## **Data sheet**



SIPLUS S7-1200 CPU 1214C DC/DC/relay based on 6ES7214-1HG40-0XB0 with conformal coating, -40...+60 °C, start up -25 °C, compact CPU, DC/DC/relay, onboard I/O: 14 DI 24 V DC; 10 DQ relay 2 A; 2 AI 0-10 V DC, power supply: AC 20.4-28.8 V DC, program/data memory 100 KB

Figure similar

Product type designation   CPU 1214C DC/DC/relay	Canagal infaguaction	
Firmware version V4.1 Engineering with	General information	
Engineering with  • STEP 7 TIA Portal configurable/integrated from version  Supply voltage  Rated value (DC)  • 24 V DC  permissible range, upper limit (DC)  • Passible range, upper limit (DC)  • Permissible range		
• STEP 7 TIA Portal configurable/integrated from version  Supply voltage  Rated value (DC)  • 24 V DC  permissible range, lower limit (DC)  permissible range, upper limit (DC)  • Part voltage L+  • Rated value (DC)  • permissible range, lower limit (DC)  • permissible range, lower limit (DC)  • permissible range, upper limit (DC		V4.1
Rated value (DC)  • 24 V DC  permissible range, lower limit (DC)  permissible range, upper limit (DC)  Load votlage L+  • Rated value (DC)  • permissible range, upper limit (DC)  bear votlage L+  • Rated value (DC)  • permissible range, lower limit (DC)  • permissible range, upper limit (DC)  • pom A; CPU only  Current consumption (rated value)  • 1500 mA; CPU only  • 100 mA; CPU only  • 100 mA; CPU only  • 100 mA; Max. 5 V DC for SM and CM  • Prover loss  • 24 V  • L+ minus 4 V DC min.  • volume consumption  • integrated  • Prover loss, typ.  • Present  • without battery  • present  • without batter  • present  • without b	Engineering with	
Rated value (DC)  • 24 V DC  permissible range, lower limit (DC)  20.4 V  permissible range, upper limit (DC)  28.8 V  Load voltage L+  • Rated value (DC)  • permissible range, lower limit (DC)  • permissible range, lower limit (DC)  • permissible range, upper limit (DC)  28.8 V  Input current  Current consumption (rated value)  Current consumption, max.  1 500 mA; CPU only  Current consumption, max.  1 1 500 mA; CPU with all expansion modules  Inrush current, max.  Output current  for backplane bus (6 V DC), max.  1 600 mA; Max. 5 V DC for SM and CM  Encoder supply  24 V	STEP 7 TIA Portal configurable/integrated from version	see entry ID: 109746275
• 24 V DC permissible range, lower limit (DC)	Supply voltage	
permissible range, lower limit (DC)  permissible range, upper limit (DC)  Load voltage L+  Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  permissible r	Rated value (DC)	
permissible range, upper limit (DC)  Load voltage L+  Rated value (DC)  permissible range, lower limit (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  28.8 V  Input current  Current consumption (rated value)  Current consumption, max.  1 500 mA; CPU only  Current consumption, max.  1 1 500 mA; CPU with all expansion modules  Inrush current, max.  1 2 A; at 28.8 V  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 encoder supply  Power loss  Power loss, typ.  12 W  Memory  Work memory  integrated  100 kbyte  Load memory  integrated  4 Mbyte  Plug-in (SIMATIC Memory Card), max.  with SIMATIC memory card  Backup  present  without battery  Yes; maintenance-free  without battery  Yes; maintenance-free  for bit operations, typ.  for bot operations, typ.  1.7 µs; / instruction  for word operations, typ.  1.7 µs; / instruction  for footing point arithmetic, typ.  2.3 µs; / instruction	• 24 V DC	Yes
Load voltage L+  • Rated value (DC) • permissible range, lower limit (DC) • permissible range, upper limit (DC) 28.8 V  Input current  Current consumption (rated value)  Current consumption, max. 1 500 mA; CPU only  Current consumption, max. 1 1 500 mA; CPU with all expansion modules  Inrush current, max. 2 2 A; at 28.8 V  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 Load memory • integrated Load memory • integrated Load memory • integrated  Pug-in (SIMATIC Memory Card), max.  Backup • present • without battery  Yes: maintenance-free • without battery  (PU with all expansion modules  100 kbyte  100 kbyte  Present • without battery  Yes: maintenance-free • without battery  (PU processing times  for bit operations, typ. 1.7 µs; / instruction  for word operations, typ. 1.7 µs; / instruction  for floating point arithmetic, typ. 2.3 µs; / instruction	permissible range, lower limit (DC)	20.4 V
Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  28.8 V    Purmissible range, upper limit (DC)  28.8 V    Current consumption (rated value)   Current consumption, max.	permissible range, upper limit (DC)	28.8 V
permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC)  permissible range, upper limit (DC)    Sestimate   S	Load voltage L+	
permissible range, upper limit (DC)  protectorent  Current consumption (rated value)  Current consumption, max.  1 500 mA; CPU with all expansion modules  Inrush current, max.  1 2 A; at 28.8 V  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 encoder supply  24 V becoder supply  24 V encoder supply  12 W  Memory  Work memory  integrated  100 kbyte  Load memory  integrated  4 Mbyte  Plug-in (SIMATIC Memory Card), max.  Backup  present  present  present  yes; maintenance-free  without battery  CPU processing times  for bit operations, typ.  0.085 µs; / instruction  for word operations, typ.  1.7 µs; / instruction  for floating point arithmetic, typ.  2.3 µs; / instruction	<ul> <li>Rated value (DC)</li> </ul>	24 V
Input current Current consumption (rated value)  Current consumption, max.  1 500 mA; CPU with all expansion modules Inrush current, max.  1 2 A; at 28.8 V  Output current  for backplane bus (5 V DC), max.  Incoder supply  24 V encoder supply  24 V encoder supply  24 V	<ul> <li>permissible range, lower limit (DC)</li> </ul>	20.4 V
Current consumption (rated value)  Current consumption, max.  Inrush current, max.  12 A; at 28.8 V  Output current  for backplane bus (5 V DC), max.  Inrush currents  Inrush current torous (5 V DC), max.  Inrush current torous (5 V DC) with all expansion modules  Inrush current, max.  Inrush at 2 A; at 28.8 V  Inrush at 2 A; at	<ul> <li>permissible range, upper limit (DC)</li> </ul>	28.8 V
Current consumption, max.  Inrush current, max.  Output current  for backplane bus (5 V DC), max.  Inrush current  for backplane bus (5 V DC), max.  Inrush current  for backplane bus (5 V DC), max.  Inrush current  for backplane bus (5 V DC), max.  Inrush current  Inrus	Input current	
Inrush current, max.  Output current  for backplane bus (5 V DC), max.  I 600 mA; Max. 5 V DC for SM and CM  Encoder supply  24 V encoder supply  • 24 V	Current consumption (rated value)	500 mA; CPU only
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	Current consumption, max.	1 500 mA; CPU with all expansion modules
for backplane bus (5 V DC), max.  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  Load memory  • integrated  • Plug-in (SIMATIC Memory Card), max.  Backup  • present  • without battery  For bit operations, typ.  10.085 µs; / instruction  for floating point arithmetic, typ.  1600 mA; Max. 5 V DC for SM and CM  L+ minus 4 V DC min.  Power loss  P	Inrush current, max.	12 A; at 28.8 V
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 100 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  for bit operations, typ. 0.085 µs; / instruction  for word operations, typ. 1.7 µs; / instruction  for floating point arithmetic, typ. 2.3 µs; / instruction	Output current	
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  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  for bit operations, typ. 0.085 µs; / instruction  for word operations, typ. 1.7 µs; / instruction  for floating point arithmetic, typ. 2.3 µs; / instruction	for backplane bus (5 V DC), max.	1 600 mA; Max. 5 V DC for SM and CM
• 24 V L+ minus 4 V DC min.  Power loss  Power loss, typ. 12 W  Memory  Work memory  • integrated 100 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  for bit operations, typ. 0.085 μs; / instruction  for word operations, typ. 1.7 μs; / instruction  for floating point arithmetic, typ. 2.3 μs; / instruction	Encoder supply	
Power loss Power loss, typ.  12 W  Memory  Work memory  integrated  100 kbyte  Load memory  integrated  Plug-in (SIMATIC Memory Card), max.  Backup  present  present  without battery  Yes; maintenance-free  without battery  Yes  CPU processing times  for bit operations, typ.  1.7 µs; / instruction  for word operations, typ.  1.7 µs; / instruction  for floating point arithmetic, typ.  2.3 µs; / instruction	24 V encoder supply	
Power loss, typ.  Memory  Work memory  integrated  look byte  Load memory  integrated  Plug-in (SIMATIC Memory Card), max.  Backup  present  present  with SIMATIC memory card  Yes; maintenance-free  without battery  CPU processing times  for bit operations, typ.  looks jus; / instruction  1.7 jus; / instruction  for word operations, typ.  2.3 jus; / instruction	• 24 V	L+ minus 4 V DC min.
Memory  Work memory  ● integrated 100 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  for bit operations, typ. 0.085 µs; / instruction  for word operations, typ. 1.7 µs; / instruction  for floating point arithmetic, typ. 2.3 µs; / instruction	Power loss	
Work memory  ● integrated 100 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  for bit operations, typ. 0.085 μs; / instruction  for word operations, typ. 1.7 μs; / instruction  for floating point arithmetic, typ. 2.3 μs; / instruction	Power loss, typ.	12 W
integrated     Load memory         • integrated	Memory	
Load memory	Work memory	
<ul> <li>integrated</li> <li>Plug-in (SIMATIC Memory Card), max.</li> <li>with SIMATIC memory card</li> </ul> Backup <ul> <li>present</li> <li>without battery</li> </ul> CPU processing times <ul> <li>for bit operations, typ.</li> <li>for word operations, typ.</li> <li>for floating point arithmetic, typ.</li> <li>4 Mbyte</li> <li>with SIMATIC memory card</li> </ul> Yes <ul> <li>CPU processing times</li> <li>for loating point arithmetic, typ.</li> <li>2.3 µs; / instruction</li> </ul> 2.3 µs; / instruction 2.3 µs; / instruction 2.3 µs; / instruction	• integrated	100 kbyte
<ul> <li>Plug-in (SIMATIC Memory Card), max.</li> <li>Backup</li> <li>present</li> <li>with SIMATIC memory card</li> <li>Present</li> <li>without battery</li> <li>Yes; maintenance-free</li> <li>without battery</li> <li>CPU processing times</li> <li>for bit operations, typ.</li> <li>for word operations, typ.</li> <li>for word operations, typ.</li> <li>1.7 μs; / instruction</li> <li>for floating point arithmetic, typ.</li> <li>2.3 μs; / instruction</li> </ul>	Load memory	
Backup         ● present       Yes; maintenance-free         ● without battery       Yes         CPU processing times         for bit operations, typ.       0.085 μs; / instruction         for word operations, typ.       1.7 μs; / instruction         for floating point arithmetic, typ.       2.3 μs; / instruction	• integrated	4 Mbyte
<ul> <li>present</li> <li>without battery</li> <li>Yes</li> </ul> CPU processing times for bit operations, typ. <ul> <li>0.085 µs; / instruction</li> <li>for word operations, typ.</li> <li>1.7 µs; / instruction</li> <li>for floating point arithmetic, typ.</li> <li>2.3 µs; / instruction</li> </ul>	<ul> <li>Plug-in (SIMATIC Memory Card), max.</li> </ul>	with SIMATIC memory card
without battery  CPU processing times  for bit operations, typ.  0.085 μs; / instruction  for word operations, typ.  1.7 μs; / instruction  for floating point arithmetic, typ.  2.3 μs; / instruction	Backup	
CPU processing times  for bit operations, typ.  for word operations, typ.  1.7 μs; / instruction  for floating point arithmetic, typ.  2.3 μs; / instruction	• present	Yes; maintenance-free
for bit operations, typ. $0.085  \mu s; /  instruction$ for word operations, typ. $1.7  \mu s; /  instruction$ for floating point arithmetic, typ. $2.3  \mu s; /  instruction$	<ul><li>without battery</li></ul>	Yes
for word operations, typ.  1.7 µs; / instruction  for floating point arithmetic, typ.  2.3 µs; / instruction	CPU processing times	
for floating point arithmetic, typ. 2.3 µs; / instruction	for bit operations, typ.	0.085 μs; / instruction
• • • • • • • • • • • • • • • • • • • •	for word operations, typ.	1.7 µs; / instruction
CPU-blocks	for floating point arithmetic, typ.	2.3 µs; / instruction
	CPU-blocks	

Number of blocks (total)	DBs, FCs, FBs, counters and timers. The maximum number of addressable blocks ranges from 1 to 65535. There is no restriction, the entire working memory can be used
OB	
Number, max.	Limited only by RAM for code
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	10 kbyte
Flag	
• Size, max.	8 kbyte; Size of bit memory address area
Address area	
Process image	
Inputs, adjustable	1 kbyte
Outputs, adjustable	1 kbyte
Hardware configuration	T NOYCE
Number of modules per system, max.	2 comm. modulos, 1 cignal heard, 9 cignal modulos
	3 comm. modules, 1 signal board, 8 signal modules
Time of day	
Clock	· ·
Hardware clock (real-time)	Yes
Backup time	480 h; Typical
Deviation per day, max.	60 s/month at 25 °C
Digital inputs	
Number of digital inputs	14; Integrated
of which inputs usable for technological functions	6; HSC (High Speed Counting)
Source/sink input	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	14
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	5 V DC at 1 mA
• for signal "1"	15 V DC at 2.5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	0.2 ms, 0.4 ms, 0.8 ms, 1.6 ms, 3.2 ms, 6.4 ms and 12.8 ms, selectable in
F	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.
Switching frequency	
of the pulse outputs, with resistive load, max.	1 Hz
Relay outputs  Relay outputs	1112
Number of relay outputs	10
Number of operating cycles, max.  Cable length	mechanically 10 million, at rated load voltage 100 000
Cable length	F00 m
	500 m
<ul><li>shielded, max.</li><li>unshielded, max.</li></ul>	150 m

Analog inputs	
Number of analog inputs	2
Input ranges	
• Voltage	Yes
Input ranges (rated values), voltages	103
• 0 to +10 V	Yes
— Input resistance (0 to 10 V)	≥100k ohms
Cable length	2 TOUR OTHERS
• shielded, max.	100 m; twisted and shielded
Analog outputs	100 III, twisted and shielded
Number of analog outputs	0
<u> </u>	0
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	40.1%
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
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	
<ul> <li>PROFINET IO Controller</li> </ul>	Yes
PROFINET IO Device	Yes; Also simultaneously with IO-Device functionality
PROFINET IO Controller	
<ul> <li>Transmission rate, max.</li> </ul>	100 Mbit/s
Services	
<ul> <li>Number of connectable IO Devices, max.</li> </ul>	16
PROFINET IO Device	
Services	
— Shared device	Yes
<ul> <li>Number of IO Controllers with shared device, max.</li> </ul>	2
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
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
· · · · · · · · · · · · · · · · · · ·	Yes
• UDP Web server	
• UDP	Yes Yes Yes
<ul> <li>UDP</li> <li>Web server</li> <li>supported</li> <li>User-defined websites</li> </ul>	Yes
UDP  Web server  supported User-defined websites  Further protocols	Yes Yes
<ul> <li>UDP</li> <li>Web server</li> <li>supported</li> <li>User-defined websites</li> <li>Further protocols</li> <li>MODBUS</li> </ul>	Yes
UDP Web server supported User-defined websites Further protocols MODBUS communication functions / header	Yes Yes
<ul> <li>UDP</li> <li>Web server</li> <li>supported</li> <li>User-defined websites</li> <li>Further protocols</li> <li>MODBUS</li> </ul>	Yes Yes

a 20 000/or	Voc
as server     as client	Yes
as client  Number of connections	Yes
Number of connections  • overall	16: dynamically
	16; dynamically
Test commissioning functions Status/control	
Status/control variable	Yes
Variables	
Forcing	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
• Forcing	Yes
Diagnostic buffer	165
• present	Yes
Traces	
Number of configurable Traces	2; Up to 512 KB of data per trace are possible
Integrated Functions	
Counter	
Number of counters	6
Counting frequency, max.	100 kHz
Frequency measurement	Yes
controlled positioning	Yes
Number of position-controlled positioning axes, max.	8
Number of positioning axes via pulse-direction interface	Up to 4 with SB 1222
PID controller	Yes
Number of alarm inputs	4
Potential separation	
Potential separation digital inputs	
<ul> <li>Potential separation digital inputs</li> </ul>	500V AC for 1 minute
between the channels, in groups of	1
Potential separation digital outputs	
<ul> <li>Potential separation digital outputs</li> </ul>	Relays
<ul> <li>between the channels</li> </ul>	No
between the channels, in groups of	2
EMC	
Interference immunity against discharge of static electricity	
<ul> <li>Interference immunity against discharge of static electricity acc. to IEC 61000-4-2</li> </ul>	Yes
Test voltage at air discharge	8 kV
Test voltage at all discharge  Test voltage at contact discharge	6 kV
Interference immunity to cable-borne interference	
Interference immunity on supply lines acc. to IEC 61000-	Yes
4-4	
<ul> <li>Interference immunity on signal cables acc. to IEC 61000-</li> </ul>	Yes
4-4	
Interference immunity against voltage surge	Voc
<ul> <li>Interference immunity on supply lines acc. to IEC 61000- 4-5</li> </ul>	Yes
Interference immunity against conducted variable disturbance indu	ced by high-frequency fields
Interference immunity against high-frequency radiation	Yes
acc. to IEC 61000-4-6	
Emission of radio interference acc. to EN 55 011	
Limit class A, for use in industrial areas	Yes; Group 1
<ul> <li>Limit class B, for use in residential areas</li> </ul>	Yes; When appropriate measures are used to ensure compliance with the limits for Class B according to EN 55011
Degree and class of protection	ior olded b decording to Life oout I
IP degree of protection	IP20
Ambient conditions	11 20
Free fall	
	0.3 m; five times, in product package
Fall height, max.  Ambient temperature during operation	0.3 m; five times, in product package
Ambient temperature during operation  • min.	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C
• min. • max.	60 °C; = Tmin (incl. condensation/riost), start-up @ -25 °C 60 °C; = Tmax; Tmax > +55 °C number of simultaneously switched-on digital
▼ IIIGA.	inputs 7, digital outputs 5, analog inputs 2 (no adjacent points) with horizontal
	mounting position

• At cold roctort min	25 °C
At cold restart, min.  Ambient temperature during storage/transportation	-25 °C
min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
Installation altitude above sea level, max.	2 000 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); above 2 000 m max. 132 V AC
Relative humidity	
With condensation, tested in accordance with IEC 60068- 2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Vibrations	
<ul> <li>Vibration resistance during operation acc. to IEC 60068- 2-6</li> </ul>	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 coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
<ul> <li>to biologically active substances according to EN 60721-3-3</li> </ul>	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); *
<ul> <li>to mechanically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
<ul> <li>Against chemically active substances acc. to EN 60654-4</li> </ul>	Yes; Class 3 (excluding trichlorethylene)
<ul> <li>Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04</li> </ul>	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	
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> </ul>	* 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
<ul> <li>Protection against fouling acc. to EN 60664-3</li> </ul>	Yes; Type 1 protection
Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life
<ul> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC- CC-830A</li> </ul>	Yes; Conformal coating, Class A
configuration / header	
configuration / programming / header	
Programming language	W.
— LAD	Yes
— FBD	Yes
— SCL	Yes
programming / cycle time monitoring / header  • adjustable	Yes
• adjustable  Dimensions	100
Width	110 mm
Height	100 mm
Depth	75 mm
Deptil	111111 61

Weights		
Weight, approx.	435 g	
	c1	
last modified:	4/1/2022	