firmware supports hardware Rev. B0

older firmware versions do not work correctly with hardware Rev. B0 or higher!

ID#176990 : new function since 1.3.0.105

SafeKEY-LED was not activated for LED test.

SafeKEY-LED was not activated for LED test.

ID#226755 : new function planned for 1.4.0.0

Download application from functional CPU

Possibility to download the SafeDESIGNER application from functional CPU to SafeLOGIC.

ID#186245 : new function planned for 1.2.0.0

extended diagnostics

Additional diagnostic datapoint have been added to EPL-V2 object dictionary, which give information about the actual state of the SL.

ID#180905 : new function planned for 1.1.2.0

first official release

first official release

ID# 400030666 : Information valid since 1.2.0.0

problems with SO modules in projects with a large amount of safety modules

Problems with SO modules could happen in some projects (with more than 92 safety modules).

ID#400034396 : known problem since 1.2.0.3, correction planned for 1.4.0.0

reset after SafeKEAY format

SafeLOGIC will be resetted automatically after a SafeKEY format.

ID#400017890 : known problem since unbekannt, correction planned for 1.2.0.0

operation in cold environment

problems when operating in cold environment (0 .. 10°C) solved (logger entries 99850 und 103946)

ID#198515 : known problem since 1.1.3.0, correction planned for 1.3.0.0

provide temperature

Temperature is provided at POWERLINK object 0x2000/0x12 (data type: INT; scale: 0.1°C).

ID#400008745 : known problem since 1.1.2.0, correction planned for 1.2.0.0

startup synchronisation SL / AR

Improvements for startup synchronisation SL / AR

ID#400008746 : known problem since unbekannt, correction planned for 1.2.0.0

synchronous module startup

It could have happened that safety modules where started delayed.

1.3.3.331.2 Firmware GFW

ID#400032288 : solved problem, known since unbekannt, solved since 1.2.0.0

logger entry "Error encountered while access file system on uPC!"

Logger entry "Error encountered while access file system on uPC!" (100870) could happen at startup sporadically with certain projects.

1.3.3.331.3 Firmware FW V270

ID#400028396 : solved problem, known since unbekannt, solved since 1.1.98.0

Problems with SafeMODULE ID > 100

Problems with SafeMODULE ID > 100 fixed.

1.3.3.331.4 Firmware 1.3.0.122

ID#233580 : known problem since 1.2.0.3, correction planned for 1.4.0.0

SL-to-SL connection

The parameters of a safe SL-to-SL connection can be changed.

1.3.3.332 X20SL8010

1.3.3.332.1 Firmware

ID#212880 : new function planned for 1.2.0.0

first official release

first official release – identical to X20SL8000 (motion functions not yet supported)

1.3.3.333 X20SL8011

1.3.3.333.1 Firmware

ID#223130 : new function since 1.3.0.0

Support SafeMC

SafeMC is supported since Safety Release 1.3 .
Requires SafeDESIGNER V2.71!

ID#212885 : new function planned for 1.2.0.0

first official release

first official release – identical to X20SL8001 (motion functions not yet supported)

1.3.3.334 X20SM1426

1.3.3.334.1 General

ID#243210 : known problem since unbekannt, correction planned for 1.2.0.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the
FieldbusDESIGNER

1.3.3.334.2 Hardware

ID#201710 : new function planned for 1.1.0.0

ABR–Counter can be displayed parallel to step–counter in I/O mapping

ID#160485 : new function planned for 1.0.0.1

Current limit was changed at module X20SM1426

ID#245855 : known problem since unbekannt, correction planned for 1.2.0.2

Customer–specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.335 X20SM1436**1.3.3.335.1 Hardware**

ID#267990 : known problem since unbekannt, correction planned for 1.2.2.0

The X20SM1436 doesn't switch in switched on with a customer motor at ramp mode.

ID#400014309 : known problem since unbekannt, correction planned for 1.0.3.0

Threshold value for module overtemperature corrected

1.3.3.335.2

ID#267135 : known problem since , correction planned for 1.2.2.0

Problem with the endswitch–reset at ramp mode.

1.3.3.336 X20SO2110**1.3.3.336.1 Firmware**

ID#180850 : new function planned for 1.4.0.0

see history of module X20SO4120

see history of module X20SO4120

ID#179300 : new function planned for 1.1.2.0

first official release

first official release

1.3.3.337 X20SO2120**1.3.3.337.1 Firmware**

ID#180845 : new function planned for 1.4.0.0

see history of module X20SO4120

see history of module X20SO4120

ID#179305 : new function planned for 1.1.2.0

first official release

first official release

1.3.3.338 X20SO4110

1.3.3.338.1 Firmware

ID#180835 : new function planned for 1.4.0.0

see history of module X20SO4120

see history of module X20SO4120

ID#179315 : new function planned for 1.1.2.0

first official release

first official release

1.3.3.339 X20SO4120

1.3.3.339.1 Firmware

ID#213410 : solved problem, known since 1.2.0.0, solved since 1.2.0.3

changes in HWC

fixed typos of safety parameters
enabled for AR B2.96

ID#191000 : solved problem, known since 1.1.3.0, solved since 1.1.5.0

Problems with PhysicalStateChannel

The availability of the PhysicalStateChannels is not configurable anymore. This avoids possible mapping problems

ID#225425 : new function since 1.3.0.94

Safety Release 1.4

- different levels for logger entries: "Info", "Warning" or "Error" (AR B3.05 required)
- logger entries with level "Info" or "Warning" are sent by only 1 of the 2 safety processors to reduce the number of messages
- X2X diagnostics data points (AR 3.08 required)

ID#182430 : new function since 1.1.3.0

enhancements HWC

restart inhibit state information can be mapped
Aprol support

ID#179325 : new function planned for 1.1.2.0

first official release

first official release

1.3.3.339.2 Firmware FW V261

ID#180215 : new function since 1.1.3.0

boot problems at certain X2X cycle times

failsafe state during boot when running at certain X2X cycle times (logger entries 119460 and 115364)

1.3.3.339.3 Hardware

ID#183545 : solved problem, known since unbekannt, solved since 1.1.4.0

solved sporadic firmware update problems

solved sporadic firmware update problems

1.3.3.340 X20XC0201

1.3.3.340.1 Hardware

ID#163760 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V21

1.3.3.341 X20XC0202

1.3.3.341.1 Hardware

ID#163750 : known problem since 1.0.0.0, correction planned for 1.0.1.0

New Firmware V21

1.3.3.342 X67AI1323

1.3.3.342.1 Hardware

ID#216035 : new function since 1.0.1.0

Support of asynchronous module status data points

1.3.3.343 X67AI2744

1.3.3.343.1 Hardware

ID#164430 : new function planned for 1.0.1.0

Support of bus coupler implemented

1.3.3.344 X67AI4850

1.3.3.344.1 Hardware

ID#169935 : new function planned for 1.0.0.1

DC–OK datapoint added

ID#400022853 : known problem since unbekannt, correction planned for 1.0.1.0

Possible jumps at the analog inputs couldn't appear again

1.3.3.345 X67AT1322

1.3.3.345.1 Hardware

ID#400060234 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

Status input channel description corrected for SGC targets

1.3.3.346 X67AT1402

1.3.3.346.1 Firmware

ID#213860 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Support of sensor type R

1.3.3.346.2 Hardware

ID#216075 : new function since 1.0.1.0

Support of asynchronous module status data points

1.3.3.347 X67BC8321–1

1.3.3.347.1 Firmware

ID#246660 : solved problem, known since unbekannt, solved since 1.2.0.0

DNA support; Update behavior on X2X bus of the BC improved

- DNA support (Dynamic Node Allocation)
- faster updating of modules with big FW files on the X2X bus of the BC
- new objects: 20A3h and 2000h/9
- support for Simulation device added

1.3.3.347.2 Hardware

ID# 400031208, 400032412, 400032783 : solved problem, known since V2.7.0.0017 SP10, solved since 1.2.0.0

Correct display of local I/O module in HW–tree

ID#183395 : solved problem, known since 1.0.3.0, solved since 1.0.3.0

New info–/diagnostic data points, new FW 1.41 for signal filter and corrections

New info–/diagnostic data points in HWC, new FW 1.41 for signal filter and corrections

ID#209590 : new function since 1.0.3.0

Extensions and Bugfixes

- New ASICS will be set to 3mA output current (A&P 182905)
- Optimization of SDO communication (unnecessary acknowledges removed)
- Support of commands ReadMultipleParameter / WriteMultipleParameter
- NodeID assignment by digital inputs supported (NodeID 241 and 242)
- Minor corrections certification
- ASnd frames with unknown ServiceID could disturb the BC (only possible with 3rd party MN)
- Access to not existing objects in OD could cause firmware crash
- When running X2X cycle times <200 us the X2X Bus was not working correctly (A&P 190630)
- When in state PREOP_2 no SoC is received for 10sec the BC will fall back in PREOP_1

ID#173300 : new function since 1.0.3.0

Extensions and Bugfixes

- Improvement of X2X Timings (Jitter reduced from 180ns to 20ns) (A&P 167857 und 171987)
- Optimizations for operation in 200us networks
- 2 nodes with the same node number generated disturbance on the network (A&P 166040)
- Functions for a new firmware download mechanism implemented (A&P 168537)

ID#160527 : new function since 1.0.3.0

New info-/diagnostic data points, new FW 1.41 for signal filter and corrections

New info-/diagnostic data points in HWC, new FW 1.41 for signal filter and corrections

ID#164670 : new function planned for 1.0.2.0

Extensions

- Extensions for operation with Safety

1.3.3.348 X67BC8321.L12**1.3.3.348.1 Firmware**

ID#246365 : solved problem, known since unbekannt, solved since 1.2.1.0

DNA support; Update behavior on X2X bus of the BC improved

- DNA support (Dynamic Node Allocation)
- faster updating of modules with big FW files on the X2X bus of the BC
- new objects: 20A3h and 2000h/9
- support for Simulation device added

1.3.3.348.2 Hardware

ID# 400052241 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Correction of X67BCOnboard Compatible Code

ID#238900 : new function since 1.0.1.0

Extensions

- Support of DNA
- Simulation device in .hwc added

1.3.3.349 X67BC8331

1.3.3.349.1 Firmware

ID#246690 : solved problem, known since unbekannt, solved since 1.2.0.0

DNA support; Update behavior on X2X bus of the BC improved

- DNA support (Dynamic Node Allocation)
- faster updating of modules with big FW files on the X2X bus of the BC
- new objects: 20A3h and 2000h/9
- support for Simulation device added

1.3.3.349.2 Hardware

ID#209765 : new function since 1.0.3.0

Extensions and Bugfixes

- New ASICS will be set to 3mA output current (A&P 182905)
- Optimization of SDO communication (unnecessary acknowledges removed)
- Support of commands ReadMultipleParameter / WriteMultipleParameter
- NodeID assignment by digital inputs supported (NodeID 241 and 242)
- Minor corrections certification
- ASnd frames with unknown ServiceID could disturb the BC (only possible with 3rd party MN)
- Access to not existing objects in OD could cause firmware crash
- When running X2X cycle times <200 us the X2X Bus was not working correctly (A&P 190630)
- When in state PREOP_2 no SoC is received for 10sec the BC will fall back in PREOP_1

1.3.3.350 X67BC8513.L12

1.3.3.350.1 Hardware

ID#228415 : new function planned for 1.2.1.0

Support X67BC8513.L12

Support X67BC8513.L12, first version

1.3.3.351 X67BCJ321

1.3.3.351.1 Hardware

ID#233020 : new function since 1.0.0.2

Support for latch function added

1.3.3.352 X67DC1198

1.3.3.352.1 General

ID#237195 : new function planned for 1.0.3.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

1.3.3.352.2 Hardware

ID#400055350 : solved problem, known since 1.0.3.1, solved since 1.0.3.1

Enhancement length check of I/O block size during Build

ID#197310 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

Comparator problem corrected. ATTENTION :: incompatibility at window margin

New FW V11 : comparator problem corrected.

ID#163715 : solved problem, known since 1.0.0.0, solved since 1.0.1.0

New Firmware V9

ID#177490 : new function since 1.0.1.0

Enhancement SSI encoder configuration and position latch, correction internal communication

Enhancement monoflop check SSI encoder configuration and position latch with pos./neg. edge, correction internal communication

1.3.3.353 X67DC2322**1.3.3.353.1 unbekannt**

ID#400050103 : known problem since unbekannt, correction planned for 1.0.1.0

Under certain conditions the resolver channel 2 doesn't work after restart

1.3.3.354 X67DI1371.L08**1.3.3.354.1 Hardware**

ID#220580 : new function since 1.0.0.1

New HW-variant to inhibit downgrades

1.3.3.355 X67DI1371.L12**1.3.3.355.1 Hardware**

ID#220570 : new function since 1.0.0.1

New HW-variant to inhibit downgrades

1.3.3.356 X67DM1321**1.3.3.356.1 Hardware**

ID#232835 : new function since 1.0.1.0

Support for latch function added

ID#216150 : new function since 1.0.1.0

Support of asynchronous module status data points

1.3.3.357 X67DM1321.L08

1.3.3.357.1 Hardware

ID#400048373 : solved problem, known since 1.1.0.0, solved since 1.1.0.0

Correction of X67BCOnboard Compatible Codes to X67BCOnboardL08

ID#232855 : new function since 1.0.2.1

Support for latch function added

ID#216155 : new function since 1.0.2.0

Support of asynchronous module status data points

1.3.3.357.2 Hardware FW

ID#400012892 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Correction of communication–IRQ–function to prevent interrupt intersections

New FW V898 : Correction of communication–IRQ–function to prevent interrupt intersections

1.3.3.358 X67DM1321.L12

1.3.3.358.1 Hardware

ID#242860 : solved problem, known since 1.1.1.0, solved since 1.1.1.0

Correction of X67BCOnboard Compatible Code

The new Compatible Code "X67BCOnboardL12" caused some problems in combination with the X67BC8321.L12

ID#239470 : solved problem, known since 1.1.0.0, solved since 1.1.0.0

Correction of X67BCOnboard Compatible Codes to X67BCOnboardL12

ID#231235 : solved problem, known since 1.0.3.1, solved since 1.0.3.1

Problem with CanIO CPU in FieldbusDESIGNER corrected

ID#209550 : solved problem, known since 1.0.2.0, solved since 1.0.2.0

CompatibleCode added

ID#232865 : new function since 1.0.3.2

Support for latch function added

ID#216160 : new function since 1.0.2.0

Support of asynchronous module status data points

1.3.3.358.2 Hardware FW

ID#194545 : solved problem, known since 1.0.1.0, solved since 1.0.1.0

Correction of communication–IRQ–function to prevent interrupt intersections

New FW V898 : Correction of communication–IRQ–function to prevent interrupt intersections

1.3.3.359 X67DM9321**1.3.3.359.1 Hardware**

ID#231255 : solved problem, known since 1.0.1.1, solved since 1.0.1.1

Problem with CanIO CPU in FieldbusDESIGNER corrected

ID#232880 : new function since 1.0.1.2

Support for latch function added

ID#216165 : new function since 1.0.1.0

Support of asynchronous module status data points

1.3.3.360 X67DM9321.L12**1.3.3.360.1 Hardware**

ID#231250 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

Problem with CanIO CPU in FieldbusDESIGNER corrected

ID#232885 : new function since 1.0.0.2

Support for latch function added

1.3.3.361 X67DM9331.L12**1.3.3.361.1 Hardware**

ID#231230 : solved problem, known since 1.0.0.1, solved since 1.0.0.1

Problem with CanIO CPU in FieldbusDESIGNER corrected

1.3.3.362 X67DV1311.L08**1.3.3.362.1 Hardware**

ID#216190 : new function since 1.0.1.0

Support of asynchronous module status data points

1.3.3.363 X67MM2436**1.3.3.363.1 Hardware**

ID#400069673 : known problem since unbekannt, correction planned for 1.0.1.0

X67MM2436 on CANIO Controller leads to malfunction of subsequent modules –> Repair by means of correction of erroneous HWC–entry

ID#177375 : known problem since V2.6.0.0012 SP02, correction planned for 1.0.0.1

HWC file has to be better documented

4–Quadrant–Mode was implemented

1.3.3.364 X67SC4122.L12

1.3.3.364.1 Firmware

ID#235610 : solved problem, known since 1.3.1.0, solved since 1.3.1.95

Safety Release 1.4

- Module can be used with Safety Release 1.4
- X2X diagnostics data points (AR 3.08 required)

ID#213650 : new function since 1.3.1.0

first official release

first official release

1.3.3.364.2 Hardware

ID#261780 : known problem since 1.40, correction planned for 1.4.0.3

Increase of minimum load to 12mA

The minimum load was increased to 12mA in the documentationErhöhung der Mindestlast auf 12mA

1.3.3.365 X67SM2436

1.3.3.365.1 Hardware

ID#256440 : known problem since unbekannt, correction planned for 1.1.1.2

Modul informations were not longer shown

Modul informations weren't shown for Automation Runtime versiones > AR A3.08. This has been corrected.

ID#255900 : known problem since unbekannt, correction planned for 1.1.1.1

Customer-specific expansion of hardware description file

This upgrade has no impact on the Automation Studio and the standard version of the FieldbusDESIGNER

ID#400043902 : known problem since unbekannt, correction planned for 1.1.1.0

X67SM2436 changes without problems in the "Switched On" state

ID#400013731 : known problem since unbekannt, correction planned for 1.0.0.2

From the revision 1.0.0.2 the Functionmodel Ramp works on SGC

1.3.3.366 X67SM4320

1.3.3.366.1 Hardware

ID#164490 : new function planned for 1.0.1.0

Firmware for the module added

ID# 400057799 : known problem since unbekannt, correction planned for 1.0.5.0

X67SM4320 works on SGC-CPU

ID#194030 : known problem since unbekannt, correction planned for 1.0.4.0

Correction: Reference on stall works also with HW Rev >= B5 of X67SM4320

1.3.3.367 X67UM4389

1.3.3.367.1

ID#400015012 : known problem since unbekannt, correction planned for 1.0.1.0

Correction of the Power-Up procedure

1.3.3.368 X67UM6342

1.3.3.368.1 unbekannt

ID#263095 : known problem since nicht relevant, correction planned for 1.2.0.0

implementation of do readback