SIEMENS

Data sheet

6AG1214-1AG40-2XB0

SIPLUS S7-1200 CPU 1214C DC/DC/DC -40....+70°C with conformal coating based on 6ES7214-1AG40-0XB0 . 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 20.4-28.8V DC, Program/data memory 100 KB



Figure similar

General information	
Product type designation	CPU 1214C DC/DC/DC
r roudel type designation	
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
locut ourront	
Input current	
Current consumption (rated value)	500 mA; CPU only
Current consumption, max.	1 500 mA; CPU with all expansion modules

PNAP

12 A; at 28.8 V DC

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 Power loss Power loss, typ. 12 W Memory Work memory • integrated • integrated • present • present • without battery Yes; maintenance-free • without battery Yes CPU processing times for bit operations, typ. 0.085 µs; / instruction for floating point arithmetic, typ. 0.085 µs; / instruction for blocks (total) DBs, FCs, FBs, counters and timers. The maximum num addressable blocks ranges from 1 to 65535. There is no restriction, the entire working memory can be used OB • Number, max. Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max.	
24 V encoder supply • 24 V L+ minus 4 V DC min. Power loss Power loss, typ. 12 W Memory Work memory • integrated 100 kbyte • expandable No Load memory • integrated 4 Mbyte • plug-in (SIMATIC Memory Card), max. with SIMATIC memory card Backup • present • present Yes; maintenance-free • without battery Yes CPU processing times 0.085 µs; / instruction for bit operations, typ. 1.7 µs; / instruction for floating point arithmetic, typ. 2.3 µs; / instruction CPU-blocks DBs, FCs, FBs, counters and timers. The maximum num 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.	
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Work memory integrated 100 kbyte • expandable No Load memory • integrated 4 Mbyte • integrated 4 Mbyte • Plug-in (SIMATIC Memory Card), max. with SIMATIC memory card Backup • present Yes; maintenance-free • without battery Yes CPU processing times 0.085 µs; / instruction for bit operations, typ. 0.085 µs; / instruction for folating point arithmetic, typ. 2.3 µs; / instruction CPU-blocks DBs, FCs, FBs, counters and timers. The maximum num 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	
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• expandable No Load memory 4 Mbyte • integrated 4 Mbyte • Plug-in (SIMATIC Memory Card), max. with SIMATIC memory card Backup • • present Yes; maintenance-free • without battery Yes CPU processing times 0.085 µs; / instruction for bit operations, typ. 0.17 µs; / instruction for floating point arithmetic, typ. 2.3 µs; / instruction CPU-blocks Number of blocks (total) DBs, FCs, FBs, counters and timers. The maximum num 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	
Load memory • integrated 4 Mbyte • Plug-in (SIMATIC Memory Card), max. with SIMATIC memory card Backup • • present Yes; maintenance-free • without battery Yes CPU processing times 0.085 µs; / instruction for bit operations, typ. 0.17 µs; / instruction for floating point arithmetic, typ. 2.3 µs; / instruction CPU-blocks Number of blocks (total) OB • • Number, max. Limited only by RAM for code Data areas and their retentivity 10 kbyte	
• integrated 4 Mbyte • Plug-in (SIMATIC Memory Card), max. with SIMATIC memory card Backup • • present Yes; maintenance-free • without battery Yes CPU processing times 0.085 µs; / instruction for bit operations, typ. 1.7 µs; / instruction for folating point arithmetic, typ. 2.3 µs; / instruction CPU-blocks DBs, FCs, FBs, counters and timers. The maximum num 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 10 kbyte	
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Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max.	
Retentive data area (incl. timers, counters, flags), 10 kbyte max. 10 kbyte	
max.	
Flag	
Number, 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 to 26: 6 KB	y class 2
Address area	
Process image	
Inputs, adjustable 1 kbyte	
Outputs, adjustable 1 kbyte	
Hardware configuration	

Number of modules per system, max.

3 communication modules, no signal board can be used, 8 signal modules

Time of aby Clock Hardware clock (real-time) Yes Backup time 480 h; Typical Digital inputs 80 s/month at 25 °C Digital inputs 14; Integrated • of which inputs usable for technological 14; Integrated • of which inputs usable for technological 14; Integrated • of which inputs Yes Number of simultaneously controllable inputs 14 Input voltage - up to 40°C, max. - up to 40°C, max. 14 Input voltage - at to 'to', max. 14 Input voltage - parameterizable St V DC at 1 mA for signal 't'' for volt 0, max, - parameterizable O.2 ms, 0.4 ms, 0.8 ms, 1.6 ms, 3.2 ms, 6.4 ms and 12.8 ms, - at '0' to 't'', max. O.2 ms - at '0' to 't'', max. O.2 ms ore manet	Time of dou	
• Hardware clock (real-time) Yes • Backup time 480 h; Typical • Deviation per day, max. 60 s/month at 25 °C Digital inputs • (f) thich inputs usable for technological functions • of which inputs usable for technological functions 6; HSC (High Speed Counting) • functions Yes Number of simultaneously controllable inputs 6; HSC (High Speed Counting) • all mouting positions • (F) V C at 1 mA • up to 40 °C, max. 14 Input voltage 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) 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 - parameterizable 0.2 ms - at °0° to °1*, max. 0.2 ms - at °0° to °1*, max. 0.2 ms - parameterizable Yes for technological functions	Time of day	
Backup time 480 h; Typical • Deviation per day, max. 60 s/month at 25 °C 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 14 all mounting positions 14 Input voltage - up to 40 °C, max. Pated value (DC) 24 V • for signal °C 5 V DC at 1 mA • for signal °C 5 V DC at 2.5 mA Input voltage 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 °C' to "1", min. 0.2 ms - at °C' to "1", max. 12.8 ms for interrupt inputs - parameterizable - parameterizable Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHz for interrupt inputs - parameterizable - parameterizable Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHz Cable length - Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHz Optical outputs 10 • of which high-speed outputs 4: 100 kHz Pulse Train Output Limitation of inductive shutdown voltage to 14 (148 V) Switching capacity of the outputs		Vac
• Deviation per day, max.60 s/month at 25 °CDigital inputs14: Integrated 6: HSC (High Speed Counting) 6: HSC (High Speed Counting) 6: HSC (High Speed Counting) 6: HSC (High Speed Counting) 6: HSC (High Speed Counting) 7: How the simultaneously controllable inputs all mounting positions - up to 40 °C, max.YesNumber of simultaneously controllable inputs all mounting positions - up to 40 °C, max.14Input voltage 9: Rated value (DC)24 V 5 V DC at 1 mA 1 for signal °0° 5 V DC at 1 mA 1 for signal °1° 1 for VDC at 2.5 mAInput delay (for rated value of input voltage) for signal °1° .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 0.2 ms 1 at 2.5 msInput delay (for rated value of input voltage) for iterrupt inputs .YesInput delay (for rated value of input voltage)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 0.2 ms 0.2 ms 1 at 0° to °1°, max.0.2 ms 0.2 ms <br< td=""><td></td><td></td></br<>		
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 9 all mounting positions 14 — up to 40 °C, max. 14 Input voltage 5V DC at 1 mA • for signal °0° 5V DC at 1 mA • for signal °1° 15 V DC at 2.5 mA Input delay (for rated value of input voltage) 5V DC at 1 mA • for signal °1° 15 V DC at 2.5 mA Input delay (for rated value of input voltage) 5V DC at 1 mA • for signal °1° 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°, 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 for technological functions - - parameterizable Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHz of which high-speed outputs 10 of which high-speed outputs <t< td=""><td></td><td></td></t<>		
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 14 all mounting positions – up to 40 °C, max. — up to 40 °C, max. 14 Input voltage . • 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 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 . - parameterizable Yes for technological functions . - parameterizable Yes for technological functions . - parameterizable Yes for technological functions . - parameterizable Single phase: 3 @ 100 kHz & 3 @ 30 kHz tot with resistive load, max. . • of which high-speed outputs . Vumber of digital outputs	 Deviation per day, max. 	60 s/month at 25 °C
• of which inputs usable for technological functions6; HSC (High Speed Counting)Source/sink inputYesNumber of simultaneously controllable inputsItemating positions- up to 40 °C, max.14Input voltageSV UC at 1 mA• Gr signal °C5 V DC at 1 mA• for signal °C5 V DC at 2.5 mAInput delay (for rated value of input voltage)For standard inputs• for signal °C0.2 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 °C' to °1'', max.0.2 ms• at °C' to °1'', max.12.8 msfor interrupt inputs parameterizableYesfor technological functionsNHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHzcable length10• unshielded, max.500 m; 50 m for technological functions. NoDigital outputs10• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+(48 V)Switching capacity of the outputs0.5 A• with resistive load, max.0.5 A• on lamp load, max.5 W	Digital inputs	
functions Yes Number of simultaneously controllable inputs Input voltage	Number of digital inputs	14; Integrated
Source/sink input Yes Number of simultaneously controllable inputs all mounting positions up to 40 °C, max. 14 Input voltage 14 Input voltage 5 V DC at 1 mA • for signal "0" 5 V DC at 2.5 mA Input delay (for rated value of input voltage) 5 V DC at 2.5 mA Input delay (for rated value of input voltage) - for standard inputs 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. 128 ms for interrupt inputs - - parameterizable Yes for interrupt inputs - - parameterizable Yes for technological functions - - parameterizable Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHz Solo m; 50 m for technological functions 300 m; for technological functions • unshielded, max. 500 m; 50 m for technological functions • unshielded, max. 10 • of which high-speed outputs 4; 100 kHz Pulse Train Output Limi	 of which inputs usable for technological 	6; HSC (High Speed Counting)
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 parameterizable parameterizable Yes for iterchnological functions parameterizable parameterizable Yes for technological functions parameterizable parameterizable Yes for technological functions 300 m; 50 m for technological functions • unshielded, max. 500 m; 50 m for technological functions • unshielded, max. 500 m; 50 m for technological functions of which high-speed outputs 10 • of which high-speed outputs 10 • of which high-speed outputs 4; 100 kHz Pulse Train Output	functions	
all mounting positions 14 Input voltage 24 V • 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) 5 V DC at 5.5 mA for standard inputs 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 - - parameterizable Yes for technological functions Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHz Cable leigth 500 m; 50 m for technological functions • unshielded, max. 300 m; for technological functions • unshielded, max. 300 m; for technological functions • unshielded, max. 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 0.5 A • on lamp load, max. 5 W	Source/sink input	Yes
	Number of simultaneously controllable inputs	
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 • or standard inputs 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 - - 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 • unshielded, max. 500 m; 50 m for technological functions 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 0.5 A • with resistive load, max. 5 W	all mounting positions	
• 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) 5 V DC at 2.5 mA for standard inputs 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 - - 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. 500 m; 50 m for technological functions • unshielded, max. 500 m; 50 m for technological functions • of which high-speed 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 0.5 A • with resistive load, max. 0.5 A • on lamp load, max. 5 W	— up to 40 °C, max.	14
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Input delay (for rated value of input voltage) for standard inputs - parameterizable - parameterizable - at "0" to "1", min at "0" to "1", max at "0" to "1", max. 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 shielded, max unshielded, max of digital outputs - of which high-speed outp	● for signal "0"	5 V DC at 1 mA
for standard inputs parameterizable0.2 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 msfor interrupt inputs parameterizable parameterizableYesfor technological functions parameterizable parameterizableSingle phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHzCable length• shielded, max.500 m; 50 m for technological functions• unshielded, max.500 m; 50 m for technological functions: NoDigital outputsNumber of digital outputs10• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+ (-48 V)Switching capacity of the outputs0.5 A• with resistive load, max.0.5 A• on lamp load, max.5 W	● for signal "1"	15 V DC at 2.5 mA
parameterizable0.2 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 msfor interrupt inputsYes parameterizableYesfor technological functionsSingle phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHzCable lengthStoo m; 50 m for technological functions• unshielded, max.500 m; 50 m for technological functions:• unshielded, max.300 m; for technological functions• unshielded, max.10• unshielded, max.10• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+ (-48 V)Switching capacity of the outputs0.5 A• with resistive load, max.0.5 A• on lamp load, max.5W	Input delay (for rated value of input voltage)	
Image: constraint of the outputsselectable in groups of four- at "0" to "1", min.0.2 ms- at "0" to "1", max.12.8 msfor interrupt inputsYes- parameterizableYes- parameterizableSingle phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHzCable lengthSingle phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz• shielded, max.500 m; 50 m for technological functions• unshielded, max.300 m; for technological functions: NoDigital outputs10Number of digital outputs4; 100 kHz Pulse Train Output• of which high-speed outputs10• of which high-speed outputs10with resistive load, max.0.5 A• on lamp load, max.5 W	for standard inputs	
Intervention12.8 msImage: orgen constraint of the outputs12.8 msImage: orgen constraint of the outputs12.8 msImage: orgen constraint of the outputsYesImage: orgen constraint of the outputsSingle phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHzImage: orgen constraint of the outputsSingle phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHzImage: orgen constraint of the outputsSoo m; 50 m for technological functionsImage: orgen constraint of the outputsSoo m; for technological functions: NoImage: orgen constraint of the outputs10Image: orgen constraint of the outputs4; 100 kHz Pulse Train OutputImage: orgen constraint of the outputsL+ (-48 V)Image: orgen constraint of the outputs0.5 AImage: orgen constraint orgen constraint of the outputsSov MImage: orgen constraint orgen constrai	— parameterizable	
for interrupt inputs	— at "0" to "1", min.	0.2 ms
— parameterizableYesfor technological functions— parameterizableSingle phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHzCable length• shielded, max.500 m; 50 m for technological functions• unshielded, max.300 m; for technological functions: NoDigital outputsNumber of digital outputs10• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+ (-48 V)Switching capacity of the outputs0.5 A• with resistive load, max.5 W	— at "0" to "1", max.	12.8 ms
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 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 0.5 A • with resistive load, max. 0.5 A • on lamp load, max. 5W	for interrupt inputs	
— parameterizableSingle phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHzCable length•• shielded, max.500 m; 50 m for technological functions• unshielded, max.300 m; for technological functions: NoDigital outputsNumber of digital outputs10• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+ (-48 V)Switching capacity of the outputs0.5 A• with resistive load, max.5 W	— parameterizable	Yes
kHz & 3 @ 30 kHzCable length• shielded, max.500 m; 50 m for technological functions• unshielded, max.300 m; for technological functions: NoDigital outputsNumber of digital outputs10• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+ (-48 V)Switching capacity of the outputs0.5 A• with resistive load, max.5 W	for technological functions	
 shielded, max. unshielded, max. 300 m; 50 m for technological functions 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 0.5 A on lamp load, max. 5 W 	— parameterizable	
• unshielded, max.300 m; for technological functions: NoDigital outputs10Number of digital outputs10• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+ (-48 V)Switching capacity of the outputs0.5 A• with resistive load, max.0.5 A• on lamp load, max.5 W	Cable length	
Digital outputs 10 Number of digital outputs 4; 100 kHz Pulse Train Output • 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 0.5 A • on lamp load, max. 5 W	• shielded, max.	500 m; 50 m for technological functions
Number of digital outputs10• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+ (-48 V)Switching capacity of the outputs0.5 A• with resistive load, max.5 W	• unshielded, max.	300 m; for technological functions: No
• of which high-speed outputs4; 100 kHz Pulse Train OutputLimitation of inductive shutdown voltage toL+ (-48 V)Switching capacity of the outputs0.5 A• with resistive load, max.0.5 A• on lamp load, max.5 W	Digital outputs	
Limitation of inductive shutdown voltage to L+ (-48 V) Switching capacity of the outputs 0.5 A • with resistive load, max. 5 W	Number of digital outputs	10
Switching capacity of the outputs • with resistive load, max. • on lamp load, max. 5 W	 of which high-speed outputs 	4; 100 kHz Pulse Train Output
 with resistive load, max. on lamp load, max. 5 W 	Limitation of inductive shutdown voltage to	L+ (-48 V)
• on lamp load, max. 5 W	Switching capacity of the outputs	
	 with resistive load, max. 	0.5 A
Output voltage	• on lamp load, max.	5 W
	Output voltage	

● for signal "0", max.	0.1 V; with 10 kOhm load
	20 V
 for signal "1", min. Output current 	20 0
for signal "1" rated value	0.5 A
-	0.1 mA
• for signal "0" residual current, max.	0.1111A
Output delay with resistive load	1.10
• "0" to "1", max.	1 μs
• "1" to "0", max.	5 µs
Switching frequency	
• of the pulse outputs, with resistive load, max.	100 kHz
Relay outputs	0
Number of relay outputs	0
Cable length	500
 shielded, max. 	500 m
 unshielded, max. 	150 m
Analog inputs	
Number of analog inputs	2
Input ranges	
• Voltage	Yes
Input ranges (rated values), voltages	
• 0 to +10 V	Yes
— Input resistance (0 to 10 V)	≥100k ohms
Cable length	
• shielded, max.	100 m; twisted and shielded
Analog outputs	
Number of analog outputs	0
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
 Resolution with overrange (bit including sign), 	10 bit
max.	
 Integration time, parameterizable 	Yes
 Conversion time (per channel) 	625 µs
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
1. Interface	
Interface type	PROFINET
Isolated	Yes
automatic detection of transmission rate	Yes
Autonegotiation	Yes



Autocrossing	Yes
Interface types	
• RJ 45 (Ethernet)	Yes
Protocols	
PROFINET IO Controller	Yes
PROFINET IO Device	Yes
Open IE communication	Yes
Web server	Yes
PROFINET IO Controller	
 Transmission rate, max. 	100 Mbit/s
Services	
— Number of connectable IO Devices, max.	16
PROFINET IO Device	
Services	
— Shared device	Yes
— Number of IO Controllers with shared	2
device, max.	
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIBUS	Yes; CM 1243-5 required
AS-Interface	Yes
Protocols (Ethernet)	
• TCP/IP	Yes
Open IE communication	
• TCP/IP	Yes
• ISO-on-TCP (RFC1006)	Yes
• UDP	Yes
Web server	
• supported	Yes
User-defined websites	Yes
Further protocols	
MODBUS	Yes
Communication functions	
S7 communication	
supported	Yes
• as server	Yes
• as client	Yes
Number of connections	
• overall	16; dynamically
Test commissioning functions Status/control	

counters oroning e Forcing Yes present Yes araces Yes e Number of configurable Traces 2; Up to 512 KB of data per trace are possible egrated Functions 6 bounting frequency (counter) max. 100 kHz requency measurement Yes ortholed positioning Yes fumber of positioning axes via pulse-direction 4; With integrated DO furmber of positioning axes via pulse-direction 4; With integrated DO furmber of pulse outputs 4 furmber of pulse outputs 4 furmber of pulse outputs 4 furmber of pulse outputs 500V AC for 1 minute imit frequency (pulse) 100 kHz etential separation digital inputs 500V AC for 1 minute operation digital outputs Yes ebetween the channels, in groups of 1 operation digital outputs Yes ebetween the channels, in groups of 1 operation digital outputs Yes ebetween the channels, in groups of 1	 Status/control variable 	Yes
Forcing Yes Alagnostic buffer Present Present Yes Traces Ves Traces Ves Traces Ves Traces Ves Ves Traces Ves Ves	Variables	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
Interface Yes • Number of configurable Traces 2: Up to 512 KB of data per trace are possible tegrated Functions 6 Counting frequency (counter) max. 100 kHz Frequency measurement Yes Southold position-controlled positioning axes, max. 8 Number of positioning axes via pulse-direction 4: With integrated DO Polo controller Yes Number of alarm inputs 4 Number of pulse outputs 4 -imit frequency (pulse) 100 kHz Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels, in groups of <td>Forcing</td> <td></td>	Forcing	
Process 2: Up to 512 KB of data per trace are possible ntegrated Functions 6 Counting frequency (counter) max. 100 kHz Frequency measurement Yes Controlled positioning Yes Number of position-controlled positioning axes, max. 8 Number of position axes via pulse-direction 4; With integrated DO Interface Yes PID controller Yes Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels, in groups of 1 Mc Yes Interference immunity against discharge of static electricity Yes • Interference immunity against discharge of static electricity 8 kV • Test voltage at air discharge 6 kV Interference immunity on supply lines acc. to IEC 61000-42 8 kV • Test voltage at air discharge 6 kV	Forcing	Yes
Process 2: Up to 512 KB of data per trace are possible ntegrated Functions 6 Counting frequency (counter) max. 100 kHz Frequency measurement Yes Controlled positioning Yes Number of position-controlled positioning axes, max. 8 Number of position-games via pulse-direction 4; With integrated DO Interface 100 kHz PID controller Yes Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Otential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels, in groups of 1 Mc Yes Interference immunity against discharge of static electricity 8 kV • Test voltage at air discharge 8 kV	Diagnostic buffer	
Itegrated Functions 6 Number of counters 6 Counting frequency (counter) max. 100 kHz Frequency measurement Yes Number of position-controlled positioning axes, max. 8 Number of position-controlled positioning axes via pulse-direction 4; With integrated DO interface Yes PID controller Yes Number of position-countrolled positioning axes via pulse-direction 4 Number of position-controlled positioning axes via pulse-direction 4 Number of position-countroller Yes Number of pulse outputs 4 Limit frequency (pulse) 100 kHz otential separation 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 MC Interference immunity against discharge of static electricity • Interference immunity against discharge of static electricity Yes - Test voltage at air discharge 8 kV - Test voltage at air discharge 6 kV Interference immunity to	• present	Yes
Itegrated Functions 6 Number of counters 6 Counting frequency (counter) max. 100 kHz Frequency measurement Yes controlled positioning axes via pulse-direction 4; With integrated DO Number of position-controlled positioning axes, max. 8 Number of position-controlled positioning axes via pulse-direction 4; With integrated DO Interface Yes Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 MC Interference immunity against discharge of static electricity • Interference immunity against discharge 8 kV - Test voltage at an discharge 8 kV	Traces	
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 positioning axes via pulse-direction 4; With integrated DO interface 4 PID controller Yes Number of alarm inputs 4 Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Otential separation digital inputs 500V AC for 1 minute • Potential separation digital outputs 1 • Potential separation digital outputs Yes • Potential separation digital outputs Yes • Detential separation digital outputs Yes • Deten	 Number of configurable Traces 	2; Up to 512 KB of data per trace are possible
Counting frequency (counter) max. 100 kHz Frequency measurement Yes controlled positioning Yes Number of position-controlled positioning axes, max. 8 Number of positioning axes via pulse-direction 4; With integrated DO interface Yes PID controller Yes Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Otential separation digital inputs 4 Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 More the channels No • between the channels, in groups of 1 Interference immunity against discharge of static electricity Yes • Interference immunity against discharge 8 kV - Test voltage at air discharge 6 kV Interference immunity to cable-borne interference 8 kV - Test voltage at air discharge 6 kV	ntegrated Functions	
Frequency measurement Yes controlled positioning Yes Number of position-controlled positioning axes, max. 8 Number of positioning axes via pulse-direction 4; With integrated DO interface Yes PID controller Yes Number of alarm inputs 4 Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Potential separation 500V AC for 1 minute Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels, in groups of 1 Momeration digital outputs Yes • between the channels, in groups of 1 Momeration digital outputs Yes • between the channels, in groups of 1 Interference immunity against discharge of static electricity 1 • Interference immunity against discharge of static electricity Yes • Test voltage at air discharge 6 kV Interference immunity to cable-borne interference 6 kV	Number of counters	6
controlled positioning Yes Number of position-controlled positioning axes, max. 8 Number of positioning axes via pulse-direction interface 4; With integrated DO PID controller Yes Number of alarm inputs 4 Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Otential separation 500V AC for 1 minute Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 Interference immunity against discharge of static electricity 1 Interference immunity against discharge of static electricity 4 kV • Test voltage at air discharge 8 kV • Test voltage at air discharge 6 kV Interference immunity to cable-borne interference 6 kV Interference immunity to cable-borne interference Yes	Counting frequency (counter) max.	100 kHz
Number of position-controlled positioning axes, max. 8 Number of positioning axes via pulse-direction interface 4; With integrated DO PID controller Yes Number of alarm inputs 4 Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Otential separation digital inputs • Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • Potential separation digital outputs Yes • Potential separation digital outputs Yes • Detential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 • Detential separation digital outputs Yes • between the channels, in groups of 1 • between the channels, in groups of 1 • Detential separation digital outputs Yes • between the channels, in groups of 1 • Detential separation digital outputs Yes • Detential separation digital discharge of static electricity acc. to IEC 61000-4-2 Yes •	Frequency measurement	Yes
Number of positioning axes via pulse-direction interface 4; With integrated DO PID controller Yes Number of alarm inputs 4 Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Potential separation digital inputs Potential separation digital inputs 500V AC for 1 minute • Potential separation digital outputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • between the channels No • between the channels No • between the channels, in groups of 1 Interference immunity against discharge of static electricity Yes • Interference immunity against discharge of static electricity Yes • Interference immunity against discharge of static electricity Yes • Interference immunity act discharge 8 kV - Test voltage at air discharge 6 kV Interference immunity to cable-borne interference Yes • Interference immunity on supply lines acc. to IEC 61000-4-2 Yes	controlled positioning	Yes
interfaceYesPID controllerYesNumber of alarm inputs4Number of pulse outputs4Limit frequency (pulse)100 kHzPotential separation digital inputsPotential separation digital inputs500V AC for 1 minute• Potential separation digital outputs1• Potential separation digital outputsYes• Potential separation digital outputsYes• Potential separation digital outputsYes• Dotential separation digital outputsYes• between the channels, in groups of1• Dotential separation digital outputsYes• between the channels, in groups of1• Detertier colsmunity against discharge of static electricityYes• Interference immunity against discharge of static electricity8 kV- Test voltage at air discharge8 kV- Test voltage at air discharge6 kVInterference immunity to cable-borne interferenceYes• Interference immunity on supply lines acc. to IEC 61000-4-4Yes	Number of position-controlled positioning axes, max.	8
Number of alarm inputs 4 Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Potential separation 100 kHz Potential separation digital inputs 500V AC for 1 minute • Potential separation digital outputs 1 Potential separation digital outputs 1 • Potential separation digital outputs Yes • Potential separation digital outputs Yes • between the channels, in groups of 1 • Detertial separation digital outputs Yes • between the channels, in groups of 1 • Interference immunity against discharge of static electricity Yes • Interference immunity against discharge 8 kV - Test voltage at air discharge 6 kV Interference immunity to cable-borne interference Yes • Interference immunity on supply lines acc. to IEC 61000-4-4		4; With integrated DO
Number of pulse outputs 4 Limit frequency (pulse) 100 kHz Potential separation 100 kHz Potential separation digital inputs 500V AC for 1 minute • Potential separation digital outputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 Interference immunity against discharge of static electricity Interference immunity against discharge of static electricity • Interference immunity against discharge 8 kV - Test voltage at air discharge 8 kV - Test voltage at air discharge 6 kV Interference immunity to cable-borne interference 1	PID controller	Yes
Limit frequency (pulse) 100 kHz Potential separation Potential separation digital inputs Potential separation digital inputs 500V AC for 1 minute • Potential separation digital outputs 1 Potential separation digital outputs Yes • Potential separation digital outputs Yes • Potential separation digital outputs Yes • between the channels, in groups of 1 • between the channels No • between the channels, in groups of 1 • Interference immunity against discharge of static electricity • • Interference immunity against discharge of static electricity acc. to IEC 61000-4-2 Yes • Test voltage at air discharge 8 kV • Test voltage at contact discharge 6 kV Interference immunity to cable-borne interference Yes • Interference immunity on supply lines acc. to IEC 61000-4-4 Yes	Number of alarm inputs	4
Potential separation digital inputs 500V AC for 1 minute Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 • between the channels No • between the channels, in groups of 1 • Interference immunity against discharge of static electricity Yes • Interference immunity against discharge of static electricity acc. to IEC 61000-4-2 Yes — Test voltage at air discharge 6 kV Interference immunity to cable-borne interference Yes • Interference immunity on supply lines acc. to IEC 61000-4-4 Yes	Number of pulse outputs	4
Potential separation digital inputs 500V AC for 1 minute • Potential separation digital inputs 500V AC for 1 minute • between the channels, in groups of 1 Potential separation digital outputs Yes • Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 • Interference immunity against discharge of static electricity Yes • Interference immunity against discharge of static electricity acc. to IEC 61000-4-2 Yes • Test voltage at air discharge 8 kV • Test voltage at contact discharge 6 kV Interference immunity to cable-borne interference Yes • Interference immunity on supply lines acc. to IEC 61000-4-4 Yes	Limit frequency (pulse)	100 kHz
 Potential separation digital inputs between the channels, in groups of Potential separation digital outputs Potential separation digital outputs Potential separation digital outputs Potential separation digital outputs Yes between the channels No between the channels, in groups of 1 MC Interference immunity against discharge of static electricity acc. to IEC 61000-4-2 — Test voltage at air discharge MV Interference immunity to cable-borne interference Interference immunity on supply lines acc. to IEC 61000-4-4 Yes State of the context of the con	otential separation	
 between the channels, in groups of between the channels, in groups of Potential separation digital outputs Potential separation digital outputs Yes between the channels between the channels, in groups of MC 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 6 kV Interference immunity to cable-borne interference Interference immunity on supply lines acc. to IEC 61000-4-4 	Potential separation digital inputs	
Potential separation digital outputs Yes • Potential separation digital outputs Yes • between the channels No • between the channels, in groups of 1 • MC Interference immunity against discharge of static electricity • Interference immunity against discharge of static electricity acc. to IEC 61000-4-2 Yes - Test voltage at air discharge 8 kV - Test voltage at contact discharge 6 kV Interference immunity to cable-borne interference Yes	 Potential separation digital inputs 	500V AC for 1 minute
 Potential separation digital outputs Potential separation digital outputs between the channels No between the channels, in groups of 1 MC 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 KV Test voltage at contact discharge KV Interference immunity to cable-borne interference Interference immunity on supply lines acc. to IEC 61000-4-2 	 between the channels, in groups of 	1
• between the channelsNo• between the channels, in groups of1MCInterference immunity against discharge of static electricity acc. to IEC 61000-4-2Yes- Test voltage at air discharge8 kV- Test voltage at contact discharge6 kVInterference immunity to cable-borne interferenceYes	Potential separation digital outputs	
between the channels, in groups of 1 1	 Potential separation digital outputs 	Yes
SMC 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 8 kV — Test voltage at contact discharge 6 kV Interference immunity to cable-borne interference Yes • Interference immunity on supply lines acc. to IEC 61000-4-4 Yes	 between the channels 	No
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 8 kV — Test voltage at contact discharge 6 kV Interference immunity to cable-borne interference Yes • Interference immunity on supply lines acc. to IEC 61000-4-4 Yes	 between the channels, in groups of 	1
 Interference immunity against discharge of static electricity acc. to IEC 61000-4-2 Test voltage at air discharge KV Test voltage at contact discharge KV Interference immunity to cable-borne interference Interference immunity on supply lines acc. to IEC 61000-4-4 	MC	
static electricity acc. to IEC 61000-4-2 — 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 IEC 61000-4-4	Interference immunity against discharge of static electri	city
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 to cable-borne interference Interference immunity on supply lines acc. to IEC 61000-4-4	— Test voltage at air discharge	8 kV
Interference immunity on supply lines acc. to Yes IEC 61000-4-4	— Test voltage at contact discharge	6 kV
IEC 61000-4-4	Interference immunity to cable-borne interference	
Interference immunity on signal cables acc. to Yes		Yes
IEC 61000-4-4		Yes

• Interference increasing on a much lines and to	Yes
 Interference immunity on supply lines acc. to IEC 61000-4-5 	
Interference immunity against conducted variable distur	bance induced by high-frequency fields
 Interference immunity against high-frequency radiation acc. to IEC 61000-4-6 	Yes
Emission of radio interference acc. to EN 55 011	
 Limit class A, for use in industrial areas 	Yes; Group 1
 Limit class B, for use in residential areas 	Yes; When appropriate measures are used to ensure compliance with the limits for Class B according to EN 55011
Degree and class of protection	
IP degree of protection	IP20
mbient conditions	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• min.	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C
• max.	70 °C; = Tmax; Tmax > +55 °C number of simultaneously switched-on digital inputs 7, digital outputs 5, analog inputs 2 (no adjacent points) with horizontal mounting position; Tmax > +60 °C number of simultaneously switched-on digital inputs 7, digital outputs 5, analog inputs 1 (no adjacent points) with horizontal mounting position
• At cold restart, min.	-25 °C
Ambient temperature during storage/transportation	
● min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	5 000 m
 Ambient air temperature-barometric pressure- altitude 	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)
Relative humidity	
 With condensation, tested in accordance with IEC 60068-2-38, max. 	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
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 60068-2-27 	Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms
Resistance	
Coolants and lubricants	

Resistant to commercially available	Yes; Incl. diesel and oil droplets in the air
coolants and lubricants	
Use in stationary industrial systems	
 — to biologically active substances according to EN 60721-3-3 	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
 to chemically active substances according to EN 60721-3-3 	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *
 — to mechanically active substances according to EN 60721-3-3 	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
 to biologically active substances according to EN 60721-3-6 	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
 to chemically active substances according to EN 60721-3-6 	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *
 — to mechanically active substances according to EN 60721-3-6 	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
 Against chemically active substances acc. to EN 60654-4 	Yes; Class 3 (excluding trichlorethylene)
 Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
 — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
 Coatings for printed circuit board assemblies acc. to EN 61086 	Yes; Class 2 for high reliability
 Protection against fouling acc. to EN 60664-3 	Yes; Type 1 protection
 Military testing according to MIL-I-46058C, Amendment 7 	Yes; Discoloration of coating possible during service life
 Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A 	Yes; Conformal coating, Class A
Configuration	
Programming	
Programming language	
— LAD	Yes
— FBD	Yes
— SCL	Yes

adjustable

Yes

Dimensions	
Width	110 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	415 g
last modified:	10/13/2020

