Data sheet



SIPLUS S7-1200 CPU 1214C AC/DC/relay based on 6ES7214-1BG40-0XB0 with conformal coating, -20...+60 °C, compact CPU, AC/DC/relay, onboard I/O: 14 DI 24 V DC 10 DQ relay 2 A 2 AI 0-10 V DC, power supply: AC 85-264 V AC @ 47-63 Hz, program/data memory 100 KB

Figure similar

Product type designation Firmware version Firmware version STEP 7 TIA Portal configurable/integrated from version V4.1 STEP 7 TIA Portal configurable/integrated from version Supply voltage Rated value (AC) 120 V AC 230 V AC Permissible range, lower limit (AC) Permissible range, upper limit (AC) Permissible range, lower limit (AC) Permissible range, lower limit (AC) Permissible range, upper limit (AC) Permissible range, upper limit (AC) Permissible range, lower limit (AC) Permissible range, lower limit (AC) Permissible range, lower limit (AC) Permissible range, upper limit (AC) Permissible range, lower limit (AC) Permissible range, lo	General information	
Engineering with • STEP 7 Th Portal configurable/integrated from version Supply voltage Rated value (AC) • 120 V AC • 230 V AC • 230 V AC permissible range, lower limit (AC) permissible range, upper limit (AC) • permissible range, upper limit (AC) permissible range, upper limit (AC) permissible range, lower limit • permissible range, lower limit • permissible range, upper limit 63 Hz Input current Current consumption (rated value) Current consumption (rated value) Current consumption, max. Insub current, max. 20 A; at 264 V Output current for backplane bus (5 V DC), max. Incoder supply 24 V encoder supply 24 V 20.4 to 28.8V Power loss Power loss, typ. Power loss, typ. 14 W Memory Work memory • integrated • expandable Load memory • integrated • Plug-in (SiMATIC Memory Card), max. With SIMATIC memory card Backup • present • without battery Yes, maintenance-free • without battery For bit operations, typ. 0.085 µs; / instruction	Product type designation	CPU 1214C AC/DC/relay
• STEP 7 TIA Portal configurable/integrated from version Supply voltage Rated value (AC) • 120 V AC • 200 V AC Permissible range, lower limit (AC) • bermissible range, lower limit (AC) • permissible range, lower limit (AC) • 264 V Current consumption (rated value) • Duma at 120 V AC; 50 mA at 240 V AC 20 A; at 264 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 20.4 to 28.8V Power loss Power loss Power loss, typ. 14 W Memory • integrated • expandable No Load memory • integrated • AMbyte • expandable Load memory • integrated • AMbyte • Plug-in (SIMATIC Memory Card), max. Backup • present • with out battery Pose Supprocessing times for bit operations, typ. 0.085 µs; / instruction	Firmware version	V4.1
version Supply voltage Rated value (AC) • 120 V AC • 230 V AC • 230 V AC permissible range, lower limit (AC) permissible range, upper limit (AC) Line frequency • permissible range, lower limit • permissible range, upper limit 63 Hz Input current Current consumption (rated value) Current consumption, max. Input current, max. 20 A; at 264 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 20.4 to 28.8V Power loss, typ. Memory Work memory • integrated • expandable Load memory • integrated • Plug-in (SIMATIC Memory Card), max. Backup • present • present • yes; maintenance-free • without battery Yes for bit operations, typ. 0.085 µs; / instruction	Engineering with	
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Rated value (AC) • 120 V AC • 120 V AC • 230 V AC permissible range, lower limit (AC) permissible range, upper limit (AC) • 264 V Line frequency • permissible range, lower limit • permissible range, lower limit • permissible range, upper limit 63 Hz Input current Current consumption (rated value) Current consumption (rated value) 100 mA at 120 V AC; 50 mA at 240 V AC Current consumption, max. 300 mA at 120 V AC; 150 mA at 240 V AC Inrush current, max. 20 A; at 264 V Output current for backplane bus (5 V DC), max. 1 600 mA; Max. 5 V DC for SM and CM Encoder supply 24 V encoder supply • 24 V 20.4 to 28.8V Power loss Power loss Power loss Power loss, typ. 14 W Memory Work memory • integrated • expandable Load memory • integrated • Plug-in (SIMATIC Memory Card), max. Backup • present • prisent • without battery CPU processing times for bit operations, typ. 0.085 µs; / instruction		
• 120 V AC • 230 V AC • 230 V AC Permissible range, lower limit (AC) permissible range, upper limit (AC) Line frequency • permissible range, lower limit • permissible range, lower limit • permissible range, upper limit • parmissible range, upper limit • parmissib		
230 V AC permissible range, lower limit (AC)		
permissible range, lower limit (AC) 264 V Line frequency • permissible range, lower limit 47 Hz • permissible range, lower limit 63 Hz Input current Current consumption (rated value) 100 mA at 120 V AC; 50 mA at 240 V AC Current consumption, max. 300 mA at 120 V AC; 150 mA at 240 V AC Inrush current, max. 20 A; at 264 V Output current for backplane bus (5 V DC), max. 1 600 mA; Max. 5 V DC for SM and CM Encoder supply 24 V encoder supply 24 V 20.4 to 28.8V Power loss Power loss, typ. 14 W Memory Work memory • integrated 100 kbyte • expandable No Load memory • integrated 4 Mbyte • Plug-in (SIMATIC Memory Card), max. with SIMATIC memory card Backup • present Yes; maintenance-free • without battery CPU processing times for bit operations, typ. 0.085 µs; / instruction		Yes
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Line frequency • permissible range, lower limit • permissible range, upper limit • permissible range, upper limit • permissible range, upper limit • 63 Hz Input current Current consumption (rated value) Current consumption, max. 300 mA at 120 V AC; 50 mA at 240 V AC Current consumption, max. 20 A; at 264 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 20 4 to 28.8V Power loss Power loss, typ. 14 W Memory • integrated • expandable Load memory • integrated • expandable Load memory • integrated • Plug-in (SIMATIC Memory Card), max. Backup • present • without battery CPU processing times for bit operations, typ. 0.085 µs; / instruction		
permissible range, lower limit	permissible range, upper limit (AC)	264 V
• permissible range, upper limit Input current Current consumption (rated value) Current consumption, max. 300 mA at 120 V AC; 50 mA at 240 V AC Inrush current, max. 20 A; at 264 V 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 20.4 to 28.8V Power loss Power loss Power loss, typ. 14 W Memory Work memory • integrated • expandable Load memory • integrated • Plug-in (SIMATIC Memory Card), max. Backup • present • without battery CPU processing times for bit operations, typ. 100 mA at 120 V AC; 50 mA at 240 V AC 20 MA at 120 V AC; 150 mA at 240 V AC 20 MA at 120 V AC; 150 mA at 240 V AC 20 Mat 240 V AC 20	, ,	
Input current Current consumption (rated value) Current consumption, max. 300 mA at 120 V AC; 50 mA at 240 V AC Current consumption, max. 300 mA at 120 V AC; 150 mA at 240 V AC Inrush current Output current for backplane bus (5 V DC), max. Insurable of the consumption of the		
Current consumption (rated value) Current consumption, max. Inrush current, max. 20 A; at 264 V Cutput current for backplane bus (5 V DC), max. Encoder supply 24 V encoder supply 2 V encoder supply • 24 V Current loss Power loss Power loss, typ. Work memory • integrated • expandable • expandable Load memory • integrated • Plug-in (SIMATIC Memory Card), max. Backup • present • without battery for bit operations, typ. 100 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 150 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 50 mA at 240 V AC 300 mA at 120 V AC; 150 mA at 240 V AC 300 mA at 120 V AC; 150 mA at 240 V AC 300 mA at 120 V AC; 150 mA at 240 V AC 100 mA; Max. 5 V DC for SM and CM 4 Max. 5 V DC for SM and CM 4 W 4 W 4 W 4 Mbyte • present • without battery • present • without battery 7 es; maintenance-free • without battery 7 es CPU processing times for bit operations, typ. 0.085 µs; / instruction	permissible range, upper limit	63 Hz
Current consumption, max. Inrush current, max. 20 A; at 264 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 20.4 to 28.8V Power loss Power loss, typ. 14 W Memory Work memory • integrated • expandable Load memory • integrated • Plug-in (SIMATIC Memory Card), max. Backup • present • without battery Yes CPU processing times for bit operations, typ. 300 mA at 120 V AC; 150 mA at 240 V AC 160 mA; Max. 5 V DC for SM and CM 4 Moy Max. 5 V DC for SM and CM 4 W W **Without battery **Vestant Card of the stand of the	Input current	
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for backplane bus (5 V DC), max. Encoder supply 24 V encoder supply • 24 V Power loss Power loss, typ. 14 W Memory Work memory • integrated • expandable Load memory • integrated • Plug-in (SIMATIC Memory Card), max. Backup • present • without battery For bit operations, typ. 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 2 4 W byte 1 600 mA; Max. 5 V DC for SM and CM 2 4 W byte 1 600 mA; Max. 5 V DC for SM and CM 2 4 W byte 1 600 mA; Max. 5 V DC for SM and CM 2 6 No CM SM	Current consumption, max.	300 mA at 120 V AC; 150 mA at 240 V AC
for backplane bus (5 V DC), max. 1 600 mA; Max. 5 V DC for SM and CM Encoder supply 24 V encoder supply • 24 V 20.4 to 28.8V Power loss Power loss, typ. 14 W Memory Work memory • integrated • expandable Load memory • integrated • Plug-in (SIMATIC Memory Card), max. Backup • present • without battery For bit operations, typ. 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 1 600 mA; Max. 5 V DC for SM and CM 2 0.4 to 28.8V 1 4 W 1 4 W Memory • integrated • Vexpandable • Plug-in (SIMATIC memory card) 1 600 mA; Max. 5 V DC for SM and CM 2 0.4 to 28.8V Power loss 1 4 W Memory • integrated • Vexpandable • Plug-in (SIMATIC memory card) 1 600 mA; Max. 5 V DC for SM and CM 2 0.4 to 28.8V Power loss 1 4 W Memory • integrated • Vexpandable • Plug-in (SIMATIC memory card) 1 600 mA; Max. 5 V DC for SM and CM 2 0.4 to 28.8V Power loss 1 4 W Memory • integrated • Vexpandable • Plug-in (SIMATIC memory card) 1 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Inrush current, max.	20 A; at 264 V
Encoder supply 24 V encoder supply 24 V 20.4 to 28.8V Power loss Power loss, typ. 14 W Memory Work memory integrated expandable No Load memory integrated Plug-in (SIMATIC Memory Card), max. with SIMATIC memory card Backup present without battery For bit operations, typ. 0.085 µs; / instruction	Output current	
24 V encoder supply 24 V 20.4 to 28.8V Power loss Power loss, typ. 14 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 Yes; maintenance-free without battery Yes CPU processing times for bit operations, typ. 0.085 µs; / instruction	for backplane bus (5 V DC), max.	1 600 mA; Max. 5 V DC for SM and CM
24 V 20.4 to 28.8V Power loss Power loss, typ. 14 W Memory Work memory integrated expandable No Load memory integrated Plug-in (SIMATIC Memory Card), max. Backup present expresent	Encoder supply	
Power loss Power loss, typ. 14 W Memory Work memory integrated expandable No Load memory integrated Plug-in (SIMATIC Memory Card), max. Backup present vertical yes; maintenance-free without battery For bit operations, typ. 14 W Memory 100 kbyte No 4 Mbyte Vertical yes; maintenance-free Yes; maintenance-free Yes CPU processing times for bit operations, typ. 0.085 µs; / instruction	24 V encoder supply	
Power loss, typ. Memory Work memory integrated expandable Load memory integrated Plug-in (SIMATIC Memory Card), max. Backup epresent epresent ewithout battery Yes; maintenance-free yes for bit operations, typ. 14 W Whyte 100 kbyte No Work memory 4 Mbyte No With SIMATIC memory card Yes; maintenance-free Yes CPU processing times for bit operations, typ. 14 W Whyte No	• 24 V	20.4 to 28.8V
Memory Work memory integrated expandable Load memory integrated Plug-in (SIMATIC Memory Card), max. Backup present expresent without battery CPU processing times for bit operations, typ. 100 kbyte No 4 Mbyte Ves without battere 4 Mbyte Ves; maintenance-free Yes; maintenance-free Yes 0.085 µs; / instruction	Power loss	
Work memory integrated expandable No Load memory integrated Plug-in (SIMATIC Memory Card), max. Backup present without battery CPU processing times for bit operations, typ. 100 kbyte No 4 Mbyte 4 Mbyte Yes Yes; maintenance-free Yes; maintenance-free Yes O.085 µs; / instruction	Power loss, typ.	14 W
 integrated expandable No Load memory integrated Plug-in (SIMATIC Memory Card), max. Backup present with SIMATIC memory card Backup Operations times CPU processing times for bit operations, typ. 100 kbyte No 4 Mbyte with SIMATIC memory card CPU processing times O.085 µs; / instruction	Memory	
 expandable Load memory integrated Plug-in (SIMATIC Memory Card), max. Backup present with SIMATIC memory card Backup Operations times CPU processing times for bit operations, typ. 0.085 µs; / instruction 	Work memory	
Load memory integrated Plug-in (SIMATIC Memory Card), max. Backup present without battery CPU processing times for bit operations, typ. 4 Mbyte with SIMATIC memory card Yes; maintenance-free Yes 0.085 µs; / instruction	<u> </u>	100 kbyte
integrated Plug-in (SIMATIC Memory Card), max. Backup present without battery CPU processing times for bit operations, typ. 4 Mbyte with SIMATIC memory card Yes; maintenance-free Yes 0.085 μs; / instruction	expandable	No
 Plug-in (SIMATIC Memory Card), max. Backup present with SIMATIC memory card Yes; maintenance-free without battery Yes CPU processing times for bit operations, typ. 0.085 µs; / instruction 	Load memory	
Backup	•	4 Mbyte
 present without battery CPU processing times for bit operations, typ. 0.085 µs; / instruction 		with SIMATIC memory card
without battery CPU processing times for bit operations, typ. 0.085 μs; / instruction	·	
CPU processing times for bit operations, typ. 0.085 µs; / instruction	·	
for bit operations, typ. 0.085 µs; / instruction	•	Yes
	CPU processing times	
for word operations, typ. 1.7 µs; / instruction	for bit operations, typ.	·
	for word operations, typ.	1.7 μs; / instruction

for floating point grithment in the	2.2 yes / instruction
for floating point arithmetic, typ.	2.3 μs; / instruction
CPU-blocks	
Number of blocks (total)	DBs, FCs, FBs, counters and timers. The maximum number of addressable blocks ranges from 1 to 65535. There is no restriction, the entire working memory can be used
OB	
Number, max.	Limited only by RAM for code
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	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	
Number of modules per system, max.	3 comm. modules, 1 signal board, 8 signal modules
	o comm. modules, i signal board, o signal modules
Time of day	
Clock - Hardware clock (real time)	Voc
Hardware clock (real-time) Packup time	Yes
Backup time Deviation per day, may	480 h; Typical 60 s/month at 25 °C
Deviation per day, max. Digital inputs	OU SHIIDHIII AL 20 O
Digital inputs	A A c last a warder of
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	44
— up to 40 °C, max.	14
Input voltage	24 V
Rated value (DC) for signal "0"	5 V DC at 1 mA
for signal "0"for signal "1"	15 V DC at 1 mA
Input delay (for rated value of input voltage)	13 V DO at 2.3 IIIA
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
pa. a. 11013	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; Single phase : 3 at 100 kHz & 3 at 30 kHz, differential: 3 at 80 kHz
	& 3 at 30 kHz
Cable length	500 50 6 4 4 4 4 5 6
• 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	40
• "0" to "1", max.	10 ms; max.
• "1" to "0", max.	10 ms; max.
Switching frequency	411-
of the pulse outputs, with resistive load, max. Policy putsuits.	1 Hz
Relay outputs	10
Number of energing system may	10 machanically 10 million at rated load valtage 100 000
Number of operating cycles, max. Cable length	mechanically 10 million, at rated load voltage 100 000
Cable length • shielded, max.	500 m
snielded, max.unshielded, max.	150 m
♥ unomerueu, max.	100 111

Analog inputs	
Number of analog inputs	2
Input ranges	
• Voltage	Yes
Input ranges (rated values), voltages	
• 0 to +10 V	Yes
— Input resistance (0 to 10 V)	≥100k ohms
Cable length	
• shielded, max.	100 m; twisted and shielded
Analog outputs	
Number of analog outputs	0
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
Resolution with overrange (bit including sign), max.	10 bit
 Integration time, parameterizable 	Yes
Conversion time (per channel)	625 µs
Encoder	020 p3
Connectable encoders	
2-wire sensor	Yes
	163
1. Interface	PROFINET
Interface type	PROFINET
Isolated	Yes
automatic detection of transmission rate	Yes Yes
Autonegotiation Autocrossing	Yes
Interface types	res
• RJ 45 (Ethernet)	Yes
Protocols	165
PROFINET IO Controller	Yes
PROFINET IO Device	Yes; Also simultaneously with IO-Device functionality
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 device, 	2
max.	
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes; CM 1243-5 required
AS-Interface	Yes
Protocols (Ethernet)	Ves
TCP/IP Open IF communication	Yes
Open IE communication • TCP/IP	Vos
• ISO-on-TCP (RFC1006)	Yes Yes
• ISO-01-1CP (RFC1006) • UDP	Yes
Web server	100
• supported	Yes
User-defined websites	Yes
Further protocols	
MODBUS	Yes
communication functions / header	
S7 communication	
	Yes
supportedas server	Yes
as server as client	Yes
Number of connections	100
overall	16; dynamically
	i o, o, ilaminouny

est 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; Up to 512 KB of data per trace are possible
ntegrated Functions	
Frequency measurement	Yes
controlled positioning	Yes
Number of position-controlled positioning axes, max.	8
Number of positioning axes via pulse-direction interface	Up to 4 with SB 1222
PID controller	Yes
Number of alarm inputs	4
·	7
otential separation	
Potential separation digital inputs	5001/40/5 4 1 1
Potential separation digital inputs	500V AC for 1 minute
between the channels, in groups of Petertial congretion digital systemate	1
Potential separation digital outputs	Delen
Potential separation digital outputs	Relays
between the channels	No
between the channels, in groups of	2
MC	
Interference immunity against discharge of static electricity	
 Interference immunity against discharge of static 	Yes
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	V
 Interference immunity on supply lines acc. to IEC 61000-4-4 	Yes
Interference immunity on signal cables acc. to IEC	Yes
61000-4-4	163
Interference immunity against voltage surge	
Interference immunity on supply lines acc. to IEC	Yes
61000-4-5	
Interference immunity against conducted variable disturbance	e induced by high-frequency fields
 Interference immunity against high-frequency 	Yes
radiation 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
 Limit class B, for use in residential areas 	Yes; When appropriate measures are used to ensure compliance with
Assumes and along of numberation	the limits for Class B according to EN 55011
egree and class of protection	IDOO
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.	-20 °C; = Tmin (incl. condensation/frost); start-up @ 0 °C
• max.	60 °C; = Tmax
At cold restart, min.	0 °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.	2 000 m
 Ambient air temperature-barometric pressure- 	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin
altitude	(Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmi (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	Condition Conditions
 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	Very last discaland all devalate in the six
Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	V Ol 000 II for any and do not an analytic for a
— 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	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on
EN 60721-3-6	request
to chemically active substances according to EN 60721-3-6 to mechanically active substances according to	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust; *
to mechanically active substances according to EN 60721-3-6 Leago in industrial process technology.	1 co, crass oco ino. sano, dust,
Usage in industrial process technology — Against chemically active substances acc. to	Yes; Class 3 (excluding trichlorethylene)
EN 60654-4	
 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 Military testing according to MIL-I-46058C, Amendment 7 	Yes; Type 1 protection 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 / header	
configuration / programming / header	
Programming language	
— LAD	Yes
— FBD	Yes
— SCL	Yes
programming / cycle time monitoring / header	
adjustable	Yes
Dimensions	
Width	110 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	455 g
last modified:	4/1/2022 🖸