6ES7214-1BG40-0XB0

Data sheet



SIMATIC S7-1200, CPU 1214C, compact CPU, AC/DC/relay, onboard I/O: 14 DI 24 V DC; 10 DO relay 2 A; 2 AI 0-10 V DC, power supply: AC 85-264 V AC at 47-63 Hz, program/data memory 150 KB

General information	
Product type designation	CPU 1214C AC/DC/relay
Firmware version	V4.6
Engineering with	
 Programming package 	STEP 7 V18 or higher
Supply voltage	
Rated value (AC)	
• 120 V AC	Yes
• 230 V AC	Yes
permissible range, lower limit (AC)	85 V
permissible range, upper limit (AC)	264 V
Line frequency	
 permissible range, lower limit 	47 Hz
permissible range, upper limit	63 Hz
Input current	
Current consumption (rated value)	100 mA at 120 V AC; 50 mA at 240 V AC
Current consumption, max.	300 mA at 120 V AC; 150 mA at 240 V AC
Inrush current, max.	20 A; at 264 V
l²t	0.8 A ² ·s
Output current	
for backplane bus (5 V DC), max.	1 600 mA; Max. 5 V DC for SM and CM
Encoder supply	
24 V encoder supply	
• 24 V	20.4 to 28.8V
Power loss	
Power loss, typ.	14 W
Memory	
Work memory	
• integrated	150 kbyte
Load memory	
• integrated	4 Mbyte
Plug-in (SIMATIC Memory Card), max.	with SIMATIC memory card
Backup	
• present	Yes
• maintenance-free	Yes
without battery	Yes
CPU processing times	
for bit operations, typ.	0.08 μs; / instruction
for word operations, typ.	1.7 μs; / instruction

for floating point arithmetic, typ.	2.3 µs; / instruction
CPU-blocks	
Number of blocks (total)	DBs, FCs, FBs, counters and timers. The maximum number of addressable blocks ranges from 1 to 65535. There is no restriction, the entire working memory can be used
OB	
Number, max.	Limited only by RAM for code
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	14 kbyte
Flag	
• Size, max.	8 kbyte; Size of bit memory address area
Local data	
per priority class, max.	16 kbyte; Priority class 1 (program cycle): 16 KB, priority class 2 to 26: 6 KB
Address area	
Process image	
 Inputs, adjustable 	1 kbyte
Outputs, adjustable	1 kbyte
Hardware configuration	
Number of modules per system, max.	3 comm. modules, 1 signal board, 8 signal modules
Time of day	
Clock	
 Hardware clock (real-time) 	Yes
Backup time	480 h; Typical
Deviation per day, max.	±60 s/month at 25 °C
Digital inputs	
Number of digital inputs	14; Integrated
of which inputs usable for technological functions	6; HSC (High Speed Counting)
Source/sink input	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	14
Input voltage	
Rated value (DC)	24 V
for signal "0"	5 V DC at 1 mA
• for signal "1"	15 V DC at 2.5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	0.2 ms, 0.4 ms, 0.8 ms, 1.6 ms, 3.2 ms, 6.4 ms and 12.8 ms, selectable in groups of four
— at "0" to "1", min.	0.2 ms
— at "0" to "1", max.	12.8 ms
for interrupt inputs	12.0 1110
— parameterizable	Yes
for technological functions	
— parameterizable	Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30
F	kHz
Cable length	
• shielded, max.	500 m; 50 m for technological functions
• unshielded, max.	300 m; for technological functions: No
Digital outputs	
Number of digital outputs	10; Relays
Switching capacity of the outputs	
 with resistive load, max. 	2 A
on lamp load, max.	30 W with DC, 200 W with AC
Output delay with resistive load	
• "0" to "1", max.	
- 0 10 1 , 1110/11	10 ms; max.
• "1" to "0", max.	10 ms; max. 10 ms; max.
• "1" to "0", max.	
• "1" to "0", max. Relay outputs	10 ms; max.

a phialded many	F00
• shielded, max.	500 m
• unshielded, max.	150 m
Analog inputs	
Number of analog inputs	2
Input ranges	
Voltage	Yes
Input ranges (rated values), voltages	
• 0 to +10 V	Yes
— Input resistance (0 to 10 V)	≥100k ohms
Cable length	
• shielded, max.	100 m; twisted and shielded
Analog outputs	
Number of analog outputs	0
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
 Resolution with overrange (bit including sign), max. 	10 bit
 Integration time, parameterizable 	Yes
 Conversion time (per channel) 	625 µs
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
1. Interface	
Interface type	PROFINET
Isolated	Yes
automatic detection of transmission rate	Yes
Autonegotiation	Yes
Autocrossing	Yes
Interface types	
RJ 45 (Ethernet)	Yes
Number of ports	1
integrated switch	No
Protocols	
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	
Transmission rate, max.	100 Mbit/s
Services	100 MBIO
— PG/OP communication	Yes; encryption with TLS V1.3 pre-selected
Isochronous mode	No
— IRT	No
— PROFlenergy	No
Prioritized startup	Yes
— Prioritized startup — Number of IO devices with prioritized startup, max.	16
Number of connectable IO Devices, max.	16
Number of connectable IO Devices, max. Number of connectable IO Devices for RT, max.	16
	16
— of which in line, max.— Activation/deactivation of IO Devices	Yes
	Yes 8
 Number of IO Devices that can be simultaneously activated/deactivated, max. 	
— Updating time	The minimum value of the update time also depends on the communication component set for PROFINET IO, on the number of IO devices and the quantity of configured user data.
PROFINET IO Device	or configured additional
Services	
— PG/OP communication	Vec. encryption with TLS V/1.2 are colocted
	Yes; encryption with TLS V1.3 pre-selected
— Isochronous mode	No No
— IRT	No

— PROFlenergy	Yes
— PROPIETERSY — Shared device	Yes
Number of IO Controllers with shared device, max.	2
Protocols	2
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes; CM 1243-5 (master) or CM 1242-5 (slave) required
OPC UA	Yes; OPC UA Server
AS-Interface	Yes; CM 1243-2 required
Protocols (Ethernet)	165, OM 1240-2 required
• TCP/IP	Yes
• DHCP	No
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Redundancy mode	100
Media redundancy	
— MRP	No
— MRPD	No
SIMATIC communication	
• S7 routing	Yes
Open IE communication	
• TCP/IP	Yes
— Data length, max.	8 kbyte
• ISO-on-TCP (RFC1006)	Yes
— Data length, max.	8 kbyte
• UDP	Yes
— Data length, max.	1 472 byte
Web server	1 II Dylo
• supported	Yes
User-defined websites	Yes
OPC UA	
Runtime license required	Yes; "Basic" license required
OPC UA Server	Yes; data access (read, write, subscribe), method call, runtime license required
— Application authentication	Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256
 User authentication 	"anonymous" or by user name & password
 Number of sessions, max. 	10
 Number of subscriptions per session, max. 	5
— Sampling interval, min.	100 ms
— Publishing interval, min.	200 ms
Number of server methods, max.	20
Number of monitored items, recommended max.	1 000
Number of server interfaces, max.	2
Number of nodes for user-defined server interfaces,	2 000
max.	
Further protocols	
• MODBUS	Yes
communication functions / header	
S7 communication	
• supported	Yes
• as server	Yes
• as client	Yes
User data per job, max.	See online help (S7 communication, user data size)
Number of connections	
• overall	PG Connections: 4 reserved / 4 max; HMI Connections: 12 reserved / 18 max; S7 Connections: 8 reserved / 14 max; Open User Connections: 8 reserved / 14 max; Web Connections: 2 reserved / 30 max; OPC UA Connections: 0 reserved / 10 max; Total Connections: 34 reserved / 64 max
Test commissioning functions	
Status/control	
Status/control variable	Yes

- Variables	Inquite/euthorite manner hite DD- distributed 1/O- "
Variables Foreign	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
Forcing	Voc
Forcing Diagnostic buffer	Yes
Diagnostic buffer	Ven
• present	Yes
Traces	
Number of configurable Traces	2
Memory size per trace, max.	512 kbyte
Interrupts/diagnostics/status information	
Diagnostics indication LED	v.
• RUN/STOP LED	Yes
• ERROR LED	Yes
MAINT LED	Yes
Integrated Functions	
Frequency measurement	Yes
controlled positioning	Yes
Number of position-controlled positioning axes, max.	8
Number of positioning axes via pulse-direction interface	Up to 4 with SB 1222
PID controller	Yes
Number of alarm inputs	4
Potential separation	
Potential separation digital inputs	
 Potential separation digital inputs 	500V AC for 1 minute
 between the channels, in groups of 	1
Potential separation digital outputs	
 Potential separation digital outputs 	Relays
 between the channels 	No
 between the channels, in groups of 	2
EMC	
Interference immunity against discharge of static electricity	
 Interference immunity against discharge of static electricity acc. to IEC 61000-4-2 	Yes
Test voltage at air discharge	8 kV
 Test voltage at contact discharge 	6 kV
Interference immunity to cable-borne interference	
• Interference immunity on supply lines acc. to IEC 61000-4-4	Yes
• Interference immunity on signal cables acc. to IEC 61000-4-4	Yes
Interference immunity against voltage surge	
• Interference immunity on supply lines acc. to IEC 61000-	Yes
4-5	
Interference immunity against conducted variable disturbance indu	ced by high-frequency fields
 Interference immunity against high-frequency radiation acc. to IEC 61000-4-6 	Yes
Emission of radio interference acc. to EN 55 011	
Limit class A, for use in industrial areas	Yes; Group 1
Limit class B, for use in residential areas	Yes; When appropriate measures are used to ensure compliance with the limits for Class B according to EN 55011
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
Marine approval	Yes
Ambient conditions	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
	, , , , , , ,

* minx. * minx. * minx. * of "C, Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 ° C (not contain installation, min. * horizontal installation, max. * horizontal installation, max. * evertical installation, max. * evertical installation, max. * evertical installation, max. * of "C * of "C * evertical installation, max. * of "C * of "C * evertical installation, max. * of "C * of "C * evertical installation, max. * of "C * of "C * evertical installation, max. * of "C * of "C * evertical installation altitude, max. * operation, min. * operation, min. * operation, min. * oborage/transport, min. * oborage/transport, min. * ostroage/transport, min. * operation altitude, min. * operation installation altitude, min. * operation, max. * operation resistance during operation acc. to IEC 60068-2.6 * operation, tested according to IEC 60068-2.7 * operation, tested according to IEC 60068-2.7 * operation, tested according to IEC 60068-2.6 * opera	Anabiant tamp aretura during an aretian	
• max. 60 °C, Number of simultaneously activated inputs or outputs? or 5 five adjacent prints at 60 °C tertical installation, max. 20 °C • horizontal installation, max. 00 °C • vertical installation, max. 50 °C • vertical installation, max. 70 °C • nim. •	Ambient temperature during operation	00.90
points) at 60 °C contrornal or 50 °C vertical, 14 or 10 at 55 °C horizontal or 45 °C vertical		
• horizontal installation, max. • vertical installation, min. • min. • min. • min. • mix. Arbient temperature during storage/transportation • min. • max. 70 °C Air pressure acc. to IEC 60088-2-13 • Operation, min. • Operation, min. • Operation, min. • Operation, max. • Oberation, max. • Storage/transport, min. • Storage/transport, min. • Installation attitude, min. • Installation attitude, min. • Installation attitude, min. • Installation attitude, max. • Stoom, Restrictions for installation attitudes > 2 000 m, see manual Relative huminity • Operation, max. Vibrations • Vibration resistance during operation acc. to IEC 60088-2-6 • Operation, tested according to IEC 60088-2-6 • Coperation, tested according to IEC 60088-2-7 • Cost RH + 60% without condensation • SO2 at RH + 60% condensation-free configuration / programming / header rendiguration / programming / header Programming language — LAD — FBD — SCL Know how protection • Ves — SCL Know how protection Ves — SCL Know how protection ves • Complete protection Ves • Protection level: Camplete protection Ves • Operation leve	• max.	points) at 60 °C horizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal or 45
• vertical installation, min. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • max. • 70 °C Air pressure acc. to IEC 60068-2-13 • Operation, min. • Operation, max. • Operation, max. • Operation, max. • Operation, max. • Storage/transport, min. • Storage/transport, min. • Storage/transport, min. • Storage/transport, min. • Installation altitude, min. • Operation, max. Vibration resistance during operation acc. to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Ves Folkutant concentrations • SO2 at RR 4 ∈ 60% without condensation • SO2 at RR 4 ∈ 60% without condensation • SO2 at RR 4 ∈ 60% without condensation • SO2 at RR 4 ∈ 60% without condensation • Ves • Programming language • LAD • FBD • SCL • Yes • SCL • Yes • SCL • Yes • Operation of confidential configuration data • Protection level: Complete protection • Ves • Operation of confidential configuration data • Protection level: Complete protection • Yes • Protection level: Read/wither protection • Yes • Protection level: Read/wither protection • Yes • Operation level: Read/wither protection • Yes • Operation level: Read/wither protection • Yes • Protection level: Read/wither protection • Yes • Operation level: Read/wither protection • Yes • Operation level: Complete protection • Yes • Operation level: Read/wither protection • Yes	 horizontal installation, min. 	-20 °C
• vertical installation, max. Ambient temperature during storage/transportation • min. • max. 70 °C Air pressure acc. to IEC 60068-2-13 • Operation, min. • Storage/transport, min. • Storage/transport, min. • Installation altitude, min. • Installation altitude, min. • Installation altitude, max. • Operation, max. 5 000 m. Restrictions for installation altitudes > 2 000 m, see manual Relative humbifly • Operation, max. 95 %; no condensation **Vibrations** • Vibrations • Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 **Pollutant concentrations • So2 at RH + 60% without condensation **Pollutant concentrations • SO2 at RH + 60% without condensation **Programming language — LAD — FBD — SCL **Programming language — LAD — FBD — SCL **Poss	 horizontal installation, max. 	60 °C
• vertical installation, max. Ambient temperature during storage/transportation • min. • max. 70 °C Air pressure acc. to IEC 60068-2-13 • Operation, min. • Operation, min. • Operation, max. 1 080 hPa • Storage/transport, min. • Storage/transport, max. Altitude during operation relating to sea level • Installation altitude, max. • Installation altitude, max. • Installation altitude, max. • Operation, max. 95 %; no condensation *Vibrations • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-7 • Vibrations • Installation altitude is the storage of the shock 15 g (peak value), duration 11 ms • So2 at RH + 60% without condensation *Pollutant concentrations • SO2 at RH + 60% without condensation * SO2 - O.5 ppm; H2S; < 0.1 ppm; RH < 60% condensation-free configuration / hasder **Configuration / hasder **Configuration / hasder **Programming language — LAD — FBD — PBD — Yes — FBD — Yes — SCL **Know-how protection • User program protection password protection • User program protection password protection • User program protection password protection • Protection level - Complete protection • Protection level- Write protection • Protection level- Write protection • Protection level- Read/write protectio		-20 °C
Ambient temperature during storage/transportation inin. 40 °C inins. 70 °C Air pressure a.c. to IEC 60088-2-13 Operation, min. 796 hPa Operation, min. 1080 hPa Storage/transport, min. 1080 hPa Storage/transport, min. 1080 hPa Storage/transport, min. 1080 hPa Storage/transport, min. 1080 hPa Altitude during operation relating to sea level Installation altitude, min. 1090 hPa		50 °C
• min.		
• max. 70 °C Air pressure soc. to IEC 60068-2-13 • Operation, min. • Operation, max. 1 080 hPa • Storage/transport, min. • Storage/transport, max. 1 1 080 hPa • Installation altitude, min 1 000 m • Installation altitude, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity • Operation, max Vibrations • Vibration resistance during operation acc. to IEC 60068-2 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-7 • Ves Stock testing • Visat decording to IEC 60068-2-7 • Ves Stock testing • Sto2 at RH + 60% without condensation • St02 at RH + 60% without condensation • St02 at RH - 60% without condensation • Yes — LAD — FBD — LAD — FBD — Yes — SCL — Yes — SCL — Yes		-40 °C
Air pressure acc. to IEC 60068-2-13 • Operation, min.		
Operation, min. Operation, max. Storage/transport, min. Storage/transport, max. Altitude during operation releting to sea level Installation altitude, min. Installation altitude, max. Felanty humbility Operation, max. Poperation, max. Solon max. S		
Operation, max. Storage/transport, min. Storage/transport, min. Storage/transport, min. Storage/transport, max. Altitude during operation relating to sea level Installation altitude, min. Installation altitudes > 2 000 m, see manual		795 hPa
Storage/transport, min. Storage/transport, max. 1 080 hPa 1 080	•	
Storage/transport, max. Altitude during operation relating to sea level Installation altitude, min. Installation altitude, max. So 00 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. Vibrations Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Yes Shock testing tested according to IEC 60068-2-7 Ves; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations So2 at RH < 60% without condensation So2: < 0.5 ppm; H2S; < 0.1 ppm; RH < 60% condensation-free configuration / programming / header Programming language LAD FBD SCL Yes Now-how protection User program protection/password protection So2 protection (ves configuration data) Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Protection level: Complete protection Protection level: Read/write protection Protection level: Complete protection Protection level: Read/write protection Protection lev	·	
Altitude during operation relating to sea level Installation altitude, min1 000 m Formation altitude, max1 000 m; Restrictions for installation altitudes > 2 000 m; see manual Felative humidity Operation, max95 %; no condensation Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Coperation, tested according to IEC 60068-2-6 Shock testing Itested according to IEC 60068-2-7 Ves: IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations SO2 at RH < 60% without condensation Organization / programming / header Programming language LDD FBD SCL Yes Access protection Subsch protection Subsch protection Protection level: Write protection Protection level: Write protection Protection level: Write protection Protection level: Complete protection Protection level		
Installation altitude, min. Installation altitude, max. So 000 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. So on m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. Vibrations Vibration Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Ves Shock testing It ested according to IEC 60068-2-7 Ves: IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations So2 at RH < 60% without condensation So2 at RH < 60% without condensation So2 at RH < 60% without condensation Ves Configuration / programming / header Programming language - LAD - FBD - SCL Yes Know-how protection User program protection/password protection Ves Slock protection Ves Slock protection Protection for confidential configuration data Protection for confidential configuration data Protection level: Write protection Protection level: Read/write protection Protection level: Read/write protection Protection level: Complete protection Protection		1 080 NPa
e Installation altitude, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity • Operation, max. Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 *Yes Shock testing • tested according to IEC 60068-2-7 Ves; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH - 6 0% without condensation configuration / header Programming language — LAD — FBD — SCL — Yes — SCL — Yes Non-who protection • User program protection/password protection • Block protection • Block protection • Protection level: Write protection • Protection level: Write protection • Protection level: Write protection • Protection level: Complete protection • Protection level: Complete protection • Protection level: Complete protection • a djustable Pights Width 110 mm Height Height 100 mm Depth • 75 mm Woghts	· · · · ·	4.000
Relative humidity Operation, max. Operation, max. 9 5 %; no condensation Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Shock testing • tested according to IEC 60068-2-6 Shock testing • tested according to IEC 60068-2-27 Ves; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / programming / header Programming language — LAD — FBD — SCL — Yes Know-how protection • User program protection/password protection • Block protection • Block protection • Protection for of confidential configuration data • Protection level: Write protection • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection • Protectio		
Operation, max. Operation, max. Vibration resistance during operation acc. to IEC 60068-2-6 Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Ves Shock testing I tested according to IEC 60068-2-27 Ves; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / programming / header Programming language — LAD — FBD — SCL Ves Know-how protection User program protection/password protection Siblock protection Protection (Pess of Confidential configuration data) Siblock protection Protection level: Write protection Protection level: Write protection Protection level: Write protection Protection level: Write protection Protection level: Read/write protection Programming / cycle time monitoring / header adjustable Programming / cycle time monitoring / header adjustable Programming / cycle time monitoring / header adjustable Ves Promensions Width In mm Height Depth 75 mm Vesignts		5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 *Yes Shock testing • tested according to IEC 60068-2-27 *Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH < 60% without condensation *SO2 at RH < 60% without condensation *Onfiguration / programming / header Programming language - LAD - FBD - SCL Yes *Now-how protection • User program protection/password protection • Block protection • Block protection • protection of confidential configuration data • Protection level: Read/write protection • Protection level: Read/write protection • Programming / cycle time monitoring / header • adjustable *Yes Dimensions Width 110 mm Height Do mm Depth *Tes *Yes make ** *Yes make ** *Yes	·	
Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Shock testing • tested according to IEC 60068-2-7 Ves; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header Configuration / programming / header Programming language — LAD — FBD — Yes — SCL Yes Know-how protection • User program protection/password protection • User program protection/password protection • User program protection • Protection of confidential configuration data • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection • Programming / cycle time monitoring / header • adjustable Programming / cycle time monitoring / header • adjustable Neights Ves 100 mm Depth 75 mm Ves Ves Yes Yes Yes Yes Yes Yes		95 %; no condensation
2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 Shock testing • tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / programming / header Programming language — LAD — FBD — SCL — Yes — SCL — Yes Know-how protection • User program protection/password protection • Copy protection • Block protection • Block protection • protection of confidential configuration data • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection • Protection level: Complete protection • adjustable Prosport immediate • adjustable Pes Dimensions Width — 110 mm Height — 100 mm Depth — 75 mm Weights	Vibrations	
Shock testing		2 g (m/s²) wall mounting, 1 g (m/s²) DIN rail
• tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH < 60% without condensation	Operation, tested according to IEC 60068-2-6	Yes
Pollutant concentrations • SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / programming / header Programming language — LAD — FBD — SCL — Yes — SCL Know-how protection • User program protection/password protection • Copy protection • Block protection • Block protection • protection level: Write protection • Protection level: Write protection • Protection level: Complete protection • Protection level: Omplete	Shock testing	
SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / programming / header Programming language — LAD Yes — FBD Yes — SCL Yes Know-how protection • User program protection/password protection Yes • Copy protection Yes • Block protection • protection of confidential configuration data Yes • Protection level: Write protection Yes • Protection level: Complete protection Yes • Protection level: Complete protection Yes • programming / cycle time monitoring / header • adjustable Yes Width 110 mm Height 100 mm Depth 75 mm Weights	tested according to IEC 60068-2-27	
configuration / header configuration / programming / header Programming language — LAD Yes — FBD Yes — SCL Yes Know-how protection • User program protection/password protection Yes • Block protection Yes • Block protection Yes • Protection for confidential configuration data Yes • Protection level: Write protection Yes • Protection level: Complete protection Yes • Protection level: Tomplete protection Yes • Protection level: Complete protection Yes • Width 110 mm Height 100 mm Depth 75 mm Weights	Pollutant concentrations	
configuration / programming / header Programming language — LAD Yes — FBD Yes — SCL Yes Know-how protection • User program protection/password protection Yes • Block protection Yes • Block protection Yes Access protection • protection of confidential configuration data Yes • Protection level: Write protection Yes • Protection level: Read/write protection Yes • Protection level: Complete protection Yes • programming / cycle time monitoring / header • adjustable Yes Dimensions Width 110 mm Height 100 mm Depth 75 mm Weights	 SO2 at RH < 60% without condensation 	S02: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free
Programming language — LAD — FBD — FBD — Yes — SCL — Yes Know-how protection • User program protection/password protection • User program protection/password protection • Elock protection • Protection • Protection • Protection fevel: Write protection • Protection level: Write protection • Protection level: Complete protection • Protection level: Complete protection • Protection level: Complete protection • Protection level: Omplete protect	configuration / header	
- LAD Yes Yes Yes Yes Yes Yes Yes Yes Xhow-how protection Yes Copy protection Yes Block protection Yes Block protection Yes Protection Yes	configuration / programming / header	
FBD	Programming language	
How-how protection User program protection/password protection Copy protection Block protection Protection Protection of confidential configuration data Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Protection level: Complete protection Protection level: Complete protection Programming / cycle time monitoring / header adjustable Protection level: Tomplete protection Programming / cycle time monitoring / header adjustable Tomm Peght Tomm Height Tomm Depth Tomm Weights	— LAD	Yes
Know-how protection • User program protection/password protection • Copy protection • Block protection • Protection • Protection of confidential configuration data • Protection level: Write protection • Protection level: Read/write protection • Protection level: Complete protection • Protection level: Complete protection • Programming / cycle time monitoring / header • adjustable • adjustable Ves Dimensions Width 110 mm Height 100 mm Depth 75 mm Weights	— FBD	Yes
User program protection/password protection Copy protection Block protection Block protection Protection protection of confidential configuration data Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Protection level: Complete protection Programming / cycle time monitoring / header adjustable Primensions Width 110 mm Height 100 mm Depth 75 mm Weights	— SCL	Yes
Copy protection Block protection Yes Access protection protection of confidential configuration data Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Protection level: Complete protection Programming / cycle time monitoring / header adjustable Width 110 mm Height 100 mm Depth 75 mm Weights	Know-how protection	
Copy protection Block protection Yes Access protection protection of confidential configuration data Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Protection level: Complete protection Programming / cycle time monitoring / header adjustable Width 110 mm Height 100 mm Depth 75 mm Weights	User program protection/password protection	Yes
Block protection Access protection protection of confidential configuration data Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Protection level: Complete protection Programming / cycle time monitoring / header adjustable Primensions Width 110 mm Height 100 mm Depth 75 mm Weights		
Access protection • protection of confidential configuration data Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Programming / cycle time monitoring / header adjustable Ves Dimensions Width 110 mm Height 100 mm Depth 75 mm Weights		
protection of confidential configuration data Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Programming / cycle time monitoring / header adjustable Yes Dimensions Width 110 mm Height 100 mm Depth Weights		
Protection level: Write protection Protection level: Read/write protection Protection level: Complete protection Programming / cycle time monitoring / header adjustable Yes Dimensions Width 110 mm Height 100 mm Depth 75 mm Weights	·	Yes
Protection level: Read/write protection Protection level: Complete protection programming / cycle time monitoring / header adjustable Yes Dimensions Width 110 mm Height 100 mm Depth 75 mm Weights		
● Protection level: Complete protection programming / cycle time monitoring / header ● adjustable Yes Dimensions Width Height 100 mm Depth 75 mm Weights	•	
programming / cycle time monitoring / header	•	
● adjustable Yes Dimensions Width 110 mm Height 100 mm Depth 75 mm Weights		1 05
Dimensions Width 110 mm Height 100 mm Depth 75 mm Weights		Voc
Width 110 mm Height 100 mm Depth 75 mm Weights		res
Height 100 mm Depth 75 mm Weights		
Depth 75 mm Weights		
Weights		
	·	75 mm
Weight, approx. 455 g	Weights	
	Weight, approx.	455 g

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