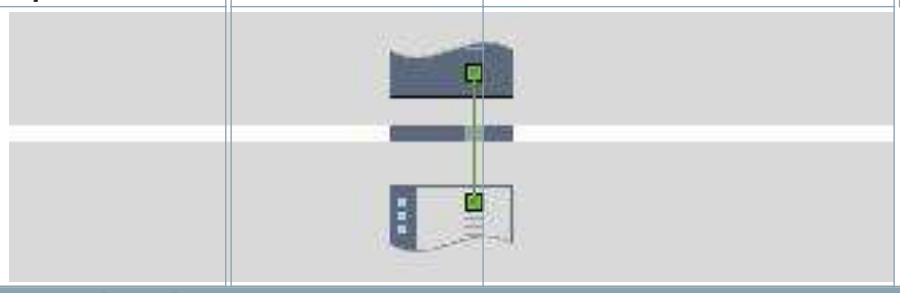
PLC_1 [CPU 1212C AC/DC/Rly]

PLC_1					
General\Project information					
Name	PLC_1	**Author**	FIFA-01	**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	V4.2				
General\Identification & Maintenance					
Plant designation		**Location identifier**		**Installation date**	2024-02-15 02:06:51.034
Additional information					
General\Checksums					
Text lists	FA 70 E8 75 1D 5A 8E 29	**Software**	3C ED 78 10 DB 4F C8 3F		
PROFINET interface [X1]\General					
Name	PROFINET interface_1	**Author**	FIFA-01	**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:	Not connected				
PROFINET interface [X1]\Ethernet addresses\IP protocol					
IP configuration	Set IP address in the project	**IP address:**	192.168.1.10	**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			**CPU synchronizes the modules of the device.**	No synchronization
PROFINET interface [X1]\Digital inputs\Channel0					
Channel address	I0.0	**Input filters**	6.4 millisec	**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 millisec	**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 millisec	**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 millisec	**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
Hardware interrupt:	0	**Falling edge3**	Falling edge3		
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				
PROFINET interface [X1]\I/O addresses\Input addresses					
Start address	0.0	**End address**	0.7	**Organization block**	0
Process image	0				
PROFINET interface [X1]\I/O addresses\Input addresses					
Start address	64	**End address**	67	**Organization block**	0
Process image	0				
PROFINET interface [X1]\I/O addresses\Output addresses					
Start address	0.0	**End address**	0.7	**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	**Limit data infeed into the network**	True
Use IEC V2.2 LLDP mode	False	**Keep-Alive connection monitoring**	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	**Calculated bandwidth for cyclic IO data:**	0.000%		
PROFINET interface [X1]\Advanced options\Port [X1 P1]\General					
Name	Port_1	**Author**	FIFA-01	**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 R]	**Medium:**	Copper	**Cable name:**	---
					
PROFINET interface [X1]\Advanced options\Port [X1 P1]\Port interconnection\Partner port:					
	Monitoring of partner port is not possible	**Partner port:**	Any partner		
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					
LADDR	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	264	**Hardware identifier**	64		
High speed counters (HSC)\HSC1\General\Enable					
Enable this high speed counter	0	**Enable this high speed counter**	0	**Enable this high speed counter**	0
Enable this high speed counter	0	**Enable this high speed counter**	0	**Enable this high speed counter**	0
High speed counters (HSC)\HSC1\General\Project information					
Name	HSC_1	**Comment**		**Name**	HSC_2
Comment		**Name**	HSC_3	**Comment**	
Name	HSC_4	**Comment**		**Name**	HSC_5
Comment		**Name**	HSC_6	**Comment**	
High speed counters (HSC)\HSC1\I/O addresses\Input addresses					
Start address	1000.0	**End address**	1003.7	**Start address**	1004.0
End address	1007.7	**Organization block**	0	**Start address**	1008.0
End address	1011.7	**Organization block**	0	**Process image**	0
Start address	1012.0	**End address**	1015.7	**Organization block**	0
Process image	0	**Start address**	1016.0	**End address**	1019.7
Organization block	0	**Process image**	0	**Start address**	1020.0
End address	1023.7	**Organization block**	0	**Process image**	0
Organization block	0	**Process image**	0	**Process image**	0
High speed counters (HSC)\HSC1\Hardware identifier\Hardware identifier					
Hardware identifier	257	**Hardware identifier**	258	**Hardware identifier**	259
Hardware identifier	260	**Hardware identifier**	261	**Hardware identifier**	262

Pulse generators (PTO/PWM)\PTO1/PWM1\General\Enable					
Enable this pulse generator	1	**Enable this pulse generator**	0		
Pulse generators (PTO/PWM)\PTO1/PWM1\General\Project information					
Name	Pulse_1	**Comment**		**Name**	Pulse_2
Comment					
Pulse generators (PTO/PWM)\PTO1/PWM1\Parameter assignment\Pulse options					
Signal type	PTO (pulse A and direction B)	**Time base:**	Milliseconds	**Pulse duration format**	Hundredths
Cycle time	100ms	**Initial pulse duration**	50 Hundredths	**Allow runtime modification of the cycle time**	0
Pulse generators (PTO/PWM)\PTO1/PWM1\I/O addresses\Output addresses					
Start address	1002.0	**End address**	1003.7	**Organization block**	0
Process image	0				
Pulse generators (PTO/PWM)\PTO1/PWM1\Hardware outputs					
Pulse output	%Q4.0	**Enable direction output**	1	**Direction output**	%Q4.1
Pulse generators (PTO/PWM)\PTO1/PWM1\Hardware identifier\Hardware identifier					
Hardware identifier	265				
Startup					
Startup after POWER ON	Warm restart - RUN	**Comparison preset to actual configuration**	Startup CPU even if mismatch	**Configuration time**	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	1	**Address of system memory byte (MBx)**	1	**First cycle**	%M1.0 (FirstScan)
Diagnostic status changed	%M1.1 (DiagStatusUpdate)	**Always 1 (high)**	%M1.2 (AlwaysTRUE)	**Always 0 (low)**	%M1.3 (AlwaysFALSE)
System and clock memory\Clock memory bits					
Enable the use of clock memory byte	1	**Address of clock memory byte (MBx)**	0	**10 Hz clock**	%M0.0 (Clock_10Hz)
5 Hz clock	%M0.1 (Clock_5Hz)	**2.5 Hz clock**	%M0.2 (Clock_2.5Hz)	**2 Hz clock**	%M0.3 (Clock_2Hz)
1.25 Hz clock	%M0.4 (Clock_1.25Hz)	**1 Hz clock**	%M0.5 (Clock_1Hz)	**0.625 Hz clock**	%M0.6 (Clock_0.625Hz)
0.5 Hz clock	%M0.7 (Clock_0.5Hz)				
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**	**Web DB number**	**Fragment DB number**
		index.htm	.htm;.html	333	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**	60 mins		
Time of day\Daylight saving time\Start of daylight saving time					
Starting week of the month:	Last		Sunday	**of**	March
at	01:00 a.m.				
Time of day\Daylight saving time\Start of standard time					
	Last		Sunday	**of**	October
at	02:00 a.m.				

Protection & Security					
Level of protection	No protection				
Protection & Security\Connection mechanisms					
Permit access with PUT/GET communication from remote partner	False				
Protection & Security\Security event					
Summarize security events in case of high message volume	True	**Length of an interval**	20	**Unit**	seconds
Protection & Security\External load memory					
Disable copying from internal load memory to external load memory	False				
Configuration control\Configuration control for central configuration					
Allow to reconfigure the device via the user program	0				

Connection resources

	Station resources - Reserved - Maximum	Station resources - Reserved - Configured	Station resources - Dynamic - Configured	Module resources - PLC_1 [CPU 1212C AC/DC/Rly] - Configured
Maximum number of resources:		62	6	68
	Maximum	Configured	Configured	Configured
PG communication:	4	-	-	-
HMI communication:	12	0	0	0
S7 communication:	8	0	0	0
Open user communication:	8	0	0	0
Web communication:	30	-	-	-
Other communication:	-	-	0	0
Total resources used:		0	0	0
Available resources:		62	6	68

Overview of addresses\Overview of addresses\Overview of addresses

Inputs	True	**Outputs**	True	**Address gaps**	False
Slot	True				

Type	Addr. from	Addr. to	Module	PIP	Device name	Device number	Size	Master / IO system	Rack	Slot
I	0	0	DI 8/DQ 6_1	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	1 Bytes	-	0	1 1
O	0	0	DI 8/DQ 6_1	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	1 Bytes	-	0	1 1
I	64	67	AI 2_1	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	4 Bytes	-	0	1 2
I	1000	1003	HSC_1	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	4 Bytes	-	0	1 16
I	1004	1007	HSC_2	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	4 Bytes	-	0	1 17
I	1008	1011	HSC_3	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	4 Bytes	-	0	1 18
I	1012	1015	HSC_4	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	4 Bytes	-	0	1 19
I	1016	1019	HSC_5	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	4 Bytes	-	0	1 20
I	1020	1023	HSC_6	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	4 Bytes	-	0	1 21
O	1002	1003	Pulse_2	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	2 Bytes	-	0	1 33
O	1004	1005	Pulse_3	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	2 Bytes	-	0	1 34
O	1006	1007	Pulse_4	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	2 Bytes	-	0	1 35
O	4	4	DQ 4x24VDC_1	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	1 Bytes	-	0	1 3
I	8	8	DI 8x24VDC/DQ 8xRelay_1	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	1 Bytes	-	0	2
O	8	8	DI 8x24VDC/DQ 8xRelay_1	Automatic update	PLC_1 [CPU 1212C AC/DC/Rly]	-	1 Bytes	-	0	2

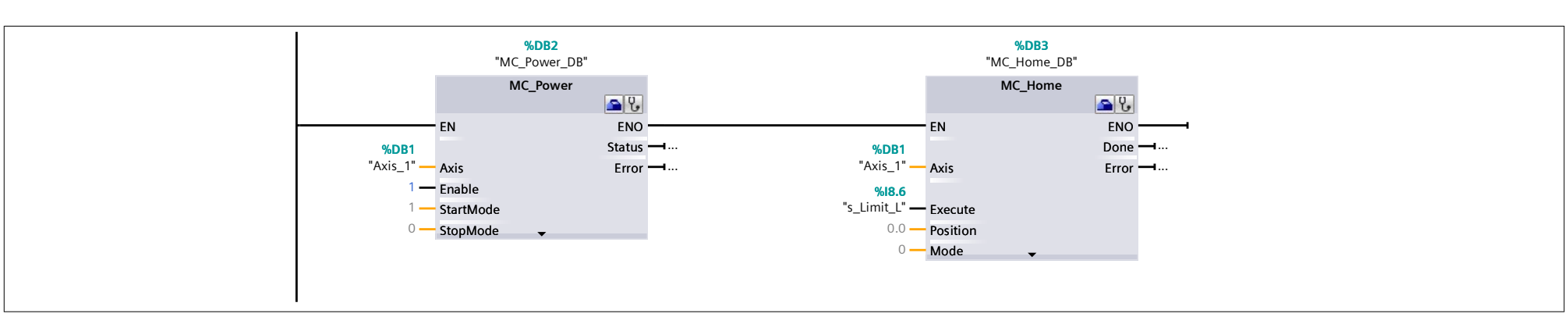
PLC_1 [CPU 1212C AC/DC/Rly] / Program blocks

Main [OB1]

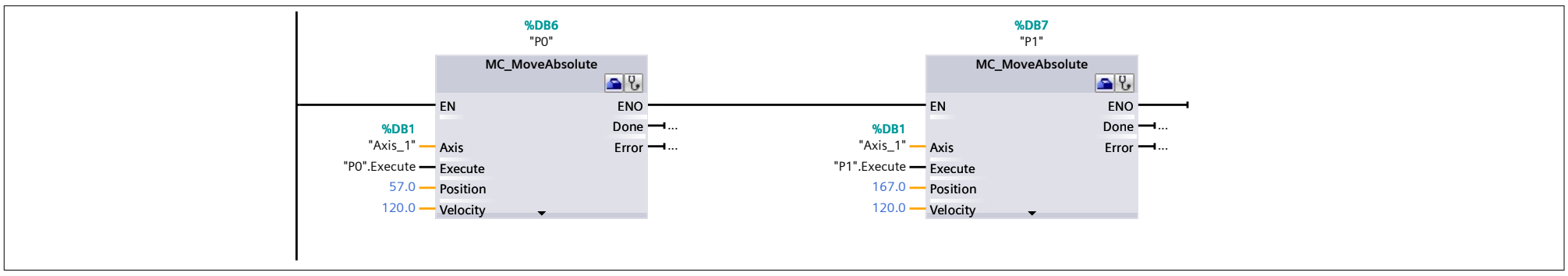
Main Properties							
General							
Name	Main	**Number**	1	**Type**	OB	**Language**	LAD
Numbering	Automatic						
Information							
Title	"Main Program Sweep (Cycle)"	**Author**		**Comment**		**Family**	
Version	0.1	**User-defined ID**					

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

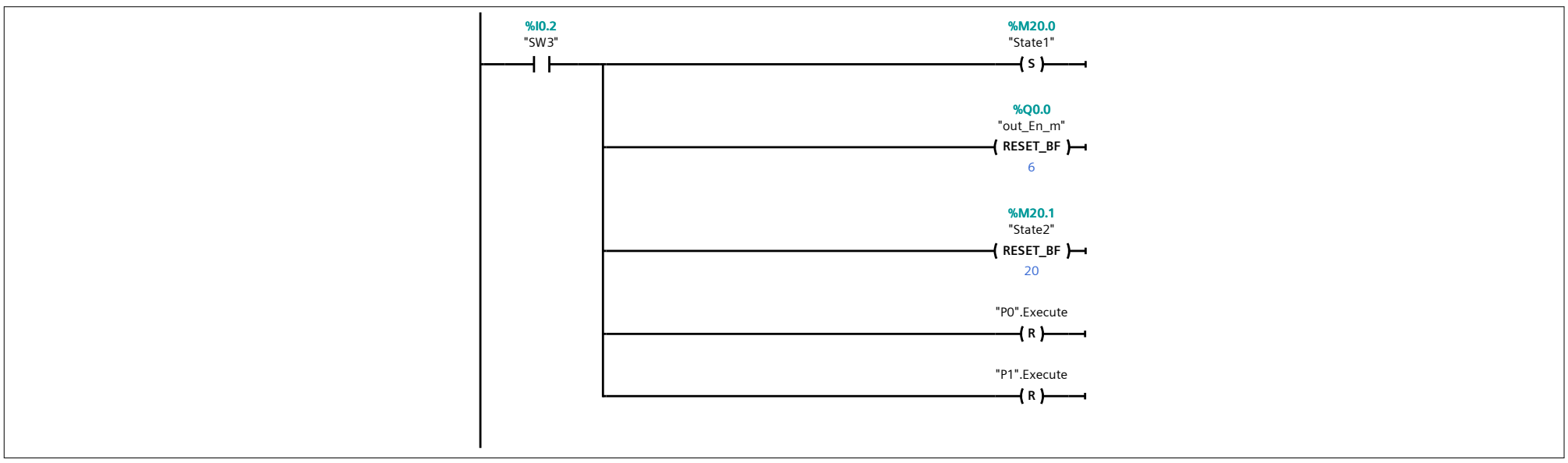
Network 1:



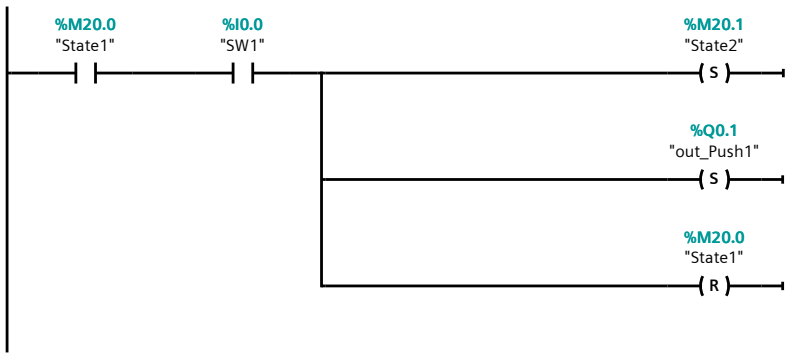
Network 2:



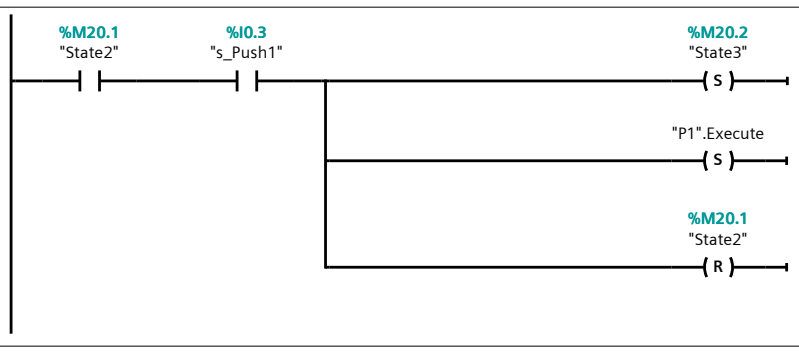
Network 3:



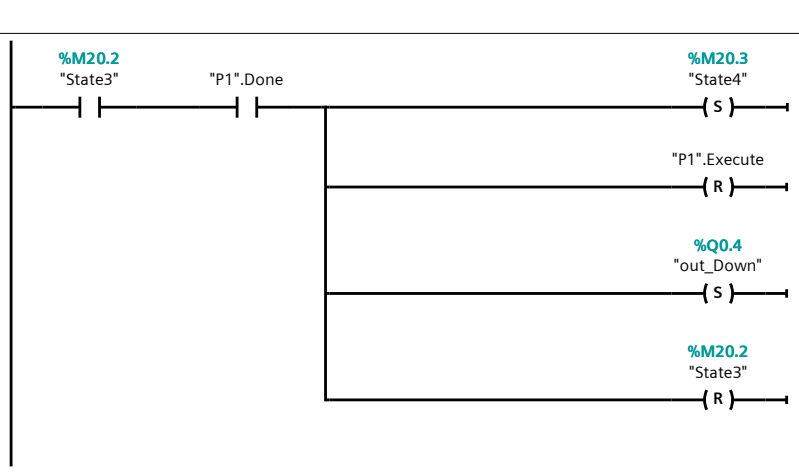
Network 4:



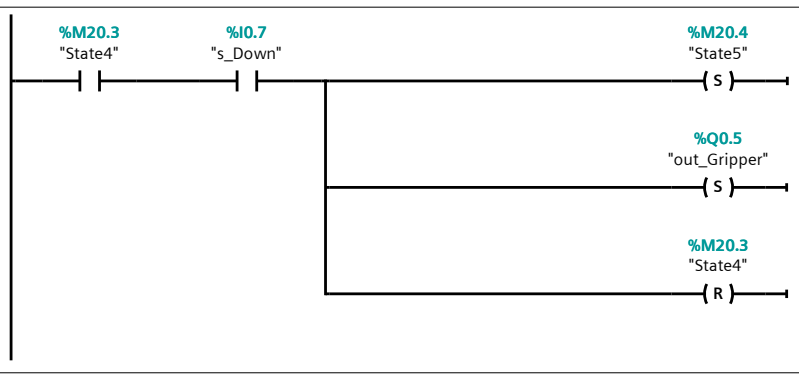
Network 5:



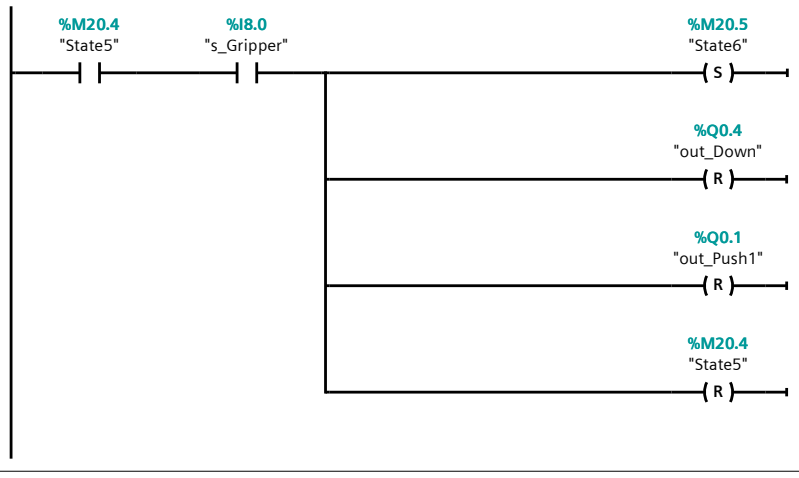
Network 6:



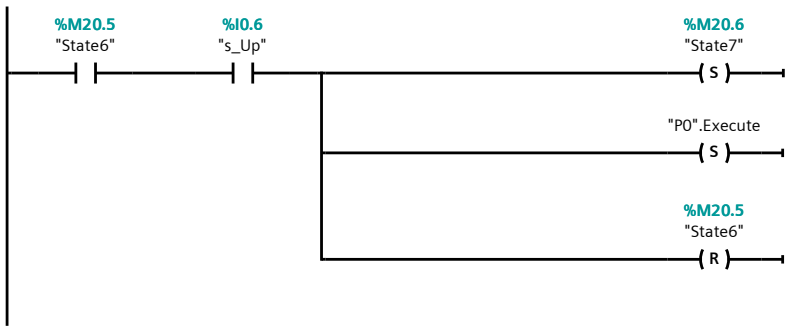
Network 7:



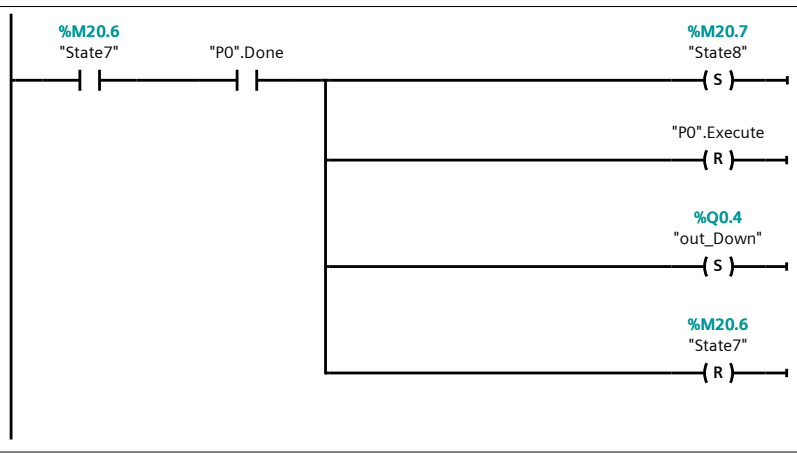
Network 8:



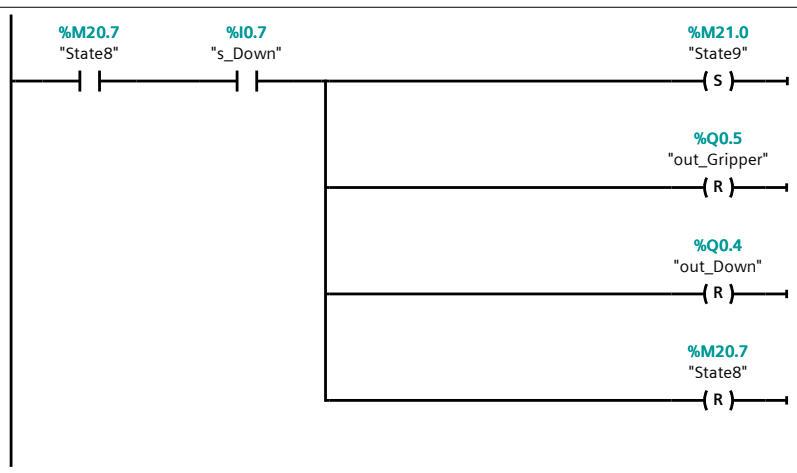
Network 9:



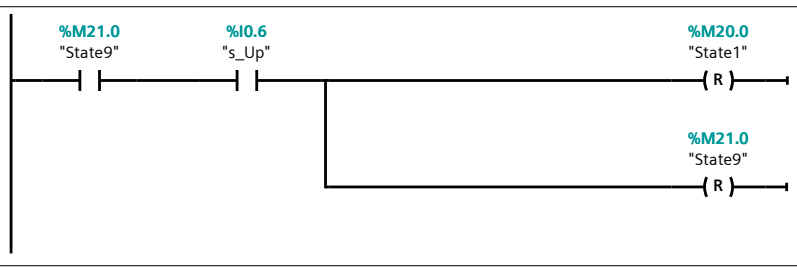
Network 10:



Network 11:



Network 12:



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

MC_Power [FB1107]

MC_Power Properties							
General							
Name	MC_Power	**Number**	1107	**Type**	FB	**Language**	SCL
Numbering	Automatic						
Information							
Title		**Author**	SIMATIC	**Comment**		**Family**	BasicMC
Version	4.0	**User-defined ID**	MC_Power				

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
▼ Input									
▼ Axis	TO_Axis			False	False	False	False		Used technology object "Axis"
▼ Base	TO_AnyMotionObject			False	False	False	False		
Input									
Output									
InOut									
▼ Static									
▼ Header	TO_Struct_Header		Non-retain	False	False	False	False		Version information of technology object
VersionMaj	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
VersionMin	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Type	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Reserved1	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Reserved2	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Input									
Output									
InOut									
Static									
Enable	Bool	false	Non-retain	True	True	True	False		Enable axis
StartMode	Int	1	Non-retain	True	True	True	False		Start mode on enabling of axis
StopMode	Int	0	Non-retain	True	True	True	False		Stop mode when disabling axis
▼ Output									
Status	Bool	false	Non-retain	True	True	True	False		Axis is enabled
Busy	Bool	false	Non-retain	True	True	True	False		MC_Power is active
Error	Bool	false	Non-retain	True	True	True	False		Error at MC_Power or associated technology object
ErrorID	Word	16#0	Non-retain	True	True	True	False		Error ID for parameter "Error"
ErrorInfo	Word	16#0	Non-retain	True	True	True	False		Error info ID for parameter "ErrorID"
InOut									
▼ Static									
FB_ID	DInt	0	Non-retain	False	False	False	False		Internal parameter; please do not change!

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

MC_Power_DB [DB2]

MC_Power_DB Properties							
General							
Name	MC_Power_DB	**Number**	2	**Type**	DB	**Language**	DB
Numbering	Automatic						
Information							
Title		**Author**	SIMATIC	**Comment**		**Family**	BasicMC
Version	4.0	**User-defined ID**	MC_Power				

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
▼ Input									
Axis	TO_Axis		False	False	False	False	False		Used technology object "Axis"
Enable	Bool	false	False	True	True	True	False		Enable axis
StartMode	Int	1	False	True	True	True	False		Start mode on enabling of axis
StopMode	Int	0	False	True	True	True	False		Stop mode when disabling axis
▼ Output									
Status	Bool	false	False	True	True	True	False		Axis is enabled
Busy	Bool	false	False	True	True	True	False		MC_Power is active
Error	Bool	false	False	True	True	True	False		Error at MC_Power or associated technology object
ErrorID	Word	16#0	False	True	True	True	False		Error ID for parameter "Error"
ErrorInfo	Word	16#0	False	True	True	True	False		Error info ID for parameter "ErrorID"
InOut									
▼ Static									
FB_ID	DInt	0	False	False	False	False	False		Internal parameter; please do not change!

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

MC_Home [FB1101]

MC_Home Properties							
General							
Name	MC_Home	**Number**	1101	**Type**	FB	**Language**	SCL
Numbering	Automatic						
Information							
Title		**Author**	SIMATIC	**Comment**		**Family**	BasicMC
Version	4.0	**User-defined ID**	MC_Home				

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
▼ Input									
▼ Axis	TO_Axis			False	False	False	False		Used technology object "Axis"
▼ Base	TO_AnyMotionObject			False	False	False	False		
Input									
Output									
InOut									
▼ Static									
▼ Header	TO_Struct_Header		Non-retain	False	False	False	False		Version information of technology object
VersionMaj	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
VersionMin	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Type	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Reserved1	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Reserved2	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Input									
Output									
InOut									
Static									
Execute	Bool	false	Non-retain	True	True	True	False		Start command
Position	Real	0.0	Non-retain	True	True	True	False		Reference point position of axis
Mode	Int	0	Non-retain	True	True	True	False		Homing mode
▼ Output									
Done	Bool	false	Non-retain	True	True	True	False		Job is completed
Busy	Bool	false	Non-retain	True	True	True	False		Job is being executed
CommandAborted	Bool	false	Non-retain	True	True	True	False		Job was cancelled
Error	Bool	false	Non-retain	True	True	True	False		Error during execution of the job
ErrorID	Word	16#0	Non-retain	True	True	True	False		Error ID for parameter "Error"
ErrorInfo	Word	16#0	Non-retain	True	True	True	False		Error info ID for parameter "ErrorID"
ReferenceMarkPosition	Real	0.0	Non-retain	True	True	True	False		Position at which the technology object was homed
InOut									
▼ Static									
FB_ID	DInt	0	Non-retain	False	False	False	False		Internal parameter; please do not change!

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

MC_Home_DB [DB3]

MC_Home_DB Properties							
General							
Name	MC_Home_DB	**Number**	3	**Type**	DB	**Language**	DB
Numbering	Automatic						
Information							
Title		**Author**	SIMATIC	**Comment**		**Family**	BasicMC
Version	4.0	**User-defined ID**	MC_Home				

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
▼ Input									
Axis	TO_Axis		False	False	False	False	False		Used technology object "Axis"
Execute	Bool	false	False	True	True	True	False		Start command
Position	Real	0.0	False	True	True	True	False		Reference point position of axis
Mode	Int	0	False	True	True	True	False		Homing mode
▼ Output									
Done	Bool	false	False	True	True	True	False		Job is completed
Busy	Bool	false	False	True	True	True	False		Job is being executed
CommandAborted	Bool	false	False	True	True	True	False		Job was cancelled
Error	Bool	false	False	True	True	True	False		Error during execution of the job
ErrorID	Word	16#0	False	True	True	True	False		Error ID for parameter "Error"
ErrorInfo	Word	16#0	False	True	True	True	False		Error info ID for parameter "ErrorID"
ReferenceMarkPosition	Real	0.0	False	True	True	True	False		Position at which the technology object was homed
InOut									
▼ Static									
FB_ID	DInt	0	False	False	False	False	False		Internal parameter; please do not change!

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

MC_MoveAbsolute [FB1102]

MC_MoveAbsolute Properties							
General							
Name	MC_MoveAbsolute	**Number**	1102	**Type**	FB	**Language**	SCL
Numbering	Automatic						
Information							
Title		**Author**	SIMATIC	**Comment**		**Family**	BasicMC
Version	4.0	**User-defined ID**	MC_MvAbs				

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
Input									
Axis	TO_PositioningAxis			False	False	False	False		Used technology object "Axis"
Base	TO_SpeedAxis			False	False	False	False		
Base	TO_Axis			False	False	False	False		
Base	TO_AnyMotionObject			False	False	False	False		
Input									
Output									
InOut									
Static									
Header	TO_Struct_Header		Non-retain	False	False	False	False		Version information of technology object
VersionMaj	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
VersionMin	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Type	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Reserved1	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Reserved2	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Input									
Output									
InOut									
Static									
Input									
Output									
InOut									
Static									
Input									
Output									
InOut									
Static									
Position	Real		Non-retain	False	False	False	False		Current axis position
Velocity	Real		Non-retain	False	False	False	False		Current axis velocity
ActualPosition	Real		Non-retain	False	False	False	False		Actual position of the axis
ActualVelocity	Real		Non-retain	False	False	False	False		Actual velocity of the axis
Actor	TO_Struct_Actor		Non-retain	False	False	False	False		Configuration data of drive connection
Type	DInt		Non-retain	False	False	False	True		Type of drive connection
InverseDirection	Bool		Non-retain	False	False	False	True		Invert direction signal
DirectionMode	Int		Non-retain	False	False	False	True		Permitted direction of rotation
DataAdaption	DInt		Non-retain	False	False	False	True		Automatic transfer of drive parameters to the CPU
Interface	TO_Struct_ActorInterface		Non-retain	False	False	False	False		Configuration data of drive interface
AddressIn	VREF		Non-retain	False	False	False	False		Drive telegram (internal parameter)
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
AddressOut	VREF		Non-retain	False	False	False	False		Drive telegram (internal parameter)
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
EnableDriveOutput	VREF		Non-retain	False	False	False	False		Enable output
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
▼ DriveReadyInput	VREF		Non-retain	False	False	False	False		Ready input
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
PTO	DWord		Non-retain	False	False	False	True		Pulse output
▼ DriveParameter	TO_Struct_ActorDriveParameter		Non-retain	False	False	False	False		Configuration data of drive parameters
ReferenceSpeed	Real		Non-retain	False	False	False	True		Enter reference speed of drive
MaxSpeed	Real		Non-retain	False	False	False	True		Enter maximum drive speed
PulsesPerDriveRevolution	DInt		Non-retain	False	False	False	True		Pulses per motor revolution
▼ Sensor	Array[1..1] of TO_Struct_Sensor		Non-retain	False	False	False	False		Configuration data of encoder
▼ Sensor[1]	TO_Struct_Sensor		Non-retain	False	False	False	False		Configuration data of encoder
Type	DInt		Non-retain	False	False	False	True		Encoder type (internal parameter)
InverseDirection	Bool		Non-retain	False	False	False	True		Invert rotation direction of encoder signals
System	DInt		Non-retain	False	False	False	True		Encoder system
MountingMode	DInt		Non-retain	False	False	False	True		Select encoder mounting type
DataAdaption	DInt		Non-retain	False	False	False	True		Automatic transfer of encoder parameters to the CPU
▼ Interface	TO_Struct_SensorInterface		Non-retain	False	False	False	False		Configuration data of encoder interface
▼ AddressIn	VREF		Non-retain	False	False	False	False		Encoder telegram (internal parameter)
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
▼ AddressOut	VREF		Non-retain	False	False	False	False		Encoder telegram (internal parameter)
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
Type	DInt		Non-retain	False	False	False	True		Encoder connection (internal parameter)
HSC	DWord		Non-retain	False	False	False	True		High speed counter
Number	UDInt		Non-retain	False	False	False	True		Encoder number
▼ Parameter	TO_Struct_SensorParameter		Non-retain	False	False	False	False		Configuration data of encoder
Resolution	Real		Non-retain	False	False	False	True		Distance between two increments
StepsPerRevolution	UDInt		Non-retain	False	False	False	True		Number of encoder steps per revolution
FineResolutionXist1	UDInt		Non-retain	False	False	False	True		Number of bits for fine resolution in incremental actual value (Gn_XIST1)
FineResolutionXist2	UDInt		Non-retain	False	False	False	True		Bits in abs. actual value (GN_XIST2)
DeterminableRevolutions	UDInt		Non-retain	False	False	False	True		Number of encoder steps per revolution
DistancePerRevolution	Real		Non-retain	False	False	False	True		Load revolutions per number of motor revolutions
▼ ActiveHoming	TO_Struct_SensorActiveHoming		Non-retain	False	False	False	False		Configuration data for active homing
Mode	DInt		Non-retain	False	False	False	True		Active homing mode
SideInput	Bool		Non-retain	False	False	False	True		Side of reference point switch to which homing is executed with "active homing"
▼ DigitalInputAddress	VREF		Non-retain	False	False	False	False		Input address of homing switch
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
HomePositionOffset	Real		Non-retain	False	False	False	True		Home position offset

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
SwitchLevel	Bool		Non-retain	False	False	False	True		Selection of signal level pending with approached homing switch at the CPU input
▼ PassiveHoming	TO_Struct_SensorPassiveHoming		Non-retain	False	False	False	False		Configuration data for passive homing
Mode	DInt		Non-retain	False	False	False	True		Passive homing mode
SideInput	Bool		Non-retain	False	False	False	True		Side of reference point switch to which homing is executed with "passive homing"
▼ DigitalInputAddress	VREF		Non-retain	False	False	False	False		Input address of homing switch
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
SwitchLevel	Bool		Non-retain	False	False	False	True		Selection of signal level pending with approached homing switch at the CPU input
▼ Units	TO_Struct_Units		Non-retain	False	False	False	False		Unit of measurement configuration data
LengthUnit	Int		Non-retain	False	False	False	True		Unit of measurement of parameters
▼ Mechanics	TO_Struct_Mechanics		Non-retain	False	False	False	False		Configuration data of mechanics
LeadScrew	Real		Non-retain	False	False	False	True		Distance per motor revolution
▼ DynamicLimits	TO_Struct_DynamicLimits		Non-retain	False	False	False	False		Configuration data of velocity limits
MaxVelocity	Real		Non-retain	False	False	False	True		Maximum velocity of axis
MinVelocity	Real		Non-retain	False	False	False	True		Start / stop velocity of axis
▼ DynamicDefaults	TO_Struct_DynamicDefaults		Non-retain	False	False	False	False		Configuration data of dynamic settings
Acceleration	Real		Non-retain	False	False	False	True		Acceleration of axis
Deceleration	Real		Non-retain	False	False	False	True		Deceleration of axis
EmergencyDeceleration	Real		Non-retain	False	False	False	True		Emergency stop deceleration of axis
Jerk	Real		Non-retain	False	False	False	True		Jerk of axis
▼ Modulo	TO_Struct_Modulo		Non-retain	False	False	False	False		Configuration data
Enable	Bool		Non-retain	False	False	False	True		Enable modulo property of axis
StartValue	Real		Non-retain	False	False	False	True		Define start value of modulo area
Length	Real		Non-retain	False	False	False	True		Define length of modulo area
▼ PositionLimits_SW	TO_Struct_PositionLimitsSW		Non-retain	False	False	False	False		Configuration data of software limit switches
Active	Bool		Non-retain	False	False	False	True		Enable software limit switches
MinPosition	Real		Non-retain	False	False	False	True		Position of lower software limit switch
MaxPosition	Real		Non-retain	False	False	False	True		Position of upper software limit switch
▼ PositionLimits_HW	TO_Struct_PositionLimitsHW		Non-retain	False	False	False	False		Configuration data of hardware limit switches
Active	Bool		Non-retain	False	False	False	True		Enable hardware limit switches
MinSwitchLevel	Bool		Non-retain	False	False	False	True		Voltage level at which the lower hardware limit switch reports "approach"
▼ MinSwitchAddress	VREF		Non-retain	False	False	False	False		Input address of lower hardware limit switch
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
MaxSwitchLevel	Bool		Non-retain	False	False	False	True		Voltage level at which the upper hardware limit switch reports "approach"
▼ MaxSwitchAddress	VREF		Non-retain	False	False	False	False		Input address of upper hardware limit switch
RID	DWord		Non-retain	False	False	False	False		
AREA	Byte		Non-retain	False	False	False	False		
DB_NUMBER	UInt		Non-retain	False	False	False	False		
OFFSET	UDInt		Non-retain	False	False	False	False		
▼ Homing	TO_Struct_Homing		Non-retain	False	False	False	False		Configuration data for homing
AutoReversal	Bool		Non-retain	False	False	False	True		Enable direction reversal on the hardware limit switch

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
ApproachDirection	Bool		Non-retain	False	False	False	True		Direction of approach and homing direction of axis
ApproachVelocity	Real		Non-retain	False	False	False	True		Approach velocity of axis
ReferencingVelocity	Real		Non-retain	False	False	False	True		Homing velocity of axis
▼ PositionControl	TO_Struct_PositionControl		Non-retain	False	False	False	False		Configuration data
Kv	Real		Non-retain	False	False	False	True		Gain Kv of position control loop
Kpc	Real		Non-retain	False	False	False	True		Precontrol of position control loop
▼ FollowingError	TO_Struct_FollowingError		Non-retain	False	False	False	False		Configuration data
EnableMonitoring	Bool		Non-retain	False	False	False	True		Enable following error monitoring
MinValue	Real		Non-retain	False	False	False	True		Permitted following error for small velocities
MaxValue	Real		Non-retain	False	False	False	True		Following error for maximum velocity
MinVelocity	Real		Non-retain	False	False	False	True		Velocity as of which the following error is to be adapted dynamically
▼ PositioningMonitoring	TO_Struct_PositioningMonitoring		Non-retain	False	False	False	False		Configuration data
ToleranceTime	Real		Non-retain	False	False	False	True		Tolerance time in which the current position value must reach the positioning window
MinDwellTime	Real		Non-retain	False	False	False	True		Minimum dwell time in positioning window
Window	Real		Non-retain	False	False	False	True		Size of the window in which the current value must be located
▼ StandstillSignal	TO_Struct_StandstillSignal		Non-retain	False	False	False	False		Configuration data
VelocityThreshold	Real		Non-retain	False	False	False	True		Size of the standstill window
MinDwellTime	Real		Non-retain	False	False	False	True		Minimum dwell time in standstill window
▼ Simulation	TO_Struct_Simulation		Non-retain	False	False	False	False		Configuration data
Mode	UDInt		Non-retain	False	False	False	True		Simulation mode
▼ StatusPositioning	TO_Struct_StatusPositioning		Non-retain	False	False	False	False		Current positioning status
Distance	Real		Non-retain	False	False	False	False		Current distance of axis to target position
TargetPosition	Real		Non-retain	False	False	False	False		Target position of axis
FollowingError	Real		Non-retain	False	False	False	False		Current axis following error
▼ StatusDrive	TO_Struct_StatusDrive		Non-retain	False	False	False	False		Status of drive
InOperation	Bool		Non-retain	False	False	False	False		Operational status of the drive
CommunicationOK	Bool		Non-retain	False	False	False	False		Cyclic BUS communication between controller and drive
AdaptionState	DInt		Non-retain	False	False	False	False		Transfer status of the drive
▼ StatusSensor	Array[1..1] of TO_Struct_StatusSensor		Non-retain	False	False	False	False		Status of encoder
▼ StatusSensor[1]	TO_Struct_StatusSensor		Non-retain	False	False	False	False		Status of encoder
State	DInt		Non-retain	False	False	False	False		Status of the encoder value
CommunicationOK	Bool		Non-retain	False	False	False	False		Cyclic BUS communication between controller and encoder
AbsEncoderOffset	Real		Non-retain	False	False	False	False		Home position offset for value of an absolute value encoder
AdaptionState	DInt		Non-retain	False	False	False	False		Tranfer status of the encoder
▼ StatusBits	TO_Struct_StatusBits		Non-retain	False	False	False	False		Status information of axis
Activated	Bool		Non-retain	False	False	False	False		Axis is activated
Enable	Bool		Non-retain	False	False	False	False		Axis is enabled
AxisSimulation	Bool		Non-retain	False	False	False	False		Simulation activated
NonPositionControlled	Bool		Non-retain	False	False	False	False		Position control deactivated
HomingDone	Bool		Non-retain	False	False	False	False		Axis is homed
Done	Bool		Non-retain	False	False	False	False		No Motion Control job is active on the axis
Error	Bool		Non-retain	False	False	False	False		An error has occurred on the axis
Standstill	Bool		Non-retain	False	False	False	False		Axis is at a standstill
PositioningCommand	Bool		Non-retain	False	False	False	False		Axis executes a positioning job

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
VelocityCommand	Bool		Non-retain	False	False	False	False		Axis executes a job with velocity specification
HomingCommand	Bool		Non-retain	False	False	False	False		Axis executes a homing job
CommandTableActive	Bool		Non-retain	False	False	False	False		Command table is being processed
ConstantVelocity	Bool		Non-retain	False	False	False	False		Axis traverses with a constant velocity
Accelerating	Bool		Non-retain	False	False	False	False		Axis is accelerating
Decelerating	Bool		Non-retain	False	False	False	False		Axis is decelerating
ControlPanelActive	Bool		Non-retain	False	False	False	False		"Manual control" mode was enabled in the axis control panel
DriveReady	Bool		Non-retain	False	False	False	False		Drive is ready
RestartRequired	Bool		Non-retain	False	False	False	False		Restart required
SWLimitMinActive	Bool		Non-retain	False	False	False	False		Status of lower software limit switch
SWLimitMaxActive	Bool		Non-retain	False	False	False	False		Status of upper software limit switch
HWLimitMinActive	Bool		Non-retain	False	False	False	False		Status of lower hardware limit switch
HWLimitMaxActive	Bool		Non-retain	False	False	False	False		Status of upper hardware limit switch
▼ ErrorBits	TO_Struct_ErrorBits		Non-retain	False	False	False	False		Error information of axis
SystemFault	Bool		Non-retain	False	False	False	False		Internal system error
ConfigFault	Bool		Non-retain	False	False	False	False		Faulty configuration of axis
DriveFault	Bool		Non-retain	False	False	False	False		Drive has displayed an error due to failure of drive-ready signal
SWLimit	Bool		Non-retain	False	False	False	False		Software limit switch approached or overtraveled
HWLimit	Bool		Non-retain	False	False	False	False		Hardware limit switch approached or overtraveled
DirectionFault	Bool		Non-retain	False	False	False	False		Invalid movement direction
HWUsed	Bool		Non-retain	False	False	False	False		Another axis is using the same PTO (Pulse Train Output) and is enabled
SensorFault	Bool		Non-retain	False	False	False	False		Error in encoder system
CommunicationFault	Bool		Non-retain	False	False	False	False		Communication with a connected device is faulty
FollowingError	Bool		Non-retain	False	False	False	False		The maximum permitted following error has been exceeded
PositioningFault	Bool		Non-retain	False	False	False	False		The positioning axis was not positioned correctly at the end of a positioning motion
AdaptionError	Bool		Non-retain	False	False	False	False		The transfer of the drive or encoder parameters failed
▼ ControlPanel	TO_Struct_ControlPanel		Non-retain	False	False	False	False		Parameters of axis control table
▼ Input	TO_Struct_ControlPanelInput		Non-retain	False	False	False	False		Input parameters of axis control panel
TimeOut	DInt		Non-retain	False	False	False	False		Internal parameter; please do not change!
EsLifeSign	DInt		Non-retain	False	False	False	False		Internal parameter; please do not change!
▼ Command	Array[1..1] of TO_Struct_ControlPanelInputCmd		Non-retain	False	False	False	False		Internal parameter; please do not change!
▼ Command[1]	TO_Struct_ControlPanelInputCmd		Non-retain	False	False	False	False		Internal parameter; please do not change!
ReqCounter	DInt		Non-retain	False	False	False	False		Internal parameter; please do not change!
Type	DInt		Non-retain	False	False	False	False		Internal parameter; please do not change!
Position	Real		Non-retain	False	False	False	False		Internal parameter; please do not change!
Velocity	Real		Non-retain	False	False	False	False		Internal parameter; please do not change!
Acceleration	Real		Non-retain	False	False	False	False		Internal parameter; please do not change!
Jerk	Real		Non-retain	False	False	False	False		Internal parameter; please do not change!
Param	DInt		Non-retain	False	False	False	False		Internal parameter; please do not change!
▼ Output	TO_Struct_ControlPanelOutput		Non-retain	False	False	False	False		Output parameters of axis control panel
RTLifeSign	DInt		Non-retain	False	False	False	False		Internal parameter; please do not change!
▼ Command	Array[1..1] of TO_Struct_ControlPanelOutputCmd		Non-retain	False	False	False	False		Internal parameter; please do not change!

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
▼ Command[1]	TO_Struct_ControlPanelOutputCmd		Non-retain	False	False	False	False		Internal parameter; please do not change!
AckCounter	DInt		Non-retain	False	False	False	False		Internal parameter; please do not change!
ErrorID	Word		Non-retain	False	False	False	False		Internal parameter; please do not change!
ErrorInfo	Word		Non-retain	False	False	False	False		Internal parameter; please do not change!
Done	Bool		Non-retain	False	False	False	False		Internal parameter; please do not change!
Aborted	Bool		Non-retain	False	False	False	False		Internal parameter; please do not change!
▼ Internal	Array[1..4] of TO_Struct_Internal		Non-retain	False	False	False	False		Parameters for internal use
▼ Internal[1]	TO_Struct_Internal		Non-retain	False	False	False	False		Parameters for internal use
Id	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Value	Real		Non-retain	False	False	False	False		Internal parameter; please do not change!
▼ Internal[2]	TO_Struct_Internal		Non-retain	False	False	False	False		Parameters for internal use
Id	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Value	Real		Non-retain	False	False	False	False		Internal parameter; please do not change!
▼ Internal[3]	TO_Struct_Internal		Non-retain	False	False	False	False		Parameters for internal use
Id	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Value	Real		Non-retain	False	False	False	False		Internal parameter; please do not change!
▼ Internal[4]	TO_Struct_Internal		Non-retain	False	False	False	False		Parameters for internal use
Id	Int		Non-retain	False	False	False	False		Internal parameter; please do not change!
Value	Real		Non-retain	False	False	False	False		Internal parameter; please do not change!
Execute	Bool	false	Non-retain	True	True	True	False		Start command
Position	Real	0.0	Non-retain	True	True	True	False		Absolute target position of axis
Velocity	Real	10.0	Non-retain	True	True	True	False		Velocity of axis
Direction	Int	1	Non-retain	True	True	True	False		Direction specification
▼ Output									
Done	Bool	false	Non-retain	True	True	True	False		Job is completed
Busy	Bool	false	Non-retain	True	True	True	False		Job is being executed
CommandAborted	Bool	false	Non-retain	True	True	True	False		Job was cancelled
Error	Bool	false	Non-retain	True	True	True	False		Error during execution of the job
ErrorID	Word	16#0	Non-retain	True	True	True	False		Error ID for parameter "Error"
ErrorInfo	Word	16#0	Non-retain	True	True	True	False		Error info ID for parameter "ErrorID"
InOut									
▼ Static									
FB_ID	DInt	0	Non-retain	False	False	False	False		Internal parameter; please do not change!

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

P0 [DB6]

P0 Properties							
General							
Name	P0	**Number**	6	**Type**	DB	**Language**	DB
Numbering	Automatic						
Information							
Title		**Author**	SIMATIC	**Comment**		**Family**	BasicMC
Version	4.0	**User-defined ID**	MC_MvAbs				

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
▼ Input									
Axis	TO_PositioningAxis		False	False	False	False	False		Used technology object "Axis"
Execute	Bool	false	False	True	True	True	False		Start command
Position	Real	0.0	False	True	True	True	False		Absolute target position of axis
Velocity	Real	10.0	False	True	True	True	False		Velocity of axis
Direction	Int	1	False	True	True	True	False		Direction specification
▼ Output									
Done	Bool	false	False	True	True	True	False		Job is completed
Busy	Bool	false	False	True	True	True	False		Job is being executed
CommandAborted	Bool	false	False	True	True	True	False		Job was cancelled
Error	Bool	false	False	True	True	True	False		Error during execution of the job
ErrorID	Word	16#0	False	True	True	True	False		Error ID for parameter "Error"
ErrorInfo	Word	16#0	False	True	True	True	False		Error info ID for parameter "ErrorID"
InOut									
▼ Static									
FB_ID	DInt	0	False	False	False	False	False		Internal parameter; please do not change!

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

P1 [DB7]

P1 Properties							
General							
Name	P1	**Number**	7	**Type**	DB	**Language**	DB
Numbering	Automatic						
Information							
Title		**Author**	SIMATIC	**Comment**		**Family**	BasicMC
Version	4.0	**User-defined ID**	MC_MvAbs				

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
▼ Input									
Axis	TO_PositioningAxis		False	False	False	False	False		Used technology object "Axis"
Execute	Bool	false	False	True	True	True	False		Start command
Position	Real	0.0	False	True	True	True	False		Absolute target position of axis
Velocity	Real	10.0	False	True	True	True	False		Velocity of axis
Direction	Int	1	False	True	True	True	False		Direction specification
▼ Output									
Done	Bool	false	False	True	True	True	False		Job is completed
Busy	Bool	false	False	True	True	True	False		Job is being executed
CommandAborted	Bool	false	False	True	True	True	False		Job was cancelled
Error	Bool	false	False	True	True	True	False		Error during execution of the job
ErrorID	Word	16#0	False	True	True	True	False		Error ID for parameter "Error"
ErrorInfo	Word	16#0	False	True	True	True	False		Error info ID for parameter "ErrorID"
InOut									
▼ Static									
FB_ID	DInt	0	False	False	False	False	False		Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / Technology objects

Axis_1 [DB1]

Axis_1 Properties							
General							
Name	Axis_1	**Number**	1	**Type**	DB	**Language**	Motion_DB
Numbering	Automatic						
Information							
Title		**Author**	SIMATIC	**Comment**		**Family**	BasicMC
Version	6.0	**User-defined ID**	TO_PosAx				

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
Base	TO_SpeedAxis		False	True	True	True	False		
Base	TO_Axis		False	True	True	True	False		
Base	TO_AnyMotionObject		False	True	True	True	False		
Input									
Output									
InOut									
Static									
Header	TO_Struct_Header		False	False	False	False	False		Version information of technology object
VersionMaj	Int	6	False	False	False	False	False		Internal parameter; please do not change!
VersionMin	Int	0	False	False	False	False	False		Internal parameter; please do not change!
Type	Int	0	False	False	False	False	False		Internal parameter; please do not change!
Reserved1	Int	0	False	False	False	False	False		Internal parameter; please do not change!
Reserved2	Int	0	False	False	False	False	False		Internal parameter; please do not change!
Input									
Output									
InOut									
Static									
Input									
Output									
InOut									
Static									
Input									
Output									
InOut									
Static									
Position	Real	0.0	False	True	False	True	False		Current axis position
Velocity	Real	0.0	False	True	False	True	False		Current axis velocity
ActualPosition	Real	0.0	False	True	False	True	False		Actual position of the axis
ActualVelocity	Real	0.0	False	True	False	True	False		Actual velocity of the axis
Actor	TO_Struct_Actor		False	True	True	True	False		Configuration data of drive connection
Type	DInt	2	False	True	False	True	True		Type of drive connection
InverseDirection	Bool	false	False	True	False	True	True		Invert direction signal
DirectionMode	Int	0	False	True	True	True	True		Permitted direction of rotation
DataAdaption	DInt	0	False	True	False	True	True		Automatic transfer of drive parameters to the CPU
Interface	TO_Struct_ActorInterface		False	False	False	False	False		Configuration data of drive interface
AddressIn	VREF		False	False	False	False	False		Drive telegram (internal parameter)
RID	DWord	16#0000_0000	False	False	False	False	False		
AREA	Byte	16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
AddressOut	VREF		False	False	False	False	False		Drive telegram (internal parameter)
RID	DWord	16#0000_0000	False	False	False	False	False		
AREA	Byte	16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
EnableDriveOutput	VREF		False	False	False	False	False		Enable output
RID	DWord	DW#16#00000000	False	False	False	False	False		
AREA	Byte	B#16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
DriveReadyInput	VREF		False	False	False	False	False		Ready input
RID	DWord	DW#16#00000000	False	False	False	False	False		
AREA	Byte	B#16#00	False	False	False	False	False		

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
PTO	DWord	16#88E1_0109	False	False	False	False	True		Pulse output
DriveParameter	TO_Struct_ActorDriveParameter		False	True	False	True	False		Configuration data of drive parameters
ReferenceSpeed	Real	3000.0	False	True	False	True	True		Enter reference speed of drive
MaxSpeed	Real	3000.0	False	True	False	True	True		Enter maximum drive speed
PulsesPerDriveRevolution	DInt	800	False	True	False	True	True		Pulses per motor revolution
Sensor	Array[1..1] of TO_Struct_Sensor		False	True	True	True	False		Configuration data of encoder
Sensor[1]	TO_Struct_Sensor		False	True	True	True	False		Configuration data of encoder
Type	DInt	0	False	True	False	True	True		Encoder type (internal parameter)
InverseDirection	Bool	false	False	True	False	True	True		Invert rotation direction of encoder signals
System	DInt	1	False	True	False	True	True		Encoder system
MountingMode	DInt	0	False	True	False	True	True		Select encoder mounting type
DataAdaption	DInt	0	False	True	False	True	True		Automatic transfer of encoder parameters to the CPU
Interface	TO_Struct_SensorInterface		False	False	False	False	False		Configuration data of encoder interface
AddressIn	VREF		False	False	False	False	False		Encoder telegram (internal parameter)
RID	DWord	16#0000_0000	False	False	False	False	False		
AREA	Byte	16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
AddressOut	VREF		False	False	False	False	False		Encoder telegram (internal parameter)
RID	DWord	16#0000_0000	False	False	False	False	False		
AREA	Byte	16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
Type	DInt	4	False	False	False	False	True		Encoder connection (internal parameter)
HSC	DWord	16#0	False	False	False	False	True		High speed counter
Number	UDInt	1	False	False	False	False	True		Encoder number
Parameter	TO_Struct_SensorParameter		False	True	False	True	False		Configuration data of encoder
Resolution	Real	0.001	False	True	False	True	True		Distance between two increments
StepsPerRevolution	UDInt	2048	False	True	False	True	True		Number of encoder steps per revolution
FineResolutionXist1	UDInt	11	False	True	False	True	True		Number of bits for fine resolution in incremental actual value (Gn_XIST1)
FineResolutionXist2	UDInt	9	False	True	False	True	True		Bits in abs. actual value (GN_XIST2)
DeterminableRevolutions	UDInt	1	False	True	False	True	True		Number of encoder steps per revolution
DistancePerRevolution	Real	100.0	False	True	False	True	True		Load revolutions per number of motor revolutions
ActiveHoming	TO_Struct_SensorActiveHoming		False	True	True	True	False		Configuration data for active homing
Mode	DInt	2	False	True	False	True	True		Active homing mode
SideInput	Bool	false	False	True	True	True	True		Side of reference point switch to which homing is executed with "active homing"
DigitalInputAddress	VREF		False	False	False	False	False		Input address of homing switch
RID	DWord	DW#16#00000000	False	False	False	False	False		
AREA	Byte	B#16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
HomePositionOffset	Real	0.0	False	True	True	True	True		Home position offset
SwitchLevel	Bool	true	False	True	True	True	True		Selection of signal level pending with approached homing switch at the CPU input
PassiveHoming	TO_Struct_SensorPassiveHoming		False	True	True	True	False		Configuration data for passive homing
Mode	DInt	2	False	True	False	True	True		Passive homing mode
SideInput	Bool	false	False	True	True	True	True		Side of reference point switch to which homing is executed with "passive homing"
DigitalInputAddress	VREF		False	False	False	False	False		Input address of homing switch
RID	DWord	DW#16#00000000	False	False	False	False	False		
AREA	Byte	B#16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
SwitchLevel	Bool	true	False	True	True	True	True		Selection of signal level pending with approached homing switch at the CPU input
▼ Units	TO_Struct_Units		False	True	False	True	False		Unit of measurement configuration data
LengthUnit	Int	1013	False	True	False	True	True		Unit of measurement of parameters
▼ Mechanics	TO_Struct_Mechanics		False	True	False	True	False		Configuration data of mechanics
LeadScrew	Real	40.0	False	True	False	True	True		Distance per motor revolution
▼ DynamicLimits	TO_Struct_DynamicLimits		False	True	False	True	False		Configuration data of velocity limits
MaxVelocity	Real	125.0	False	True	False	True	True		Maximum velocity of axis
MinVelocity	Real	25.0	False	True	False	True	True		Start / stop velocity of axis
▼ DynamicDefaults	TO_Struct_DynamicDefaults		False	True	True	True	False		Configuration data of dynamic settings
Acceleration	Real	500.0	False	True	True	True	True		Acceleration of axis
Deceleration	Real	500.0	False	True	True	True	True		Deceleration of axis
EmergencyDeceleration	Real	50.0	False	True	True	True	True		Emergency stop deceleration of axis
Jerk	Real	0.0	False	True	True	True	True		Jerk of axis
▼ Modulo	TO_Struct_Modulo		False	True	False	True	False		Configuration data
Enable	Bool	false	False	True	False	True	True		Enable modulo property of axis
StartValue	Real	0.0	False	True	False	True	True		Define start value of modulo area
Length	Real	360.0	False	True	False	True	True		Define length of modulo area
▼ PositionLimits_SW	TO_Struct_PositionLimitsSW		False	True	True	True	False		Configuration data of software limit switches
Active	Bool	false	False	True	True	True	True		Enable software limit switches
MinPosition	Real	-10000.0	False	True	True	True	True		Position of lower software limit switch
MaxPosition	Real	10000.0	False	True	True	True	True		Position of upper software limit switch
▼ PositionLimits_HW	TO_Struct_PositionLimitsHW		False	True	True	True	False		Configuration data of hardware limit switches
Active	Bool	false	False	True	True	True	True		Enable hardware limit switches
MinSwitchLevel	Bool	false	False	True	False	True	True		Voltage level at which the lower hardware limit switch reports "approach"
▼ MinSwitchAddress	VREF		False	False	False	False	False		Input address of lower hardware limit switch
RID	DWord	DW#16#00000000	False	False	False	False	False		
AREA	Byte	B#16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
MaxSwitchLevel	Bool	false	False	True	False	True	True		Voltage level at which the upper hardware limit switch reports "approach"
▼ MaxSwitchAddress	VREF		False	False	False	False	False		Input address of upper hardware limit switch
RID	DWord	DW#16#00000000	False	False	False	False	False		
AREA	Byte	B#16#00	False	False	False	False	False		
DB_NUMBER	UInt	0	False	False	False	False	False		
OFFSET	UDInt	0	False	False	False	False	False		
▼ Homing	TO_Struct_Homing		False	True	True	True	False		Configuration data for homing
AutoReversal	Bool	false	False	True	True	True	True		Enable direction reversal on the hardware limit switch
ApproachDirection	Bool	true	False	True	True	True	True		Direction of approach and homing direction of axis
ApproachVelocity	Real	200.0	False	True	True	True	True		Approach velocity of axis
ReferencingVelocity	Real	40.0	False	True	True	True	True		Homing velocity of axis
▼ PositionControl	TO_Struct_PositionControl		False	True	False	True	False		Configuration data
Kv	Real	10.0	False	True	False	True	True		Gain Kv of position control loop
Kpc	Real	100.0	False	True	False	True	True		Precontrol of position control loop
▼ FollowingError	TO_Struct_FollowingError		False	True	False	True	False		Configuration data
EnableMonitoring	Bool	True	False	True	False	True	True		Enable following error monitoring
MinValue	Real	10.0	False	True	False	True	True		Permitted following error for small velocities
MaxValue	Real	100.0	False	True	False	True	True		Following error for maximum velocity
MinVelocity	Real	10.0	False	True	False	True	True		Velocity as of which the following error is to be adapted dynamically
▼ PositioningMonitoring	TO_Struct_PositioningMonitoring		False	True	False	True	False		Configuration data
ToleranceTime	Real	1.0	False	True	False	True	True		Tolerance time in which the current position value must reach the positioning window
MinDwellTime	Real	0.1	False	True	False	True	True		Minimum dwell time in positioning window
Window	Real	1.0	False	True	False	True	True		Size of the window in which the current value must be located

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
StandstillSignal	TO_Struct_StandstillSignal		False	True	False	True	False		Configuration data
VelocityThreshold	Real	5.0	False	True	False	True	True		Size of the standstill window
MinDwellTime	Real	0.01	False	True	False	True	True		Minimum dwell time in standstill window
Simulation	TO_Struct_Simulation		False	True	False	True	False		Configuration data
Mode	UDInt	0	False	True	False	True	True		Simulation mode
StatusPositioning	TO_Struct_StatusPositioning		False	True	False	True	False		Current positioning status
Distance	Real	0.0	False	True	False	True	False		Current distance of axis to target position
TargetPosition	Real	0.0	False	True	False	True	False		Target position of axis
FollowingError	Real	0.0	False	True	False	True	False		Current axis following error
StatusDrive	TO_Struct_StatusDrive		False	True	False	True	False		Status of drive
InOperation	Bool	false	False	True	False	True	False		Operational status of the drive
CommunicationOK	Bool	false	False	True	False	True	False		Cyclic BUS communication between controller and drive
AdaptionState	DInt	0	False	True	False	True	False		Transfer status of the drive
StatusSensor	Array[1..1] of TO_Struct_StatusSensor		False	True	False	True	False		Status of encoder
StatusSensor[1]	TO_Struct_StatusSensor		False	True	False	True	False		Status of encoder
State	DInt	0	False	True	False	True	False		Status of the encoder value
CommunicationOK	Bool	false	False	True	False	True	False		Cyclic BUS communication between controller and encoder
AbsEncoderOffset	Real	0.0	False	True	False	True	False		Home position offset for value of an absolute value encoder
AdaptionState	DInt	0	False	True	False	True	False		Tranfer status of the encoder
StatusBits	TO_Struct_StatusBits		False	True	False	True	False		Status information of axis
Activated	Bool	false	False	True	False	True	False		Axis is activated
Enable	Bool	false	False	True	False	True	False		Axis is enabled
AxisSimulation	Bool	false	False	True	False	True	False		Simulation activated
NonPositionControlled	Bool	false	False	True	False	True	False		Position control deactivated
HomingDone	Bool	false	False	True	False	True	False		Axis is homed
Done	Bool	false	False	True	False	True	False		No Motion Control job is active on the axis
Error	Bool	false	False	True	False	True	False		An error has occurred on the axis
Standstill	Bool	false	False	True	False	True	False		Axis is at a standstill
PositioningCommand	Bool	false	False	True	False	True	False		Axis executes a positioning job
VelocityCommand	Bool	false	False	True	False	True	False		Axis executes a job with velocity specification
HomingCommand	Bool	false	False	True	False	True	False		Axis executes a homing job
CommandTableActive	Bool	false	False	True	False	True	False		Command table is being processed
ConstantVelocity	Bool	false	False	True	False	True	False		Axis traverses with a constant velocity
Accelerating	Bool	false	False	True	False	True	False		Axis is accelerating
Decelerating	Bool	false	False	True	False	True	False		Axis is decelerating
ControlPanelActive	Bool	false	False	True	False	True	False		"Manual control" mode was enabled in the axis control panel
DriveReady	Bool	false	False	True	False	True	False		Drive is ready
RestartRequired	Bool	false	False	True	False	True	False		Restart required
SWLimitMinActive	Bool	false	False	True	False	True	False		Status of lower software limit switch
SWLimitMaxActive	Bool	false	False	True	False	True	False		Status of upper software limit switch
HWLimitMinActive	Bool	false	False	True	False	True	False		Status of lower hardware limit switch
HWLimitMaxActive	Bool	false	False	True	False	True	False		Status of upper hardware limit switch
ErrorBits	TO_Struct_ErrorBits		False	True	False	True	False		Error information of axis
SystemFault	Bool	false	False	True	False	True	False		Internal system error
ConfigFault	Bool	false	False	True	False	True	False		Faulty configuration of axis
DriveFault	Bool	false	False	True	False	True	False		Drive has displayed an error due to failure of drive-ready signal
SWLimit	Bool	false	False	True	False	True	False		Software limit switch approached or overtraveled
HWLimit	Bool	false	False	True	False	True	False		Hardware limit switch approached or overtraveled
DirectionFault	Bool	false	False	True	False	True	False		Invalid movement direction
HWUsed	Bool	false	False	True	False	True	False		Another axis is using the same PTO (Pulse Train Output) and is enabled
SensorFault	Bool	false	False	True	False	True	False		Error in encoder system
CommunicationFault	Bool	false	False	True	False	True	False		Communication with a connected device is faulty
FollowingError	Bool	false	False	True	False	True	False		The maximum permitted following error has been exceeded
PositioningFault	Bool	false	False	True	False	True	False		The positioning axis was not positioned correctly at the end of a positioning motion
AdaptionError	Bool	false	False	True	False	True	False		The transfer of the drive or encoder parameters failed

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Supervision	Comment
ControlPanel	TO_Struct_ControlPanel		False	False	False	False	False		Parameters of axis control table
Input	TO_Struct_ControlPanelInput		False	False	False	False	False		Input parameters of axis control panel
TimeOut	DInt	L#3000	False	False	False	False	False		Internal parameter; please do not change!
EsLifeSign	DInt	0	False	False	False	False	False		Internal parameter; please do not change!
Command	Array[1..1] of TO_Struct_ControlPanelInputCmd		False	False	False	False	False		Internal parameter; please do not change!
Command[1]	TO_Struct_ControlPanelInputCmd		False	False	False	False	False		Internal parameter; please do not change!
ReqCounter	DInt	0	False	False	False	False	False		Internal parameter; please do not change!
Type	DInt	0	False	False	False	False	False		Internal parameter; please do not change!
Position	Real	0.0	False	False	False	False	False		Internal parameter; please do not change!
Velocity	Real	0.0	False	False	False	False	False		Internal parameter; please do not change!
Acceleration	Real	0.0	False	False	False	False	False		Internal parameter; please do not change!
Jerk	Real	0.0	False	False	False	False	False		Internal parameter; please do not change!
Param	DInt	0	False	False	False	False	False		Internal parameter; please do not change!
Output	TO_Struct_ControlPanelOutput		False	False	False	False	False		Output parameters of axis control panel
RTLifeSign	DInt	0	False	False	False	False	False		Internal parameter; please do not change!
Command	Array[1..1] of TO_Struct_ControlPanelOutputCmd		False	False	False	False	False		Internal parameter; please do not change!
Command[1]	TO_Struct_ControlPanelOutputCmd		False	False	False	False	False		Internal parameter; please do not change!
AckCounter	DInt	0	False	False	False	False	False		Internal parameter; please do not change!
ErrorID	Word	16#0	False	False	False	False	False		Internal parameter; please do not change!
ErrorInfo	Word	16#0	False	False	False	False	False		Internal parameter; please do not change!
Done	Bool	false	False	False	False	False	False		Internal parameter; please do not change!
Aborted	Bool	false	False	False	False	False	False		Internal parameter; please do not change!
Internal	Array[1..4] of TO_Struct_Internal		False	False	False	False	False		Parameters for internal use
Internal[1]	TO_Struct_Internal		False	False	False	False	False		Parameters for internal use
Id	Int	0	False	False	False	False	False		Internal parameter; please do not change!
Value	Real	0.0	False	False	False	False	False		Internal parameter; please do not change!
Internal[2]	TO_Struct_Internal		False	False	False	False	False		Parameters for internal use
Id	Int	0	False	False	False	False	False		Internal parameter; please do not change!
Value	Real	0.0	False	False	False	False	False		Internal parameter; please do not change!
Internal[3]	TO_Struct_Internal		False	False	False	False	False		Parameters for internal use
Id	Int	0	False	False	False	False	False		Internal parameter; please do not change!
Value	Real	0.0	False	False	False	False	False		Internal parameter; please do not change!
Internal[4]	TO_Struct_Internal		False	False	False	False	False		Parameters for internal use
Id	Int	0	False	False	False	False	False		Internal parameter; please do not change!
Value	Real	0.0	False	False	False	False	False		Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / PLC tags / Default tag table [70]

PLC tags

PLC tags

Name	Data type	Address	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Supervision	Comment
System_Byte	Byte	%MB1	False	True	True	True		
FirstScan	Bool	%M1.0	False	True	True	True		
DiagStatusUpdate	Bool	%M1.1	False	True	True	True		
AlwaysTRUE	Bool	%M1.2	False	True	True	True		
AlwaysFALSE	Bool	%M1.3	False	True	True	True		
Clock_Byte	Byte	%MB0	False	True	True	True		
Clock_10Hz	Bool	%M0.0	False	True	True	True		
Clock_5Hz	Bool	%M0.1	False	True	True	True		
Clock_2.5Hz	Bool	%M0.2	False	True	True	True		
Clock_2Hz	Bool	%M0.3	False	True	True	True		
Clock_1.25Hz	Bool	%M0.4	False	True	True	True		
Clock_1Hz	Bool	%M0.5	False	True	True	True		
Clock_0.625Hz	Bool	%M0.6	False	True	True	True		
Clock_0.5Hz	Bool	%M0.7	False	True	True	True		
Axis_1_Pulse	Bool	%Q4.0	False	True	True	True		
Axis_1_Direction	Bool	%Q4.1	False	True	True	True		
out_En_m	Bool	%Q0.0	False	True	True	True		
out_Push1	Bool	%Q0.1	False	True	True	True		
out_Push2	Bool	%Q0.2	False	True	True	True		
out_Push3	Bool	%Q0.3	False	True	True	True		
out_Down	Bool	%Q0.4	False	True	True	True		
out_Gripper	Bool	%Q0.5	False	True	True	True		
out_L1	Bool	%Q8.1	False	True	True	True		
out_L2	Bool	%Q8.2	False	True	True	True		
out_L3	Bool	%Q8.3	False	True	True	True		
SW1	Bool	%I0.0	False	True	True	True		
SW2	Bool	%I0.1	False	True	True	True		
SW3	Bool	%I0.2	False	True	True	True		
s_Push1	Bool	%I0.3	False	True	True	True		
s_Push2	Bool	%I0.4	False	True	True	True		
s_Push3	Bool	%I0.5	False	True	True	True		
s_Up	Bool	%I0.6	False	True	True	True		
s_Down	Bool	%I0.7	False	True	True	True		
s_Gripper	Bool	%I8.0	False	True	True	True		
s_Photo1	Bool	%I8.1	False	True	True	True		
s-Photo2	Bool	%I8.2	False	True	True	True		
s-Photo3	Bool	%I8.3	False	True	True	True		
s_Photo4	Bool	%I8.4	False	True	True	True		
s_Limit_L	Bool	%I8.6	False	True	True	True		
s_Limit_R	Bool	%I8.7	False	True	True	True		

PLC_1 [CPU 1212C AC/DC/Rly] / PLC tags / Default tag table [70]

User constants

User constants				
	Name	Data type	Value	Comment

PLC_1 [CPU 1212C AC/DC/Rly] / PLC tags / State [10]

PLC tags

PLC tags

	Name	Data type	Address	Retain	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Supervision	Comment
	State1	Bool	%M20.0	False	True	True	True		
	State2	Bool	%M20.1	False	True	True	True		
	State3	Bool	%M20.2	False	True	True	True		
	State4	Bool	%M20.3	False	True	True	True		
	State5	Bool	%M20.4	False	True	True	True		
	State6	Bool	%M20.5	False	True	True	True		
	State7	Bool	%M20.6	False	True	True	True		
	State8	Bool	%M20.7	False	True	True	True		
	State9	Bool	%M21.0	False	True	True	True		
	State10	Bool	%M21.1	False	True	True	True		

PLC_1 [CPU 1212C AC/DC/Rly] / PLC tags / State [10]

User constants

User constants				
	Name	Data type	Value	Comment

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Header

TO_Struct_Header Properties							
General							
Name	TO_Struct_Header	**Number**	1100	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Header struct of an TO	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
VersionMaj	Int	0	False	False	False	False	Internal parameter; please do not change!
VersionMin	Int	0	False	False	False	False	Internal parameter; please do not change!
Type	Int	0	False	False	False	False	Internal parameter; please do not change!
Reserved1	Int	0	False	False	False	False	Internal parameter; please do not change!
Reserved2	Int	0	False	False	False	False	Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Actor

TO_Struct_Actor Properties							
General							
Name	TO_Struct_Actor	**Number**	1700	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Actor structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Type	DInt	2	True	False	True	True	Type of drive connection
InverseDirection	Bool	false	True	False	True	True	Invert direction signal
DirectionMode	Int	0	True	True	True	True	Permitted direction of rotation
DataAdaption	DInt	0	True	False	True	True	Automatic transfer of drive parameters to the CPU
▼ Interface	TO_Struct_ActorInterface		False	False	False	False	Configuration data of drive interface
▼ AddressIn	VREF		False	False	False	False	Drive telegram (internal parameter)
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
▼ AddressOut	VREF		False	False	False	False	Drive telegram (internal parameter)
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
▼ EnableDriveOutput	VREF		False	False	False	False	Enable output
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
▼ DriveReadyInput	VREF		False	False	False	False	Ready input
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
PTO	DWord	16#0	False	False	False	True	Pulse output
▼ DriveParameter	TO_Struct_ActorDriveParameter		True	False	True	False	Configuration data of drive parameters
ReferenceSpeed	Real	3000.0	True	False	True	True	Enter reference speed of drive
MaxSpeed	Real	3000.0	True	False	True	True	Enter maximum drive speed
PulsesPerDriveRevolution	DInt	1000	True	False	True	True	Pulses per motor revolution

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_ActorInterface

TO_Struct_ActorInterface Properties							
General							
Name	TO_Struct_ActorInterface	**Number**	1701	**Type**	UDT	**Language**	
Numbering							
Information							
Title	ActorInterface structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
AddressIn	VREF		False	False	False	False	Drive telegram (internal parameter)
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
AddressOut	VREF		False	False	False	False	Drive telegram (internal parameter)
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
EnableDriveOutput	VREF		False	False	False	False	Enable output
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
DriveReadyInput	VREF		False	False	False	False	Ready input
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
PTO	DWord	16#0	False	False	False	True	Pulse output

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_ActorDriveParameter

TO_Struct_ActorDriveParameter Properties							
General							
Name	TO_Struct_ActorDrivePara-meter	**Number**	1702	**Type**	UDT	**Language**	
Numbering							
Information							
Title	ActorDriveParameter struc-ture of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writ-able from HMI/ OPC UA	Visible in HMI engi-neering	Setpoint	Comment
ReferenceSpeed	Real	3000.0	True	False	True	True	Enter reference speed of drive
MaxSpeed	Real	3000.0	True	False	True	True	Enter maximum drive speed
PulsesPerDriveRevolution	DInt	1000	True	False	True	True	Pulses per motor revolution

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Sensor

TO_Struct_Sensor Properties							
General							
Name	TO_Struct_Sensor	**Number**	1703	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Sensor structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Type	DInt	0	True	False	True	True	Encoder type (internal parameter)
InverseDirection	Bool	false	True	False	True	True	Invert rotation direction of encoder signals
System	DInt	1	True	False	True	True	Encoder system
MountingMode	DInt	0	True	False	True	True	Select encoder mounting type
DataAdaption	DInt	0	True	False	True	True	Automatic transfer of encoder parameters to the CPU
▼ Interface	TO_Struct_SensorInterface		False	False	False	False	Configuration data of encoder interface
▼ AddressIn	VREF		False	False	False	False	Encoder telegram (internal parameter)
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
▼ AddressOut	VREF		False	False	False	False	Encoder telegram (internal parameter)
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
Type	DInt	4	False	False	False	True	Encoder connection (internal parameter)
HSC	DWord	16#0	False	False	False	True	High speed counter
Number	UDInt	1	False	False	False	True	Encoder number
▼ Parameter	TO_Struct_SensorParameter		True	False	True	False	Configuration data of encoder
Resolution	Real	0.001	True	False	True	True	Distance between two increments
StepsPerRevolution	UDInt	2048	True	False	True	True	Number of encoder steps per revolution
FineResolutionXist1	UDInt	11	True	False	True	True	Number of bits for fine resolution in incremental actual value (Gn_XIST1)
FineResolutionXist2	UDInt	9	True	False	True	True	Bits in abs. actual value (GN_XIST2)
DeterminableRevolutions	UDInt	1	True	False	True	True	Number of encoder steps per revolution
DistancePerRevolution	Real	100.0	True	False	True	True	Load revolutions per number of motor revolutions
▼ ActiveHoming	TO_Struct_SensorActiveHoming		True	True	True	False	Configuration data for active homing
Mode	DInt	2	True	False	True	True	Active homing mode
SideInput	Bool	false	True	True	True	True	Side of reference point switch to which homing is executed with "active homing"
▼ DigitalInputAddress	VREF		False	False	False	False	Input address of homing switch
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
HomePositionOffset	Real	0.0	True	True	True	True	Home position offset
SwitchLevel	Bool	true	True	True	True	True	Selection of signal level pending with approached homing switch at the CPU input
▼ PassiveHoming	TO_Struct_SensorPassiveHoming		True	True	True	False	Configuration data for passive homing
Mode	DInt	2	True	False	True	True	Passive homing mode
SideInput	Bool	false	True	True	True	True	Side of reference point switch to which homing is executed with "passive homing"
▼ DigitalInputAddress	VREF		False	False	False	False	Input address of homing switch
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
SwitchLevel	Bool	true	True	True	True	True	Selection of signal level pending with approached homing switch at the CPU input

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_SensorInterface

TO_Struct_SensorInterface Properties							
General							
Name	TO_Struct_SensorInterface	**Number**	1704	**Type**	UDT	**Language**	
Numbering							
Information							
Title	SensorInterface structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
AddressIn	VREF		False	False	False	False	Encoder telegram (internal parameter)
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
AddressOut	VREF		False	False	False	False	Encoder telegram (internal parameter)
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
Type	DInt	4	False	False	False	True	Encoder connection (internal parameter)
HSC	DWord	16#0	False	False	False	True	High speed counter
Number	UDInt	1	False	False	False	True	Encoder number

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_SensorParameter

TO_Struct_SensorParameter Properties							
General							
Name	TO_Struct_SensorParameter	**Number**	1705	**Type**	UDT	**Language**	
Numbering							
Information							
Title	SensorParameter structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Resolution	Real	0.001	True	False	True	True	Distance between two increments
StepsPerRevolution	UDInt	2048	True	False	True	True	Number of encoder steps per revolution
FineResolutionXist1	UDInt	11	True	False	True	True	Number of bits for fine resolution in incremental actual value (Gn_XIST1)
FineResolutionXist2	UDInt	9	True	False	True	True	Bits in abs. actual value (GN_XIST2)
DeterminableRevolutions	UDInt	1	True	False	True	True	Number of encoder steps per revolution
DistancePerRevolution	Real	100.0	True	False	True	True	Load revolutions per number of motor revolutions

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_SensorActiveHoming

TO_Struct_SensorActiveHoming Properties							
General							
Name	TO_Struct_SensorActive-Homing	**Number**	1706	**Type**	UDT	**Language**	
Numbering							
Information							
Title	SensorActiveHoming structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Mode	DInt	2	True	False	True	True	Active homing mode
SideInput	Bool	false	True	True	True	True	Side of reference point switch to which homing is executed with "active homing"
▼ DigitalInputAddress	VREF		False	False	False	False	Input address of homing switch
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
HomePositionOffset	Real	0.0	True	True	True	True	Home position offset
SwitchLevel	Bool	true	True	True	True	True	Selection of signal level pending with approached homing switch at the CPU input

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_SensorPassiveHoming

TO_Struct_SensorPassiveHoming Properties							
General							
Name	TO_Struct_SensorPassive-Homing	**Number**	1707	**Type**	UDT	**Language**	
Numbering							
Information							
Title	SensorPassiveHoming structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Mode	DInt	2	True	False	True	True	Passive homing mode
SideInput	Bool	false	True	True	True	True	Side of reference point switch to which homing is executed with "passive homing"
▼ DigitalInputAddress	VREF		False	False	False	False	Input address of homing switch
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
SwitchLevel	Bool	true	True	True	True	True	Selection of signal level pending with approached homing switch at the CPU input

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Units

TO_Struct_Units Properties							
General							
Name	TO_Struct_Units	**Number**	1708	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Units structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
LengthUnit	Int	1013	True	False	True	True	Unit of measurement of parameters

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Mechanics

TO_Struct_Mechanics Properties							
General							
Name	TO_Struct_Mechanics	**Number**	1711	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Mechanics structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
LeadScrew	Real	10.0	True	False	True	True	Distance per motor revolution

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_DynamicLimits

TO_Struct_DynamicLimits Properties							
General							
Name	TO_Struct_DynamicLimits	**Number**	1713	**Type**	UDT	**Language**	
Numbering							
Information							
Title	DynamicLimits structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
MaxVelocity	Real	250.0	True	False	True	True	Maximum velocity of axis
MinVelocity	Real	10.0	True	False	True	True	Start / stop velocity of axis

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_DynamicDefaults

TO_Struct_DynamicDefaults Properties							
General							
Name	TO_Struct_DynamicDefaults	**Number**	1714	**Type**	UDT	**Language**	
Numbering							
Information							
Title	DynamicDefaults structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Acceleration	Real	48.0	True	True	True	True	Acceleration of axis
Deceleration	Real	48.0	True	True	True	True	Deceleration of axis
EmergencyDeceleration	Real	120.0	True	True	True	True	Emergency stop deceleration of axis
Jerk	Real	0.0	True	True	True	True	Jerk of axis

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Modulo

TO_Struct_Modulo Properties							
General							
Name	TO_Struct_Modulo	**Number**	1712	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Modulo structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Enable	Bool	false	True	False	True	True	Enable modulo property of axis
StartValue	Real	0.0	True	False	True	True	Define start value of modulo area
Length	Real	360.0	True	False	True	True	Define length of modulo area

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_PositionLimitsSW

TO_Struct_PositionLimitsSW Properties							
General							
Name	TO_Struct_PositionLimitsSW	**Number**	1715	**Type**	UDT	**Language**	
Numbering							
Information							
Title	PositionLimitsSW structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Active	Bool	false	True	True	True	True	Enable software limit switches
MinPosition	Real	-10000.0	True	True	True	True	Position of lower software limit switch
MaxPosition	Real	10000.0	True	True	True	True	Position of upper software limit switch

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_PositionLimitsHW

TO_Struct_PositionLimitsHW Properties							
General							
Name	TO_Struct_PositionLimitsHW	**Number**	1716	**Type**	UDT	**Language**	
Numbering							
Information							
Title	PositionLimitsHW structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Active	Bool	false	True	True	True	True	Enable hardware limit switches
MinSwitchLevel	Bool	false	True	False	True	True	Voltage level at which the lower hardware limit switch reports "approach"
▼ MinSwitchAddress	VREF		False	False	False	False	Input address of lower hardware limit switch
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	
MaxSwitchLevel	Bool	false	True	False	True	True	Voltage level at which the upper hardware limit switch reports "approach"
▼ MaxSwitchAddress	VREF		False	False	False	False	Input address of upper hardware limit switch
RID	DWord	DW#16#00000000	False	False	False	False	
AREA	Byte	B#16#00	False	False	False	False	
DB_NUMBER	UInt	0	False	False	False	False	
OFFSET	UDInt	0	False	False	False	False	

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Homing

TO_Struct_Homing Properties							
General							
Name	TO_Struct_Homing	**Number**	1717	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Homing structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
AutoReversal	Bool	false	True	True	True	True	Enable direction reversal on the hardware limit switch
ApproachDirection	Bool	true	True	True	True	True	Direction of approach and homing direction of axis
ApproachVelocity	Real	200.0	True	True	True	True	Approach velocity of axis
ReferencingVelocity	Real	40.0	True	True	True	True	Homing velocity of axis

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_PositionControl

TO_Struct_PositionControl Properties							
General							
Name	TO_Struct_PositionControl	**Number**	1719	**Type**	UDT	**Language**	
Numbering							
Information							
Title	PositioningControl structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Kv	Real	10.0	True	False	True	True	Gain Kv of position control loop
Kpc	Real	100.0	True	False	True	True	Precontrol of position control loop

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_FollowingError

TO_Struct_FollowingError Properties							
General							
Name	TO_Struct_FollowingError	**Number**	1720	**Type**	UDT	**Language**	
Numbering							
Information							
Title	FollowingError structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
EnableMonitoring	Bool	True	True	False	True	True	Enable following error monitoring
MinValue	Real	10.0	True	False	True	True	Permitted following error for small velocities
MaxValue	Real	100.0	True	False	True	True	Following error for maximum velocity
MinVelocity	Real	10.0	True	False	True	True	Velocity as of which the following error is to be adapted dynamically

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_PositioningMonitoring

TO_Struct_PositioningMonitoring Properties							
General							
Name	TO_Struct_PositioningMonitoring	**Number**	1721	**Type**	UDT	**Language**	
Numbering							
Information							
Title	PositioningMonitoring structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
ToleranceTime	Real	1.0	True	False	True	True	Tolerance time in which the current position value must reach the positioning window
MinDwellTime	Real	0.1	True	False	True	True	Minimum dwell time in positioning window
Window	Real	1.0	True	False	True	True	Size of the window in which the current value must be located

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_StandstillSignal

TO_Struct_StandstillSignal Properties							
General							
Name	TO_Struct_StandstillSignal	**Number**	1722	**Type**	UDT	**Language**	
Numbering							
Information							
Title	StandstillSignal structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
VelocityThreshold	Real	5.0	True	False	True	True	Size of the standstill window
MinDwellTime	Real	0.01	True	False	True	True	Minimum dwell time in standstill window

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Simulation

TO_Struct_Simulation Properties							
General							
Name	TO_Struct_Simulation	**Number**	1739	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Simulation structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Mode	UDInt	0	True	False	True	True	Simulation mode

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_StatusPositioning

TO_Struct_StatusPositioning Properties							
General							
Name	TO_Struct_StatusPositioning	**Number**	1723	**Type**	UDT	**Language**	
Numbering							
Information							
Title	StatusPositioning structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writ-able from HMI/ OPC UA	Visible in HMI engi-neering	Setpoint	Comment
Distance	Real	0.0	True	False	True	False	Current distance of axis to target position
TargetPosition	Real	0.0	True	False	True	False	Target position of axis
FollowingError	Real	0.0	True	False	True	False	Current axis following error

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_StatusDrive

TO_Struct_StatusDrive Properties							
General							
Name	TO_Struct_StatusDrive	**Number**	1724	**Type**	UDT	**Language**	
Numbering							
Information							
Title	StatusDrive structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
InOperation	Bool	false	True	False	True	False	Operational status of the drive
CommunicationOK	Bool	false	True	False	True	False	Cyclic BUS communication between controller and drive
AdaptionState	DInt	0	True	False	True	False	Transfer status of the drive

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_StatusSensor

TO_Struct_StatusSensor Properties							
General							
Name	TO_Struct_StatusSensor	**Number**	1725	**Type**	UDT	**Language**	
Numbering							
Information							
Title	StatusSensor structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
State	DInt	0	True	False	True	False	Status of the encoder value
CommunicationOK	Bool	false	True	False	True	False	Cyclic BUS communication between controller and encoder
AbsEncoderOffset	Real	0.0	True	False	True	False	Home position offset for value of an absolute value encoder
AdaptionState	DInt	0	True	False	True	False	Tranfer status of the encoder

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_StatusBits

TO_Struct_StatusBits Properties							
General							
Name	TO_Struct_StatusBits	**Number**	1726	**Type**	UDT	**Language**	
Numbering							
Information							
Title	StatusBits structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Activated	Bool	false	True	False	True	False	Axis is activated
Enable	Bool	false	True	False	True	False	Axis is enabled
AxisSimulation	Bool	false	True	False	True	False	Simulation activated
NonPositionControlled	Bool	false	True	False	True	False	Position control deactivated
HomingDone	Bool	false	True	False	True	False	Axis is homed
Done	Bool	false	True	False	True	False	No Motion Control job is active on the axis
Error	Bool	false	True	False	True	False	An error has occurred on the axis
Standstill	Bool	false	True	False	True	False	Axis is at a standstill
PositioningCommand	Bool	false	True	False	True	False	Axis executes a positioning job
VelocityCommand	Bool	false	True	False	True	False	Axis executes a job with velocity specification
HomingCommand	Bool	false	True	False	True	False	Axis executes a homing job
CommandTableActive	Bool	false	True	False	True	False	Command table is being processed
ConstantVelocity	Bool	false	True	False	True	False	Axis traverses with a constant velocity
Accelerating	Bool	false	True	False	True	False	Axis is accelerating
Decelerating	Bool	false	True	False	True	False	Axis is decelerating
ControlPanelActive	Bool	false	True	False	True	False	"Manual control" mode was enabled in the axis control panel
DriveReady	Bool	false	True	False	True	False	Drive is ready
RestartRequired	Bool	false	True	False	True	False	Restart required
SWLimitMinActive	Bool	false	True	False	True	False	Status of lower software limit switch
SWLimitMaxActive	Bool	false	True	False	True	False	Status of upper software limit switch
HWLimitMinActive	Bool	false	True	False	True	False	Status of lower hardware limit switch
HWLimitMaxActive	Bool	false	True	False	True	False	Status of upper hardware limit switch

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_ErrorBits

TO_Struct_ErrorBits Properties							
General							
Name	TO_Struct_ErrorBits	**Number**	1727	**Type**	UDT	**Language**	
Numbering							
Information							
Title	ErrorBits structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
SystemFault	Bool	false	True	False	True	False	Internal system error
ConfigFault	Bool	false	True	False	True	False	Faulty configuration of axis
DriveFault	Bool	false	True	False	True	False	Drive has displayed an error due to failure of drive-ready signal
SWLimit	Bool	false	True	False	True	False	Software limit switch approached or overtraveled
HWLimit	Bool	false	True	False	True	False	Hardware limit switch approached or overtraveled
DirectionFault	Bool	false	True	False	True	False	Invalid movement direction
HWUsed	Bool	false	True	False	True	False	Another axis is using the same PTO (Pulse Train Output) and is enabled
SensorFault	Bool	false	True	False	True	False	Error in encoder system
CommunicationFault	Bool	false	True	False	True	False	Communication with a connected device is faulty
FollowingError	Bool	false	True	False	True	False	The maximum permitted following error has been exceeded
PositioningFault	Bool	false	True	False	True	False	The positioning axis was not positioned correctly at the end of a positioning motion
AdaptionError	Bool	false	True	False	True	False	The transfer of the drive or encoder parameters failed

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_ControlPanel

TO_Struct_ControlPanel Properties							
General							
Name	TO_Struct_ControlPanel	**Number**	1729	**Type**	UDT	**Language**	
Numbering							
Information							
Title	ControlPanel structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Input	TO_Struct_ControlPanelInput		False	False	False	False	Input parameters of axis control panel
TimeOut	DInt	L#3000	False	False	False	False	Internal parameter; please do not change!
EsLifeSign	DInt	0	False	False	False	False	Internal parameter; please do not change!
Command	Array[1..1] of TO_Struct_ControlPanelInputCmd		False	False	False	False	Internal parameter; please do not change!
Command[1]	TO_Struct_ControlPanelInputCmd		False	False	False	False	Internal parameter; please do not change!
ReqCounter	DInt	0	False	False	False	False	Internal parameter; please do not change!
Type	DInt	0	False	False	False	False	Internal parameter; please do not change!
Position	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Velocity	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Acceleration	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Jerk	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Param	DInt	0	False	False	False	False	Internal parameter; please do not change!
Output	TO_Struct_ControlPanelOutput		False	False	False	False	Output parameters of axis control panel
RTLifeSign	DInt	0	False	False	False	False	Internal parameter; please do not change!
Command	Array[1..1] of TO_Struct_ControlPanelOutputCmd		False	False	False	False	Internal parameter; please do not change!
Command[1]	TO_Struct_ControlPanelOutputCmd		False	False	False	False	Internal parameter; please do not change!
AckCounter	DInt	0	False	False	False	False	Internal parameter; please do not change!
ErrorID	Word	16#0	False	False	False	False	Internal parameter; please do not change!
ErrorInfo	Word	16#0	False	False	False	False	Internal parameter; please do not change!
Done	Bool	false	False	False	False	False	Internal parameter; please do not change!
Aborted	Bool	false	False	False	False	False	Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_ControlPanelInput

TO_Struct_ControlPanelInput Properties							
General							
Name	TO_Struct_ControlPanelInput	**Number**	1730	**Type**	UDT	**Language**	
Numbering							
Information							
Title	ControlPanelInput structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
TimeOut	DInt	L#3000	False	False	False	False	Internal parameter; please do not change!
EsLifeSign	DInt	0	False	False	False	False	Internal parameter; please do not change!
▼ Command	Array[1..1] of TO_Struct_ControlPanelInputCmd		False	False	False	False	Internal parameter; please do not change!
▼ Command[1]	TO_Struct_ControlPanelInputCmd		False	False	False	False	Internal parameter; please do not change!
ReqCounter	DInt	0	False	False	False	False	Internal parameter; please do not change!
Type	DInt	0	False	False	False	False	Internal parameter; please do not change!
Position	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Velocity	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Acceleration	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Jerk	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Param	DInt	0	False	False	False	False	Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_ControlPanelInputCmd

TO_Struct_ControlPanelInputCmd Properties							
General							
Name	TO_Struct_ControlPanelInputCmd	**Number**	1731	**Type**	UDT	**Language**	
Numbering							
Information							
Title	ControlPanelInputCommand structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
ReqCounter	DInt	0	False	False	False	False	Internal parameter; please do not change!
Type	DInt	0	False	False	False	False	Internal parameter; please do not change!
Position	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Velocity	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Acceleration	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Jerk	Real	0.0	False	False	False	False	Internal parameter; please do not change!
Param	DInt	0	False	False	False	False	Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_ControlPanelOutput

TO_Struct_ControlPanelOutput Properties							
General							
Name	TO_Struct_ControlPanelOut-put	**Number**	1732	**Type**	UDT	**Language**	
Numbering							
Information							
Title	ControlPanelOutput struc-ture of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writ-able from HMI/ OPC UA	Visible in HMI engi-neering	Setpoint	Comment
RTLifeSign	DInt	0	False	False	False	False	Internal parameter; please do not change!
▼ Command	Array[1..1] of TO_Struct_ControlPane-lOutputCmd		False	False	False	False	Internal parameter; please do not change!
▼ Command[1]	TO_Struct_ControlPane-lOutputCmd		False	False	False	False	Internal parameter; please do not change!
AckCounter	DInt	0	False	False	False	False	Internal parameter; please do not change!
ErrorID	Word	16#0	False	False	False	False	Internal parameter; please do not change!
ErrorInfo	Word	16#0	False	False	False	False	Internal parameter; please do not change!
Done	Bool	false	False	False	False	False	Internal parameter; please do not change!
Aborted	Bool	false	False	False	False	False	Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_ControlPanelOutputCmd

TO_Struct_ControlPanelOutputCmd Properties							
General							
Name	TO_Struct_ControlPanelOutputCmd	**Number**	1733	**Type**	UDT	**Language**	
Numbering							
Information							
Title	ControlPanelOutputCommand structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
AckCounter	DInt	0	False	False	False	False	Internal parameter; please do not change!
ErrorID	Word	16#0	False	False	False	False	Internal parameter; please do not change!
ErrorInfo	Word	16#0	False	False	False	False	Internal parameter; please do not change!
Done	Bool	false	False	False	False	False	Internal parameter; please do not change!
Aborted	Bool	false	False	False	False	False	Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / PLC data types

TO_Struct_Internal

TO_Struct_Internal Properties							
General							
Name	TO_Struct_Internal	**Number**	1734	**Type**	UDT	**Language**	
Numbering							
Information							
Title	Internal structure of a technology object	**Author**		**Comment**		**Family**	
Version		**User-defined ID**					

Name	Data type	Default value	Accessible from HMI/OPC UA	Writable from HMI/OPC UA	Visible in HMI engineering	Setpoint	Comment
Id	Int	0	False	False	False	False	Internal parameter; please do not change!
Value	Real	0.0	False	False	False	False	Internal parameter; please do not change!

PLC_1 [CPU 1212C AC/DC/Rly] / Watch and force tables

Force table

Name	Address	Display format	Force value	Comment

PLC_1 [CPU 1212C AC/DC/Rly]

Traces

Name

PLC_1 [CPU 1212C AC/DC/Rly] / Traces

Measurements

Name

PLC_1 [CPU 1212C AC/DC/Rly] / Traces

Combined measurements

Name

PLC_1 [CPU 1212C AC/DC/Rly]

PLC alarm text lists

This folder is empty.

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

DI 8x24VDC/DQ 8xRelay_1

DI 8x24VDC/DQ 8xRelay_1					
General\Project information					
Name	DI 8x24VDC/DQ 8xRelay_1	**Author**	FIFA-01	**Comment**	
Slot	2				
General\Catalog information					
Short designation	SM 1223 DI8/DQ8 x relay	**Description**	Digital input/output module DI8 x 24VDC SINK/SOURCE and DQ8 x relay; configurable input delay; plug-in terminal blocks	**Article number**	6ES7 223-1PH32-0XB0
Firmware version	V2.0				
DI 8/DQ 8\Project information					
Name	DI 8x24VDC/DQ 8xRelay_1	**Comment**			
DI 8/DQ 8\Digital inputs\Input filters					
I8.0 - I8.3	6.40ms	**I8.4 - I8.7**	6.40ms		
DI 8/DQ 8\Digital inputs\Channel0					
Channel address	I8.0				
DI 8/DQ 8\Digital inputs\Channel1					
Channel address	I8.1				
DI 8/DQ 8\Digital inputs\Channel2					
Channel address	I8.2				
DI 8/DQ 8\Digital inputs\Channel3					
Channel address	I8.3				
DI 8/DQ 8\Digital inputs\Channel4					
Channel address	I8.4				
DI 8/DQ 8\Digital inputs\Channel5					
Channel address	I8.5				
DI 8/DQ 8\Digital inputs\Channel6					
Channel address	I8.6				
DI 8/DQ 8\Digital inputs\Channel7					
Channel address	I8.7				
DI 8/DQ 8\Digital outputs					
Reaction to CPU STOP	Use substitute value				
DI 8/DQ 8\Digital outputs\Channel0					
Channel address	Q8.0	**Substitute a value of 1 on a change from RUN to STOP.**	0		
DI 8/DQ 8\Digital outputs\Channel1					
Channel address	Q8.1	**Substitute a value of 1 on a change from RUN to STOP.**	0		
DI 8/DQ 8\Digital outputs\Channel2					
Channel address	Q8.2	**Substitute a value of 1 on a change from RUN to STOP.**	0		
DI 8/DQ 8\Digital outputs\Channel3					
Channel address	Q8.3	**Substitute a value of 1 on a change from RUN to STOP.**	0		
DI 8/DQ 8\Digital outputs\Channel4					
Channel address	Q8.4	**Substitute a value of 1 on a change from RUN to STOP.**	0		
DI 8/DQ 8\Digital outputs\Channel5					
Channel address	Q8.5	**Substitute a value of 1 on a change from RUN to STOP.**	0		
DI 8/DQ 8\Digital outputs\Channel6					
Channel address	Q8.6	**Substitute a value of 1 on a change from RUN to STOP.**	0		
DI 8/DQ 8\Digital outputs\Channel7					
Channel address	Q8.7	**Substitute a value of 1 on a change from RUN to STOP.**	0		
DI 8/DQ 8\I/O addresses\Input addresses					
Start address	8.0	**End address**	8.7	**Organization block**	0
Process image	0				
DI 8/DQ 8\I/O addresses\Output addresses					
Start address	8.0	**End address**	8.7	**Organization block**	0
Process image	0				
DI 8/DQ 8\Hardware identifier\Hardware identifier					
Hardware identifier	270				