


Totally Integrated Automation Portal							
PLC_1 [CPU 1212C AC/DC/Rly]							
PLC_1							
General\Project information							
Name	PLC_1	Author	admin	Comment			
Slot	1	Rack	0				
General\Catalog information							
Short designation	CPU 1212C AC/DC/Rly	Description	Work memory 75 KB; 120/240VAC power supply with DI8 x 24VDC SINK/SOURCE, DQ6 x relay and AI2 on board; 4 high-speed counters (expandable with digital signal board) and 4 pulse outputs on board; signal board expands on-board I/O; up to 3 communication modules for serial communication; up to 2 signal modules for I/O expansion; 0.04 ms/1000 instructions; PROFINET interface for programming, HMI and PLC to PLC communication	Article number	6ES7 212-1BE40-0XB0		
Firmware version	V4.1						
General\Identification & Maintenance							
Plant designation		Location identifier		Installation date	2019-03-26 16:23:17.062		
Additional information							
PROFINET interface [X1]\General							
Name	PROFINET interface_1	Author	admin	Comment			
PROFINET interface [X1]\General\Project information							
Name	DI 8/DQ 6_1	Comment		Name	AI 2_1		
Comment		Name	DQ 4x24VDC_1	Comment			
PROFINET interface [X1]\General\Catalog information							
Short designation	DQ4 signal board (200 kHz)	Description	Signal board DQ4 x 24VDC / 200 kHz; plug-in terminal blocks	Article number	6ES7 222-1BD30-0XB0		
Firmware version	V1.0						
PROFINET interface [X1]\Ethernet addresses\Interface networked with							
Subnet:	PN/IE_1						
PROFINET interface [X1]\Ethernet addresses\IP protocol							
	Set IP address in the project	IP address:	192.168.0.1	Subnet mask:	255.255.255.0		
Use router	False						
PROFINET interface [X1]\Ethernet addresses\PROFINET							
PROFINET device name is set directly at the device	False	Generate PROFINET device name automatically	True	PROFINET device name	plc_1		
Converted name:	plcxb1d0ed	Device number:	0				
PROFINET interface [X1]\Time synchronization							
Enable time synchronization via NTP server	Enable time synchronization via NTP server		IP addresses	Server 1	0.0.0.0		
Server 2	0.0.0.0	Server 3	0.0.0.0	Server 4	0.0.0.0		
Update interval	10sec						
PROFINET interface [X1]\Digital inputs\Channel0							
Channel address	I0.0	Input filters	6.4 millise	Enable pulse catch	0		
PROFINET interface [X1]\Digital inputs\Channel0\							
Enable rising edge detection	0	RidPrefixRisingEdgeEvent	49152	Event name:	0		
Hardware interrupt:	0	Rising edge0	Rising edge0				
PROFINET interface [X1]\Digital inputs\Channel0\							
Enable falling edge detection	0	RidPrefixFallingEdgeEvent	49280	Event name:	0		
Hardware interrupt:	0	Falling edge0	Falling edge0				
PROFINET interface [X1]\Digital inputs\Channel1							
Channel address	I0.1	Input filters	6.4 millise	Enable pulse catch	0		
PROFINET interface [X1]\Digital inputs\Channel1\							
Enable rising edge detection	0	RidPrefixRisingEdgeEvent	49153	Event name:	0		
Hardware interrupt:	0	Rising edge1	Rising edge1				
PROFINET interface [X1]\Digital inputs\Channel1\							
Enable falling edge detection	0	RidPrefixFallingEdgeEvent	49281	Event name:	0		
Hardware interrupt:	0	Falling edge1	Falling edge1				
PROFINET interface [X1]\Digital inputs\Channel2							
Channel address	I0.2	Input filters	6.4 millise	Enable pulse catch	0		
PROFINET interface [X1]\Digital inputs\Channel2\							
Enable rising edge detection	0	RidPrefixRisingEdgeEvent	49154	Event name:	0		
Hardware interrupt:	0	Rising edge2	Rising edge2				
PROFINET interface [X1]\Digital inputs\Channel2\							
Enable falling edge detection	0	RidPrefixFallingEdgeEvent	49282	Event name:	0		
Hardware interrupt:	0	Falling edge2	Falling edge2				
PROFINET interface [X1]\Digital inputs\Channel3							
Channel address	I0.3	Input filters	6.4 millise	Enable pulse catch	0		
PROFINET interface [X1]\Digital inputs\Channel3\							
Enable rising edge detection	0	RidPrefixRisingEdgeEvent	49155	Event name:	0		
Hardware interrupt:	0	Rising edge3	Rising edge3				
PROFINET interface [X1]\Digital inputs\Channel3\							
Enable falling edge detection	0	RidPrefixFallingEdgeEvent	49283	Event name:	0		

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<div>Hardware interrupt: 0</div> <div>Falling edge3</div> <div>Falling edge3</div>						
PROFINET interface [X1]\Digital inputs\Channel4						
Channel address		I0.4	Input filters		6.4 millisec	Enable pulse catch 0
PROFINET interface [X1]\Digital inputs\Channel4\						
Enable rising edge detection		0	RidPrefixRisingEdgeEvent		49156	Event name: 0
Hardware interrupt:		0	Rising edge4		Rising edge4	
PROFINET interface [X1]\Digital inputs\Channel4\						
Enable falling edge detection		0	RidPrefixFallingEdgeEvent		49284	Event name: 0
Hardware interrupt:		0	Falling edge4		Falling edge4	
PROFINET interface [X1]\Digital inputs\Channel5						
Channel address		I0.5	Input filters		6.4 millisec	Enable pulse catch 0
PROFINET interface [X1]\Digital inputs\Channel5\						
Enable rising edge detection		0	RidPrefixRisingEdgeEvent		49157	Event name: 0
Hardware interrupt:		0	Rising edge5		Rising edge5	
PROFINET interface [X1]\Digital inputs\Channel5\						
Enable falling edge detection		0	RidPrefixFallingEdgeEvent		49285	Event name: 0
Hardware interrupt:		0	Falling edge5		Falling edge5	
PROFINET interface [X1]\Digital inputs\Channel6						
Channel address		I0.6	Input filters		6.4 millisec	Enable pulse catch 0
PROFINET interface [X1]\Digital inputs\Channel6\						
Enable rising edge detection		0	RidPrefixRisingEdgeEvent		49158	Event name: 0
Hardware interrupt:		0	Rising edge6		Rising edge6	
PROFINET interface [X1]\Digital inputs\Channel6\						
Enable falling edge detection		0	RidPrefixFallingEdgeEvent		49286	Event name: 0
Hardware interrupt:		0	Falling edge6		Falling edge6	
PROFINET interface [X1]\Digital inputs\Channel7						
Channel address		I0.7	Input filters		6.4 millisec	Enable pulse catch 0
PROFINET interface [X1]\Digital inputs\Channel7\						
Enable rising edge detection		0	RidPrefixRisingEdgeEvent		49159	Event name: 0
Hardware interrupt:		0	Rising edge7		Rising edge7	
PROFINET interface [X1]\Digital inputs\Channel7\						
Enable falling edge detection		0	RidPrefixFallingEdgeEvent		49287	Event name: 0
Hardware interrupt:		0	Falling edge7		Falling edge7	
PROFINET interface [X1]\Analog inputs\Noise reduction						
Integration time		50 Hz (20 ms)				
PROFINET interface [X1]\Analog inputs\Channel0						
Channel address		IW64	Measurement type		Voltage	Voltage range 0..10 V
Smoothing		Weak (4 cycles)				Enable overflow diagnostics 1
PROFINET interface [X1]\Analog inputs\Channel1						
Channel address		IW66	Measurement type		Voltage	Voltage range 0..10 V
Smoothing		Weak (4 cycles)				Enable overflow diagnostics 1
PROFINET interface [X1]\Digital outputs						
Reaction to CPU STOP		Use substitute value	Reaction to CPU STOP		Use substitute value	
PROFINET interface [X1]\Digital outputs\Channel0						
Channel address		Q0.0	Substitute a value of 1 on a change from RUN to STOP.		0	Channel address Q4.0
Substitute a value of 1 on a change from RUN to STOP.		0				
PROFINET interface [X1]\Digital outputs\Channel1						
Channel address		Q0.1	Substitute a value of 1 on a change from RUN to STOP.		0	Channel address Q4.1
Substitute a value of 1 on a change from RUN to STOP.		0				
PROFINET interface [X1]\Digital outputs\Channel2						
Channel address		Q0.2	Substitute a value of 1 on a change from RUN to STOP.		0	Channel address Q4.2
Substitute a value of 1 on a change from RUN to STOP.		0				
PROFINET interface [X1]\Digital outputs\Channel3						
Channel address		Q0.3	Substitute a value of 1 on a change from RUN to STOP.		0	Channel address Q4.3
Substitute a value of 1 on a change from RUN to STOP.		0				
PROFINET interface [X1]\Digital outputs\Channel4						
Channel address		Q0.4	Substitute a value of 1 on a change from RUN to STOP.		0	
PROFINET interface [X1]\Digital outputs\Channel5						
Channel address		Q0.5	Substitute a value of 1 on a change from RUN to STOP.		0	
PROFINET interface [X1]\Operating mode						
IO controller		True	IO system			Device number 0
IO device		False				

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PROFINET interface [X1]\I/O addresses\Input addresses						
Start address	0	End address	0	Organization block	0	
Process image	0					
PROFINET interface [X1]\I/O addresses\Output addresses						
Start address	0	End address	0	Organization block	0	
Process image	0					
PROFINET interface [X1]\Advanced options\Interface options						
Support device replacement without exchangeable medium	True	Permit overwriting of device names of all assigned IO devices	False	Use IEC V2.2 LLDP mode	False	
Send keepalives for connections	30s					
PROFINET interface [X1]\Advanced options\Real time settings\IO communication						
Send clock:	1.000ms					
PROFINET interface [X1]\Advanced options\Real time settings\Real time options						
Calculated bandwidth for cyclic IO data:	0.000ms					
PROFINET interface [X1]\Advanced options\Port [X1 P1]\General						
Name	Port_1	Author	admin	Comment		
PROFINET interface [X1]\Advanced options\Port [X1 P1]\Port interconnection\Local port:						
Local port:	PLC_1\PROFINET interface_1 [X1]\Port_1 [X1 P1]	Medium:	Copper	Cable name:	---	
						
PROFINET interface [X1]\Advanced options\Port [X1 P1]\Port interconnection\Partner port:						
	Monitoring of partner port is not possible	Alternative partners	False	Partner port:	CSM 1277_1\SCALANCE interface [X1]\Port_1 [X1 P1]	
Medium:	Copper	Cable length:				
PROFINET interface [X1]\Advanced options\Port [X1 P1]\Port options\Activate						
Activate this port for use	True					
PROFINET interface [X1]\Advanced options\Port [X1 P1]\Port options\Connection						
Transmission rate / duplex:	Automatic	Monitor	False	Enable autonegotiation	True	
PROFINET interface [X1]\Advanced options\Port [X1 P1]\Port options\Boundaries						
End of detection of accessible devices	False	End of topology discovery	False	End of the sync domain	False	
PROFINET interface [X1]\Advanced options\Port [X1 P1]\Hardware identifier\Hardware identifier						
Hardware identifier	65					
PROFINET interface [X1]\Web server access						
Enable Web server using this interface	False	The Web server must also be activated in the properties of the PLC.				
PROFINET interface [X1]\Hardware identifier\Hardware identifier						
Hardware identifier	257	Hardware identifier	64			
High speed counters (HSC)\HSC1\General\Enable						
Enable this high speed counter	0					
High speed counters (HSC)\HSC1\General\Project information						
Name	HSC_1	Comment				
High speed counters (HSC)\HSC1\Function						
Type of counting	Count	Operating phase	Single phase			
Counting direction is specified by	User program (internal direction control)	Initial counting direction	Count up			
Frequency measuring period	-/-sec					
High speed counters (HSC)\HSC1\Reset to initial values\Reset values						
Initial counter value	0	Initial reference value	0			
High speed counters (HSC)\HSC1\Reset to initial values\Reset options						
Use external reset input	0	Reset signal level	-/-			
High speed counters (HSC)\HSC1\Event configuration\						
Generate interrupt for counter value equals reference value event.	0	RidPrefixCvEqualsPv	49152	Event name:	0	
Hardware interrupt:	0	Counter value equal to reference value0	Counter value equal to reference value0	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC1\Event configuration\						
Generate interrupt for external reset event.	0	RidPrefixExternalReset	49408	Event name:	0	
Hardware interrupt:	0	External reset0	External reset0	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC1\Event configuration\						
Generate interrupt for change of direction event.	0	RidPrefixDirection-Change	49280	Event name:	0	
Hardware interrupt:	0	Change of direction0	Change of direction0	ValueNull	0	
ValueNull	0	EventPriority	6			

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High speed counters (HSC)\HSC1\Hardware inputs\						
Clock generator input	---	HSCInput0_Status	1	Direction input	---	
Reset input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC1\Hardware inputs\						
Direction input	---	HSCInput1_Status	1	Clock generator input	---	
Reset input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC1\Hardware inputs\						
Reset input	---	HSCInput2_Status	1	Clock generator input	---	
Direction input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC1\I/O addresses\Input addresses						
Start address	1000	End address	1003	Organization block	0	
Process image	0					
High speed counters (HSC)\HSC1\Hardware identifier\Hardware identifier						
Hardware identifier	259					
High speed counters (HSC)\HSC2\General\Enable						
Enable this high speed counter	0					
High speed counters (HSC)\HSC2\General\Project information						
Name	HSC_2	Comment				
High speed counters (HSC)\HSC2\Function						
Type of counting	Count	Operating phase	Single phase			
Counting direction is specified by	User program (internal direction control)	Initial counting direction	Count up			
Frequency measuring period	-/-sec					
High speed counters (HSC)\HSC2\Reset to initial values\Reset values						
Initial counter value	0	Initial reference value	0			
High speed counters (HSC)\HSC2\Reset to initial values\Reset options						
Use external reset input	0	Reset signal level	-/-			
High speed counters (HSC)\HSC2\Event configuration\						
Generate interrupt for counter value equals reference value event.	0	RidPrefixCvEqualsPv	49152	Event name:	0	
Hardware interrupt:	0	Counter value equal to reference value1	Counter value equal to reference value1	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC2\Event configuration\						
Generate interrupt for external reset event.	0	RidPrefixExternalReset	49408	Event name:	0	
Hardware interrupt:	0	External reset1	External reset1	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC2\Event configuration\						
Generate interrupt for change of direction event.	0	RidPrefixDirection-Change	49280	Event name:	0	
Hardware interrupt:	0	Change of direction1	Change of direction1	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC2\Hardware inputs\						
Clock generator input	---	HSCInput0_Status	1	Direction input	---	
Reset input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC2\Hardware inputs\						
Direction input	---	HSCInput1_Status	1	Clock generator input	---	
Reset input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	

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Adapter name the user control should use for the Output Source

HscChannel.OutputSource

High speed counters (HSC)\HSC2\Hardware inputs\

Reset input

HSCInput2_Status

1

Clock generator input

Direction input

Adapter name the user control should use for the address string

HscChannel.AddressString

Adapter name the user control should use for the SpeedAndSourceDisplay

HscChannel.SpeedAndSourceDisplay

Adapter name the user control should use for the Output Source

HscChannel.OutputSource

High speed counters (HSC)\HSC2\I/O addresses\Input addresses

Start address

1004

End address

1007

Organization block

0

Process image

0

High speed counters (HSC)\HSC2\Hardware identifier\Hardware identifier

Hardware identifier

260

High speed counters (HSC)\HSC3\General\Enable

Enable this high speed counter

0

High speed counters (HSC)\HSC3\General\Project information

Name

HSC_3

Comment

High speed counters (HSC)\HSC3\Function

Type of counting

Count

Operating phase

Single phase

Counting direction is specified by

User program (internal direction control)

Initial counting direction

Count up

Frequency measuring period

-/-sec

High speed counters (HSC)\HSC3\Reset to initial values\Reset values

Initial counter value

0

Initial reference value

0

High speed counters (HSC)\HSC3\Reset to initial values\Reset options

Use external reset input

0

Reset signal level

-/-

High speed counters (HSC)\HSC3\Event configuration\

Generate interrupt for counter value equals reference value event.

0

RidPrefixCvEqualsPv

49152

Event name:

0

Hardware interrupt:

0

Counter value equal to reference value2

Counter value equal to reference value2

ValueNull

0

ValueNull

0

EventPriority

6

High speed counters (HSC)\HSC3\Event configuration\

Generate interrupt for external reset event.

0

RidPrefixExternalReset

49408

Event name:

0

Hardware interrupt:

0

External reset2

External reset2

ValueNull

0

ValueNull

0

EventPriority

6

High speed counters (HSC)\HSC3\Event configuration\

Generate interrupt for change of direction event.

0

RidPrefixDirection-Change

49280

Event name:

0

Hardware interrupt:

0

Change of direction2

Change of direction2

ValueNull

0

ValueNull

0

EventPriority

6

High speed counters (HSC)\HSC3\Hardware inputs\

Clock generator input

HSCInput0_Status

1

Direction input

Reset input

Adapter name the user control should use for the address string

HscChannel.AddressString

Adapter name the user control should use for the SpeedAndSourceDisplay

HscChannel.SpeedAndSourceDisplay

Adapter name the user control should use for the Output Source

HscChannel.OutputSource

High speed counters (HSC)\HSC3\Hardware inputs\

Direction input

HSCInput1_Status

1

Clock generator input

Reset input

Adapter name the user control should use for the address string

HscChannel.AddressString

Adapter name the user control should use for the SpeedAndSourceDisplay

HscChannel.SpeedAndSourceDisplay

Adapter name the user control should use for the Output Source

HscChannel.OutputSource

High speed counters (HSC)\HSC3\Hardware inputs\

Reset input

HSCInput2_Status

1

Clock generator input

Direction input

Adapter name the user control should use for the address string

HscChannel.AddressString

Adapter name the user control should use for the SpeedAndSourceDisplay

HscChannel.SpeedAndSourceDisplay

Adapter name the user control should use for the Output Source

HscChannel.OutputSource

High speed counters (HSC)\HSC3\I/O addresses\Input addresses

Start address

1008

End address

1011

Organization block

0

Process image

0

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High speed counters (HSC)\HSC3\Hardware identifier\Hardware identifier						
Hardware identifier	261					
High speed counters (HSC)\HSC4\General\Enable						
Enable this high speed counter	0					
High speed counters (HSC)\HSC4\General\Project information						
Name	HSC_4		Comment			
High speed counters (HSC)\HSC4\Function						
Type of counting	Count		Operating phase	Single phase		
Counting direction is specified by	User program (internal direction control)		Initial counting direction	Count up		
Frequency measuring period	-/sec					
High speed counters (HSC)\HSC4\Reset to initial values\Reset values						
Initial counter value	0		Initial reference value	0		
High speed counters (HSC)\HSC4\Reset to initial values\Reset options						
Use external reset input	0		Reset signal level	-/-		
High speed counters (HSC)\HSC4\Event configuration\						
Generate interrupt for counter value equals reference value event.	0		RidPrefixCvEqualsPv	49152		Event name: 0
Hardware interrupt:	0		Counter value equal to reference value3	Counter value equal to reference value3		ValueNull 0
ValueNull	0		EventPriority	6		
High speed counters (HSC)\HSC4\Event configuration\						
Generate interrupt for external reset event.	0		RidPrefixExternalReset	49408		Event name: 0
Hardware interrupt:	0		External reset3	External reset3		ValueNull 0
ValueNull	0		EventPriority	6		
High speed counters (HSC)\HSC4\Event configuration\						
Generate interrupt for change of direction event.	0		RidPrefixDirection-Change	49280		Event name: 0
Hardware interrupt:	0		Change of direction3	Change of direction3		ValueNull 0
ValueNull	0		EventPriority	6		
High speed counters (HSC)\HSC4\Hardware inputs\						
Clock generator input	---		HSCInput0_Status	1		Direction input ---
Reset input	---		Adapter name the user control should use for the address string	HscChannel.AddressString		Adapter name the user control should use for the SpeedAndSourceDisplay HscChannel.SpeedAndSourceDisplay
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC4\Hardware inputs\						
Direction input	---		HSCInput1_Status	1		Clock generator input ---
Reset input	---		Adapter name the user control should use for the address string	HscChannel.AddressString		Adapter name the user control should use for the SpeedAndSourceDisplay HscChannel.SpeedAndSourceDisplay
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC4\Hardware inputs\						
Reset input	---		HSCInput2_Status	1		Clock generator input ---
Direction input	---		Adapter name the user control should use for the address string	HscChannel.AddressString		Adapter name the user control should use for the SpeedAndSourceDisplay HscChannel.SpeedAndSourceDisplay
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC4\I/O addresses\Input addresses						
Start address	1012		End address	1015		Organization block 0
Process image	0					
High speed counters (HSC)\HSC4\Hardware identifier\Hardware identifier						
Hardware identifier	262					
High speed counters (HSC)\HSC5\General\Enable						
Enable this high speed counter	0					
High speed counters (HSC)\HSC5\General\Project information						
Name	HSC_5		Comment			
High speed counters (HSC)\HSC5\Function						
Type of counting	Count		Operating phase	Single phase		
Counting direction is specified by	User program (internal direction control)		Initial counting direction	Count up		
Frequency measuring period	-/sec					
High speed counters (HSC)\HSC5\Reset to initial values\Reset values						
Initial counter value	0		Initial reference value	0		

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High speed counters (HSC)\HSC5\Reset to initial values\Reset options						
Use external reset input	0	Reset signal level	-/-			
High speed counters (HSC)\HSC5\Event configuration\						
Generate interrupt for counter value equals reference value event.	0	RidPrefixCvEqualsPv	49152	Event name:	0	
Hardware interrupt:	0	Counter value equal to reference value4	Counter value equal to reference value4	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC5\Event configuration\						
Generate interrupt for external reset event.	0	RidPrefixExternalReset	49408	Event name:	0	
Hardware interrupt:	0	External reset4	External reset4	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC5\Event configuration\						
Generate interrupt for change of direction event.	0	RidPrefixDirection-Change	49280	Event name:	0	
Hardware interrupt:	0	Change of direction4	Change of direction4	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC5\Hardware inputs\						
Clock generator input	---	HSCInput0_Status	1	Direction input	---	
Reset input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC5\Hardware inputs\						
Direction input	---	HSCInput1_Status	1	Clock generator input	---	
Reset input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC5\Hardware inputs\						
Reset input	---	HSCInput2_Status	1	Clock generator input	---	
Direction input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC5\I/O addresses\Input addresses						
Start address	1016	End address	1019	Organization block	0	
Process image	0					
High speed counters (HSC)\HSC5\Hardware identifier\Hardware identifier						
Hardware identifier	263					
High speed counters (HSC)\HSC6\General\Enable						
Enable this high speed counter	0					
High speed counters (HSC)\HSC6\General\Project information						
Name	HSC_6	Comment				
High speed counters (HSC)\HSC6\Function						
Type of counting	Count	Operating phase	Single phase			
Counting direction is specified by	User program (internal direction control)	Initial counting direction	Count up			
Frequency measuring period	-/-sec					
High speed counters (HSC)\HSC6\Reset to initial values\Reset values						
Initial counter value	0	Initial reference value	0			
High speed counters (HSC)\HSC6\Reset to initial values\Reset options						
Use external reset input	0	Reset signal level	-/-			
High speed counters (HSC)\HSC6\Event configuration\						
Generate interrupt for counter value equals reference value event.	0	RidPrefixCvEqualsPv	49152	Event name:	0	
Hardware interrupt:	0	Counter value equal to reference value5	Counter value equal to reference value5	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC6\Event configuration\						
Generate interrupt for external reset event.	0	RidPrefixExternalReset	49408	Event name:	0	
Hardware interrupt:	0	External reset5	External reset5	ValueNull	0	
ValueNull	0	EventPriority	6			

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High speed counters (HSC)\HSC6\Event configuration\						
Generate interrupt for change of direction event.	0	RidPrefixDirection-Change	49280	Event name:	0	
Hardware interrupt:	0	Change of direction5	Change of direction5	ValueNull	0	
ValueNull	0	EventPriority	6			
High speed counters (HSC)\HSC6\Hardware inputs\						
Clock generator input	---	HSCInput0_Status	1	Direction input	---	
Reset input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC6\Hardware inputs\						
Direction input	---	HSCInput1_Status	1	Clock generator input	---	
Reset input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC6\Hardware inputs\						
Reset input	---	HSCInput2_Status	1	Clock generator input	---	
Direction input	---	Adapter name the user control should use for the address string	HscChannel.AddressString	Adapter name the user control should use for the SpeedAndSourceDisplay	HscChannel.SpeedAndSourceDisplay	
Adapter name the user control should use for the Output Source	HscChannel.OutputSource					
High speed counters (HSC)\HSC6\I/O addresses\Input addresses						
Start address	1020	End address	1023	Organization block	0	
Process image	0					
High speed counters (HSC)\HSC6\Hardware identifier\Hardware identifier						
Hardware identifier	264					
Pulse generators (PTO/PWM)\PTO1/PWM1\General\Enable						
Enable this pulse generator	0					
Pulse generators (PTO/PWM)\PTO1/PWM1\General\Project information						
Name	Pulse_1	Comment				
Pulse generators (PTO/PWM)\PTO1/PWM1\Parameter assignment\Pulse options						
Signal type	PWM	Time base:	Milliseconds	Pulse duration format	Hundredths	
Cycle time	100ms	Initial pulse duration	50Hundredths			
Pulse generators (PTO/PWM)\PTO1/PWM1\Hardware outputs						
Enable direction output	0					
Pulse generators (PTO/PWM)\PTO1/PWM1\Hardware outputs\						
Pulse output	%Q4.0	PulseOutput1_Status	1	Adapter name the user control should use for the address string	PulseChannel.AddressString	
Adapter name the user control should use for the SpeedAndSourceDisplay	PulseChannel.SpeedAndSourceDisplay	Adapter name the user control should use for the Output Source	PulseChannel.OutputSource			
Pulse generators (PTO/PWM)\PTO1/PWM1\Hardware outputs\						
PulseOutput2_Status	1	Pulse output	%Q4.0	Adapter name the user control should use for the address string	PulseChannel.AddressString	
Adapter name the user control should use for the SpeedAndSourceDisplay	PulseChannel.SpeedAndSourceDisplay	Adapter name the user control should use for the Output Source	PulseChannel.OutputSource			
Pulse generators (PTO/PWM)\PTO1/PWM1\I/O addresses\Output addresses						
Start address	1000	End address	1001	Organization block	0	
Process image	0					
Pulse generators (PTO/PWM)\PTO1/PWM1\Hardware identifier\Hardware identifier						
Hardware identifier	265					
Pulse generators (PTO/PWM)\PTO2/PWM2\General\Enable						
Enable this pulse generator	0					
Pulse generators (PTO/PWM)\PTO2/PWM2\General\Project information						
Name	Pulse_2	Comment				
Pulse generators (PTO/PWM)\PTO2/PWM2\Parameter assignment\Pulse options						
Signal type	PWM	Time base:	Milliseconds	Pulse duration format	Hundredths	
Cycle time	100ms	Initial pulse duration	50Hundredths			
Pulse generators (PTO/PWM)\PTO2/PWM2\Hardware outputs						
Enable direction output	0					

Totally Integrated Automation Portal					
Pulse generators (PTO/PWM)\PTO2/PWM2\Hardware outputs\					
Pulse output	%Q4.2	PulseOutput1_Status	1	Adapter name the user control should use for the address string	PulseChannel.AddressString
Adapter name the user control should use for the SpeedAndSourceDisplay	PulseChannel.SpeedAndSourceDisplay	Adapter name the user control should use for the Output Source	PulseChannel.OutputSource		
Pulse generators (PTO/PWM)\PTO2/PWM2\Hardware outputs\					
PulseOutput2_Status	1	Pulse output	%Q4.2	Adapter name the user control should use for the address string	PulseChannel.AddressString
Adapter name the user control should use for the SpeedAndSourceDisplay	PulseChannel.SpeedAndSourceDisplay	Adapter name the user control should use for the Output Source	PulseChannel.OutputSource		
Pulse generators (PTO/PWM)\PTO2/PWM2\I/O addresses\Output addresses					
Start address	1002	End address	1003	Organization block	0
Process image	0				
Pulse generators (PTO/PWM)\PTO2/PWM2\Hardware identifier\Hardware identifier					
Hardware identifier	266				
Pulse generators (PTO/PWM)\PTO3/PWM3\General\Enable					
Enable this pulse generator	0				
Pulse generators (PTO/PWM)\PTO3/PWM3\General\Project information					
Name	Pulse_3	Comment			
Pulse generators (PTO/PWM)\PTO3/PWM3\Parameter assignment\Pulse options					
Signal type	PWM	Time base:	Milliseconds	Pulse duration format	Hundredths
Cycle time	100ms	Initial pulse duration	50Hundredths		
Pulse generators (PTO/PWM)\PTO3/PWM3\Hardware outputs					
Enable direction output	0				
Pulse generators (PTO/PWM)\PTO3/PWM3\Hardware outputs\					
Pulse output	%Q4.0	PulseOutput1_Status	1	Adapter name the user control should use for the address string	PulseChannel.AddressString
Adapter name the user control should use for the SpeedAndSourceDisplay	PulseChannel.SpeedAndSourceDisplay	Adapter name the user control should use for the Output Source	PulseChannel.OutputSource		
Pulse generators (PTO/PWM)\PTO3/PWM3\Hardware outputs\					
PulseOutput2_Status	1	Pulse output	%Q4.0	Adapter name the user control should use for the address string	PulseChannel.AddressString
Adapter name the user control should use for the SpeedAndSourceDisplay	PulseChannel.SpeedAndSourceDisplay	Adapter name the user control should use for the Output Source	PulseChannel.OutputSource		
Pulse generators (PTO/PWM)\PTO3/PWM3\I/O addresses\Output addresses					
Start address	1004	End address	1005	Organization block	0
Process image	0				
Pulse generators (PTO/PWM)\PTO3/PWM3\Hardware identifier\Hardware identifier					
Hardware identifier	267				
Pulse generators (PTO/PWM)\PTO4/PWM4\General\Enable					
Enable this pulse generator	0				
Pulse generators (PTO/PWM)\PTO4/PWM4\General\Project information					
Name	Pulse_4	Comment			
Pulse generators (PTO/PWM)\PTO4/PWM4\Parameter assignment\Pulse options					
Signal type	PWM	Time base:	Milliseconds	Pulse duration format	Hundredths
Cycle time	100ms	Initial pulse duration	50Hundredths		
Pulse generators (PTO/PWM)\PTO4/PWM4\Hardware outputs					
Enable direction output	0				
Pulse generators (PTO/PWM)\PTO4/PWM4\Hardware outputs\					
Pulse output	%Q4.2	PulseOutput1_Status	1	Adapter name the user control should use for the address string	PulseChannel.AddressString
Adapter name the user control should use for the SpeedAndSourceDisplay	PulseChannel.SpeedAndSourceDisplay	Adapter name the user control should use for the Output Source	PulseChannel.OutputSource		
Pulse generators (PTO/PWM)\PTO4/PWM4\Hardware outputs\					
PulseOutput2_Status	1	Pulse output	%Q4.2	Adapter name the user control should use for the address string	PulseChannel.AddressString
Adapter name the user control should use for the SpeedAndSourceDisplay	PulseChannel.SpeedAndSourceDisplay	Adapter name the user control should use for the Output Source	PulseChannel.OutputSource		
Pulse generators (PTO/PWM)\PTO4/PWM4\I/O addresses\Output addresses					
Start address	1006	End address	1007	Organization block	0
Process image	0				

Totally Integrated Automation Portal						
Pulse generators (PTO/PWM)\PTO4/PWM4\Hardware identifier\Hardware identifier						
Hardware identifier		268				
Startup						
Startup after POWER ON		Warm restart - mode before POWER OFF		Comparison preset to actual configuration		Startup CPU even if mismatch
				Configuration time for central and distributed I/O		60000ms
OBs should be interruptible		1				
Cycle						
Cycle monitoring time		150ms			Enable minimum cycle time for cyclic OBs	0
Minimum cycle time		1ms				
Communication load						
Cycle load due to communication		20%				
System and clock memory\System memory bits						
Enable the use of system memory byte		0		Address of system memory byte (MBx)		1
				First cycle		
Diagnostic status changed				Always 1 (high)		Always 0 (low)
System and clock memory\Clock memory bits						
Enable the use of clock memory byte		0		Address of clock memory byte (MBx)		0
5 Hz clock				10 Hz clock		
1.25 Hz clock				2.5 Hz clock		
0.5 Hz clock				1 Hz clock		
				2 Hz clock		
				0.625 Hz clock		
Web server\General						
Activate Web server on all modules of this device		False		Permit access only with HTTPS		True
Web server\Automatic update						
Enable automatic update		True		Update interval		0s
Web server\User interface languages						
Assign project language				User interface languages		
English (United States)				German		
English (United States)				English		
English (United States)				French		
English (United States)				Spanish		
English (United States)				Italian		
English (United States)				Chinese (simplified)		
Web server\User management						
User name				User rights		
Everybody						
Web server>User defined web pages						
Application name		HTML source path		Default HTML page		Files with dynamic content
				index.htm		.htm;.html
				333		Fragment DB number
						334
Web server\Overview of interfaces						
Device		Interface				Enabled web server access
PLC_1		PROFINET interface_1				False
User interface languages						
Assign project language				User interface languages		
English (United States)				German		
English (United States)				English		
English (United States)				French		
English (United States)				Spanish		
English (United States)				Italian		
English (United States)				Chinese (simplified)		
Time of day\Local time						
Time zone		(UTC +01:00) Berlin, Bern, Brussels, Rome, Stockholm, Vienna				
Time of day\Daylight saving time						
Activate daylight saving time		1		Difference between standard and daylight saving time		60mins
Time of day\Daylight saving time\Start of daylight saving time						
Starting week of the month:		Last		Sunday		of
at		01:00 a.m.		March		
Time of day\Daylight saving time\Start of standard time						
		Last		Sunday		of
at		02:00 a.m.		October		
Protection						
Level of protection		No protection				
Protection\Connection mechanisms						
Permit access with PUT/GET communication from remote partner (PLC, HMI, OPC, ...)		False				
Configuration control\Configuration control for central configuration						
Allow to reconfigure the device via the user program		0				
Anchor (AddressesOverviewMenu)						
Inputs		True		Outputs		True
Slot		True		Address gaps		False

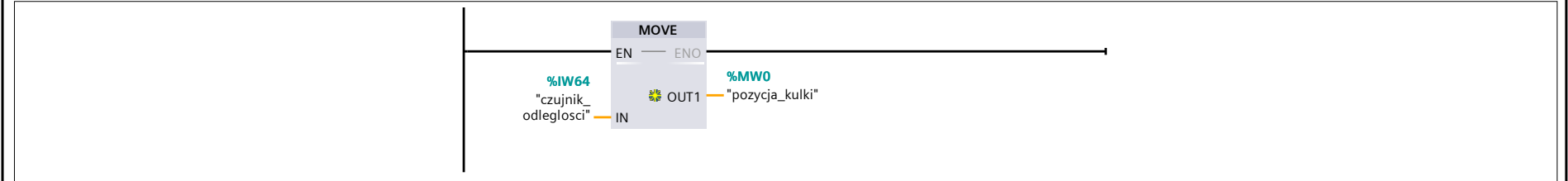
PLC_1 [CPU 1212C AC/DC/Rly] / Program blocks

Main [OB1]

Main Properties							
General							
Name	Main	Number	1	Type	OB	Language	LAD
Numbering	automatic						
Information							
Title	"Main Program Sweep (Cycle)"	Author		Comment		Family	
Version	0.1	User-defined ID					

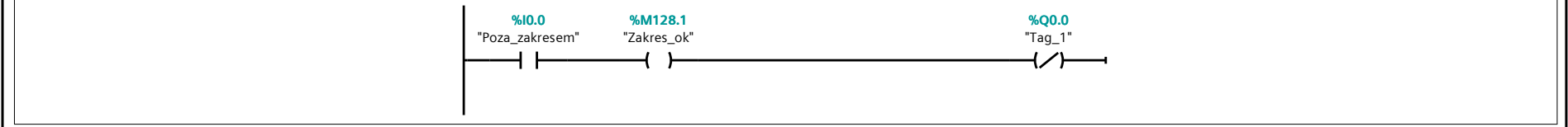
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Symbol	Address	Type	Comment
"czujnik_odleglosci"	%IW64	Word	
"pozycja_kulki"	%MW0	Word	

Network 2:



Symbol	Address	Type	Comment
"Poza_zakresem"	%I0.0	Bool	
"Tag_1"	%Q0.0	Bool	
"Zakres_ok"	%M128.1	Bool	

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<div>PLC_1 [CPU 1212C AC/DC/Rly]</div> <div>Technology objects</div> <div>This folder is empty.</div>		

Totally Integrated Automation Portal																																																																																																																																		
<div>PLC_1 [CPU 1212C AC/DC/Rly] / PLC tags / Default tag table [45]</div> <div>PLC tags</div> <div><div>PLC tags</div><table><tr><th></th><th>Name</th><th>Data type</th><th>Address</th><th>Retain</th><th>Visible in HMI</th><th>Accessible from HMI</th><th>Comment</th></tr><tr><td></td><td>czujnik_odleglosci</td><td>Word</td><td>%IW64</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>pozycja_kulki</td><td>Word</td><td>%MW0</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>PWM_Start</td><td>Bool</td><td>%M128.0</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Zakres_ok</td><td>Bool</td><td>%M128.1</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Poza_zakresem</td><td>Bool</td><td>%IO.0</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Stan_PWM</td><td>Word</td><td>%MW2</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Zadany_PWM</td><td>Word</td><td>%MW4</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Wartosc_PWM</td><td>Word</td><td>%QW1000</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Manual_ON</td><td>Bool</td><td>%M128.2</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>War_zadana</td><td>Real</td><td>%MD6</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Ster_manual</td><td>Real</td><td>%MD10</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Obroty</td><td>DWord</td><td>%ID1004</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>RPM</td><td>DWord</td><td>%MD14</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>blad_poz</td><td>Real</td><td>%MD20</td><td>False</td><td>True</td><td>True</td><td></td></tr><tr><td></td><td>Tag_1</td><td>Bool</td><td>%Q0.0</td><td>False</td><td>True</td><td>True</td><td></td></tr></table></div>				Name	Data type	Address	Retain	Visible in HMI	Accessible from HMI	Comment		czujnik_odleglosci	Word	%IW64	False	True	True			pozycja_kulki	Word	%MW0	False	True	True			PWM_Start	Bool	%M128.0	False	True	True			Zakres_ok	Bool	%M128.1	False	True	True			Poza_zakresem	Bool	%IO.0	False	True	True			Stan_PWM	Word	%MW2	False	True	True			Zadany_PWM	Word	%MW4	False	True	True			Wartosc_PWM	Word	%QW1000	False	True	True			Manual_ON	Bool	%M128.2	False	True	True			War_zadana	Real	%MD6	False	True	True			Ster_manual	Real	%MD10	False	True	True			Obroty	DWord	%ID1004	False	True	True			RPM	DWord	%MD14	False	True	True			blad_poz	Real	%MD20	False	True	True			Tag_1	Bool	%Q0.0	False	True	True	
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Totally Integrated Automation Portal																
<div>PLC_1 [CPU 1212C AC/DC/Rly] / PLC tags / Default tag table [45]</div> <div>User constants</div> <table><tr><th colspan="4">User constants</th></tr><tr><th></th><th>Name</th><th>Data type</th><th>Value</th><th>Comment</th></tr><tr><td colspan="5"></td></tr></table>			User constants					Name	Data type	Value	Comment					
User constants																
	Name	Data type	Value	Comment												

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<div>PLC_1 [CPU 1212C AC/DC/Rly]</div> <div>PLC data types</div> <div>This folder is empty.</div>		

Totally Integrated Automation Portal												
<div>PLC_1 [CPU 1212C AC/DC/Rly] / Watch and force tables</div> <div>Force table</div> <table><tr><th>Name</th><th>Address</th><th>Display format</th><th>Force value</th><th>Comment</th></tr><tr><td colspan="5"></td></tr></table>			Name	Address	Display format	Force value	Comment					
Name	Address	Display format	Force value	Comment								

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<div>PLC_1 [CPU 1212C AC/DC/Rly] / Traces</div> <div>Measurements</div> <div>This folder is empty.</div>		

Totally Integrated Automation Portal		
<div>PLC_1 [CPU 1212C AC/DC/Rly]</div> <div>Text lists</div> <div>This folder is empty.</div>		

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PLC_1 [CPU 1212C AC/DC/Rly] / Local modules

DQ 4x24VDC_1

DQ 4x24VDC_1

General\Project information

Name	DQ 4x24VDC_1	Comment		
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General\Catalog information

Short designation	DQ4 signal board (200 kHz)	Description	Signal board DQ4 x 24VDC / 200 kHz; plug-in terminal blocks	Article number	6ES7 222-1BD30-0XB0
Firmware version	V1.0				
Reaction to CPU STOP	Use substitute value				
Channel address	Q4.0	Substitute a value of 1 on a change from RUN to STOP.	0		
Channel address	Q4.1	Substitute a value of 1 on a change from RUN to STOP.	0		
Channel address	Q4.2	Substitute a value of 1 on a change from RUN to STOP.	0		
Channel address	Q4.3	Substitute a value of 1 on a change from RUN to STOP.	0		
Start address	4	End address	4	Organization block	0
Process image	0				
Hardware identifier	269				

Totally Integrated Automation Portal		
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PLC_1 [CPU 1212C AC/DC/Rly] / Local modules

AQ 2x14BIT_1

AQ 2x14BIT_1

General\Project information

Name	AQ 2x14BIT_1	Author	admin	Comment	
Slot	2				

General\Catalog information

Short designation	SM 1232 AQ2	Description	Analog output module AQ2 x 14 bits; plug-in terminal blocks; output: +/-10V and 0 to 20 mA; selectable diagnostics; selectable substitute value for output		Article number	6ES7 232-4HB32-0XB0
Firmware version	V2.0					

AQ 2\Project information

Name	AQ 2x14BIT_1	Comment		
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AQ 2\Module diagnostics

Enable power supply diagnostics	1	Additional diagnostics may be selected for each input/output.		
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AQ 2\Analog outputs

Reaction to CPU STOP

Use substitute value

AQ 2\Analog outputs\Channel0

Channel address	QW96	Analog output type	Voltage	Voltage range	+/- 10 V
Substitute value for channel on a change from RUN to STOP	0.000V			Enable short circuit diagnostics	1
Enable overflow diagnostics	1	Enable underflow diagnostics	1		

AQ 2\Analog outputs\Channel1

Channel address	QW98	Analog output type	Voltage	Voltage range	+/- 10 V
Substitute value for channel on a change from RUN to STOP	0.000V			Enable short circuit diagnostics	1
Enable overflow diagnostics	1	Enable underflow diagnostics	1		

AQ 2\I/O addresses\Output addresses

Start address	96	End address	99	Organization block	0
Process image	0				

AQ 2\Hardware identifier\Hardware identifier

Hardware identifier	270
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