SIEMENS

Data sheet

6ES7214-1AG40-0XB0





SIMATIC S7-1200, CPU 1214C, compact CPU, DC/DC/DC, onboard I/O: 14 DI 24 V DC; 10 DO 24 V DC; 2 AI 0-10 V DC, power supply: DC 20.4-28.8 V DC, program/data memory 150 KB



Figure similar

General information	
Product type designation	CPU 1214C DC/DC/DC
Firmware version	V4.6
Engineering with	
 Programming package 	STEP 7 V18 or higher
Supply voltage	
Rated value (DC)	
• 24 V DC	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Load voltage L+	
 Rated value (DC) 	24 V
 permissible range, lower limit (DC) 	20.4 V
 permissible range, upper limit (DC) 	28.8 V
Input current	
Current consumption (rated value)	500 mA; CPU only
Current consumption, max.	1 500 mA; CPU with all expansion modules
Inrush current, max.	12 A; at 28.8 V
l²t	0.5 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	L+ minus 4 V DC min.
Power loss	
Power loss, typ.	12 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
	1.7 μs; / instruction
for word operations, typ. for floating point arithmetic, typ.	2.3 µs; / instruction
CPU-blocks	2.5 µs, / Instruction
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
•	±60 s/month at 25 °C
Deviation per day, max. District invertee	±00 \$/III0IIIII 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	V
— parameterizable	Yes
for technological functions	0. 1 1 0 0 400 111 0 0 0 00 111 117
— parameterizable	Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 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
of which high-speed outputs	4; 100 kHz Pulse Train Output
Limitation of inductive shutdown voltage to	L+ (-48 V)
Switching capacity of the outputs	
 with resistive load, max. 	0.5 A
• on lamp load, max.	5 W
Output voltage	

 for signal "0", max. for signal "1", min. 20 V Output current for signal "1" rated value for signal "0" residual current, max. O.1 mA Output delay with resistive load "0" to "1", max. "1" to "0", max. 5 μs Switching frequency of the pulse outputs, with resistive load, max. Relay outputs Number of relay outputs shielded, max. unshielded, max. unshielded, max. to m Analog inputs Voltage Input ranges Voltage Input resistance (0 to 10 V) Pes 2100 m; twisted and shielded shielded, max. 100 m; twisted and shielded 	
Output current • for signal "1" rated value • for signal "0" residual current, max. Output delay with resistive load • "0" to "1", max. • "1" to "0", max. Switching frequency • of the pulse outputs, with resistive load, max. Relay outputs • Number of relay outputs • shielded, max. • unshielded, max. Analog inputs Number of analog inputs • Voltage Input ranges • Voltage Input ranges (rated values), voltages • 0 to +10 V — Input resistance (0 to 10 V) Cable length • shielded, max. 100 m; twisted and shielded	
 for signal "1" rated value for signal "0" residual current, max. 0.1 mA Output delay with resistive load "0" to "1", max. "1" to "0", max. 5 μs Switching frequency of the pulse outputs, with resistive load, max. Number of relay outputs shielded, max. unshielded, max. unshielded, max. to m Analog inputs Voltage Yes Input ranges (rated values), voltages 0 to +10 V — Input resistance (0 to 10 V) Cable length Shielded, max. 100 m; twisted and shielded 	
• for signal "0" residual current, max. Output delay with resistive load • "0" to "1", max. • "1" to "0", max. 5 µs Switching frequency • of the pulse outputs, with resistive load, max. Relay outputs • Number of relay outputs • Shielded, max. • unshielded, max. Analog inputs Number of analog inputs • Voltage Input ranges • Voltage Input ranges (rated values), voltages • 0 to +10 V — Input resistance (0 to 10 V) Cable length • shielded, max. 100 nm; twisted and shielded 100 m; twisted and shielded	
 for signal "0" residual current, max. Output delay with resistive load • "0" to "1", max. • "1" to "0", max. 5 μs Switching frequency • of the pulse outputs, with resistive load, max. Number of relay outputs • Number of relay outputs • Shielded, max. • unshielded, max. • unshielded, max. • Voltage Input ranges • Voltage γes Input ranges (rated values), voltages • 0 to +10 V — Input resistance (0 to 10 V) Cable length • shielded, max. 100 m; twisted and shielded 	
Output delay with resistive load • "0" to "1", max. • "1" to "0", max. Switching frequency • of the pulse outputs, with resistive load, max. Relay outputs • Number of relay outputs • Number of relay outputs • shielded, max. • unshielded, max. Analog inputs Number of analog inputs Voltage Input ranges • Voltage Input ranges (rated values), voltages • 0 to +10 V — Input resistance (0 to 10 V) Cable length • shielded, max. 100 kHz	
 "0" to "1", max. "1" to "0", max. 5 μs Switching frequency of the pulse outputs, with resistive load, max. 100 kHz Relay outputs Number of relay outputs shielded, max. unshielded, max. unshielded, max. unshielded, max. 150 m Analog inputs Voltage Voltage Yes Input ranges (rated values), voltages 0 to +10 V — Input resistance (0 to 10 V) Cable length shielded, max. 100 m; twisted and shielded 	
 "1" to "0", max. Switching frequency of the pulse outputs, with resistive load, max. Number of relay outputs Number of relay outputs shielded, max. unshielded, max. unshielded, max. unshielded, max. 150 m Analog inputs Voltage Voltage Yes Input ranges (rated values), voltages 0 to +10 V — Input resistance (0 to 10 V) Cable length shielded, max. 100 m; twisted and shielded 	
Switching frequency of the pulse outputs, with resistive load, max. Relay outputs Number of relay outputs other shielded, max. shielded, max. unshielded, max. foo m analog inputs Number of analog inputs Number of analog inputs Voltage voltage other shielded, voltages other shielded, voltages other shielded, voltages other shielded, voltages and shielded Yes Input ranges (rated values), voltages other shielded, voltages and shielded other shielded, max. 100 kHz	
of the pulse outputs, with resistive load, max. Relay outputs Number of relay outputs o Cable length shielded, max. unshielded, max. languary Number of analog inputs Number of analog inputs 2 Input ranges voltage Input ranges (rated values), voltages o to +10 V — Input resistance (0 to 10 V) Cable length shielded, max. 100 kHz 100	
Relay outputs Number of relay outputs Shielded, max. Soo m unshielded, max. Iso m Analog inputs Number of analog inputs Voltage Voltage Input ranges (rated values), voltages Oto +10 V — Input resistance (0 to 10 V) Cable length shielded, max. 100 m; twisted and shielded	
 Number of relay outputs Cable length shielded, max. unshielded, max. unshielded, max. 150 m Analog inputs Number of analog inputs 12 Input ranges Voltage Yes Input ranges (rated values), voltages 0 to +10 V — Input resistance (0 to 10 V) Yes — Input resistance (0 to 10 V) Cable length shielded, max. 100 m; twisted and shielded 	
Cable length	
 shielded, max. unshielded, max. 150 m Analog inputs Number of analog inputs 2 Input ranges Voltage Yes Input ranges (rated values), voltages 0 to +10 V — Input resistance (0 to 10 V) Yes — Input resistance (0 to 10 V) Cable length shielded, max. 100 m; twisted and shielded 	
unshielded, max. Analog inputs Number of analog inputs voltage voltage Input ranges (rated values), voltages o to +10 V — Input resistance (0 to 10 V) Cable length shielded, max. 150 m Yes 2 Input ranges Yes Input ranges (rated values), voltages 100 m; twisted and shielded	
Analog inputs Number of analog inputs Input ranges Voltage Voltage Input ranges (rated values), voltages 0 to +10 V Input resistance (0 to 10 V) Cable length shielded, max. **Shielded, max.** **Shielded to the shielded to the	
Number of analog inputs Input ranges Voltage Voltage Input ranges (rated values), voltages o to +10 V — Input resistance (0 to 10 V) Cable length shielded, max. 100 m; twisted and shielded	
Input ranges	
Input ranges	
Voltage Input ranges (rated values), voltages 0 to +10 V	
Input ranges (rated values), voltages ● 0 to +10 V — Input resistance (0 to 10 V) Cable length ● shielded, max. 100 m; twisted and shielded	
• 0 to +10 V — Input resistance (0 to 10 V) Cable length • shielded, max. Yes ≥100k ohms 100 m; twisted and shielded	
— Input resistance (0 to 10 V) ≥100k ohms Cable length • shielded, max. 100 m; twisted and shielded	
Cable length ◆ shielded, max. 100 m; twisted and shielded	
• 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.	
• Integration time, parameterizable Yes	
• Conversion time (per channel) 625 μs	
Encoder	
Connectable encoders	
• 2-wire sensor Yes	
1. Interface	
Interface type PROFINET	
<u>Isolated</u> 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 Ven	
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	
— PG/OP communication Yes; encryption with TLS V1.3 pre-selected	
— Isochronous mode No	
- IRT No	
— PROFlenergy No	
— Prioritized startup Yes	
— Number of IO devices with prioritized startup, max.	

Number of connectable IO Devices for RT, max of which in line, max: Activation/deachvation of IO Devices Number of IO Devices that can be simultaneously activate/diseachvated.max Updating time		
- of which in line, max Activationideactivation of IO Devices - Number of IO Devices that can be simultaneously activated deviced. max Updating time	 Number of connectable IO Devices, max. 	16
	 Number of connectable IO Devices for RT, max. 	16
	— of which in line, max.	16
activated/deactivated, max. — Updaling time PROFINET IO Device Services — PG/OP communication — Isochronous mode — Isochronous mode — Isochronous mode — No — PROFInergy — Shared device — Number of IO Controllers with shared device, max. PROFIser process Supports protocol for PROFINET IO — Yes — Number of IO Controllers with shared device, max. PROFIser Supports protocol for PROFINET IO — Yes — Number of IO Controllers with shared device, max. PROFIser Supports protocol for PROFINET IO — Yes — Number of IO Controllers with shared device, max. PROFISES Supports protocol for PROFINET IO — Yes — Number of IO Controllers with shared device, max. PROFIEUS — Yes, CMI 1243-5 (master) or CMI 1242-5 (slave) required PROFIGUR PROFIGUR — Yes, CMI 1243-2 required Protocols (lethmen) — TCPIP — Yes — OHCP — No — SMMP — Yes — OHCP — No — NEP — No — NeP — MRPD — No — NRPD — No — ST routing — Yes — Data length, max. — Yes POPU UA Runtime license required — Yes, "Basic" license required — Ves, "Basic" license required — OPC UA Server — Application authentication — Number of subscriptions par session, max. — Sampling interval, min. Publishing interval, min. Publishing interval, min. To mine interval, min	 Activation/deactivation of IO Devices 	Yes
Updating time components eftor PROFINET IO, on the number of IO devices and the quan of configured user data. PROFINET IO Device Services PCUOP communication Isostronous mode IRT No IRT No PROFienergy Shared device Number of IO Controllers with shared device, max. 2 Protocols Supports protocol for PROFINET IO Yes; CM 1243-5 (master) or CM 1242-5 (slave) required		8
component set for PROFINET IO, on the number of IO devices and the quan of configured user data. PROFINET IO Device Services - PG/OP communication - Isochronous mode No - IRIT No - PROFInengy - Shared device - Number of IO Controllers with shared device, max. Protocols Supports protocol for PROFINET IO PROFIssfe No PROFISSfe PROFILES - Yes; CM1243-5 (master) or CM1242-5 (slave) required PROFISSfe OPC UA Server - SMMP - OPC - SMMP - OPC - SMMP - OPC - SMMP - OPC - LLDP - MRP - MRP - MRP - MRP - MRP - MRP - Data length, max ISO-on-TCP (RFC1008) - Oata length, max Supports protocol - Supports protocol - Ves - OPC UA - Runtime license required - PCP UA - Runtime license required - No - Runtime license required - No - Number of sessions, max Number of sessions, max Sampling interval, min Publishing interval, min Publishing interval, min Communication - Sampling interval, min Publishing interval, min Uon max - Sampling interval, min Von max - Valuation security policies. None, Basic128Rsa15, Basic296Rsa15, Basic296SRsa15, Basic296SRs	,	
PROFINET IO Device	— Updating time	component set for PROFINET IO, on the number of IO devices and the quantity
- PG/OP communication Yes; encryption with TLS V1.3 pre-selected No	PROFINET IO Device	of configured door data.
	Services	
	— PG/OP communication	Yes; encryption with TLS V1.3 pre-selected
— IRT — PROFlenergy — Shared device — Number of IO Controllers with shared device, max. Protocols Supports protocol for PROFINET IO — Yes PROFlaste — No PROFIBUS — Yes; CM 1243-5 (master) or CM 1242-5 (slave) required — Yes; CM 1243-2 required — Yes — SMMP — DCP — No — SMMP — DCP — Yes — LLDP — No — MRPD — No — MRPD — No — SMRD — No — SIMATIC communication — ST routing — Data length, max. — ISO-on-TCP (RFC1006) — Data length, max. — UDP — Data length, max. — UDP — Data length, max. — Sampline interval, min. ■ POCU A Server — Application authentication — Number of subscriptions per session, max. — Publishing interval, min. — Publishing interval, min. ■ 100 ms — Publishing interval, min. ■ 100 ms — Publishing interval, min.		
- PROFlenergy - Shared device - Number of IO Controllers with shared device, max. Protocols Supports protocol for PROFINET IO Supports protocol for PROFINET IO PROFISUS - PROFISUS - PROFISUS - PROFIBUS - PR		
- Shared device - Number of IO Controllers with shared device, max. 2 Protocols Supports protocol for PROFINET IO		
Number of IO Controllers with shared device, max. 2		
Supports protocol for PROFINET IO		
Supports protocol for PROFINET IO PROFIsate No PROFIsate No OPC UA S-Interface Protocols (Ethernet) • TCP/IP • DHCP • No • SNMP • DCP • LLDP • MRP • Data length, max • ISO-on-TCP (RFC1008) • Data length, max • UDP • Data length, max •		
PROFIBUS		Vac
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) ***		
OPC UA Yes; OPC UA Server AS-Interface Yes; CM 1243-2 required Protocols (Ethernet) Yes • TCP/IP Yes • DHCP No • SNMP Yes • DCP Yes • LLDP Yes Redundancy mode Media redundancy — MRP No — MRPD No SIMATIC communication Yes • S7 routing Yes Open IE communication Yes • 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 • 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 • OPC UA Server Yes; data access (read, write, subscribe), method call, runtime license required • OPC UA Server <td></td> <td></td>		
AS-Interface Yes; CM 1243-2 required Protocols (Ethernet) TCP/IP OHCP No SIMMP Yes DCP LLDP Yes LLDP Redundancy mode Media redundancy - MRP No SIMATIC communication ST routing Pata length, max. SISO-on-TCP (RRC1006) Pata length, max. UDP Pata length, max. UDP Yes - Data length, max. UDP Yes - Data length, max. UDP Yes - Data length max. Siso-on-TCP (RRC1006) Yes - Data length max. Yes - Data length max. Type - Data length max. Siso-on-TCP (RRC1006) - Pata length max. Siso-on-TCP		
Protocols (Ethemet)		
		Yes; CM 1243-2 required
	· · · · ·	
SNMP DCP SLLDP Yes LLDP Yes LLDP Yes Pedundancy mode Media redundancy Media redundancy MRP No No SIMATIC communication ST routing Open IE communication TCP/IP Data length, max. Skyte SISO-on-TCP (RFC1006) Data length, max. Supported Supported Susperded Suspe		
● LLIDP Yes Redundancy mode Media redundancy	• SNMP	Yes
Redundancy mode Media redundancy	• DCP	Yes
Media redundancy	• LLDP	Yes
- MRP - MRPD No SIMATIC communication ● \$7 routing Open IE communication ● TCP/IP - Data length, max. ● ISO-on-TCP (RFC1006) - Data length, max. ● UDP - Data length, max. ● UPP - Data length, max. ● Supported ● User-defined websites OPC UA ● Runtime license required ● OPC UA Server - Application authentication - Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 - User authentication - Number of sessions, max Number of subscriptions per session, max Sampling interval, min Publishing interval, min Publishing interval, min Publishing interval, min 200 ms	Redundancy mode	
— MRPD No SIMATIC communication ● \$7 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. 1472 byte Web server ● 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 ● OPC UA Server Yes; data access (read, write, subscribe), method call, runtime license required ■ User 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	Media redundancy	
SIMATIC communication Soluting Open IE communication TCP/IP Data length, max. Soluting Pes Post length, max. Soluting Pes Post length, max. Soluting Pes Pes Pes OPC UA Runtime license required OPC UA Server Pes; "Basic" license required Pes; "Basic" license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, write, subscribe), method call, runtime license required Pes; data access (read, writ	— MRP	No
ST routing Open IE communication TCP/IP Data length, max. ISO-on-TCP (RFC1006) Data length, max. IVES Data length, max. IVES Data length, max. Ves Ves Ves Ves Ves Ves Ves OPC UA Runtime license required OPC UA Server Application authentication Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 Descriptions of sessions, max. Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. Publishing interval, min. 200 ms	— MRPD	No
Open IE communication TCP/IP Data length, max. Skbyte SlSO-on-TCP (RFC1006) Pes Data length, max. Skbyte UDP Data length, max. Skbyte UDP Data length, max. Skbyte Ves Data length, max. Skbyte Ves UDP Ves Uspr-defined websites Ves OPC UA Runtime license required OPC UA Server Application authentication Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 Basic256Sha256 User authentication Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. Data keyte Yes Skbyte Yes Yes Ves Yes Ves Ves Sampling interval, min. Subscriptions per session, max.	SIMATIC communication	
TCP/IP Data length, max. Sk kbyte Data length, max. Sk kbyte Data length, max. Sk kbyte Data length, max. Sk kbyte Data length, max. Sk kbyte Data length, max. Sk kbyte Ves Data length, max. Ves Data length, max. Ves Data length, max. Ves Supported Supported Subser-defined websites Pes OPC UA Runtime license required OPC UA Server Application authentication Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 User authentication Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Dublishing interval, min. Data length, max. Sk kbyte Yes Sk kbyte Sk kap Sk kbyte Sk kbyte Sk kbyte Sk kbyte Sk kbyte Sk kap Sk kbyte	S7 routing	Yes
- Data length, max. ISO-on-TCP (RFC1006) - Data length, max. IVES - Sampling interval, min. IVES - Data length, max. IVES - Data length, max. IVES - Sampling interval, min. IVES - Data length, max. IVES - Data length, max. IVES - Data length, max. IVES - Sampling interval, min. IVES - Data length, max. IVES - Data length,	Open IE communication	
ISO-on-TCP (RFC1006) — Data length, max. IUDP — Data length, max. I 472 byte Web server I supported User-defined websites OPC UA Runtime license required OPC UA Server — Application authentication — Number of sessions, max. — Number of subscriptions per session, max. — Sampling interval, min. — Publishing interval, min. — Publishing interval, min. I 100 ms 8 kbyte Yes 8 kbyte Yes 9 kbyte Yes 1 472 byte Yes Yes Yes Yes Yes Yes Yes Y	• TCP/IP	Yes
- Data length, max. ● UDP - Data length, max. 1 472 byte Web server ● supported ● User-defined websites OPC UA ● Runtime license required ● OPC UA Server - Application authentication - User authentication - Number of sessions, max. - Number of subscriptions per session, max. - Sampling interval, min. - Publishing interval, min. ● UDP Yes Yes Yes Yes Yes Yes Yes Ye	— Data length, max.	8 kbyte
UDP Data length, max. 1472 byte Web server supported User-defined websites PC UA Runtime license required OPC UA Server Application authentication Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 User authentication Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. 100 ms 1472 byte Yes 1472 byte 1472 byte 1472 byte	• ISO-on-TCP (RFC1006)	Yes
— Data length, max. Web server ● supported ● User-defined websites Pes OPC UA ● Runtime license required ● OPC UA Server — Application authentication — Number of sessions, max. — Number of subscriptions per session, max. — Sampling interval, min. — Publishing interval, min. 1 472 byte Yes 1 472 byte Yes Yes Yes Yes Yes Yes Yes Y	— Data length, max.	8 kbyte
Web server Yes ● User-defined websites Yes OPC UA Yes; "Basic" license required ● 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	• UDP	Yes
Web server Yes ● User-defined websites Yes OPC UA Yes; "Basic" license required ● 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	— Data length, max.	1 472 byte
User-defined websites OPC UA Runtime license required OPC UA Server Application authentication User authentication Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. Ves; "Basic" license required Yes; "Basic" license required Yes; data access (read, write, subscribe), method call, runtime license required Yes; data access (read, write, subscribe), method call, runtime license required Yes; "Basic" license req	Web server	
OPC UA ● Runtime license required ● OPC UA Server — Application authentication — User authentication — Number of sessions, max. — Number of subscriptions per session, max. — Sampling interval, min. — Publishing interval, min. ● Runtime license required Yes; "Basic" license required Yes; data access (read, write, subscribe), method call, runtime license required Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 "anonymous" or by user name & password 10 100 ms 200 ms	• supported	Yes
 Runtime license required OPC UA Server Application authentication User authentication Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. Yes; "Basic" license required Yes; data access (read, write, subscribe), method call, runtime license required Yes; data access (read, write, subscribe), method call, runtime license required Yes; data access (read, write, subscribe), method call, runtime license required Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 User authorizes: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 User authorizes: None, Basic128Rsa15, Basic256Rsa15, Basic256Rsa15, Basic256Sha256 User authorizes: None, Basic128Rsa15, Basic256Rsa15, Basic256Rsa15, Basic256Sha256 User authorizes: None, Basic128Rsa15, Basic256Rsa15, Basic256Rsa15, Basic256Sha256 User authorizes: None, Basic128Rsa15, Basic256Rsa15, Basic256Rsa15, <	 User-defined websites 	Yes
 OPC UA Server Application authentication User authentication Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. Yes; data access (read, write, subscribe), method call, runtime license required. Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 "anonymous" or by user name & password 10 5 100 ms 200 ms 	OPC UA	
 OPC UA Server Application authentication User authentication Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. Yes; data access (read, write, subscribe), method call, runtime license required. Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 "anonymous" or by user name & password 10 5 100 ms 200 ms 	Runtime license required	Yes; "Basic" license required
 Application authentication Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256 User authentication Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Rsa15,	·	Yes; data access (read, write, subscribe), method call, runtime license required
 Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. 200 ms 	— Application authentication	Available security policies: None, Basic128Rsa15, Basic256Rsa15,
 Number of sessions, max. Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. 200 ms 	 User authentication 	"anonymous" or by user name & password
 Number of subscriptions per session, max. Sampling interval, min. Publishing interval, min. 200 ms 	— Number of sessions, max.	
— Sampling interval, min.— Publishing interval, min.200 ms		
— Publishing interval, min. 200 ms		
— multipet of server friethous, friax.	Number of server methods, max.	20
— Number of monitored items, recommended max. 1 000		
— Number of monitored items, recommended max. — Number of server interfaces, max. 2		
— Number of nodes for user-defined server interfaces, max. 2 000 max.	 Number of nodes for user-defined server interfaces, 	
Further protocols		
MODBUS Yes	·	Yes
▲ MIODDO0	▼ IVIODUO	160

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	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
Forcing	
Forcing	Yes
Diagnostic buffer	
• present	Yes
Traces	
Number of configurable Traces	2
Memory size per trace, max.	512 kbyte
nterrupts/diagnostics/status information	
Diagnostics indication LED	Voc
• RUN/STOP LED	Yes
• ERROR LED	Yes
MAINT LED	Yes
ntegrated Functions	
Counter	
 Number of counters 	6
Counting frequency, max.	100 kHz
Frequency measurement	Yes
controlled positioning	Yes
Number of position-controlled positioning axes, max.	8
Number of positioning axes via pulse-direction interface	4; With integrated outputs
PID controller	Yes
Number of alarm inputs	4
Number of pulse outputs	4
Limit frequency (pulse)	100 kHz
Potential separation	
Potential separation digital inputs	
Potential separation digital inputs	No
 between the channels, in groups of 	1
Potential separation digital outputs	
Potential separation digital outputs	Yes
between the channels	No
between the channels, in groups of	1
EMC	
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static Interference immunity against discharge of static	Yes
electricity acc. to IEC 61000-4-2	160
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- 4-5 	Yes

gree and class of protection P degree of protection IP20 Indiards, approvals, certificates IE mark IL approval IL approval IULUS IM approval IVes IVes IM approval IVes IVes IM approval IVes IVes IVes IVes IVes IVes IVes IVes	
Limit class A, for use in industrial areas Limit class B, for use in residential areas Limit class B, for use in residential areas Created and class of protection Pedgree of p	
Limit class B, for use in residential areas Yes; When approprict for Class B according gree and class of protection P degree of protection IP20 Indards, approvals, certificates E mark J. approval Yes M. approval Yes Collogical footprint A environmental product declaration Global warming potential — global warming potential, (fotal) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — hibert conditions Free fall Fall height, max. A benicontal installation, min. I end I horizontal installation, min. I horizontal installation, min. I end I end Operation, min. Operation, max. Storage/transport, min. Operation, tested according to IEC 60068-2-6 Yes Collicutant concentrations	
Per degree of protection IP20 andards, approvals, certificates Emark Yes Was Was Mapproval Yes Mapproval Yes Common Yes	riate measures are used to ensure compliance with the limit ng to EN 55011
Emark Yes IL approval Yes All approval Yes Mapproval Yes Mapproval Yes Mapproval Yes Colored Warming potential (out in j [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — slobal warming potential, (after end of life cycle) [CO2 eq] — hibert conditions Free fall • Fall height, max. Ambient temperature during operation • min. • max. • oo "C. Number of sin points) at 60 "C. Number of sin points) at 60 "C. Number of sin points) at 60 "C. Norized of the points of the p	
Emark Yes IL approval Yes All approval Yes Mapproval Yes Mapproval Yes Mapproval Yes Colored Warming potential (out in j [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — slobal warming potential, (after end of life cycle) [CO2 eq] — hibert conditions Free fall • Fall height, max. Ambient temperature during operation • min. • max. • oo "C. Number of sin points) at 60 "C. Number of sin points) at 60 "C. Number of sin points) at 60 "C. Norized of the points of the p	
Emark Yes JL approval Yes LULus Yes Mapproval Yes KM approval Yes KM approval Yes KM paproval Area Maproval Yes KM paproval Yes KM paproval Area Maproval Ye	
Maproval Yes Yes Was Yes Yes Was Yes Yes Was Yes Yes Xem Yes Xem Yes Xem Yes Xem Yes Xem Yes Xem Xem Yes Xem Xem Yes Xem	
Mapproval Mapproval Mapproval Mapproval Mapproval Mapproval Marine approval Marine a	
RM approval RCM (formerly C-TICK) RCM (formerly C-TICK) RCM (promerly C-TICK) RCM (comprived C-TICK) RCM (comprived C-TICK) Responsible to the proval Responsible to the prova	
CCM (formerly C-TICK) CC approval Agrine agrine approval Agrine approva	
Agrine approval Agrine	
Addine approval Addine	
environmental product declaration environmental product declaration Global warming potential — global warming potential, (total) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during operation) [CO2 eq] — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — global warming potential, (after end of life cycle) — co.896 kg — co.906 kg — co.906 kg — co.906 kg — co.90 °C — co.90 °C —	
environmental product declaration Global warming potential — global warming potential, (total) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during operation) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (during potential) [CO2 eq] — global warming potential, (during potential) [CO2 eq] — global warming potential, (during potential) [CO2 eq] — global warming potential, (during potential) [CO2 eq] — global warming potential, (during potential) [CO2 eq] — global warming potential, (during potential) [CO2 eq] — global warming potential, (during potential) [CO2 eq] — global warming potential, (during potential, (after end of life cycle) elsa ("C) 91.5 kg elsa ("C) 92.0 kg el	
Global warming potential — global warming potential, (total) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during operation) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] ablent conditions Free fall • Fall height, max. Ambient temperature during operation • min. • max. • horizontal installation, min. • horizontal installation, min. • horizontal installation, min. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • or conditions • min. • max. Ambient temperature during storage/transportation • min. • vertical installation, min. • vertical installation, min. • operation, max. • Operation, min. • Operation, min. • Operation, min. • Operation, min. • Storage/transport, min. • Storage/transport, min. • Storage/transport, max. * Altitude during operation relating to sea level • Installation altitude, min. • Installation altitude, max. * Storage/transport, max. * Altitude during operation relating to sea level • Installation altitude, min. • Installation altitude, min. • Installation altitude, max. * Storage/transport, max. * Storage/transport, max. * Storage/transport, max. * Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-27 * Yes; IEC 68, Part 2-2 duration 11 ms * Pollutant concentrations	
— global warming potential, (total) [CO2 eq] — global warming potential, (during production) [CO2 eq] — global warming potential, (during operation) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] ablent conditions Free fall • Fall height, max. Ambient temperature during operation • min. • max. • horizontal installation, min. • horizontal installation, min. • horizontal installation, max. • vertical installation, max. • vertical installation, min. • po °C • Operation, min. • Doperation, min. • Installation altitude, min. • Installation altitude, min. • Installation altitude, min. • Installation altitude, max. • Vibration resistance during operation acc. to IEC 60068-2 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-27 Ves; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	
— global warming potential, (during production) [CO2 eq] — global warming potential, (during operation) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — global warming potential, (after end of life cycle) [CO2 eq] — blent conditions Free fall	
eq] — global warming potential, (after end of life cycle) [CO2 eq] ablent conditions Free fall • Fall height, max. Ambient temperature during operation • min. • max. • horizontal installation, min. • horizontal installation, min. • vertical installation, min. • vertical installation, max. • vertical installation, min. • max. • 70 °C Auritical installation altitude during operation in	
CO2 eq	
Free fall Fall height, max. Fall or C Fall height, max. Fall or C Fall or C Fall height, max. Fall or C Fall or C Fall height, max. Fall or C Fall or C Fall height, max. Fall or C Fall height, max. Fall or C Fall height, max. Fall or C Fall or C Fall or C Fall height, max. Fall or C	
• Fall height, max. Ambient temperature during operation • min. • max. • horizontal installation, min. • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. • or c • min. • max. • or c • max. • or c • vertical installation altinute during storage/transportation • min. • max. • or c • vertical installation altinute during operation relating to sea level • Installation altitude, min. • Installation altitude, min. • Installation altitude, max. • 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 60068-2-7 Yes; IEC 68, Part 2-3 duration 11 ms Pollutant concentrations	
with temperature during operation min. max. m	
 min. -20 °C 60 °C; Number of sin points) at 60 °C horiz °C vertical horizontal installation, min. -20 °C horizontal installation, max. vertical installation, min. vertical installation, max. vo °C min. min. max. operation, min. Operation, min. Operation, max. Storage/transport, min. Storage/transport, max. Storage/transport, max. Nititude during operation relating to sea level Installation altitude, min. Installation altitude, min. Installation altitude, max. Relative humidity Operation, max. Operation, max. Vibrations Vibrations Vibration resistance during operation acc. 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 2-2 duration 11 ms 	product package
max. 60 °C; Number of sin points) at 60 °C horize °C vertical horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. vertical installation, min. vertical installation, min. min. vertical installation, max. vertical installation, max. vertical installation, max. vertical installation, min. vertical installation altitude, min. vertical installation altitude, min. vertical installation altitude, max. vertical installation altitude, max. vertical installation altitude, max. vertical installation altitude, max. vertical installation altitude, min. vertical installation altitude, min. vertical installation altitude, min. vertical installation altitude, min. vertical installation, min. vertical ins	
points) at 60 °C horize °C vertical • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, min. • vertical installation, max. • vertical installation, max. **O °C **Imbient temperature during storage/transportation • min. • min. • max. • Operation, min. • Operation, min. • Operation, max. • Storage/transport, min. • Storage/transport, min. • Storage/transport, max. **Other pressure acc. to IEC 60068-2-13 • Operation, max. • Storage/transport, min. • Storage/transport, max. **Other pressure acc. to IEC 60068-2-13 • Operation, max. • Storage/transport, min. • Storage/transport, max. **Other pressure acc. to IEC 60068-2-13 • Operation, max. **Other pressure acc. to IEC 60068-2-13 • Operation relating to sea level • Installation altitude, min. • Installation altitude, max. **Other pressure acc. to IEC 60068-2-13 • Operation, max. **Other pressure acc. to IEC 60068-2-13 **Other pressure acc	
 horizontal installation, max. vertical installation, min. vertical installation, max. vertical installation, max. vertical installation, max. vertical installation, max. vonder temperature during storage/transportation min. min. max. max. Operation, min. Operation, max. Storage/transport, min. Storage/transport, max. Installation altitude, min. Installation altitude, min. Installation altitude, max. 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 2-2 duration 11 ms 	imultaneously activated inputs or outputs 7 or 5 (no adjacer rizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal or 45
 vertical installation, min. vertical installation, max. vertical installation, min. min. min. max. max. Operation, min. Operation, max. Storage/transport, min. Storage/transport, max. Storage/transport, max. Installation altitude, min. Installation altitude, max. Operation, max. Operation, max. Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Yes Collutant concentrations 	
vertical installation, max. Ambient temperature during storage/transportation min.	
Ambient temperature during storage/transportation • min. • max. 70 °C Air pressure acc. to IEC 60068-2-13 • Operation, min. • Operation, max. • Storage/transport, min. • Storage/transport, max. Altitude during operation relating to sea level • Installation altitude, min. • Installation altitude, max. Relative humidity • Operation, max. • Vibration resistance during operation acc. to IEC 60068- 2-6 • Operation, tested according to IEC 60068-2-6 Shock testing • tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	
 min. max. max. max. Operation, min. Operation, max. Operation, max. Storage/transport, min. Storage/transport, max. Storage/transport, max. Installation altitude, min. Installation altitude, max. Operation, tested according to IEC 60068-2-6 Operation, tested according to IEC 60068-2-27 Operation to IEC 68, Part 2-2 duration 11 ms 	
 max. Air pressure acc. to IEC 60068-2-13 Operation, min. Operation, max. Storage/transport, min. Storage/transport, max. Installation altitude, min. Installation altitude, max. Operation, max. Operation, max. Installation altitude, min. Installation altitude, max. Operation, max. Operation, max. Operation, max. Operation, tested according to IEC 60068-2-6 Operation, tested according to IEC 60068-2-27 Operation tested according to IEC 60068-2-27 	
Operation, min. Operation, min. Operation, max. Storage/transport, min. Storage/transport, max. Ottitude during operation relating to sea level Installation altitude, min. Installation altitude, max. Relative humidity Operation, max. Operation, max. Operation, max. Operation, max. 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, min. Operation, max. Storage/transport, min. Storage/transport, max. In the limit of	
Operation, max. Storage/transport, min. Storage/transport, max. 1 080 hPa 1 080	
Storage/transport, min. Storage/transport, max. Altitude during operation relating to sea level Installation altitude, min. Installation altitude, max. Relative humidity Operation, max. Vibrations Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Yes Shock testing tested according to IEC 60068-2-27 Ves; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	
Storage/transport, max. Ititude during operation relating to sea level Installation altitude, min. Installation altitude, max. Relative humidity Operation, max. Vibrations Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Yes Chock testing tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	
Altitude during operation relating to sea level Installation altitude, min. Installation altitude, max. Relative humidity Operation, max. Vibrations Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Yes Chock testing Item 1 000 m 5 000 m; Restrictions 2 g (m/s²) wall mount 3 g (m/s²) wall mount 4 g (m/s²) wall mount 6 g (m/s²) wall mount 7 g (m/s²) wall mount 8 g (m/s²	
Installation altitude, min. Installation altitude, max. Installation altitude, min. Installation altitude, max. Installation alt	
Installation altitude, max. Relative humidity Operation, max. Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Chock testing tested according to IEC 60068-2-27 Ves; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	
Relative humidity Operation, max. Storage of the	
Operation, max. Shock testing tested according to IEC 60068-2-27 Pollutant concentrations 95 %; no condensation of the co	ns for installation altitudes > 2 000 m, see manual
## Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 2 g (m/s²) wall mount 2-6 Operation, tested according to IEC 60068-2-6 Yes Shock testing	
Vibration resistance during operation acc. to IEC 60068- 2-6 Operation, tested according to IEC 60068-2-6 Yes Chock testing tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	tion
2-6 • Operation, tested according to IEC 60068-2-6 Shock testing • tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	
Shock testing ● tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	nting, 1 g (m/s²) DIN rail
• tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-2 duration 11 ms Pollutant concentrations	
duration 11 ms Pollutant concentrations	
	2-27 half-sine: strength of the shock 15 g (peak value),
 SO2 at RH < 60% without condensation S02: < 0.5 ppm: H2S 	
·	2S: < 0.1 ppm; RH < 60% condensation-free
nfiguration / header	
onfiguration / programming / header	

— LAD	Yes	
— FBD	Yes	
— SCL	Yes	
Know-how protection		
 User program protection/password protection 	Yes	
Copy 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		
Weight, approx.	415 g	

last modified: 10/9/2024 🖸