

6.4 Error codes HMI

These error codes are presented in a dialogue box with the text *A general HMI fault has occurred.*

| Error code | Description | Action |
|------------|---|---|
| 52001 | A necessary input for a function block is missing. | Check the input parameters that are necessary to the function block. |
| 52002 | A value for an input parameter is outside allowed range. The number of the line is higher than number of lines. | Make sure that the number of the line does not exceed the number of lines. |
| 52003 | The CSV file that was treated is no longer open. Either it has not been opened or it has been closed automatically during an alarm. | Open the CSV file again. |
| 65535 | The called function block is busy. | Call the function block until the value is not equal to 65535. |
| 52101 | The number of commands (constants) and the number of command name (strings) in the file commandlist.h are not equal. | For each command constant (enum COMMANDS) there must be a specific command name (cmd_typ Command[]). |
| 52102 | An unknown command has been encountered in the program file (.csv file). The command does not exist. | This fault can occur when a program has been created on an external PC. |
| 52103 | A necessary input for a function block is missing. | Check the input parameters that are necessary to the function block. |
| 52104 | A value for an input parameter is outside allowed range. The number of the line is higher than number of lines. | Make sure that the number of the line does not exceed the number of lines. |
| 52105 | The CSV file that was treated is no longer open. Either it has not been opened or it has been closed automatically during an alarm. | Open the CSV file again. |
| 52106 | | |
| 52107 | The requested line in the program is empty. | Create program without empty lines or search for another line. |
| 52108 | | |
| 52109 | | |
| 52110 | | |
| 52111 | | |
| 52112 | | |
| 52113 | | |
| 52114 | | |
| 52115 | | |
| 52116 | The stated variable name can not be found in the structure for the analogue or digital variables. | This fault can only occur when a program is created on an external PC or if the variable name in a structure has been changed. Select a variable from the available structures. |
| 52117 | Called subroutine is empty/does not exist. | |
| 52118 | | |
| 52119 | | |
| 52120 | | |
| 52121 | | |
| 52122 | | |
| 52123 | | |
| 52124 | | |
| 52125 | | |
| 52126 | | |
| 52127 | | |
| 52128 | | |
| 52129 | Called subroutine is not available in the program. | Create a subroutine with the stated name. |
| 52130 | Called jump has no label/receiving line. | Create a label/receiving line with the stated name. |
| 52131 | The new program is not compatible with active run program. Program lines and/or commands has been changed. | It is only allowed to change values for commands. Not type of command. |

| | | |
|-------|---|--|
| 52132 | A value has been changed more than allowed. | Certain values, e.g. positions, has a limited range in which they can be changed. |
| 65535 | The called function block is busy. | Call the function block until the value is not equal to 65535. |
| 52300 | A necessary input for a function block is missing. | Check the input parameters that are necessary to the function block. |
| 52301 | The node number for the module was not found in the I/O configuration file. | State the node number for each module in the CSV file. |
| 52302 | | |
| 52303 | | |
| 52304 | The stated module type in the I/O configuration has too many characters. | Check the spelling or select a selectable module type. |
| 52305 | The stated module type in the I/O configuration is not known or it is wrongly spelt. | Check the spelling or select a selectable module type. |
| 52306 | An error occurred during memory allocation. | |
| 52307 | The stated variable name in the I/O configuration does not exist or is wrongly spelt. | This error can only arise when an I/O configuration has been created on an external PC or if the structure has been changed. Select a variable from the available digital and analogue structures. |
| 52308 | The stated node number in the I/O configuration is higher than 63 (the highest node number for a CAN node). | Choose a node number between 1 and 63. |
| 52309 | No node configured in the I/O configuration. | |
| 52310 | No modules configured on the I/O configuration page. | |
| 52311 | | |
| 52312 | Updating time for inputs/outputs is higher than the error time. | The error time must be higher than the update time. |
| 52313 | | |
| 52314 | | |
| 52315 | | |
| 52316 | | |
| 52317 | The CAN bus communication was stopped due to a communication error. | Check the cables, plugs and connections of the CAN bus. |
| 52318 | | |
| 65535 | The called function block is busy. | Call the function block until the value is not equal to 65535. |

6.5 Error codes Servo

When a servo gives alarm the error code can be read on the alarm page of the handheld controller.

- 1: Invalid parameter ID
- 2: Data block for upload is not available
- 3: Write access for a read-only parameter
- 4: Read access for a write-only parameter
- 8: Data block read access already initialized
- 9: Data block write access already initialized
- 10: Data block read access not initialized
- 11: Data block write access not initialized
- 16: The data segment is already the last when reading the data block
- 17: The data segment is already the last when writing the data block
- 18: The data segment is not yet the last when reading the data block
- 19: The data segment is not yet the last when writing the data block
- 21: Checksum after data block write is invalid
- 23: Parameter ID in data block is invalid (data block write)
- 25: Burn system module only allowed immediately after download
- 27: Operating system not able to be started (operating system is not on the FPROM)
- 40: Value of parameter higher than maximum value
- 41: Value of parameter higher than maximum value
- 42: Value of parameter higher than maximum value
- 52: Value of parameter lower than minimum value
- 53: Value of parameter lower than minimum value
- 54: Value of parameter lower than minimum value
- 64: Hardware ID in B&R module is invalid (data block write)
- 65: Hardware version in B&R module is invalid (data block write)
- 66: The operating system on the drive is incompatible to the existing network
- 67: Necessary parameter is missing or is invalid
- 1001: Error-FIFO overflow
- 1002: Parameter outside the valid range
- 1003: Parameter cannot be written while loop control is active
- 1004: Timeout in network life sign monitor
- 1005: Parameter cannot be written while a movement is active
- 1006: Invalid parameter for trigger event (digital input + edge)
- 1007: Master for network coupling deactivated - one master is already sending
- 1008: Master for network coupling deactivated - Encoder error
- 1009: Error during memory allocation
- 1011: Quickstop input active
- 1012: Breakdown of cyclic network communication
- 1013: Station is not available for network communication
- 1016: Maximum cycle time exceeded - CPU load too high
- 1017: Invalid parameter ID for cyclic read access
- 1018: Invalid parameter ID for cyclic write access
- 1021: Parameter cannot be written: Function block active
- 2001: Upload of trace data not allowed: Recording active
- 2003: Trace start not allowed: Recording active
- 2004: Trace start not allowed: No trace test data defined
- 2006: Initialization of trace parameters not allowed: Recording active
- 4005: Controller cannot be switched on: Drive in error state
- 4007: Lag error stop limit exceeded
- 4008: Positive limit switch reached
- 4009: Negative limit switch reached

4010: Controller cannot be switched on: Both limit switches are closed
4011: Controller cannot be switched off: Movement active
4012: Controller cannot be switched on: Init parameters missing or not valid
4014: Two encoder control: Stop limit of positions difference exceeded
5001: Target position exceeds positive SW limit
5002: Target position exceeds negative SW limit
5003: Positive SW limit reached
5004: Negative SW limit reached
5005: Start of movement not possible: Position controller inactive
5006: Start of movement not possible: Axis not referenced
5010: Move in pos. direction not possible: Pos. limit switch is closed
5011: Move in neg. direction not possible: Neg. limit switch is closed
5012: Start of movement not possible: Stop ramp active
5013: Cyclic set value mode cannot be switched on: Movement active
5015: Start of movement not possible: Homing procedure active
5016: Parameter cannot be written: Homing procedure active
5017: Homing procedure mode not possible: Position controller inactive
5018: Homing procedure not possible: Movement active
5019: Homing parameter outside the valid range
5020: Homing procedure not possible: Both limit switches are closed
5021: Limit switch closed: No direction change for this homing mode
5022: Second limit switch signal received: Reference switch not found
5023: Incorrect limit switch signal received for current movement direction
5024: Cyclic set value mode aborted: Set positions missing
5025: Homing offset with counting range correction cannot be set
5026: Basis movement parameters (with override) exceed speed limit value
5027: Basis movement parameters (with override) exceed acceleration limit value
5028: Current movement is not a basis movement
5029: Trigger ignored - remaining distance exceeds SW limit
5030: Homing procedure mode not possible: Position controller active
5031: Homing procedure mode not possible: Cyclic set values mode is off
5032: Acceleration too low - braking distance exceeds positive SW limit
5033: Acceleration too low - braking distance exceeds negative SW limit
5034: Homing procedure not possible: Encoder error
5035: Reference marks not detected
5036: Acceleration stop limit exceeded
5101: Cam profile compensation gears: Limit values exceeded
5102: Too many changes of cam profile per cycle (master period too short)
5103: Slave trigger FIFO full
5104: Slave trigger FIFO empty
5105: Master trigger FIFO full
5106: Master trigger FIFO empty
5107: Cam coupling cannot be started: Parameter outside the valid range
5108: Master compensation trigger FIFO full
5109: Master compensation trigger FIFO empty
5110: Cam coupling aborted: Cyclic set positions missing
5111: Cam coupling aborted: Encoder error
5112: Command not allowed: Cam profile coupling not active
5113: Command not allowed: Controller is already active
5114: Parameter cannot be written: Cam coupling active
5115: Restart command not possible: The cam automat is not active
5201: Parameter cannot be written: Drumsequencer active
5202: Drumsequencer: Switch positions not in ascending order

5300: Data block for upload is not available
5302: Parameter cannot be written: Cam automat active
5303: Cam profile data not available at index
5304: Format error in cam profile data
5311: Cam automat: Event leads to non initialized state
5315: Download error: Cam profile data in use by cam automat or function block
5316: Event type ncST_END+ncNEGATIVE is not possible for entry in compensation gears
5317: Start of cam automat leads to non initialized state
5318: Relative distance of master axis higher than cam profile period
5319: Cam profile data not allowed for state 0
5329: No valid cam profile data or state deactivated
6000: Master sampling time is not a multiple of position controller sampling time
6001: Sync controller: Timeout for sync telegram occurred
6002: Sync controller: Error tolerance of system time difference exceeded
6008: Controller is already active
6011: Controller is not in speed mode
6014: Drive initialization active
6015: CAN controller: CAN bus disturbance (receive error counter greater 96)
6016: CAN controller: CAN bus disturbance (transmit error counter greater 96)
6017: Software: Watchdog active
6018: Hardware: 15V power supply fail
6019: ACOPOS: Overcurrent
6020: Hardware: 24V power supply fail
6021: Low level at controller enable input
6022: Current controller: Permissible current offset values exceeded
6023: Voltage sag at controller enable input
6024: Current was latched before conversion (OpSys error in ABLS)
6025: Temperature was latched before conversion (OpSys error in ABLS)
6026: Holding brake: Stator current limit exceeded during release
6027: Holding brake: Manual operation not permitted
6028: Holding brake: Undervoltage/-current (wire breakage, check 24V supply)
6029: Holding brake: Voltage- or current failure (wire breakage, check 24V supply)
6030: Holding brake: Brake output is active, but no brake entered in motor data
6031: System module already deleted
6032: Interface: FPGA configuration error
6033: Type of servo amplifier is not supported by ACOPOS-firmware
6034: Cyclic set value mode aborted: Set speeds missing
6036: Motor parameters missing or invalid
6038: Torque limit higher than peak motor torque
6040: Operating system version is less than allowed minimum version
6041: Operating system version is greater than allowed maximum version
6042: Operating system version is not in the allowed range
6043: PHASING_MODE is not valid
6044: Wiring: Unequal rotational direction motor - encoder (change two motor phases)
6045: Wiring: At least one motor phase is disconnected
6046: Phasing: No rotor movement
7012: Encoder: Hiperface error bit
7013: Encoder: Status message
7014: Encoder: CRC error during parameter transfer
7015: Encoder: Timeout error during parameter transfer
7016: Encoder: Busy error during parameter transfer
7017: Encoder: Error while reading encoder parameter
7020: OEM data: Data write error

7021: Encoder: Timeout error while reading absolute position
7022: Encoder: Initialization is active
7023: Encoder: Parameter transfer is active
7029: Encoder: Incremental signal amplitude too small
7030: Encoder: Incremental signal amplitude too large
7031: Encoder: Incremental signal amplitude too large (Disturbance)
7032: Encoder: Incremental signal amplitude too small (Disturbance, no connection)
7036: Encoder: Interface ID invalid (Check slot and Interface EEPROM data)
7038: Encoder: Position value not synchronous with absolute value
7039: Incremental encoder: Cable disturbance track A
7040: Incremental encoder: Cable disturbance track B
7041: Incremental encoder: Cable disturbance track R
7042: Incremental encoder: Edge distance of quadrature signal too small
7043: Encoder: Cable disturbance track D
7044: Encoder: Parity
7045: Resolver: Signal disturbance (plausibility check)
7046: Resolver: Cable disturbance
7047: Invalid distance of reference marks
7048: Error during the reading of encoder memory
7100: Parameter function not supported. (Module ?)
7200: DC bus: Overvoltage
7210: DC bus: Voltage unstable
7211: DC bus: Voltage drop - check the power line
7212: DC bus: Voltage drop - Emergency-Stop interrupted
7214: DC bus: Charging resistor hot (too many power line fails)
7215: DC bus: At least one phase of the power line failed
7217: DC bus: Voltage too high - Check power supply
7218: DC bus: Voltage too low - Nominal voltage detection not possible
7219: DC bus: Voltage too low - Check power supply
7220: Nominal voltage detection: Voltage not allowed
7300: Digital IO: IO Configuration invalid
7401: Parameter position exceeds maximum data length
7402: Processing of parameter sequence aborted: Write error
7403: Processing of parameter sequence is still active
7404: Parameter sequence not available at index
8001: EEPROM select not valid
8003: Table index not valid
8004: EEPROM variable type not valid
8005: EEPROM type not valid
8006: Value of EEPROM parameter is zero
8007: Value of EEPROM parameter is not valid
8020: Invalid switch frequency <param name="Name" value="
9000: Heatsink temperature sensor: Overtemperature -> <param name="Name" value="
9001: Heatsink temperature sensor: Overtemperature ->
9002: Heatsink temperature sensor: Not connected or destroyed
9003: Heatsink temperature sensor: Not connected or destroyed
9010: Motor temperature sensor: Overtemperature -> <param name="Name" value="
9011: Motor temperature sensor: Overtemperature ->
9012: Motor temperature sensor: Not connected or destroyed
9013: Motor temperature sensor: Short circuit <param name="Name" value="
9030: Junction temperature model: Overtemperature -> <param name="Name" value="
9031: Junction temperature model: Overtemperature -> <param name="Name" value="
9040: Bleeder temperature model: Overtemperature -> <param name="Name" value="

9041: Bleeder temperature model: Overtemperature -> <param name="Name" value=""
9050: ACOPOS peak current: Overload -> <param name="Name" value=""
9051: ACOPOS peak current: Overload -> <param name="Name" value=""
9060: ACOPOS continuous current: Overload -> <param name="Name" value=""
9061: ACOPOS continuous current: Overload -> <param name="Name" value=""
9070: Motor temperature model: Overload -> <param name="Name" value=""
9071: Motor temperature model: Overload -> <param name="Name" value=""
9075: ACOPOS continuous power: Overload -> <param name="Name" value=""
9076: ACOPOS continuous power: Overload ->
9300: Current controller: Overcurrent
32001: Error calling CAN_xopen()
32002: Error defining Write COB for Broadcast Command
32003: Error defining Write COB for Parameter Read Request
32004: Error defining Write COB for Parameter Write Request
32005: Error defining Read COB for Parameter Read Response
32006: Error defining Read COB for Parameter Write Response
32007: Error defining Read COB for Monitor Data from the drive
32008: Error sending Read Request (network error ?)
32009: Error sending Write Request (network error ?)
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 ?)
32012: Error reading module description of system module
32013: No operating system present on the drive
32014: Operating system version on the drive not compatible with NC manager version
32015: Error creating message queue
32016: Error sending an idle time command to the NC Manager Task
32017: Wrong boot state after start of operating system
32018: Invalid Parameter ID in system module
32019: Download of NC system module not allowed (the module is on the PLC)
32020: System module data could not be read from the drive during NC manager INIT
32021: System module data could not be read from the drive after download
32022: Error aborting data block access before download
32023: Error reading boot state before download
32025: Wrong boot state after SW Reset before download
32026: Error during INIT of data block write access for download
32027: Error sending data segment for download
32029: Response error after sending data segment for download
32030: Error at command for system module burn after download
32031: Error reading status for system module burn after download
32032: Error while burning system module after download
32033: Timeout while burning system module after download
32034: Error at SW Reset before download
32035: Error at SW Reset after download
32036: Different system module data after download
32037: Error message(s) lost because of FIFO overflow (acknowledge errors)
32038: Error searching for INIT parameter module
32039: Error reading INIT parameter module
32040: Version of INIT parameter module is not compatible to NC manager
32041: The module acp10cfg does not exist
32042: The module acp10cfg is not an NC data module
32043: The NC module type of the module acp10cfg is invalid
32044: The NC module type of the module acp10cfg cannot be read
32045: The data address in module acp10cfg cannot be read

32046: The data section of module acp10cfg is empty
32047: A CAN node number in module acp10cfg is invalid
32048: A CAN node number in module acp10cfg is used repeatedly
32049: Trace is already active at trace start
32050: A Trace Data Upload is already active
32051: Invalid Trace Status for Trace Data Upload
32052: Error using ev_send() for Trace Data Upload
32053: Error defining Write COB for Parameter Read Request 2
32054: Error defining Write COB for Parameter Write Request 2
32055: Error defining Read COB for Parameter Read Response 2
32056: Error defining Read COB for Parameter Write Response 2
32057: Error accessing HS task class table
32058: Error accessing task class table
32059: Parameter tk_no invalid for access to task class table
32060: Timeout for cyclic data from drive - Indications invalid (network error ?)
32061: Timeout sending a Read Request telegram (network error ?)
32062: Timeout sending a Write Request telegram (network error ?)
32063: Data address zero (set/read parameter via service interface)
32064: Parameter with that type cannot be set with option ncDATA_TEXT
32065: Parameter with that type cannot be read with option ncDATA_TEXT
32066: Parameter ID zero (set/read parameter via service interface)
32067: Parameter ID invalid (set/read parameter with option ncDATA_TEXT)
32069: The data address of the ACOPOS parameters in module acp10cfg cannot be read
32070: Drive for ACOPOS parameters in module acp10cfg not found
32071: The ACOPOS parameters are invalid (an update of AutomationStudio is necessary)
32072: Wrong boot state after SW Reset
32073: Download of NC system module: Error reading NC hardware version of BsLoader
32074: Incompatible NC hardware version: Download of BsLoader not possible
32075: Incompatible NC hardware version: Download of operating system not possible
32076: FIFO for messages with high priority to NC Manager Task is full
32077: A Powerlink node number in module acp10cfg is invalid
32078: A Powerlink node number in module acp10cfg is used repeatedly
32079: With this version one CAN interface must be in module acp10cfg
32080: With this version one Powerlink interface must be in module acp10cfg
32081: With this version only one Powerlink interface is allowed in module acp10cfg
32082: Module acp10cfg contains a CAN interface without any drive node
32083: Module acp10cfg contains a Powerlink interface without any drive node
32084: No drive node defined in module acp10cfg
32085: Module acp10cfg invalid (AutomationStudio V2.2 or higher necessary)
32086: With this version no CAN interface is allowed in module acp10cfg
32087: With this version no Powerlink interface is allowed in module acp10cfg
32088: The INIT parameter module specified in the deployment module does not exist
32089: NC-HW-ID of INIT parameter module is not compatible to NC manager
32090: NC object type of INIT parameter module is not equal to NC object
32091: Invalid block data in INIT parameter module (data range exceeded)
32092: Error sending a command to the NC Idle Task
32093: NcManCtrl is defined repeatedly with different values
32094: NetworkInit is defined repeatedly for ncMANAGER with different values
32095: Value of drive group in CAN-CFG-Module higher than maximum value
32096: Size of data buffer for trace data upload in module acp10cfg too small
32097: All counts of used network interfaces in module acp10cfg are zero
32098: Version of the module acp10cfg is not compatible with NC-manager
32099: Length of data section of module acp10cfg is too small

32100: Memory for NC error text management cannot be allocated
32101: Error accessing NC error text module in B&R module table
32102: Version ID of error text module not equal to that of NC manager
32103: Data section of error text module cannot be read
32104: Data section of error text module is empty
32105: Length of data section of error text module is too small
32106: Error list of error text module not equal with that of NC manager
32107: Parameter list of error text module not equal with that of NC manager
32108: The last error number of error text module is not equal to 65535
32109: The last parameter ID of error text module is not equal to 65535
32110: Length of data section of CAN-CFG-Module cannot be read
32111: Length of data section of CAN-CFG-Module is too small
32112: The data address in the CAN-CFG-Module cannot be read
32113: The enable code in the CAN-CFG-Module is invalid
32114: Values not equal to zero in reserved area of CAN-CFG-Module
32115: The basis CAN ID for WR/RD channel1 in the CAN-CFG-Module is invalid
32116: The basis CAN ID for WR/RD channel2 in the CAN-CFG-Module is invalid
32117: The basis CAN ID for WR/RD channel3 in the CAN-CFG-Module is invalid
32118: The basis CAN ID for monitor data in the CAN-CFG-Module is invalid
32119: Invalid basis CAN ID for cyclic data to the drive in CAN-CFG-Module
32120: Invalid basis CAN ID for cyclic data from the drive in CAN-CFG-Module
32121: The CAN ID for the SYNC telegram in the CAN-CFG-Module is invalid
32122: The CAN ID for the broadcast command in the CAN-CFG-Module is invalid
32123: Error defining Read COB for WR2 Request (external set position mode)
32124: Error defining Read COB for WR2 Response (external set position mode)
32125: Error defining Read COB for RD2 Request (external set position mode)
32126: Error defining Read COB for RD2 Response (external set position mode)
32127: Error deleting Write COB for Broadcast Command (external set position mode)
32128: Error defining Read COB for Broadcast Command (external set position mode)
32129: Error defining Read COB for cyclic user data from drive (ext. set pos. mode)
32130: This external set position mode is only allowed with one CAN interface
32131: The specified NC data module does not exist
32132: The specified module is not an NC data module
32133: The NC module type of the specified NC data module is invalid
32134: The NC module type of the specified NC data module cannot be read
32135: The data address of the specified NC data module cannot be read
32136: The Data section of the specified NC data module is empty
32137: Data address of structure for a data block operation is zero
32138: Data address zero (user data for data block operation)
32139: Data length zero (user data for data block operation)
32140: Data block operation: Data module name or data address must be zero
32141: Invalid data format in a parameter sequence
32142: ID or type of a parameter invalid in parameter sequence with text format
32143: Data of a parameter in a parameter sequence longer than 4 bytes
32144: Error for the ACOPOS parameter module specified in the deployment module
32145: The ACOPOS parameter module does not exist
32146: The ACOPOS parameter module is not an NC data module
32147: The NC module type of the ACOPOS parameter module is invalid
32148: The NC module type of the ACOPOS parameter module cannot be read
32149: The data address in ACOPOS parameter module cannot be read
32150: The data section of ACOPOS parameter module is empty
32151: Error initializing memory buffer for XML parser
32152: No XML elements present in ACOPOS parameter data

32153: The name of the first XML element is invalid in ACOPOS parameter data
32154: The data does not contain any ACOPOS parameters
32155: Nesting depth for ACOPOS parameter groups exceeded
32156: ID or type of an ACOPOS parameter invalid for text conversion
32157: Length of parameter data too large for ACOPOS parameter in XML data
32158: ACOPOS parameter: An attribute is not defined (ID)
32159: ACOPOS parameter: An attribute is not defined (Value)
32160: Basis movements with mode ncTRG_STOP are not allowed for ncV_AXIS
32161: ncNC_SYS_RESTART,ncACKNOWLEDGE is not allowed network.init=ncFALSE)
32162: Internal task class number wrong (from now on operation is blocked !!!)
32163: A system module download to all drives is not possible with SwNodeSelect
32164: The text defined with NetworkInit (global) is invalid
32165: A CAN node number is equivalent to HW node number
32166: Network initialization during active network initialization not allowed
32167: The text defined with NetworkInit is invalid
32168: NodeNr_SwNodeSelect is defined repeatedly with different values
32169: The node number defined with NodeNr_SwNodeSelect is invalid
32170: A data module name has to be entered for this data block operation
32171: Index zero is not allowed (user data for data block operation)
32179: ID or type of a parameter invalid in parameter list with text format
32180: Data address of structure for a parameter list operation is zero
32181: Data address zero (user data for parameter list operation)
32182: Data length zero (user data for parameter list operation)
32183: Data length invalid (user data for parameter list operation)
32184: Invalid data format in a parameter list
32185: Data of a parameter in a parameter list longer than 6 bytes
32186: NetBasisInitNr is defined repeatedly for ncMANAGER with different values
32187: Error for synchronization of network initialization (details in Log Book)
32188: This NC object is defined in hardware configuration and NC Deployment Table
32189: Timeout for cyclic data from drive - Indications invalid (network error ?)
32190: Error defining Write COB for selection of node number via software
32191: This parameter ID is reserved for the PLCopen MC library
32195: Error downloading BsLoader to ACOPOS
32196: Error downloading operating system to ACOPOS
32197: Error downloading BsLoader to ACOPOS (additional info in Log Book)
32198: Error downloading operating system to ACOPOS (additional info in Log Book)
32200: Error calling plAcycWrite() (read parameter)
32201: Error calling plAcycWrite() (write parameter)
32202: Error calling plAcycRead() (read parameter)
32203: Error calling plAcycRead() (write parameter)
32204: Timeout while reading par. via acyclic channel (is the drive in the network ?)
32205: Timeout while writing par. via acyclic channel (is the drive in the network ?)
32206: Cyclic channel: Read Request in spite of Wait for Response
32207: Cyclic channel: Write Request in spite of Wait for Response
32208: Error using plACTION_DEVICE_TO_BUS_NR (additional info in Log Book)
32209: Error using plACTION_GET_IDENT (additional info in Log Book)
32210: Wrong interface ident when calling plState() (additional info in Log Book)
32211: Interface not available when calling plState() (additional info in Log Book)
32212: Fatal interface error when calling plState() (additional info in Log Book)
32213: Timeout for Powerlink interface (additional info in Log Book)
32214: Error calling plAcycOpen() (additional info in Log Book)
32215: Error calling plICECreate() (additional info in Log Book)
32216: Error using plACTION_GET_IF_PARAMETERS (additional info in Log Book)

32217: Broadcast channel: Error calling plAcycWrite() (read parameter)
32218: Broadcast channel: Error calling plAcycWrite() (write parameter)
32219: Error using pIACTION_GET_IF_MUXPRESCALE (additional info in Log Book)
32220: Error using pIACTION_GET_IF_CYCLE_TIME (additional info in Log Book)
32221: Error using pIACTION_GET_IF_PRESCALE (additional info in Log Book)
32222: Error using pIACTION_GET_STATIONFLAG (additional info in Log Book)
32250: NcNetCyc: The relationship of cycle times is not integral (see logbook)
32251: NcNetCyc: Response timeout
32252: NcNetCyc: Unexpected Response (invalid counter value)
32500: The Message FIFO already exists
32501: Error creating Message FIFO
32502: The Critical Section for Command Semaphore already exists
32503: Error creating Critical Section for Command Semaphore
32504: The NC Manager Idle Task already exists
32505: Error creating NC Manager Idle Task
32506: Error reading Taskclass Cycle Time
32507: Error reading Taskclass Tolerance
32508: Error sending an idle time command to the NC Manager Task
32509: The Critical Section for Network Command Trace already exists
32510: Error creating Critical Section for Network Command Trace
33000: Master cycle time is not a multiple of communication cycle time
36001: Parameter limited to valid range
36002: Total time for the position loop controller limited to prediction time
37101: Calculated compensation distance on slave axis limited to maximum
37102: Calculated compensation distance on slave axis limited to minimum
37103: Slave trigger outside of window
37104: Slave trigger missing
37105: Master compensation trigger outside of window
37107: Displacement actual/set position too high during 'controller switch on'
37108: Calculated compensation distance of master axis limited to minimum
37109: Master trigger outside of window
37110: Master position at start higher than first trigger position
37111: Cam profile data: Difference between polynomial value $y(x_n)$ and slave period
37112: Polynomial within cam profile data exceeds limit value
38000: Current controller: Motor speed at compensation of current offset too high
38001: Torque limit is additionally limited by peak ACOPOS current
39001: Encoder: Position correction active
39002: Resolver: Speed limit for 14 bit resolution exceeded
39003: EnDat encoder: Alarm bit is set
39004: EnDat encoder: Alarm bit - Lighting failure
39005: EnDat encoder: Alarm bit - Signal amplitude too small
39006: EnDat encoder: Alarm bit - Position value contains an error
39007: EnDat encoder: Alarm bit - Overvoltage
39008: EnDat encoder: Alarm bit - Undervoltage
39009: EnDat encoder: Alarm bit - Overcurrent
39010: EnDat encoder: Alarm bit - Battery change required
39011: EnDat encoder: Warning bit - Frequency too high
39012: EnDat encoder: Warning bit - Temperature too high
39013: EnDat encoder: Warning bit - Lighting reserve reached
39014: EnDat encoder: Warning bit - Battery charge too low
39016: Incremental encoder emulation: Frequency too high
39017: EnDat encoder: CRC error while reading position
39018: Reference pulse monitoring: Faulty position, resolution, or reference pulse

39301: Digital IO: 24V power supply fail
39302: Digital IO 1-4: Diagnose bit active (current, 24V supply)
39303: Digital IO 5-8: Diagnose bit active (current, 24V supply)
39305: Digital IO 10: Diagnose bit active (current, temperature)
39306: Digital IO 9: Diagnose bit active (current, temperature)
41001: Heatsink temperature sensor: Overtemperature
41011: Motor temperature sensor: Overtemperature
41031: Junction temperature model: Overtemperature
41041: Bleeder temperature model: Overtemperature
41051: ACOPoS peak current: Overload
41061: ACOPoS continuous current: Overload
41070: Motor temperature model: Overtemperature
41075: ACOPoS continuous power: Overload
64001: ncalloc in slower task class than defined for NC Manager Task
64002: Delay before SW Reset (network with ascending node numbers ?)
64003: Delay before NC System Start (network with ascending node numbers ?)
64004: The following boot error could be entered here with a delay
64005: Timeout for parameter enable after start of operating system
64006: Drive did not become synchronous with network master
64500: Positive speed limiter active
64501: Negative speed limiter active
64502: Positive direction acceleration torque limiter active
64503: Negative direction acceleration torque limiter active
64504: Positive direction deceleration torque limiter active
64505: Negative direction deceleration torque limiter active
64506: Recovery power limiter active (deceleration too high)
65535: Response error
65501: StepperMotor, InputSupply2
65502: StepperMotor, InputSupply1
65503: StepperMotor, Overcurrent
65504: StepperMotor, OpenLoad, can't detect motor.
65505: StepperMotor, Motor stalled
65506: StepperMotor, Incorrect settings
65507: StepperMotor, Over temperature
65508: StepperMotor, Lag error
65509: StepperMotor, Timeout error

For more information is referred to the manuals and the robot's technical description described below.

- Technical documentation, electric drawing for electric connection.
- ACOPoS. Technical manual.

Manuals can be downloaded from the web site of B&R: www.br-automation.com