SIEMENS

Data sheet

6ES7516-3AN01-0AB0



*** Spare part *** SIMATIC S7-1500, CPU 1516-3 PN/DP, central processing unit with work memory 1 MB for program and 5 MB for data, 1st interface: PROFINET IRT with 2-port switch, 2nd interface: PROFINET RT, 3rd interface: PROFIBUS, 10 ns bit performance, SIMATIC Memory Card required

General information	
Product type designation	CPU 1516-3 PN/DP
HW functional status	FS03
Firmware version	V2.9
Product function	
● I&M data	Yes; I&M0 to I&M3
Isochronous mode	Yes; Distributed and central; with minimum OB $6x$ cycle of $375~\mu s$ (distributed) and 1 ms (central)
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V17 (FW V2.9) / V13 SP1 Update 4 (FW V1.8) or higher
Configuration control	
via dataset	Yes
Display	
Screen diagonal [cm]	6.1 cm
Control elements	
Number of keys	6
Mode selector switch	1
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Mains buffering	
 Mains/voltage failure stored energy time 	5 ms
 Repeat rate, min. 	1/s
Input current	
Current consumption (rated value)	0.85 A
Inrush current, max.	2.4 A; Rated value
l²t	0.02 A²-s
Power	
Infeed power to the backplane bus	12 W
Power consumption from the backplane bus (balanced)	6.7 W
Power loss	
Power loss, typ.	7 W
Memory	
Number of slots for SIMATIC memory card	1
SIMATIC memory card required	Yes
Work memory	
• integrated (for program)	1 Mbyte
• integrated (for data)	5 Mbyte

Data blocks	
Retentivity adjustable	Yes
Retentivity preset	No
Local data	
per priority class, max.	64 kbyte; max. 16 KB per block
Address area	
Number of IO modules	8 192; max. number of modules / submodules
I/O address area	
Inputs	32 kbyte; All inputs are in the process image
 Outputs 	32 kbyte; All outputs are in the process image
per integrated IO subsystem	
— Inputs (volume)	8 kbyte
Outputs (volume)	8 kbyte
per CM/CP	
— Inputs (volume)	8 kbyte
— Outputs (volume)	8 kbyte
Subprocess images	
Number of subprocess images, max.	32
Hardware configuration	
Number of distributed IO systems	64; A distributed I/O system is characterized not only by the integration of distributed I/O via PROFINET or PROFIBUS communication modules, but also by the connection of I/O via AS-i master modules or links (e.g. IE/PB-Link)
Number of DP masters	by the confidence of the via Ao-thiaster modules of links (e.g. IL/1 b-Link)
• integrated	1
Integrated Via CM	
● VIA CIVI	8; A maximum of 8 CMs/CPs (PROFIBUS, PROFINET, Ethernet) can be inserted in total
Number of IO Controllers	
• integrated	2
• Via CM	8; A maximum of 8 CMs/CPs (PROFIBUS, PROFINET, Ethernet) can be inserted in total
Rack	
Modules per rack, max.	32; CPU + 31 modules
 Number of lines, max. 	1
PtP CM	
Number of PtP CMs	the number of connectable PtP CMs is only limited by the number of available slots
Time of day	
Clock	
• Type	Hardware clock
Backup time	6 wk; At 40 °C ambient temperature, typically
 Deviation per day, max. 	10 s; Typ.: 2 s
Operating hours counter	
Number	16
Clock synchronization	
• supported	Yes
• to DP, master	Yes
• in AS, master	Yes
	Yes
in AS, device n Ethornet via NTP	
on Ethernet via NTP Interfeces	Yes
Interfaces	
Number of PROFINET interfaces	2
Number of PROFIBUS interfaces	1
1. Interface	
Interface types	
• RJ 45 (Ethernet)	Yes; X1
 Number of ports 	2
integrated switch	Yes
Protocols	
IP protocol	Yes; IPv4
PROFINET IO Controller	Yes
PROFINET IO Device	Yes
SIMATIC communication	Yes

Yes; Optionally also encrypted • Open IE communication Web server Yes Media redundancy Yes PROFINET IO Controller Services - PG/OP communication Yes Yes Isochronous mode - Direct data exchange Yes; Requirement: IRT and isochronous mode (MRPD optional) — IRT - PROFlenergy Yes; per user program - Prioritized startup Yes; Max. 32 PROFINET devices 256; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET $\,$ - Number of connectable IO Devices, max. - Of which IO devices with IRT, max. 64 - Number of connectable IO Devices for RT, max. 256 256 - of which in line, max. - Number of IO Devices that can be simultaneously 8; in total across all interfaces activated/deactivated, max. - Number of IO Devices per tool, max. 8 - Updating times The minimum value of the update time also depends on communication share set for PROFINET IO, on the number of IO devices, and on the quantity of configured user data Update time for IRT — for send cycle of 250 µs $250~\mu s$ to 4 ms; Note: In the case of IRT with isochronous mode, the minimum update time of 375 µs of the isochronous OB is decisive — for send cycle of 500 µs 500 µs to 8 ms - for send cycle of 1 ms 1 ms to 16 ms - for send cycle of 2 ms 2 ms to 32 ms - for send cycle of 4 ms 4 ms to 64 ms - With IRT and parameterization of "odd" send cycles Update time = set "odd" send clock (any multiple of 125 µs: 375 µs, 625 µs ... 3 875 μs) Update time for RT — for send cycle of 250 µs 250 µs to 128 ms — for send cycle of 500 µs 500 µs to 256 ms - for send cycle of 1 ms 1 ms to 512 ms - for send cycle of 2 ms 2 ms to 512 ms - for send cycle of 4 ms 4 ms to 512 ms PROFINET IO Device Services - PG/OP communication Yes - Isochronous mode No - IRT Yes - PROFlenergy Yes; per user program Shared device Yes - Number of IO Controllers with shared device, max. - activation/deactivation of I-devices Yes; per user program - Asset management record Yes; per user program 2. Interface Interface types • RJ 45 (Ethernet) Yes; X2 Number of ports 1 • integrated switch No Protocols • IP protocol Yes; IPv4 • PROFINET IO Controller Yes • PROFINET IO Device Yes • SIMATIC communication Yes • Open IE communication Yes; Optionally also encrypted • Web server Yes Media redundancy No **PROFINET IO Controller** Services

DC/CD communication	Voc
— PG/OP communication	Yes
Isochronous mode Direct data evenenge	No No
— Direct data exchange	No
— IRT	No
— PROFlenergy	Yes; per user program
— Prioritized startup	No
 Number of connectable IO Devices, max. 	32; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET
 Number of connectable IO Devices for RT, max. 	32
— of which in line, max.	32
 Number of IO Devices that can be simultaneously activated/deactivated, max. 	8; in total across all interfaces
 Number of IO Devices per tool, max. 	8
— Updating times	The minimum value of the update time also depends on communication share set for PROFINET IO, on the number of IO devices, and on the quantity of configured user data
Update time for RT	J
— for send cycle of 1 ms	1 ms to 512 ms
PROFINET IO Device	
Services	
— PG/OP communication	Yes
— Isochronous mode	No
— IRT	No
— PROFlenergy	Yes; per user program
— Prioritized startup	No
— Shared device	Yes
Number of IO Controllers with shared device, max.	4
— activation/deactivation of I-devices	Yes; per user program
Asset management record	Yes; per user program
3. Interface	roo, por abor program
Interface types	
• RS 485	Yes; X3
- 1.0 1.00	. 55,716
 Number of ports 	1
Number of ports Protocols	1
Number of ports Protocols PROFIBUS DP master	
Protocols • PROFIBUS DP master	Yes
Protocols • PROFIBUS DP master • PROFIBUS DP device	
Protocols • PROFIBUS DP master	Yes No
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master	Yes No Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i,
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max.	Yes No Yes 48; for the integrated PROFIBUS DP interface
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services — PG/OP communication	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i,
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode — activation/deactivation of DP devices	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet)	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services — PG/OP communication — Equidistance — Isochronous mode — activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps Autonegotiation	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps Autonegotiation Autocrossing	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) Autocrossing Industrial Ethernet status LED	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps Autonegotiation Autocrossing Industrial Ethernet status LED RS 485	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps Autonegotiation Autocrossing Industrial Ethernet status LED RS 485 Transmission rate, max.	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps Autonegotiation Autocrossing Industrial Ethernet status LED RS 485 Transmission rate, max.	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps Autonegotiation Autocrossing Industrial Ethernet status LED RS 485 Transmission rate, max. Protocols PROFIsafe	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps Autonegotiation Autocrossing Industrial Ethernet status LED RS 485 Transmission rate, max. Protocols PROFIsafe Number of connections	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) 100 Mbps Autonegotiation Autocrossing Industrial Ethernet status LED RS 485 Transmission rate, max. Protocols PROFIsafe Number of connections Number of connections, max.	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) Autocrossing Industrial Ethernet status LED RS 485 Transmission rate, max. Protocols PROFIsafe Number of connections, max. Number of connections reserved for ES/HMI/web	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) Industrial Ethernet status LED RS 485 Transmission rate, max. Protocols PROFIsafe Number of connections, max. Number of connections reserved for ES/HMI/web Number of connections via integrated interfaces	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Protocols PROFIBUS DP master PROFIBUS DP device SIMATIC communication PROFIBUS DP master Number of connections, max. max. number of DP devices Services PG/OP communication Equidistance Isochronous mode activation/deactivation of DP devices Interface types RJ 45 (Ethernet) Autocrossing Industrial Ethernet status LED RS 485 Transmission rate, max. Protocols PROFIsafe Number of connections, max. Number of connections reserved for ES/HMI/web	Yes No Yes 48; for the integrated PROFIBUS DP interface 125; In total, up to 1 000 distributed I/O devices can be connected via AS-i, PROFIBUS or PROFINET Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye

H-Sync forwarding	Yes
Media redundancy	
— Media redundancy	only via 1st interface (X1)
— MRP	Yes; MRP Automanager according to IEC 62439-2 Edition 2.0, MRP Manager; MRP Client
 MRP interconnection, supported 	Yes; as MRP ring node according to IEC 62439-2 Edition 3.0
— MRPD	Yes; Requirement: IRT
Switchover time on line break, typ.	200 ms; For MRP, bumpless for MRPD
•	50
— Number of stations in the ring, max.	50
SIMATIC communication	Very and with TLOVA or an elected
PG/OP communication	Yes; encryption with TLS V1.3 pre-selected
• S7 routing	Yes
Data record routing	Yes
 S7 communication, as server 	Yes
 S7 communication, as client 	Yes
User data per job, max.	See online help (S7 communication, user data size)
Open IE communication	
• TCP/IP	Yes
— Data length, max.	64 kbyte
several passive connections per port, supported	Yes
• ISO-on-TCP (RFC1006)	Yes
— Data length, max.	64 kbyte
• UDP	Yes
— Data length, max.	2 kbyte; 1 472 bytes for UDP broadcast
— UDP multicast	Yes; Max. 5 multicast circuits
• DHCP	Yes
• DNS	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Encryption	Yes; Optional
Web server	
• HTTP	Yes; Standard and user pages
• HTTPS	Yes; Standard and user pages
OPC UA	
Runtime license required	Yes; "Medium" license required
OPC UA Client	Yes
Application authentication	Yes
Security policies	Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256
— User authentication	"anonymous" or by user name & password
Number of connections, max.	10
Number of connections, max. Number of nodes of the client interfaces, recommended max.	2 000
Number of elements for one call of OPC_UA_NodeGetHandleList/OPC_UA_ReadList/OPC_I max.	300
Number of elements for one call of OPC_UA_NameSpaceGetIndexList, max.	20
Number of elements for one call of OPC_UA_MethodGetHandleList, max.	100
 Number of simultaneous calls of the client instructions for session management, per connection, max. 	1
Number of simultaneous calls of the client instructions for data access, per connection, max.	5
·	5 000
— Number of registerable nodes, max.— Number of registerable method calls of	100
— Number of registerable nodes, max.	
 Number of registerable nodes, max. Number of registerable method calls of OPC_UA_MethodCall, max. Number of inputs/outputs when calling 	100
 Number of registerable nodes, max. Number of registerable method calls of OPC_UA_MethodCall, max. Number of inputs/outputs when calling OPC_UA_MethodCall, max. 	100 20

- OSS auport (ordicate management) - Number of seriors, max Number of accessible variables, max Number of accessible variables, max Number of educerisors, max Number of educerisors present, max Number of subscriptions present, min Publishing interval, min Publishing interval, min Publishing interval, min Number of some methods, max Number of mystisoropian per server method, max Number of mystisoropian per server method, max Number of mystisoropian per server method, max Number of server interfaces, max Number of program alarms - Number of program alarms - Number of program alarms - Number of alarms for system diagnostics - Number of configurable program messages in truth min Number of configurable program alarms - Number of configurable program messages in truth min Number of configurable program messages in truth min Number of configurable program messages in truth min Number of configurables, max of which early system diagnostics - Number of configurables, max of which control variables, max of which control v	— User authentication	"anonymous" or by user name & password
- Number of seriosine, max Number of accessible validation, max Number of subscriptors per session, max Number of subscriptors per session, max Support of subscriptors per session, max Support of subscriptors per session, max Number of subscriptors per session, max Number of subscriptors per session, max Number of server methods, max Number of server inheritors, max Number of monitorise teams, recommended max Number of server inheritors, max Number of server		
- Number of registerable nodes, max Number of registerable nodes, max Number of easecaptions per session, max Number of selections per session, max Number of public-loughus per server method, max Number of server inefforce, max Number of productions and server methods, max Yes - Stransage functions - Number of configurable program message, functions, max Number of configurable program messages in RINL max Number of configurable program and and an analysis in the server messages in RINL max Number of configurable program and an analysis in the server messages in RINL max Number		
- Number of registerable nodes, max Number of subscriptions per session, max. 20 - Sampling interval, min Publishing interval, min Number of sever methods, max Number of subscriptions per sever method, max Number of program interfaces, max Number of program atoms - Number of program atoms - Number of nodes for user-defined server interfaces, max Number of program atoms - Number of drams for system diagnostics - Number of drams for system diagnostics - Number of drams for system diagnostics - Number of oringurable program messages, max Yes, MOBBUS TCP - Strinessages functions - Number of oringurable program messages, max 10 000, Program messages are generated by the "Program_Alarm" block, Prolong or SRAPH - Number of ainumaneously active program atoms - Number of ainumaneously active pr		
- Number of subscriptions per assaion, max Sampling interval, min Publishing interval, min Number of server methods, max Number of impulsivalytish per server method, max Number of monitored items, recommended max Number of nones for user-defined server interfaces, max. - Number of nones for user-defined server interfaces, max. - Number of program alarms - Number of program messages functions, max. - Number of program alarms - Number of orifications or message functions, max Number of orifications or messages max Number of orifications or program alarms - Number of simultaneously ache program alarms - Number of variables, max Of which control variables, max Of which powerfail proof - Process - Number of configurable Troes - Number of configurable		
- Sampling interval. min Publishing interval. min Number of server methods, max Number of server methods, max Number of server interfaces, max Number of faces for user-defined server interfaces, max Number of adminisher of program alarms - Number of alarms for system diagnostics - Number of alarms for system diagnostics - Number of alarms for system diagnostics - Number of login stations for message functions, max Program alarms - Ves Was MODBUS TCP - Recommendations - Number of configurable program messages, max 10 000; Program messages are generated by the "Program_Alarm" block, Proplag or GRAPH - Number of alarms for system diagnostics - Number of alarms for motion chronicity objects - Number of alarms for system diagnostics - Number of alarms for motion chronicity objects - Number of alarms for motion chronicity objects - Number of alarms for motion chronicity objects - Number of alarms for system chronicity objects - Number of alarms for motion chronicity objects - Number of the variables, max of which status variables, max of which control variables, max of which powerfail prior - Number of technology objects affects the cycle time of	-	
- Publishing interval, min Number of inspelsolutors per server methods, max Number of impolsolutors per server methods, max Number of impolsolutors per server method, max Number of nonders for server interfaces, max Number of nonders for user-defined server interfaces, server Number of nonders for user-defined server interfaces, server Number of program alarms - Number of objects and server Number of program alarms - Number of long stations for message functions, max Yes - Sames seg functions - Number of long stations for message functions, max Yes - Number of long stations for message functions, max Number of long stations for messages, max Number of versibles, max On which statius variables, max On which statius variables, max On which statius variables, max On which powerfail proof - Number of versibles, max On which powerfail proof - Number of versibles, max On which powerfail proof - Number of or variables, max On which powerfail proof - Number of the proof of the proof of the pr		
Number of anystrophics per sever methods, max Number of monitored items, recommended max Number of monitored items, recommended max Number of monitored items, recommended max Number of nonetioned for user-defined server interfaces, 15 000 Number of program alarms Number of program alarms Number of alarms for system diagnostics Number of alarms for system diagnostics Number of alarms for system diagnostics Number of login stations for message functions, max Number of login stations for message functions, max Number of of simultaneously active program alarms Number of of simultaneously active program alarms Number of simultaneously active program alarms Number of program messages in RUN, max Number of alarms for system diagnostics Number of program alarms Number of program alarms Number of alarms for system diagnostics Number of alarms for post technology objects Number of variables, max of which status variables, max of which control variables, max of which powerfal-proof Number of configurable Traces Number of configurabl		
Number of monitored items, recommended max Number of server interfaces, max Number of server interfaces, max Number of nondes for user-defined server interfaces, max Number of alarms for system diagnostics Number of alarms for system diagnostics Number of situations for message functions, max Number of login stations for message functions, max Number of login stations for message s, max Number of login stations for message s, max Number of loginum program messages, max Number of loginum program messages in RUN, max Number of alarms for system diagnostics Number of alarms for system diagnostics Number of alarms for motion technology objects Number of variations, max of which status variations, max of which powerial-proof	-	
- Number of nodes for user-defined server interfaces, max. - Number of nodes for user-defined server interfaces, max. - Alarms and Conditions - Number of program alarms - Number of alarms for system diagnostics - MODBUS - MODB		
ype "Reference namespace" max. - Number of nodes for user-defined server interfaces, max. - Number of program alarms - Number of program alarms - Number of program alarms - Number of program states for system diagnostics - MODRUS - Number of login stations for restage functions, max Program alarms - Number of login stations for message functions, max Program alarms - Number of login stations for message functions, max Program alarms - Number of configurable program messages, max 10000, Program messages are generated by the "Program_Alarm" block, Problag or GRAPH - Number of loging alarms - Number of orgonam alarms - Number of alarms for system diagnostics - Number of program alarms - Number of alarms for system diagnostics - Yes, Up to 8 simultaneously (in total across all ES clients) - Number of roreakpoints - Statuscontrol - Status block - Yes, Up to 8 simultaneously (in total across all ES clients) - Number of variables, max of which control variables, max of which status variables, max of which status variables, max of which control variables, max of which powerfail-proof - Procring, variables - Number of entries, max of which powerfail-proof - Procring variables - Number of configurable Traces - Number of c		
max. Alarms and Conditions Number of program alarms Number of login stations for message functions, max. Program alarms Number of login stations for message functions, max. Program alarms Number of login stations for messages, max. Number of simultaneously active program alarms Number of program alarms Number of program alarms Number of simultaneously active program alarms Number of alarms for system diagnostics Number of variables (program alarms) Number of transport (program alarms) Number of transport (program alarms) Number of variables, max. Of which status variables, max. Of which status variables, max. Of which control variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. Or of which program alarms Number of variables, max. O		type "Reference namespace"
Number of program alarms	•	5 000
- Number of alarms for system diagnostics #MODBUS #MODBUS *MODBUS *MODB		
Further protocols • MODBUS • MODBUS Press, MODBUS TCP	· -	
## MODBUS Social Program Social Prog		100
Schronous mode Equidistance Yes		
Equidistance 87 message functions Number of login stations for message functions, max. Program alarms Number of confligurable program messages, max. Program alarms Number of loadable program messages max. Number of simultaneously active program alarms Number of simultaneously active program alarms Number of simultaneously active program alarms Number of program alarms Number of simultaneously active program alarms Number of simultaneously active program alarms Number of simultaneously active program alarms Number of status for system diagnostics Number of patients for system diagnostics Ves; Up to 8 simultaneously (in total across all ES clients) No Number of breakpoints Status Sloots Yes Status Sloots Number of variables Number of variables, max. - of which status variables, max. - of which control variables, max. - of which control variables, max. 200, per job Forcing Forcing, variables Number of variables, max. 200 Diagnostics buffer Present Number of configurable Traces Number of configurable Traces Number of configurable Traces Number of configurable Traces Number of variables, max. 200 Peripheral inputs/outputs Number of configurable Traces N		Yes; MODBUS TCP
Number of login stations for message functions, max. Number of login stations for message functions, max. G4	Isochronous mode	
Number of login stations for message functions, max. Program alarms Number of configurable program messages, max. Number of loadable program messages, max. Number of loadable program messages in RUN, max. Number of simultaneously active program alarms Number of simultaneously active program alarms Number of alarms for motion technology objects Test commissioning functions Joint commission (Team Engineering) Yes; Parallel online access possible for up to 8 engineering systems Status block Yes; Up to 8 simultaneously (in total across all ES clients) Single step No No Number of breakpoints Status/control variable Variables Number of variables, max. — of which control variables, max. Peripheral inputs/outputs Number of variables, max. 200 Diagnostic buffer Peripheral inputs/outputs Number of configurable Traces Nes Number of configurable Traces Number of configurable Traces Number of configurable Traces Nes Number of configurable Traces Nes Number of configurable Traces Numbe	Equidistance	Yes
Program alarms Number of configurable program messages, max. Number of loadable program messages in RUN, max. Number of simultaneously active program alarms Number of simultaneously active program alarms Number of loadable program messages in RUN, max. Number of simultaneously active program alarms Number of simultaneously active program alarms Number of lamms for system diagnostics Number of alarms for motion technology objects 160 Test commissioning functions Joint commission (Team Engineering) Yes; Parallel online access possible for up to 8 engineering systems Yes; Up to 8 simultaneously (in total across all ES clients) Sitatus block Yes; Up to 8 simultaneously (in total across all ES clients) Single step No Number of breakpoints 8 Status/control variables Number of variables, max. - of which status variables, max. - of which control variables, max. - of which control variables, max. 200; per job Forcing Forcing Forcing, variables Number of variables, max. 200 Peripheral inputs/outputs Number of variables, max. 200 Diagnostic buffer present Number of entries, max. - of which powerfall-proof Traces Number of onligurable Traces Number of onligurable Traces RUN/STOP LED R	S7 message functions	
Number of configurable program messages, max. Number of loadable program messages in RUN, max. Number of simultaneously active program alarms Number of simultaneously active program alarms Number of alarms for system diagnostics Number of alarms for system diagnostics Number of alarms for system diagnostics Number of alarms for motion technology objects 160 **Status of the system Engineering)* Joint Commission (Team Engineering)* Yes: Parallel online access possible for up to 8 engineering systems Status block Yes: Up to 8 simultaneously (in total across all ES clients) No Number of breakpoints 8 Status/control variable Variables Number of variables, max. — of which status variables, max. — of which control variables, max. — of which control variables, max. 200; per job Forcing Forcing Forcing Forcing, variables Number of variables, max. 200 Diagnostic buffer • present	Number of login stations for message functions, max.	64
ProDiag or GRAPH	Program alarms	Yes
Number of simultaneously active program alarms Number of program alarms Number of program alarms Number of alarms for system diagnostics Number of alarms for motion technology objects Test commission (Team Engineering) Joint commission (Team Engineering) Yes; Parallel online access possible for up to 8 engineering systems Status block Yes; Up to 8 simultaneously (in total across all ES clients) Single step No Number of breakpoints 8 Status/control Status/control variable Ves Number of variables, max. — of which status variables, max. — of which control variables, max. — of which control variables, max. — of which of variables, max. — of which other of variables, max. — of which operation of variables, max. 200; per job Forcing Forcing Forcing Forcing, variables Peripheral inputs/outputs Number of variables, max. 200 Diagnostic buffer present Present Ves Number of entries, max. 3 200 — of which powerfall-proof Traces Number of configurable Traces At Up to 512 KB of data per trace are possible Interrupts/diagnostics/status information Diagnostics indication LED PKS Number of variables, indication LED PKS Number of variables, indication LED PKS Number of variables, indication LED PKS PKS Number of variables, vax. PKS PKS PKS PKS PKS PKS PKS PK	Number of configurable program messages, max.	
Number of program alarms Number of alarms for system diagnostics Number of alarms for motion technology objects Test commissioning functions Joint commission (Team Engineering) Yes; Parallel online access possible for up to 8 engineering systems Status block Yes; Up to 8 simultaneously (in total across all ES clients) Single step No Number of breakpoints 8 Status/control Status/control variable Status/control variables Number of variables, max. Of which status variables, max. Of which status variables, max. Porcing Forcing Forcing Forcing Forcing Forcing Forcing Forcing, variables Number of variables, max. 200; per job Peripheral inputs/outputs Number of variables, max. 200 Diagnostic buffer Present Yes Number of entries, max. Of which powerfail-proof S00 Traces Number of configurable Traces Number	Number of loadable program messages in RUN, max.	5 000
Number of alarms for system diagnostics Number of alarms for motion technology objects Set commissioning functions	Number of simultaneously active program alarms	
Number of alarms for motion technology objects Test commissioning functions Joint commissioning functions Joint commissioning functions Status block Yes; Up to 8 simultaneously (in total across all ES clients) Single step No Number of breakpoints 8 Status/control variable • Variables • Variables • Number of variables, max. — of which status variables, max. — of which control variables, max. — Forcing • Forcing • Forcing • Forcing, variables • Number of variables, max. — of which status variables, max. — of which status variables, max. — of which control variables, max. — of which present • Number of variables, max. 200; per job Forcing • Forcing	 Number of program alarms 	1 000
Test commissioning functions Yes; Parallel online access possible for up to 8 engineering systems	 Number of alarms for system diagnostics 	200
Joint commission (Team Engineering) Yes; Parallel online access possible for up to 8 engineering systems Status block Yes; Up to 8 simultaneously (in total across all ES clients) No Number of breakpoints 8 Status/control • Status/control variable • Variables • Number of variables, max. — of which status variables, max. — of which control variables, max. 200; per job Forcing • Forcing, variables • Number of variables, max. 200 per job Forcing • Forcing, variables • Number of variables, max. 200 Diagnostic buffer • present • present • Number of onfigurable Traces • Number of configurable Traces •	 Number of alarms for motion technology objects 	160
Status block Yes; Up to 8 simultaneously (in total across all ES clients) Single step No Number of breakpoints 8 Status/control • Status/control variable • Variables • Number of variables, max. — of which status variables, max. — of which status variables, max. — of which status variables, max. 200; per job Forcing • Forcing • Forcing • Forcing, variables • Number of variables, max. 200 per job Peripheral inputs/outputs • Number of variables, max. 200 Diagnostic buffer • present • Number of entries, max. — of which powerfall-proof Traces • Number of configurable Traces • Number of configurable Traces • RUN/STOP LED • RUN/STOP LED • REROR LED • MAINT LED • Connection display LINK TX/RX Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	Test commissioning functions	
Single step No Number of breakpoints 8 Status/control • Status/control variable • Variables Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters • Number of variables, max. — of which status variables, max. — of which control variables, max. 200; per job 200; p	Joint commission (Team Engineering)	Yes; Parallel online access possible for up to 8 engineering systems
Number of breakpoints 8 Status/control Status/control variable Variables Number of variables, max. of which status variables, max. of which control variables, max. Peripheral inputs/outputs Number of variables, max. Peripheral inputs/outputs Number of variables, max. Peripheral inputs/outputs Number of variables, max. 200; per job Forcing Forcing Forcing Forcing Peripheral inputs/outputs Number of variables, max. 200 Diagnostic buffer present Number of entries, max. of which powerfail-proof Traces Number of configurable Traces Number of configurable Traces Number of configurable Traces RUN/STOP LED RUN/STOP LED RUN/STOP LED RUN/STOP LED Connection display LINK TX/RX Yes Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	Status block	Yes; Up to 8 simultaneously (in total across all ES clients)
Status/control Status/control variable Variables Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters Inputs/outputs Outputs Ou	Single step	No
Status/control variable Variables Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters 200; per job Yes Forcing	Number of breakpoints	8
Variables Number of variables, max. — of which status variables, max. — of which control variables, max. — of which control variables, max. 200; per job 200; per job Forcing Forcing Forcing Forcing, variables Number of variables, max. 200 Diagnostic buffer present Number of entries, max. — of which powerfail-proof Traces Number of configurable Traces Yes Number of configurable Traces the Up to 512 KB of data per trace are possible to the Place to the Number of technology objects Notion Control Yes; Note: The number of technology objects affects the cycle time of the Place	Status/control	
Number of variables, max. of which status variables, max. of which control variables, max. 200; per job 200; per job Forcing Forcing Forcing Forcing Forcing Forcing Forcing Forcing, variables Number of variables, max. 200 Diagnostic buffer present Number of entries, max. of which powerfail-proof Traces Number of configurable Traces Number of configurable Traces RUN/STOP LED RUN/STOP LED REROR LED MAINT LED Connection display LINK TX/RX Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	 Status/control variable 	Yes
- of which status variables, max of which control variables, max. 200; per job 200; per job Forcing Forcin	 Variables 	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
- of which control variables, max. Forcing Forcing Forcing, variables Forcing, variables Number of variables, max. Diagnostic buffer Present Number of entries, max. Pof which powerfail-proof Traces Number of configurable Traces Number of configurable Traces Number of configurable Traces PRUN/STOP LED REROR LED REROR LED MAINT LED Connection display LINK TX/RX Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	 Number of variables, max. 	
Forcing Forcing Forcing, variables Forcing, variables Number of variables, max. Diagnostic buffer Peripheral inputs/outputs Number of variables, max. Persent Number of entries, max. Of which powerfail-proof Traces Number of configurable Traces Number of configurable Traces Number of configurable Traces Number of configurable Traces Number of variables Peripheral inputs/outputs Yes 4 yes 4 yes Yes Number of configurable Traces Yes Yes Yes Yes Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	of which status variables, max.	200; per job
Forcing Forcing, variables Forcing, variables Number of variables, max. Diagnostic buffer present Number of entries, max. of which powerfail-proof Traces Number of configurable Traces Number of configurable Traces Number of configurable Traces RUN/STOP LED RUN/STOP LED ERROR LED MAINT LED Connection display LINK TX/RX Supported technology objects Motion Control Yes Peripheral inputs/outputs 200 Peripheral inputs/outputs 200 Yes 4; Up to 512 KB of data per trace are possible Yes Yes Yes Yes Yes Yes Yes Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	— of which control variables, max.	200; per job
Forcing, variables Number of variables, max. Peripheral inputs/outputs Number of variables, max. present present Number of entries, max. of which powerfail-proof Traces Number of configurable Traces Number of configurable Traces A; Up to 512 KB of data per trace are possible Interrupts/diagnostics/status information Diagnostics indication LED RUN/STOP LED RROR LED RROR LED MAINT LED MAINT LED Connection display LINK TX/RX Yes Supported technology objects Motion Control Peripheral inputs/outputs Yes Yes Yes Yes Notion Control Yes Note: The number of technology objects affects the cycle time of the PLC	Forcing	
Number of variables, max. Diagnostic buffer present Number of entries, max. of which powerfail-proof Traces Number of configurable Traces Number of configurable Traces Number of configurable Traces RUN/STOP LED RUN/STOP LED REROR LED MAINT LED MAINT LED Connection display LINK TX/RX Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	• Forcing	Yes
Diagnostic buffer • present • Number of entries, max. — of which powerfail-proof Traces • Number of configurable Traces • Number of configurable Traces • Number of configurable Traces 4; Up to 512 KB of data per trace are possible Interrupts/diagnostics/status information Diagnostics indication LED • RUN/STOP LED • RUN/STOP LED • ERROR LED • MAINT LED • MAINT LED • Connection display LINK TX/RX Yes Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	 Forcing, variables 	Peripheral inputs/outputs
present Yes Number of entries, max.	Number of variables, max.	200
Number of entries, max. of which powerfail-proof Traces Number of configurable Traces Number of configurable Traces Interrupts/diagnostics/status information Diagnostics indication LED RUN/STOP LED REROR LED MAINT LED MAINT LED Connection display LINK TX/RX Supported technology objects Motion Control 3 200 500 Traces 4; Up to 512 KB of data per trace are possible Yes Yes Yes Yes Yes Yes Yes Supported technology objects Yes; Note: The number of technology objects affects the cycle time of the PLC	Diagnostic buffer	
	• present	Yes
Traces Number of configurable Traces 4; Up to 512 KB of data per trace are possible Interrupts/diagnostics/status information Diagnostics indication LED RUN/STOP LED ERROR LED MAINT LED MOINT LED Connection display LINK TX/RX Yes Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	 Number of entries, max. 	3 200
Number of configurable Traces Interrupts/diagnostics/status information Diagnostics indication LED RUN/STOP LED Yes ERROR LED MAINT LED Connection display LINK TX/RX Supported technology objects Motion Control 4; Up to 512 KB of data per trace are possible Yes Yes Yes Yes Yes Yes Yes Y	— of which powerfail-proof	500
Interrupts/diagnostics/status information Diagnostics indication LED • RUN/STOP LED • ERROR LED • MAINT LED • MAINT LED • Connection display LINK TX/RX Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	Traces	
Diagnostics indication LED RUN/STOP LED ERROR LED MAINT LED Connection display LINK TX/RX Supported technology objects Motion Control Yes Yes Yes Yes Yes Yes Yes Ye	Number of configurable Traces	4; Up to 512 KB of data per trace are possible
RUN/STOP LED Yes ERROR LED MAINT LED Connection display LINK TX/RX Yes Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	Interrupts/diagnostics/status information	
ERROR LED Yes MAINT LED Yes Connection display LINK TX/RX Yes Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	Diagnostics indication LED	
 MAINT LED Connection display LINK TX/RX Yes Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC 	• RUN/STOP LED	Yes
 Connection display LINK TX/RX Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC 		Yes
Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	MAINT LED	Yes
Supported technology objects Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	Connection display LINK TX/RX	
Motion Control Yes; Note: The number of technology objects affects the cycle time of the PLC	. ,	Yes
	Supported technology objects	Yes

Number of available Motion Control resources for	2 400
technology objects	
 Required Motion Control resources 	
per speed-controlled axis	40
— per positioning axis	80
— per synchronous axis	160
— per external encoder	80
— per output cam	20
— per cam track	160
— per probe	40
 Positioning axis 	
 Number of positioning axes at motion control cycle of 4 ms (typical value) 	7
 Number of positioning axes at motion control cycle of 8 ms (typical value) 	14
Controller	
PID_Compact	Yes; Universal PID controller with integrated optimization
PID_3Step	Yes; PID controller with integrated optimization for valves
PID-Temp	Yes; PID controller with integrated optimization for temperature
Counting and measuring	
High-speed counter	Yes
Ambient conditions	
Ambient temperature during operation	
horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C; Display: 50 °C, at an operating temperature of typically 50 °C, the display is switched off
 vertical installation, min. 	0 °C
• vertical installation, max.	40 °C; Display: 40 °C, at an operating temperature of typically 40 °C, the display is switched off
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
Altitude during operation relating to sea level • Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
<u> </u>	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Installation altitude above sea level, max. configuration / header configuration / programming / header	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Installation altitude above sea level, max. configuration / header	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language	
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL	Yes Yes Yes
● Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL	Yes Yes Yes Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH	Yes Yes Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection	Yes Yes Yes Yes Yes Yes
	Yes Yes Yes Yes Yes Yes Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection	Yes Yes Yes Yes Yes Yes Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection	Yes Yes Yes Yes Yes Yes Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection	Yes Yes Yes Yes Yes Yes Yes Yes Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection • Protection level: Read/write protection	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection programming / cycle time monitoring / header	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection programming / cycle time monitoring / header • lower limit	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection programming / cycle time monitoring / header • lower limit • upper limit	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection programming / cycle time monitoring / header • lower limit • upper limit Dimensions	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection programming / cycle time monitoring / header • lower limit • upper limit Dimensions Width	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Password for display • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection programming / cycle time monitoring / header • lower limit • upper limit Dimensions Width Height	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection User program protection/password protection Copy protection Block protection Block protection oprotection of confidential configuration data password for display Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection programming / cycle time monitoring / header Illumentary Width Height Depth	Yes
Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection User program protection/password protection Copy protection Block protection Block protection oprotection of confidential configuration data Password for display Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Programming / cycle time monitoring / header I lower limit upper limit Dimensions Width Height Depth Weights	Yes
Installation altitude above sea level, max. configuration / programming / header Programming language — LAD — FBD — STL — SCL — GRAPH Know-how protection User program protection/password protection Copy protection Block protection Protection of confidential configuration data Password for display Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection programming / cycle time monitoring / header lower limit upper limit Dimensions Width Height Depth	Yes

