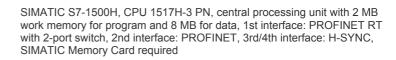
6ES7517-3HP00-0AB0

Data sheet





General information	
Product type designation	CPU 1517H-3 PN
HW functional status	FS05
Firmware version	V2.9
Product function	
 I&M data 	Yes; I&M0 to I&M3
Isochronous mode	No
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V17 (FW V2.9) / V16 (FW V2.8) / V15.1 (FW V2.6)
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
Input current	
Current consumption (rated value)	1.5 A
Inrush current, max.	2.4 A; Rated value
l²t	0.02 A ² ·s
Power loss	
Power loss, typ.	24 W
Memory	
Number of slots for SIMATIC memory card	1
SIMATIC memory card required	Yes
Work memory	
integrated (for program)	2 Mbyte
integrated (for data)	8 Mbyte
Load memory	
 Plug-in (SIMATIC Memory Card), max. 	32 Gbyte
Backup	
maintenance-free	Yes
CPU processing times	

for bit operations, typ.	4 ns
for word operations, typ.	6 ns
for fixed point arithmetic, typ.	6 ns
for floating point arithmetic, typ.	24 ns
CPU-blocks	
Number of elements (total)	12 000; Blocks (OB, FB, FC, DB) and UDTs
DB	
Number range	Number range: 1 to 59 999
Size, max.	8 Mbyte; For non-optimized block accesses, the max. size of the DB is
	64 KB
FB	
Number range	0 65 535
• Size, max.	1 Mbyte
FC	
Number range	0 65 535
• Size, max.	1 Mbyte
OB	
• Size, max.	1 Mbyte
Number of free cycle OBs	100
Number of time alarm OBs	20
Number of delay alarm OBs	20
Number of cyclic interrupt OBs	20
Number of process alarm OBs	50
 Number of startup OBs 	100
 Number of asynchronous error OBs 	4
 Number of synchronous error OBs 	2
Number of diagnostic alarm OBs	1
Nesting depth	
per priority class	24
Counters, timers and their retentivity	
S7 counter	
Number	2 048
Retentivity	
— adjustable	Yes
IEC counter	
Number	Any (only limited by the main memory)
Retentivity	
— adjustable	Yes
S7 times	
Number	2 048
Retentivity	
— adjustable	Yes
IEC timer	
Number	Any (only limited by the main memory)
Retentivity	
— adjustable	Yes
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	768 kbyte
Flag	
• Size, max.	16 kbyte
Number of clock memories	8; 8 clock memory bit, grouped into one clock memory byte
Data blocks	
 Retentivity adjustable 	Yes
Retentivity adjustableRetentivity preset	Yes No
Retentivity preset	
Retentivity preset Local data	No
Retentivity preset Local data per priority class, max.	No
Retentivity preset Local data per priority class, max. Address area	No 64 kbyte; max. 16 KB per block

0.1.1	
• Outputs	32 kbyte; All outputs are in the process image
per integrated IO subsystem	
— Inputs (volume)	16 kbyte
— Outputs (volume)	16 kbyte
Subprocess images	
Number of subprocess images, max.	32
Hardware configuration	
Number of distributed IO systems	1
Number of IO Controllers	
• integrated	1
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
on Ethernet via NTP	Yes
Interfaces	
Number of PROFINET interfaces	2
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 	No
 SIMATIC communication 	Yes; Only Server
 Open IE communication 	Yes
Web server	No
Media redundancy	Yes
PROFINET IO Controller	
Services	
— PG/OP communication	Yes
 Isochronous mode 	No
— IRT	No
— PROFlenergy	Yes
 Number of connectable IO Devices, max. 	256
Update time for RT	
— for send cycle of 1 ms	1 ms to 512 ms
2. Interface	
Interface types	
• RJ 45 (Ethernet)	Yes; X2
Number of ports	1
integrated switch	No
Protocols	
• IP protocol	Yes; IPv4
PROFINET IO Controller	No
PROFINET IO Device	No
SIMATIC communication	Yes; Only Server
Open IE communication	Yes
Web server	No
Media redundancy	No
3. Interface	
Interface type	Pluggable synchronization submodule (FO)

	_
design of the interface module / at interface 3 / plug-in	Synchronization module 6ES7960-1CB00-0AA5 or 6ES7960-1FB00-0AA5
4. Interface	
Interface type	Pluggable synchronization submodule (FO)
design of the interface module / at interface 4 / plug-in	Synchronization module 6ES7960-1CB00-0AA5 or 6ES7960-1FB00-0AA5
Interface types	
RJ 45 (Ethernet)	
• 100 Mbps	Yes
 Autonegotiation 	Yes
 Autocrossing 	Yes
 Industrial Ethernet status LED 	Yes
Protocols	
PROFIsafe	No
Number of connections	
 Number of connections, max. 	288
 Number of connections reserved for ES/HMI/web 	10
Number of S7 routing paths	64
Redundancy mode	
Media redundancy	
— MRP	Yes; MRP Automanager according to IEC 62439-2 Edition 2.0
 MRP interconnection, supported 	Yes; as MRP ring node according to IEC 62439-2 Edition 3.0
— MRPD	No
 Switchover time on line break, typ. 	200 ms; PROFINET MRP
Number of stations in the ring, max.	50
SIMATIC communication	
PG/OP communication	Yes; encryption with TLS V1.3 pre-selected
• S7 routing	Yes
S7 communication, as server	Yes
S7 communication, as client	No
Open IE communication	V
TCP/IP Date langth many	Yes C4 kb 4a
— Data length, max.— several passive connections per port,	64 kbyte Yes
supported	165
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; 128 multicast circuits (of which max. 5 via X1)
• DHCP	No
• DNS	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Web server	No
• HIIP	
HTTP HTTPS	
• HTTPS	No No
HTTPS OPC UA	No
• HTTPS	
HTTPS OPC UA OPC UA Client OPC UA Server	No No
HTTPS OPC UA OPC UA Client	No No
HTTPS OPC UA OPC UA Client OPC UA Server Further protocols MODBUS	No No No
HTTPS OPC UA OPC UA Client OPC UA Server Further protocols	No No No
HTTPS OPC UA OPC UA Client OPC UA Server Further protocols MODBUS Isochronous mode Equidistance	No No No Yes; MODBUS TCP
HTTPS OPC UA OPC UA Client OPC UA Server Further protocols MODBUS Isochronous mode Equidistance S7 message functions	No No No Yes; MODBUS TCP
HTTPS OPC UA OPC UA Client OPC UA Server Further protocols MODBUS Isochronous mode Equidistance S7 message functions Number of login stations for message functions, max.	No No Yes; MODBUS TCP No
HTTPS OPC UA OPC UA Client OPC UA Server Further protocols MODBUS Isochronous mode Equidistance S7 message functions	No No No Yes; MODBUS TCP

Number of loadable program messages in RIN. max. * Number of program alarms * Number of program alarms of the program alarms * Number of program alarms of the program alarms * Number of configurable max * Number o		
Number of alams for system diagnostics and successful and suc	Number of loadable program messages in RUN, max.	5 000
* Number of alarms for system diagnostics Joint commissioning functions Joint commission (Tram Engineering) Status block Yes: Up to 16 simultaneously No Number of breakpoints Statusborotric variable * Statusborotric variable * Variables * Number of variables, max — of which status variables, max — of which powerfail proof * Forcing * Number of entries, max — of which powerfail-proof * Number of configurable Traces • Number of configurable Traces • Nember of configurable Traces • Number of con		
Tost commission (Team Engineering)	· -	
Joint commission (Team Engineering) Straus block Single step No Number of breakpoints Statuse control Statuse		1 000
Status block Yes; Up to 16 simultaneously		
Single step		No
Number of breakpoints 20; Breakpoints are only supported in RUN-Solo status	Status block	Yes; Up to 16 simultaneously
Status/control variable Status/control variable Ves Status/control variable Number of variables, max. — of which satus variables, max. — of which control variables, max. — of which powerfall-prof Forcing Forcing, variables Number of variables, max. — of which powerfall-prof Number of ortifies, max. — of which powerfall-prof Number of configurable Traces Number of con	Single step	No
Slatus/control variable Variables Variables Variables, max. — of which status variables, max. — of which control variables, max. — Percing Forcing For	Number of breakpoints	20; Breakpoints are only supported in RUN-Solo status
Variables Number of variables, max. — of which status variables, max. — of which status variables, max. — of which control variables, max. — of which control variables, max. — of which control variables, max. Perpheral inputs/outputs Perpheral inputs/outputs Number of variables, max. 200; per job 200; per job Perpheral inputs/outputs Perpheral inputs/outputs Number of variables, max. 200 Diagnosts buffer Present Number of entries, max. — of which powerfail-proof Traces Number of configurable Traces Nemony size per trace, max. 1000 Traces Nemony size per trace, max. Nemony size per trace, max. Nemony size per trace, max. 1000 Traces Nemony size per trace, max. 1000 Traces Nemony size per trace, max. No Connection display LINK TX/RX Yes Supported technology objects No Ambient conditions No Ambient emperature during operation No No Ambient temperature during operation, max. No No Ambient temperature during storagetransportation No No Configuration / programming / header Programming language No No No No No No No No No N	Status/control	
Number of variables, max. — of which control variables, max. — of which control variables, max. — of which control variables, max. Forcing Forcing Forcing Forcing Forcing Forcing Forcing, Forcing Forc	 Status/control variable 	Yes
of which status variables, max. 200; per job of which control variables, max. 200; per job Forcing Forcing Forcing	Variables	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
Forcing Forcing Forcing Forcing, variables, max. Forcing, variables, max. Peripheral inputs/outputs Number of variables, max. Forwhich powerfail-proof Number of configurable Traces Memory size per trace, max. Formal Status Information Diagnostics butter Number of configurable Traces Number of vertical installation, min. Number of configurable Traces Number o	 Number of variables, max. 	
Forcing Forcing Forcing Forcing, variables Forcing, variables Number of variables, max. Of which powerfall-proof Forcing Number of entiries, max. Of which powerfall-proof Forcing Number of configurable Traces Number of variety Number of Number	of which status variables, max.	200; per job
Forcing	— of which control variables, max.	200; per job
Forcing, variables Number of variables, max. Number of variables, max. Of which powerfail-proof Number of configurable Traces Number of configurable Traces Nemory size per trace, max. For Number of configurable Traces Nemory size per trace, max. Nessendants in the size per size	Forcing	
Diagnostic buffer present Number of entries, max. 1000 Traces Number of configurable Number of typically 50 °C, the display is switched off Number of configurable Number of typically 40 °C, the display is switched off Number of configuration Number of typically 40 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50 °C, the display is switched off Number of configuration Number of typically 50	Forcing	Yes
Diagnostic buffer • present • Number of entries, max. — of which powerfall-proof 1 000 Traces • Number of configurable Traces • Number of configuration Pleader configuration / Programming / header configuration / programming / header Programming Ianguage — LAD — FBD — STL Yes * St. ** Yes ** ** ** ** ** ** ** ** **	 Forcing, variables 	Peripheral inputs/outputs
Present Number of entries, max. Owhich powerfail-proof 1000 Traces Number of configurable Traces Number of configurable Of Number of Configurable Of Number of Configuration (Number of Configura	Number of variables, max.	200
Number of entries, max. — of which powerfall-proof 1000 Traces Number of configurable Traces 8 8 512 kbyte Interrupts/Gliagnostics/status information Diagnostics indication LED RUN/STOP LED Yes RAINT LED Yes MAINT LED Yes Connection display LINK TX/RX Yes Supported technology objects Molion Control Controller PID_Compact Yes; Universal PID controller with integrated optimization for valves Yes; PID controller with integrated optimization for temperature Ves; PID controller with integrated optimization for vesters and the Ves; PID controller with integrated optimization for vesters and the Ves; PID controller with integrated optimization for vesters and temperature vesters and temperature vesters and temperature vesters and	Diagnostic buffer	
Traces Number of configurable Traces Number of Configurable Traces Number of Configurable Traces Number of Configurable Number of Numbe	• present	Yes
Number of configurable Traces 8 Memory size per trace, max 512 kbyte	 Number of entries, max. 	3 200
Number of configurable Traces 8 Memory size per trace, max 512 kbyte	— of which powerfail-proof	1 000
Memory size per trace, max. Interrupts/diagnostics/status information Diagnostics indication LED RUN/STOP LED REROR LED MAINT LED Connection display LINK TX/RX Yes Supported technology objects Motion Control Controller PID_Compact PID_Compact PID_Temp Counting and measuring High-speed counter No Ambient conditions Ambient temperature during operation No Cortical installation, min. No O °C O °C Vertical installation, min. Vertical installation, max. Authorized installation, max. Profit installation, max. Authorized installation, max. In the presume of typically 40 °C, the display is switched off Ambient temperature during operation Installation max. Authorized installation, max. O °C No Ambient temperature during storage/transportation In max. Authorized installation, max. O °C Allitude during operation relating to sea level Installation allitude above sea level, max. Find D Programming I header Programming I header Programming I anguage Programming I anguage Programming I paguage Pres STL Yes Suphis Statistical sea	Traces	
Diagnostics indication LED	Number of configurable Traces	8
Diagnostics indication LED RUN/STOP LED FROR LED FROR LED MAINT LED Connection display LINK TX/RX Yes Connection display LINK TX/RX Yes Supported technology objects Motion Control Controller PID_Compact PID_Compact PID_Temp For PID_Temp Counting and measuring High-speed counter Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, min. horizontal installation, min. vertical installation installation, min. Vertical installation installation, min. Vertical installation installation installation, min. Vertical installation installation installation installation, min. Vertical installation installation, min. Vertical installation installation, min. Vertical installation, min. Vertical installation installation, min. Vertical installation installation, min. Vertical installation inst	Memory size per trace, max.	512 kbyte
Diagnostics indication LED RUN/STOP LED FROR LED FROR LED MAINT LED Connection display LINK TX/RX Yes Connection display LINK TX/RX Yes Supported technology objects Motion Control Controller PID_Compact PID_Compact PID_Temp For PID_Temp Counting and measuring High-speed counter Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, min. horizontal installation, min. vertical installation installation, min. Vertical installation installation, min. Vertical installation installation installation, min. Vertical installation installation installation installation, min. Vertical installation installation, min. Vertical installation installation, min. Vertical installation, min. Vertical installation installation, min. Vertical installation installation, min. Vertical installation inst	Interrupts/diagnostics/status information	
RUN/STOP LED ERROR LED Yes MAINT LED Yes Onnection display LINK TX/RX Yes Supported technology objects Motion Control Controller PID_Compact PID_Compact PID_Step Yes; PID controller with integrated optimization for valves PID-Temp Yes; PID controller with integrated optimization for valves PID-Temp Yes; PID controller with integrated optimization for temperature Counting and measuring High-speed counter Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, min. • horizontal installation, max. • vertical installation, max. • no "C • max. Ad "C; Display: 40 "C, at an operating temperature of typically 40 "C, the display is switched off • min. • min. • max. 70 "C Altitude during operation relating to sea level • Installation altitude above sea level, max. configuration / header configuration / programming / header Programming language — LAD — FBD — STL Yes Yes Yes Yes		
ERROR LED MAINT LED Yes Yes Yes Connection display LINK TX/RX Yes Supported technology objects Motion Control Ontroller PID_Compact PID_Compact PID_Temp Yes; PID controller with integrated optimization for valves PID_Temp Yes; PID controller with integrated optimization for valves PID_Temp Counting and measuring Pigs, PID controller with integrated optimization for temperature Counting and measuring Pigs, PID controller with integrated optimization for temperature Counting and measuring Pigs, PID controller with integrated optimization for temperature No Ambient conditions Ambient temperature during operation Phorizontal installation, min. Phorizontal installation, min. Phorizontal installation, min. Proceedings in the stallation, min. Procedure of typically 50 °C, the display is switched off Procedure of typically 40 °C, the display is switched off Ambient temperature during storage/transportation The min. Procedure of typically 40 °C, the display is switched off Ambient temperature during storage/transportation The min. Procedure of typically 40 °C, the display is switched off Ambient temperature during storage/transportation The min. Procedure of typically 40 °C, the display is switched off Ambient temperature during storage/transportation The min. Procedure of typically 40 °C, the display is switched off Ambient temperature during storage/transportation The min. Procedure of typically 40 °C, the display is switched off Ambient temperature during storage/transportation The min of the min	-	Yes
Connection display LINK TX/RX Supported technology objects Motion Control Controller PID_Compact PID_Step PID_Temp PID_Temp Pigh-speed counter Ambient conditions Ambient temperature during operation Pertical installation, min. Pertical installation, max. Verical installation, max. Authorization installation, max. Authorization installation, max. Por C Counted installation, max. Authorization installation, min. Pertical installation, min. Pertical installation, max. Authorization installation, max. Pertical installation, max. Authorization installation, max. Pertical in		
Motion Control Motion Control PID_Compact PID_Step PID_Temp Yes; PID controller with integrated optimization for valves PID_Temp Yes; PID controller with integrated optimization for valves PID_Temp Yes; PID controller with integrated optimization for temperature Counting and measuring Pigh-speed counter No Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, max. vertical installation, max. vertical installation, max. 40 °C; Display: 50 °C, at an operating temperature of typically 50 °C, the display is switched off 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. vertical installation greation relating to sea level Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual configuration / header configuration / programming / header Programming language — LAD — FBD — STL — Yes Yes Yes Yes		
Motion Control Controller PID_Compact PID_Step PID_Temp Counting and measuring High-speed counter Ambient conditions Ambient temperature during operation vertical installation, min. vertical installation, max. Pertical installation, max. Ambient temperature during storage/transportation vertical installation altitude above sea level, max. Altitude during operation relating to sea level Installation / hoader Configuration / hoader Configuration / programming / header Programming language — LAD — FBD — STL Yes; PID controller with integrated optimization for valves Yes; PID controll	· ·	100
Controller PID_Compact PID_Step PID-Temp Yes; PID controller with integrated optimization Yes; PID controller with integrated optimization for valves PID-Temp Yes; PID controller with integrated optimization for valves Yes; PID controller with integrated optimization for temperature Yes PID-Temp Counting and measuring High-speed counter No Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. 0 °C 00 °C; Display: 50 °C, at an operating temperature of typically 50 °C, the display is switched off 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. min. min. 140 °C 70 °C 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 configuration / header configuration / programming / header Programming language — LAD — FBD — Yes — STL Yes		No
PID_Compact PID_Sstep PID_Step PID_Temp Pignate PiD_Temp Pignate Pidn this peed counter Ambient conditions Ambient temperature during operation Portical installation, min. Pertical installation pertical pert		INO
PID_3Step PID-Temp Yes; PID controller with integrated optimization for valves Yes; PID controller with integrated optimization for temperature Yes High-speed counter No Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • horizontal installation, min. • vertical installation, min. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation max. • vertical installation at temperature during storage/transportation • min. • min. • 40 °C; Display: 40 °C, at an operating temperature of typically 40 °C, the display is switched off Ambient temperature during storage/transportation • min. • max. 70 °C 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 configuration / header Programming language — LAD — FBD — STL Yes Yes Yes Yes Yes		Voc. Universal PID controller with integrated entimization
PID-Temp Yes; PID controller with integrated optimization for temperature Yes High-speed counter No Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. o o C vertical installation, max. vertical installation, max. o o C vertical installation, max. o o C vertical installation, max. do o C; Display: 50 o C, at an operating temperature of typically 50 o C, the display is switched off vertical installation, max. do o C; Display: 40 o C, at an operating temperature of typically 40 o C, the display is switched off Ambient temperature during storage/transportation min. max. do o C 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 configuration / programming / header Programming language — LAD — FBD — STL Yes Yes Yes Yes		
Counting and measuring High-speed counter Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. overtical installation, min. vertical installation, max. overtical installation overtically 50 °C, at an operating temperature of typically 50 °C, the display is switched off overtical installation overtically 50 °C, at an operating temperature of typically 50 °C, the display is switched off overtical installation, min. overtical installation, min. overtical installation, min. overtical installation, min. overtical installation overtically 50 °C, at an operating temperature of typically 50 °C, the display is switched off overtical installation, min. overtical installation, min.		
 High-speed counter Ambient conditions Ambient temperature during operation Installation, min. Installation altitude above sea level. Installation altitude above sea level. Installation / programming language — LAD — FBD — FBD — STL O°C O°C O°C O°C, pisplay: 50 °C, at an operating temperature of typically 50 °C, the display is switched off O°C O°C, pisplay: 40 °C, at an operating temperature of typically 40 °C, the display is switched off Ambient temperature during storage/transportation Installation altitude above sea level Installation altitude above sea level, max. Fess Fess	·	
Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • horizontal installation, max. • vertical installation, min. • vertical installation, max. •		
Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • horizontal installation, max. • horizontal installation, max. • vertical installation, min. • vertical installation, max. • vertical installation and perature of typically 40 °C, the display is switched off • vertical installation and perature of typically 40 °C, the display is switched off • vertical installation, max. •		INU
 horizontal installation, min. 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. 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 configuration / header configuration / programming / header Programming language LAD FBD STL Yes Yes Yes Yes Yes 		
 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 Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual configuration / header configuration / programming / header Programming language LAD FBD Yes STL Yes Yes Yes Yes Yes 		
 vertical installation, min. 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 Installation altitude above sea level, max. soon m; Restrictions for installation altitudes > 2 000 m, see manual configuration / header configuration / programming / header Programming language LAD FBD STL Yes Yes Yes Yes 	•	
 vertical installation, min. 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 Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual configuration / header Programming language LAD FBD STL Yes Yes Yes Yes Yes Yes Yes Yes 	 horizontal installation, max. 	
 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 Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual configuration / header Programming language LAD FBD STL Yes Yes Yes Yes Yes 	 vertical installation, min. 	
Ambient temperature during storage/transportation • min. • max. 70 °C 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 configuration / header configuration / programming / header Programming language — LAD — FBD — FBD — STL Yes Yes		
 min. max. 70 °C 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 configuration / header Configuration / programming / header Programming language LAD FBD STL Yes STL Yes Yes Yes 	Ambient temperature during storage (france et alice	display is switched off
 max. 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 configuration / header configuration / programming / header Programming language — LAD — FBD — STL Yes Yes Yes 		40.00
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 configuration / header Configuration / programming / header Programming language — LAD — FBD — FBD — STL Yes Yes		
● Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual configuration / header configuration / programming / header Programming language — LAD Yes — FBD Yes — STL Yes		70 C
configuration / header configuration / programming / header Programming language — LAD Yes — FBD Yes — STL Yes		5 000 ms Doctrictions for installation altitudes a 0 000 ms and make
configuration / programming / header Programming language — LAD Yes — FBD Yes — STL Yes	·	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Programming language — LAD Yes — FBD Yes — STL Yes		
— LAD Yes — FBD Yes — STL Yes		
FBDSTLYesYes	Programming language	
— STL Yes	— LAD	Yes
	— FBD	
— SCL Yes		Yes
	— SCL	Yes

— CFC	No	
— GRAPH	Yes	
Know-how protection		
 User program protection/password protection 	Yes	
 Copy protection 	No	
Block protection	Yes	
Access protection		
 protection of confidential configuration data 	Yes	
 Password for display 	Yes	
 Protection level: Write protection 	Yes	
 Protection level: Read/write protection 	Yes	
Protection level: Complete protection	Yes	
programming / cycle time monitoring / header		
 lower limit 	adjustable minimum cycle time	
• upper limit	adjustable maximum cycle time	
Dimensions		
Width	210 mm	
Height	147 mm	
Depth	129 mm	
Weights		
Weight, approx.	2 119 g; Interface modules: 2x 18 g	

last modified:

4/1/2022