SIEMENS

Data sheet

6ES7215-1HG40-0XB0



SIMATIC S7-1200, CPU 1215C, compact CPU, DC/DC/relay, 2 PROFINET ports, onboard I/O: 14 DI 24 V DC; 10 DO relay 2 A, 2 AI 0-10 V DC, 2 AO 0-20 mA DC, Power supply: DC 20.4-28.8 V DC, Program/data memory 125 KB

General information	
Product type designation	CPU 1215C DC/DC/Relay
Firmware version	V4.4
Engineering with	
 Programming package 	STEP 7 V16 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
Current consumption, max.	1 500 mA; CPU with all expansion modules
Inrush current, max.	12 A; at 28.8 V DC
l ² t	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 	125 kbyte
• expandable	No
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. for floating point arithmetic, typ.	1.7 µs; / instruction
	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.	10 kbyte
Flag	
Number, max.	8 kbyte; Size of bit memory address area
Local data	
 per priority class, max. 	16 kbyte
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
Digital inputs	
	14: Integrated
Number of digital inputs of which inputs usable for technological functions 	14; Integrated
Source/sink input	6; HSC (High Speed Counting) Yes
Number of simultaneously controllable inputs	165
all mounting positions	
— up to 40 °C, max.	14
Input voltage	14
	24 V
 Rated value (DC) 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)	13 V DC at 2.3 mA
for standard inputs	
— parameterizable	Yes; 0.2 ms, 0.4 ms, 0.8 ms, 1.6 ms, 3.2 ms, 6.4 ms and 12.8 ms,
- parametenzable	selectable in groups of four
— at "0" to "1", min.	0.2 ms
— at "0" to "1", max.	12.8 ms
for interrupt inputs	
— parameterizable	Yes
for technological functions	
— 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; 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.	10 ms; max.
• "1" to "0", max.	10 ms; max.
Relay outputs Number of relay outputs	10
 Number of operating cycles, max. 	mechanically 10 million, at rated load voltage 100 000
Cable length	
• shielded, max.	500 m
 unshielded, max. 	150 m
	150 m
Analog inputs	
Number of analog inputs	2
Input ranges	Vec
Voltage	Yes
Input ranges (rated values), voltages • 0 to +10 V	Yes
- Input resistance (0 to 10 V)	≥100k ohms
Cable length	2 TOOK ONITIS
• shielded, max.	100 m; twisted and shielded
Analog outputs	2
Number of analog outputs	2
Output ranges, current • 0 to 20 mA	Yes
	Tes
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
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
 Resolution with overrange (bit including sign), max. 	10 bit
	10 51
Encoder	
Encoder Connectable encoders	
Encoder Connectable encoders • 2-wire sensor	Yes
Encoder Connectable encoders	Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type	Yes PROFINET
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated	Yes PROFINET Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate	Yes PROFINET Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation	Yes PROFINET Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing	Yes PROFINET Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types	Yes PROFINET Yes Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet)	Yes PROFINET Yes Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports	Yes PROFINET Yes Yes Yes Yes Yes 2
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch	Yes PROFINET Yes Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols	Yes PROFINET Yes Yes Yes Yes Yes 2 Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller	Yes PROFINET Yes Yes Yes Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device	Yes PROFINET Yes Yes Yes Yes 2 Yes 2 Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication	Yes PROFINET Yes Yes Yes Yes Yes 2 Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication	Yes PROFINET Yes Yes Yes Yes Yes 2 Yes Yes Yes Yes Yes Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Web server	Yes PROFINET Yes Yes Yes Yes Yes Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication • Web server • Media redundancy	Yes PROFINET Yes Yes Yes Yes Yes 2 Yes Yes Yes Yes Yes Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication • Web server • Media redundancy PROFINET IO Controller	Yes PROFINET Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication • Web server • Media redundancy PROFINET IO Controller • Transmission rate, max.	Yes PROFINET Yes Yes Yes Yes Yes Yes Yes Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication • Web server • Media redundancy PROFINET IO Controller • Transmission rate, max. Services	Yes PROFINET Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication • Web server • Media redundancy PROFINET IO Controller • Transmission rate, max. Services — PG/OP communication	Yes PROFINET Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication • Web server • Media redundancy PROFINET IO Controller • Transmission rate, max. Services - PG/OP communication - Isochronous mode	Yes PROFINET Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication • Web server • Media redundancy PROFINET IO Controller • Transmission rate, max. Services - PG/OP communication - Isochronous mode - IRT	Yes PROFINET Yes
Encoder Connectable encoders • 2-wire sensor 1. Interface Interface type Isolated automatic detection of transmission rate Autonegotiation Autocrossing Interface types • RJ 45 (Ethernet) • Number of ports • integrated switch Protocols • PROFINET IO Controller • PROFINET IO Controller • PROFINET IO Device • SIMATIC communication • Open IE communication • Web server • Media redundancy PROFINET IO Controller • Transmission rate, max. Services - PG/OP communication - Isochronous mode	Yes PROFINET Yes

 — Number of IO devices with prioritized startup, 	16
Max.	16
— Number of connectable IO Devices, max.	16
 — Number of connectable IO Devices for RT, max. 	16
— of which in line, max.	16
 Activation/deactivation of IO Devices 	Yes
— Number of IO Devices that can be	8
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	
Services	Vee
 — PG/OP communication — Isochronous mode 	Yes No
— ISCHRONOUS Mode — IRT	No
	Yes
— PROFlenergy	
— Shared device Number of IQ Controllers with shared device	Yes 2
 — Number of IO Controllers with shared device, max. 	2
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIBUS	Yes; CM 1243-5 (master) or CM 1242-5 (slave) required
AS-Interface	Yes; CM 1243-2 required
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	No
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Redundancy mode	165
Media redundancy	
— MRP	Yes
— MRPD	No
SIMATIC communication	110
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	1472 0916
	Yes
 supported User-defined websites 	Yes
• User-defined websites OPC UA	
Runtime license required	Yes
OPC UA Server	Yes; Data access (read, write, subscribe), runtime license required
Number of sessions, max.	5
 – Number of accessible variables, max. 	1 000
 – Number of subscriptions per session, max. 	5
	5 100 ms
— Sampling interval, min.	
 Publishing interval, min. Number of monitored items, max 	200 ms
— Number of monitored items, max.	500
— Number of server interfaces, max.	2
 Number of nodes for user-defined server interfaces, max. 	1 000
Further protocols	

	Yes
MODBUS Communication functions	165
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	See online help (S7 continunication, user data size)
• overall	8 connections for open user communication (active or passive):
• overall	TSEND_C, TRCV_C, TCON, TDISCON, TSEND and TRCV, 8 CPU/CPU connections (Client or Server) for GET/PUT data, 6 connections for dynamic assignment to GET/PUT or open user communication
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
Interrupts/diagnostics/status information	
Diagnostics indication LED	
RUN/STOP LED	Yes
• ERROR LED	Yes
MAINT LED	Yes
Integrated Functions	
Number of counters	6
Counting frequency (counter) max.	100 kHz
Frequency measurement	Yes
controlled positioning	Yes
Number of position-controlled positioning axes, max.	8
Number of position-controlled positioning axes, max. Number of positioning axes via pulse-direction interface	8 Up to 4 with SB 1222
Number of position-controlled positioning axes, max. Number of positioning axes via pulse-direction interface PID controller	
Number of positioning axes via pulse-direction interface	Up to 4 with SB 1222
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs	Up to 4 with SB 1222 Yes
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation	Up to 4 with SB 1222 Yes
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs	Up to 4 with SB 1222 Yes
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs	Up to 4 with SB 1222 Yes 4
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • between the channels • between the channels	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • Detential separation digital outputs • Detential separation digital outputs • between the channels • between the channels • between the channels	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • between the channels • between the channels of EMC Interference immunity against discharge of static electricity	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No 2
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • Detential separation digital outputs • Detential separation digital outputs • between the channels • between the channels • between the channels	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • Potential separation digital outputs • between the channels • between the channels of	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No 2
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • Potential separation digital outputs • between the channels • between the channels, in groups of EMC Interference immunity against discharge of static electricity • Interference immunity against discharge of static electricity • laterference immunity against discharge of static electricity acc. to IEC 61000-4-2	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No 2 Yes
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • Potential separation digital outputs • between the channels • between the channels, in groups of EMC Interference immunity against discharge of static electricity • Interference immunity against discharge of static electricity • Interference immunity against discharge of static electricity acc. to IEC 61000-4-2 — Test voltage at air discharge	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No 2 Yes 8 kV
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • between the channels • between the channels • between the channels, in groups of EMC Interference immunity against discharge of static electricity • Interference immunity against discharge of static electricity • Interference immunity against discharge — Test voltage at air discharge — Test voltage at contact discharge Interference immunity to cable-borne interference • Interference immunity on supply lines acc. to IEC 61000-4-4	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No 2 Yes 8 kV
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • Potential separation digital outputs • between the channels • between the channels • between the channels, in groups of EMC Interference immunity against discharge of static electricity • Interference immunity against discharge of static electricity • Interference immunity against discharge — Test voltage at air discharge — Test voltage at contact discharge Interference immunity to cable-borne interference • Interference immunity on supply lines acc. to IEC 61000-4-4 • Interference immunity on signal cables acc. to IEC 61000-4-4	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No 2 Yes 8 kV 6 kV
Number of positioning axes via pulse-direction interface PID controller Number of alarm inputs Potential separation Potential separation digital inputs • Potential separation digital inputs • between the channels, in groups of Potential separation digital outputs • Potential separation digital outputs • Potential separation digital outputs • Detential separation digital outputs • between the channels • Detertierence immunity against discharge of static electricity • Interference immunity against discharge - Test voltage at contact discharge Interference immunity to cable-borne interference • Interference immu	Up to 4 with SB 1222 Yes 4 500V AC for 1 minute 1 Relays No 2 Yes 8 kV 6 kV

Indefense Indefense Indefense Indefense Indefense Indefense <tdindefense< td=""> Indefense</tdindefense<>	61000-4-5	
• Inherference immunity against hipf-requency rediction acc. to EC 6 1000-04-6 Yes Emission of radio interference acc, to EN 85 011 • • Limit class B, for use in residential areas Yes, Group 1 Pagree and class of protection IP 20 Standards, approval Yes Using tasks of protection IP 20 Standards, approvals, cartificates Emission CF mark Yes U.approval Yes RCM (formerly C-TICK) Yes RCM (formerly C-TICK) Yes Marine approval Yes Anbient temperature during operation Free fail • Fine fail -0 °C Number of structuremeuty activated inputs or outputs 7 or 5 for or opic reproval or 40° °C vertical • max. -0 °C Number of structuremeuty activated inputs or outputs 7 or 5 for opic reproval or 40° °C vertical • nin. -20 °C • nin. -20 °C • nin. -20 °C • writical installation, min. -1000 minital or 50 °C vertical <td></td> <td>a induced by high frequency fields</td>		a induced by high frequency fields
analoto acc. to IEC 6100-4-6 Emission of nation interference acc. IS EN 85.011 • Linit class A, for use in industrial areas Yes. Group 1 • Linit class A, for use in industrial 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 IP20 Standards, approvalis, cutificates Yes. CC mark. Yes. CLU a Yes. CLU a Yes. CLU approval. Yes. CLU approval. Yes. CLU a Yes. FM approval. Yes. CAM dommy C-TICK) Yes. Marine approval. Yes. Ambient conditions Yes. Free fail - Fail height, max. 0.3 m • min. - 20 °C. Bit °C: Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent purchas) at 60 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertica		
• Limit class A for use in industrial areas Yes: Group 1 • Limit class B, for use in industrial areas Yes: Group 1 Degree and class G protection IP20 Standards, approvals, cartificates IP20 CE mark Yes OL approval Yes CE mark Yes CH approval Yes CLus Yes Charter Yes Roth domedry C-TICK) Yes K approval Yes Anbient conditions Image: Conditions Free fail • Free fail • Anbient conditions 0.3 m Anbient conditions • Conditions • Indication approval Yes • Anbient conditions • Conditions • Indication approval Yes • Anbient conditions • Conditions • Indication approval Yes • Anbient conditions • Conditions • Indication approval Yes • Anbient conditions • Conditions • Indication approval • Conditions • Op		165
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 Jegree and class of protection IP degree of protec	Emission of radio interference acc. to EN 55 011	
 Linit class B, for use in residential areas Yes; When appropriate measures are used to ensure compliance with the links for Class B according to EN 55011 Pegree and class of protection IP degree of protection	 Limit class A, for use in industrial areas 	Yes; Group 1
the limits for Class B according to EN 55011 Perceand class of protection Perceand class of pr	• Limit class B, for use in residential areas	
IP degree of protection IP20 Standards, approvals, certificates CE mark Ves Use approval Ves Yes FM approval Yes FM approval Yes RCM (formerly C-TICK) Yes KC approval Yes Ambient conditions Free fail • Fee fail -20 °C • min. -20 °C • min. -20 °C • min. -20 °C • horizontal installation, min. -20 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C • Ambient temperature during storage/transportation -min. • min. -70 °C • Alt pressure acc. to IEC 60068-2-13 -0 °C • Operation, max. 1060 PPa • Storage/transport, max. 1060 PPa • Storage/transport, max. 1060 PPa • Storage/transport, max. 2 g (m/s ²) wall mounti		
Standards, approvals, certificates CE mark Yes UL approval Yes CULus Yes CULus Yes RCM (formerly C-TICK) Yes KC approval Yes Marine approval Yes Antisent conditions Yes Free fall - • Free fall - • min. -20 °C • max. 0.3 m Ambient temperature during operation - • min. -20 °C • horizontal installation, min. -20 °C • horizontal installation, max. 60 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C • vertical installation, max. 50 °C • vertical installation, max. 70 °C Ambient temperature during storage/transportation - • min. -40 °C • Operation, min. -20 °C • vertical installation, max. 1000 Pa • Storage/transport, min. -1000 m • Installation altrude, min. -1000 m • Installat	Degree and class of protection	
CE mark Yes UL approval Yes CULUS Yes FM approval Yes RCM (formerly C-TCK) Yes Marine approval Yes Marine approval Yes Ambient conditions Yes Free fail -0.3 m • Fail height, max. 0.3 m • min. -20 °C • max. 60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C horizontal in stallation, min. • horizontal installation, min. -20 °C • vertical installation, min. -20 °C • wertical installation, min. -20 °C • wertical installation, min. -20 °C • vertical installation, min. -20 °C • Vertical installation, min. -20 °C • Operation, min. -20 °C • Operation, min. -20 °C • Operation, max. 1080 hPa • Storagetransport, max. 1080 hPa • Installation altitude, max. 2 000 m • Installation altitude, max. 2 0000 m	IP degree of protection	IP20
UL approval Yes CULus Yes FM approval Yes RCM (formerly C-TICK) Yes KC approval Yes Ambinet conditions Yes Free fall • Fail height, max. 0.3 m Ambinet temperature during operation • min. -20 °C • min. -20 °C 60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no afgect points) af 60 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 50 °C vertical. • horizontal installation, min. -20 °C 60 °C. Neutral installation, max. • horizontal installation, max. 60 °C C Neutral installation, max. 60 °C • vertical installation, max. 50 °C C Neutral installation, max. 50 °C • operation, max. 1060 PPa C C Neutral installation, max. 1080 PPa • Operation, max. 1080 PPa 1080 PPa 1080 Pa • Storage/transport, max. 1080 PPa 1080 Pa • Installation altitude, max. 20 °C 20 °C • Ubration resistance during operation ac	Standards, approvals, certificates	
cULus Yes FM approval Yes RCM (tornerly C-TICK) Yes KC approval Yes Ambient conditions Yes Free fail - Pail height, max. 0.3 m Ambient conditions * Free fail - 20 °C * min. -20 °C * horizontal installation, min. -20 °C * horizontal installation, min. -20 °C * horizontal installation, max. 60 °C * vertical installation, max. -20 °C * vertical installation, max. 50 °C * vertical installation, max. 50 °C * vertical installation, min. -20 °C * operation, max. 100 °C • Operation, min. 70 °C * Operation, max. 1000 PPa • StorageUransport, min. -1000 m • Installation altitude, max. 2000 m * Installation a	CE mark	Yes
FM approval Yes RCM (tormerly C-TICK) Yes KC approval Yes Marine approval Yes Ambient conditions Free fall • Free fall 0.3 m Annient temperature during operation • • min. -20 °C • horizontal installation, max. 60 °C • vertical installation, max. 60 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C • vertical installation, min. -20 °C • Norizontal installation, max. 50 °C • vertical installation, max. 50 °C • operation, min. -40 °C • operation, min. -40 °C • Operation, min. -100 °C • Operation, max. 1060 PPa • Storage/transport, min. 1060 PPa • Storage/transport, min. -1000 m • Installation altitude, max. 200 °C • Operation, max. 95 %; no condensation Vibration Vibration resistance during operation acc. to IEC </td <td>UL approval</td> <td>Yes</td>	UL approval	Yes
RCM (formerly C-TICK) Yes KC approval Yes Ambient conditions Yes Ambient conditions -20 °C • Fail height, max. 0.3 m Ambient temperature during operation -20 °C • min. -20 °C • max. 60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C. Chorizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal installation, min. • horizontal installation, max. -20 °C • horizontal installation, max. 60 °C • vertical installation, max. 50 °C • wortical installation, max. 50 °C • vertical installation, max. 50 °C • wortical installation, max. 50 °C • vertical installation, max. 50 °C • Nonzontal or AG 70 °C Ambient temperature during storage/transportation -40 °C • min. -40 °C • Operation, min. 795 hPa • Operation, max. 1080 hPa • Storage/transport, max. 1080 hPa • Storage/transport, max. 1080 hPa • Installation altitude, min. -1000 m • Installation altitude, min. -1000 m • Installation altitude, min. -1000 m • Installation altitude, mix. 95 %; ino con	cULus	Yes
KC approval Yes Marine approval Yes Ambient conditions Free fail • Fail height, max. 0.3 m Ambient competature during operation -20 °C • inin. -20 °C • max. 60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C. horizontal or 50 °C ventical, 14 or 10 at 55 °C horizontal or 50 °C ventical installation, min. • horizontal installation, min. -20 °C • horizontal installation, max. 60 °C • vertical installation, max. 70 °C Ambient temperature during storage/transportation -40 °C • operation, max. 1080 hPa • Operation, max. 1080 hPa • Operation, max. 1080 hPa • Storage/transport, max. 1080 hPa • Installation altitude, min. -1000 m • Installation altitude, min. -1000 m • Installation altitude, min. -2000 m • Vibration resistance during operation acc. to IEC 60068-2-6 <	FM approval	Yes
Markine approval Yes Amblent conditions Free fail Free fail Fail height, max. 0.3 m Amblent temperature during operation -20 °C max. 60 °C: Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C horizontal or 50 °C vertical. 14 or 10 at 55 °C horizontal or 54 °C vertical horizontal installation, min. -20 °C wertical installation, max. 60 °C wertical installation, max. 60 °C wertical installation, max. 60 °C wertical installation, max. 90 °C wertical installation, max. 90 °C wertical installation, max. 90 °C wertical installation, max. 00 Paration, max. 1060 PPa 00 paration, max. 1080 PPa Storage/transport, max. 1080 PPa Installation attrude, min. Installation attrude, max. 2000 m Installation attrude, max. 2000 m 	RCM (formerly C-TICK)	Yes
Ambient conditions Free fail • Fail height, max. 0.3 m Ambient temperature during operation • min. -20 °C 60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C horizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal installation, min. • horizontal installation, min. -20 °C • vertical installation, min. -20 °C • vertical installation, max. 60 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C • vertical installation, max. 50 °C • operation, min. -20 °C • operation, min. -20 °C • operation, min. -20 °C • operation, max. 50 °C • Operation, max. 1080 hPa • Storage/transport, min. 660 hPa • Storage/transport, max. 1080 hPa Attude during operation relating to sea level -1000 m • installation attitude, min. -1000 m • installation attitude, max. 95 %; no condensation Vibrations 95 %; no condensation • Operation, reaked according to IEC 60068-2-6 Yes	KC approval	Yes
Free fail • Fail height, max. 0.3 m Ambient temperature during operation • 0.1 m • 0.0 °C • inin. • 0.0 °C 60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C vertical • horizontal installation, min. -20 °C • horizontal installation, min. -20 °C • vertical installation, max. 60 °C • vertical installation, max. 60 °C • vertical installation, max. 60 °C • vertical installation, max. 70 °C • orizontal installation, max. 70 °C • Ambient temperature during storage/transportation • 100 °C • max. 70 °C Ambient temperature during storage/transport and 70 °C • Ambient temperature during storage/transport. • Operation, max. 1080 hPa • Storage/transport, min. -1000 m • Storage/transport, min. -1000 m • Installation attitude, max. 20 °C • Operation, max. 95 %; no condensation Vibration resistance during operation acc. to IEC 2 g (m/s²) wall mounting. 1 g (m/s²) DIN rail Ø0662-26 Yes • Lobd or C Yes	Marine approval	Yes
• Fall height, max. 0.3 m Ambient temperature during operation -20 °C • min. -20 °C • max. 60 °C, Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C horizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal or 45 °C vertical • horizontal installation, min. -20 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C • vertical installation, max. 50 °C • vertical installation, max. 50 °C • Ambient temperature during storage/transportation -40 °C • min. -40 °C • nax. 70 °C • Operation, min. -40 °C • Operation, min. -40 °C • Operation, min. -40 °C • Operation, max. 1060 Pa • Storage/transport, min. 1060 Pa • Installation attitude, min. -1000 m	Ambient conditions	
Ambient temperature during operation -20 °C • min. -20 °C 60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C horizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal installation, min. -20 °C • horizontal installation, min. -20 °C • vertical installation, max. 60 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C Ambient temperature during storage/transportation -40 °C • max. 70 °C Ambient temperature during storage/transportation -40 °C • max. 70 °C Ambient temperature during operation min. -20 °C • Operation, min. -20 °C • Operation, max. 1080 hPa • Operation, max. 1080 hPa • Storage/transport, max. 1080 hPa • Installation altitude, min. -1 000 m • Installation altitude, max. 2000 m • Operation, max. 95 %; no condensation Vibration resistance during operation acc. to IEC 2 g (m/s*) wall mounting, 1 g (m/s*) DIN rail • Operation, tested according to IEC 60068-2-6 Yes • Shock testing -<	Free fall	
• min. -20 °C • max. 60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C horizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal or 45 °C vertical • horizontal installation, min. -20 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C • vertical installation, max. 50 °C • vertical installation, max. 70 °C • vertical installation, max. 70 °C • Ambient themperature during storage/transportation -40 °C • min. -40 °C • max. 70 °C All pressure acc. to IEC 60068-2-13 -60 hPa • Operation, max. 1080 hPa • Storage/transport, max. 1080 hPa • Storage/transport, max. 1080 hPa • Installation altitude, min. -1 000 m • Installation altitude, max. 2 000 m Relative humidity 95 %; no condensation • Vibration resistance during operation acc. to IEC 60068-2-6 Yes Shock testing • Vibration resistance during operation acc. to IEC 60068-2-7 Yes • Operation, tested according to IEC 60068-2-7 Yes Programming <td>• Fall height, max.</td> <td>0.3 m</td>	• Fall height, max.	0.3 m
• max.60 °C; Number of simultaneously activated inputs or outputs 7 or 5 (no adjacent points) at 60 °C horizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal installation, min20 °C 60 °C horizontal installation, max.• horizontal installation, max.60 °C 0 °C• vertical installation, max.50 °C• vertical installation, max.50 °C• vertical installation, max.50 °C• vertical installation, max.50 °C• vertical installation, max.70 °C• min40 °C• min70 °C• Operation, max.70 °C• Operation, max.1080 hPa• Operation, max.1080 hPa• Storage/transport, max.1080 hPa• Installation altitude, min1 000 m• Installation altitude, max.2000 mRelative humidity95 %; no condensation• Operation, max.95 %; no condensation• Vibration resistance during operation acc. to IEC 60068-2-62 g (m/s²) wall mounting. 1 g (m/s²) DIN rail 60068-2-6• Vibration-• Vibration resistance during to IEC 60068-2-6Yes• Operation, tested according to IEC 60068-2-6Yes• Operation, tested according to IEC 60068-2-7Yes• Programming I-ADYes I-ADYes FBDYes SCLYes- SocuertonYes SCLYes SCLYes SCLYes SCLYes SocuertonYes<	Ambient temperature during operation	
adjacent points) at 60 °C horizontal or 50 °C vertical, 14 or 10 at 55 °C horizontal installation, min. -20 °C • horizontal installation, max. 60 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C Ambient temperature during storage/transportation -40 °C • min. -40 °C • max. 70 °C Arbient temperature during storage/transportation - • min. -40 °C • max. 70 °C Air pressure acc. to IEC 60068-2-13 - • Operation, min. 795 hPa • Operation, max. 1080 hPa • Storage/transport, min. 660 hPa • Storage/transport, max. 1080 hPa • Installation altitude, min. -1000 m • Installation altitude, min. -1000 m • Installation altitude, min. -1000 m • Installation altitude, min. 2000 m • Relative humidity - • Operation, max. 95 %; no condensation Vibration - • Operation, tested according to IEC 60068-2-6 Yes • Vibration resistance during operation acc. to IEC 2 g (m/s²) wall mounting, 1 g (m/s²) DIN rail • Operation, tested according to IEC 60068-2-7 Yes • Configuration -	• min.	-20 °C
horizontal or 45 °C vertical • horizontal installation, min. -20 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C • min. -40 °C • max. 70 °C Air pressure acc. to IEC 60068-2-13 70 °C • Operation, max. 1080 hPa • Operation, max. 1080 hPa • Storage/transport, min. 660 hPa • Storage/transport, max. 1080 hPa • Installation altitude, min. -1 000 m • Installation altitude, min. -1 000 m • Installation altitude, max. 2000 m • Operation, max. 95 %; no condensation • Ubration resistance during operation acc. to IEC 2 g (m/s²) wall mounting. 1 g (m/s²) DIN rail • Operation, tested according to IEC 60068-2-6 Yes • Operation, tested according to IEC 60068-2-7 Yes • Operation, tested according to IEC 60068-2-7 Yes • Operation tested according to IEC 60068-2-7 Yes Configur	• max.	
 horizontal installation, min. -20 °C horizontal installation, max. 60 °C vertical installation, min. -20 °C outical installation, max. 50 °C Ambient temperature during storage/transportation max. 70 °C Air pressure acc. to IEC 60068-2-13 Operation, min. 795 hPa Operation, max. 1080 hPa Storage/transport, min. 660 hPa Storage/transport, max. 1080 hPa Storage/transport, max. 1080 hPa Attitude during operation relating to sea level Installation attitude, min. 1000 m Installation attitude, min. <		
• horizontal installation, max. 60 °C • vertical installation, min. -20 °C • vertical installation, max. 50 °C Ambient temperature during storage/transportation - • min. -40 °C • max. 70 °C Air pressure acc. to IEC 60068-2-13 - • Operation, max. 1080 hPa • Operation, max. 1080 hPa • Storage/transport, min. 660 hPa • Storage/transport, max. 1080 hPa • Installation altitude, max. 2000 m • Installation altitude, min. -1 000 m • Installation altitude, max. 2000 m • Operation, max. 95 %; no condensation • Vibrations - • Operation, tested according to IEC 60068-2-6 Yes • Operation, tested according to IEC 60068-2-6 Yes • Operation, tested according to IEC 60068-2-6 Yes • Operation relating to IEC 60068-2-7 Yes • Operation go to IEC 60068-2-7 Yes • Configuration - • tested according to IEC 60068-2-7 Yes Configuration Yes - FBD	a harizantal installation min	
 vertical installation, min. -20 °C vertical installation, max. 50 °C Ambient temperature during storage/transportation min. 40 °C max. 70 °C Air pressure acc. to IEC 60068-2-13 Operation, min. Operation, max. 1080 hPa Storage/transport, min. 660 hPa Storage/transport, max. 1080 hPa Storage/transport, max. 1080 hPa Attitude during operation relating to sea level Installation altitude, min. -1 000 m Installation altitude, max. 2 000 m Relative humidity Operation, max. 95 %; no condensation Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Yes Stock testing e tested according to IEC 60068-2-6 Yes Stock testing e tested according to IEC 60068-2-6 Yes Configuration Programming Programming regression Programming regression Yes - LAD Yes - SCL Yes Know-how protection Ves Know-how protection Ves Copy protection Yes		
• vertical installation, max. 50 °C Ambient temperature during storage/transportation - • min. -40 °C • max. 70 °C Air pressure acc. to IEC 60068-2-13 - • Operation, min. 795 hPa • Operation, max. 1080 hPa • Storage/transport, min. 60 hPa • Storage/transport, max. 1080 hPa • Installation altitude, min. -1 000 m • Installation altitude, max. 2 000 m Relative humidity - • Operation, max. 95 %; no condensation Vibration resistance during operation acc. to IEC 60068-2-6 Yes • Oberation, tested according to IEC 60068-2-6 Yes • Operation, tested according to IEC 60068-2-6 Yes • Operation to be colores - 27 Yes Configuration - Programming - Programming language - - FBD Yes - FBD Yes - Sct. Yes Know-how protection Yes		
Ambient temperature during storage/transportation -40 °C • max. 70 °C Air pressure acc. to IEC 60068-2-13 -0 peration, min. • Operation, max. 1 080 hPa • Storage/transport, min. 660 hPa • Storage/transport, max. 1 080 hPa • Altitude during operation relating to sea level -1 000 m • Installation altitude, min. -1 000 m • Installation altitude, max. 2 000 m Relative humidity -0 operation, max. • Operation, max. 95 %; no condensation Vibrations -1 000 m • Operation, max. 95 %; no condensation Vibrations -2 g (m/s²) wall mounting, 1 g (m/s²) DIN rail • Operation, tested according to IEC 60068-2-6 Yes Shock testing - • tested according to IEC 60068-2-7 Yes Configuration - Programming language - — LAD Yes — SCL Yes Know-how protection Yes Visor program protection/password protection Yes		
 min. 40 °C max. 70 °C Air pressure acc. to IEC 60068-2-13 Operation, min. 795 hPa Operation, max. 1080 hPa Storage/transport, min. 660 hPa Storage/transport, max. 1080 hPa Attitude during operation relating to sea level Installation altitude, min1 000 m Installation altitude, max. 2000 m Relative humidity Operation, max. 95 %; no condensation Vibration resistance during operation acc. to IEC 60068-2-6 Vibration resistance during operation acc. to IEC 60068-2-6 Yes Shock testing tested according to IEC 60068-2-27 Yes Configuration Programming language — LAD — FBD — SCL Yes Know-how protection Ves Know-how protection Yes 		50 C
• max. 70 °C Air pressure acc. to IEC 60068-2-13		-40 °C
Air pressure acc. to IEC 60068-2-13 795 hPa • Operation, min. 795 hPa • Operation, max. 1 080 hPa • Storage/transport, min. 660 hPa • Storage/transport, max. 1 080 hPa • Installation altitude, min. -1 000 m • Installation altitude, min. -1 000 m • Installation altitude, max. 2 000 m Relative humidity • Operation, max. • Operation, max. 95 %; no condensation 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 60068-2-77 Yes Configuration Fogramming Programming Yes - LAD Yes - FBD Yes - SCL Yes - FRD Yes - Scl Yes - Scl Yes		
 Operation, min. Operation, max. Storage/transport, min. Storage/transport, max. 1080 hPa Storage/transport, max. 1080 hPa Storage/transport, max. 1080 hPa Altitude during operation relating to sea level Installation altitude, min. 1 000 m Installation altitude, max. 2 000 m Relative humidity Operation, max. 95 %; no condensation 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 Configuration Programming language - LAD - FBD Yes - SCL Yes Know-how protection Ves Know-how protection Ves Copy protection Yes 		10.0
Operation, max. 1080 hPa Storage/transport, min. Storage/transport, max. 1080 hPa Altitude during operation relating to sea level Installation altitude, min. I 000 m Installation altitude, max. 2000 m Relative humidity Operation, max. 95 %; no condensation Vibration Operation resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Ves Shock testing I ested according to IEC 60068-2-6 Ves Shock testing I ested according to IEC 60068-2-7 Yes Configuration Programming language - LAD Yes - FBD Yes - FBD Yes - SCL Yes Know-how protection User program protection/password protection Yes Copy protection Copy pro	· · ·	795 hPa
 Storage/transport, min. Storage/transport, max. 1080 hPa Attitude during operation relating to sea level Installation altitude, min. 1 000 m Installation altitude, max. 2 000 m Relative humidity Operation, max. 95 %; no condensation Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Yes Operation, tested according to IEC 60068-2-6 Yes Ested according to IEC 60068-2-7 Yes Programming language I LAD Yes SCL Yes SCL Yes Sclue Yes Sclue Yes Sclue Yes Sclue Yes Yes Yes Sclue Yes Yes Yes Sclue Yes Yes Yes Sclue Yes Yes Yes 		
• Storage/transport, max.1 080 hPaAttitude during operation relating to sea level-1 000 m• Installation altitude, min1 000 m• Installation altitude, max.2 000 mRelative humidity- 0 operation, max.• Operation, max.95 %; no condensationVibrations- 1 000 m• Vibration resistance during operation acc. to IEC 60068-2-62 g (m/s²) wall mounting, 1 g (m/s²) DIN rail• Operation, tested according to IEC 60068-2-6Yes• Operation, tested according to IEC 60068-2-6Yes• ested according to IEC 60068-2-7Yes• tested according to IEC 60068-2-7Yes• ested according to IEC 60068-2-7Yes• Torgramming- LADProgramming language- LAD- FBDYes- SCLYesKnow-how protectionYes• User program protection/password protectionYes• Copy protectionYes		
Altitude during operation relating to sea level • Installation altitude, min. -1 000 m • Installation altitude, max. 2 000 m Relative humidity 2 000 m • Operation, max. 95 %; no condensation Vibrations 2 g (m/s²) wall mounting, 1 g (m/s²) DIN rail • Vibration resistance during operation acc. to IEC 60068-2-6 Yes • Operation, tested according to IEC 60068-2-6 Yes Shock testing - • tested according to IEC 60068-2-7 Yes Configuration - Programming - Programming language - - FBD Yes - SCL Yes Know-how protection Yes • User program protection/password protection Yes		
 Installation altitude, min. -1 000 m Installation altitude, max. 2 000 m Relative humidity Operation, max. 95 %; no condensation 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 60068-2-7 Yes Configuration Programming Programming language - LAD - FBD - SCL Yes Know-how protection User program protection/password protection Yes 		
• Installation altitude, max. 2 000 m Relative humidity 95 %; no condensation • Operation, max. 95 %; no condensation Vibrations 2 g (m/s²) wall mounting, 1 g (m/s²) DIN rail • Operation, tested according to IEC 60068-2-6 Yes • Operation, tested according to IEC 60068-2-6 Yes • Operation tested according to IEC 60068-2-6 Yes • tested according to IEC 60068-2-7 Yes • tested according to IEC 60068-2-27 Yes • tested according to IEC 60068-2-27 Yes • Togramming Programming language - LAD Yes - FBD Yes - SCL Yes Vibar program protection/password protection Yes • User program protection/password protection Yes • Copy protection Yes		-1 000 m
Relative humidity • Operation, max. 95 %; no condensation Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 2 g (m/s²) wall mounting, 1 g (m/s²) DIN rail • Operation, tested according to IEC 60068-2-6 Yes Shock testing • • tested according to IEC 60068-2-7 Yes Configuration • Programming • Programming language - - FBD Yes - SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes		
• Operation, max.95 %; no condensationVibrations• Vibration resistance during operation acc. to IEC 60068-2-62 g (m/s²) wall mounting, 1 g (m/s²) DIN rail• Operation, tested according to IEC 60068-2-6YesShock testing• tested according to IEC 60068-2-27YesConfigurationProgrammingProgramming language- LADYes- FBDYes- SCLYesKnow-how protection• User program protection/password protection• Copy protectionYes		
Vibrations • Vibration resistance during operation acc. to IEC 2 g (m/s²) wall mounting, 1 g (m/s²) DIN rail 60068-2-6 Yes • Operation, tested according to IEC 60068-2-6 Yes Shock testing - • tested according to IEC 60068-2-27 Yes Configuration - Programming - Programming language - - LAD Yes - FBD Yes - SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes	-	95 %; no condensation
60068-2-6 Yes Operation, tested according to IEC 60068-2-6 Yes Shock testing • tested according to IEC 60068-2-27 • tested according to IEC 60068-2-27 Yes Configuration • Programming • Programming language • - LAD Yes - FBD Yes - SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes		
60068-2-6 Yes Operation, tested according to IEC 60068-2-6 Yes Shock testing • tested according to IEC 60068-2-27 • tested according to IEC 60068-2-27 Yes Configuration • Programming • Programming language • - LAD Yes - FBD Yes - SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes	Vibration resistance during operation acc. to IEC	2 g (m/s ²) wall mounting, 1 g (m/s ²) DIN rail
Shock testing • tested according to IEC 60068-2-27 Yes Configuration Programming Programming language - LAD Yes - FBD Yes - SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes	60068-2-6	
tested according to IEC 60068-2-27 Yes Configuration Programming Programming language - LAD - FBD Yes - SCL Yes Know-how protection User program protection/password protection Yes Copy protection Yes		Yes
Configuration Programming Programming language - LAD Yes - FBD Yes - SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes		
Programming Programming language LAD Yes FBD Yes SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes	 tested according to IEC 60068-2-27 	Yes
Programming language - LAD Yes - FBD Yes - SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes	Configuration	
LAD Yes FBD Yes SCL Yes Know-how protection Yes •User program protection/password protection Yes • Copy protection Yes	Programming	
FBD Yes SCL Yes Know-how protection Yes •		
— SCL Yes Know-how protection Yes • User program protection/password protection Yes • Copy protection Yes		
Know-how protection • User program protection/password protection • Copy protection Yes		
User program protection/password protection Yes Copy protection Yes		Yes
Copy protection Yes		
Block protection Yes		
	 Block protection 	Yes

Access protection	
Protection level: Write protection	Yes
 Protection level: Read/write protection 	Yes
 Protection level: Complete protection 	Yes
Cycle time monitoring	
adjustable	Yes
Dimensions	
Width	130 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	585 g

last modified:

1/16/2021 🖸