## **SIEMENS**

## **Data sheet**

## 6AG1212-1AE40-2XB0

SIPLUS S7-1200 CPU 1212C DC/DC/DC -40...+70°C with conformal coating based on 6ES7212-1AE40-0XB0 . compact "CPU, DC/DC/DC, onboard I/O: ""8" "DI 24 V DC;"" ""6 DO 24 V DC;"" 2" AI 0-10 V DC, Power supply: 20.4-28.8V DC, Program/data memory 75 KB

Product type designation  Supply Voltage  Rated value (DC)  • 24 V DC  permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Pease V Rated value (DC)  • Patter value (DC)  • permissible range, lower limit (DC)  permissibl	General information	
Rated value (DC)  • 24 V DC  permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Reverse polarity protection  Yes  Load voltage L+  • Rated value (DC) • permissible range, upper limit (DC)  permissible range, upper limit (DC)  28.8 V  Input current  Current consumption (rated value)  Current consumption (rated value)  Current consumption (rated value)  1 200 mA; CPU with all expansion modules  Inrush current, max.  1 200 mA; CPU with all expansion modules  Inrush current, max.  1 22 A; at 28.8 V DC  Output current  for backplane bus (S V DC), max.  Inrush current, max.  1 000 mA; Max. 5 V DC for SM and CM  Encoder supply  24 V L+ minus 4 V DC min.  Power loss, typ.  9 W  Momory  Work memory  integrated  Pug-in (SIMATIC Memory Card), max.  Backup  persent  persent  Pes; maintenance-free  veithout battery  Pes; maintenance-free  veith out battery  Pes; maintenance-free  veith out battery  Pes; mintenance-free  Pes; instruction  for vord operations, typ.  for bit operations, typ.  for bit operations, typ.  for bit operations, typ.  for bit operations, typ.  for both operations, typ.  for word operations, typ.  for word operations, typ.  for word operations, typ.  for word operations, typ.  for both operations typ.  for both operations, typ.  for both operations, typ.  for both operations, typ.  for both operations, typ.  for both operations typ.  for both operations typ.  for both operations	Product type designation	CPU 1212C DC/DC/DC
e 24 V DC permissible range, lower limit (DC) permissible range, upper limit (DC) 28.8 V Reverse polarity protection Load voltage L+  • Rated value (DC) • permissible range, lower limit (DC) permissible range, lower limit (DC) • permissible range, lower limit (DC) • permissible range, upper limit	Supply voltage	
permissible range, lower limit (DC) permissible range, upper limit (DC) 28.8 V Reverse polarity protection Ves Load voltage L+  • Rated value (DC) • permissible range, lower limit (DC) • permissible range, upper limit (DC) • permissible range, lower limit (DC)	Rated value (DC)	
permissible range, upper limit (DC) Reverse polarity protection Load voltage L+  • Rated value (DC) • permissible range, lower limit (DC) • permissible range, lower limit (DC) • permissible range, upper limit (DC) • permis	• 24 V DC	Yes
Reverse polarity protection  Load voltage L+	permissible range, lower limit (DC)	20.4 V
Load voltage L+  Rated value (DC)  Partissible range, lower limit (DC)  permissible range, upper limit (DC)  permissible range, upper limit (DC)  Partissible range, upper limit (DC)  Partit consumption (rated value)  Current consumption (rated value)  Current consumption, max.  1 200 mA; CPU with all expansion modules  Inrush current, max.  1 2A; at 28.8 V DC  Output current  for backplane bus (5 V DC), max.  1 1 000 mA; Max. 5 V DC for SM and CM  Encoder supply  24 V encoder supply  24 V encoder supply  Power loss.  Power loss, typ.  9 W  Momory  Work memory  integrated  Pupian (SIMATIC Memory Card), max.  Backup  Present  Present  Ves; maintenance-free  without battery  Yes  CPU processing times  for bit operations, typ.  for floating point arithmetic, typ.  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	permissible range, upper limit (DC)	28.8 V
Rated value (DC)  permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC)  permissible range, upper limit (DC)  28.8 V  Input current  Current consumption (rated value)  Current consumption, max. 1 200 mA; CPU with all expansion modules Inrush current, max.  1 2 A; at 28.8 V DC  Output current  for backplane bus (5 V DC), max.  1 000 mA; Max. 5 V DC for SM and CM  Encodor supply 24 V encoder supply 22 V L+ minus 4 V DC min.  Power loss  Power loss, typ.  9 W  Memory  Work memory  integrated point (SIMATIC Memory Card), max.  Backup  present present without battery  (PU processing times for bid operations, typ. for word operations, typ. for word operations, typ. for loating point arithmetic, typ.  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	Reverse polarity protection	Yes
permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC) 28.8 V	Load voltage L+	
permissible range, upper limit (DC) put current Current consumption (rated value)  Current consumption, max.  Inrush current, max.  1 200 mA; CPU with all expansion modules Inrush current, max.  1 200 mA; CPU with all expansion modules Inrush current, max.  1 200 mA; CPU with all expansion modules Inrush current, max.  1 200 mA; CPU with all expansion modules Inrush current  for backplane bus (5 V DC), max.  1 000 mA; Max. 5 V DC for SM and CM  Encoder supply  24 V encoder supply  24 V encoder supply  24 V encoder supply  9 W  Memory  Work loss  Power loss Power loss, typ.  9 W  Memory  Work memory  integrated  expandable  No  Load memory  integrated  Plug-in (SIMATIC Memory Card), max.  Backup  present  present  yes; maintenance-free  without battery  CPU processing times  for bid operations, typ.  for word operations, typ.  for word operations, typ.  for floating point arithmetic, typ.  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  Number, max.  Limited only by RAM for code	<ul> <li>Rated value (DC)</li> </ul>	24 V
Input current	<ul> <li>permissible range, lower limit (DC)</li> </ul>	20.4 V
Current consumption (rated value)  Current consumption, max.  1 200 mA; CPU with all expansion modules  Inrush current, max.  1 2 A; at 28.8 V DC  Output current  for backplane bus (5 V DC), max.  1 000 mA; Max. 5 V DC for SM and CM  Encoder supply  24 V encoder supply  24 V encoder supply  9 24 V  1 + minus 4 V DC min.  Power loss  Power loss, typ.  9 W  Memory  Work memory  integrated  expandable  No  Load memory  integrated  Plug-in (SIMATIC Memory Card), max.  Backup  present  present  yes; maintenance-free  without battery  Yes  for bid operations, typ.  1.7 µs; / instruction  for word operations, typ.  for floating point arithmetic, typ.  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  Number, max.  Limited only by RAM for code	<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.  Encoder supply  24 V encoder supply  • 24 V  L+ minus 4 V DC min.  Power loss  Power loss, typ.  9 W  Memory  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.  for word operations, typ.  for floating point arithmetic, typ.  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  I must at 280 V DC for SM and CM  L+ minus 4 V DC min.  1 000 mA; Max. 5 V DC for SM and CM  L+ minus 4 V DC min.  1 000 mA; max. 1 000 max. 1 000 max.  1 000 max. 1 000 max. 1 000 max.  1 000	Input current	
Inrush current, max.  Output current  for backplane bus (5 V DC), max.  1 000 mA; Max. 5 V DC for SM and CM  Encoder supply  24 V encoder supply  • 24 V	Current consumption (rated value)	400 mA
for backplane bus (5 V DC), max.  Encoder supply  24 V encoder supply  • 24 V  • 24 V    L+ minus 4 V DC min.   Power loss   Power loss   Power loss, typ.   • integrated   • expandable   No   Load memory  • integrated   • Plug-in (SIMATIC Memory Card), max.   Backup   • present   • without battery   • without battery   For bit operations, typ.   for bit operations, typ.   for word operations, typ.   for floating point arithmetic, typ.   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	Current consumption, max.	1 200 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.  9 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.  for floating point arithmetic, typ.  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	Inrush current, max.	12 A; at 28.8 V DC
Encoder supply  24 V encoder supply  • 24 V	Output current	
24 V L+ minus 4 V DC min.  Power loss Power loss, typ. 9 W  Memory  Work memory  integrated 75 kbyte expandable No  Load memory  integrated 1 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  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  Number, max. Limited only by RAM for code	for backplane bus (5 V DC), max.	1 000 mA; Max. 5 V DC for SM and CM
Power loss Power loss, typ.  Power loss, typ.  9 W  Memory  Work memory  integrated  expandable  Load memory  integrated  Plug-in (SIMATIC Memory Card), max.  Backup  present  eyers maintenance-free  without battery  CPU processing times  for bit operations, typ.  for word operations, typ.  for word operations, typ.  for floating point arithmetic, typ.  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  Number, max.  Limited only by RAM for code	Encoder supply	
Power loss, typ.  Power loss, typ.  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. for word operations, typ. for floating point arithmetic, typ.  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  Imited only by RAM for code	24 V encoder supply	
Power loss, typ.  Memory  Work memory  integrated 75 kbyte expandable No  Load memory integrated 1 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  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	• 24 V	L+ minus 4 V DC min.
Memory         • integrated       75 kbyte         • expandable       No         Load memory       • integrated         • Plug-in (SIMATIC Memory Card), max.       with SIMATIC memory card         Backup       Yes; maintenance-free         • present       Yes         • without battery       Yes         CPU processing times       To bit operations, typ.         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 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	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. for word operations, typ. for floating point arithmetic, typ.  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	Power loss, typ.	9 W
<ul> <li>integrated</li> <li>expandable</li> <li>No</li> </ul> Load memory <ul> <li>integrated</li> <li>Plug-in (SIMATIC Memory Card), max.</li> <li>Backup</li> <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> </ul> CPU-blocks Number of blocks (total) <ul> <li>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 <ul> <li>OB</li> <li>Number, max.</li> <li>Limited only by RAM for code</li> </ul> Limited only by RAM for code Limited only by RAM for code</li></ul>	Memory	
<ul> <li>integrated</li> <li>expandable</li> <li>No</li> </ul> Load memory <ul> <li>integrated</li> <li>Plug-in (SIMATIC Memory Card), max.</li> <li>Backup</li> <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> </ul> CPU-blocks Number of blocks (total) <ul> <li>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 <ul> <li>OB</li> <li>Number, max.</li> <li>Limited only by RAM for code</li> </ul> Limited only by RAM for code Limited only by RAM for code</li></ul>	Work memory	
<ul> <li>expandable</li> <li>Load memory</li> <li>integrated</li> <li>Plug-in (SIMATIC Memory Card), max.</li> <li>Backup</li> <li>present</li> <li>without battery</li> <li>Yes</li> <li>CPU processing times</li> <li>for bit operations, typ.</li> <li>for word operations, typ.</li> <li>for floating point arithmetic, typ.</li> <li>CPU-blocks</li> <li>Number of blocks (total)</li> <li>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</li> <li>OB</li> <li>Number, max.</li> <li>Limited only by RAM for code</li> </ul>	•	75 kbyte
Load memory	expandable	
<ul> <li>Plug-in (SIMATIC Memory Card), max.</li> <li>Backup</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 floating point arithmetic, typ.</li> <li>CPU-blocks</li> <li>Number of blocks (total)</li> <li>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</li> <li>OB</li> <li>Number, max.</li> <li>Limited only by RAM for code</li> </ul>		
<ul> <li>● present</li> <li>● without battery</li> <li>Yes</li> <li>CPU processing times</li> <li>for bit operations, typ.</li> <li>for word operations, typ.</li> <li>for floating point arithmetic, typ.</li> <li>CPU-blocks</li> <li>Number of blocks (total)</li> <li>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</li> <li>OB</li> <li>Number, max.</li> <li>Limited only by RAM for code</li> </ul>	• integrated	1 Mbyte
<ul> <li>● present</li> <li>● without battery</li> <li>Yes</li> <li>CPU processing times</li> <li>for bit operations, typ.</li> <li>for word operations, typ.</li> <li>for floating point arithmetic, typ.</li> <li>CPU-blocks</li> <li>Number of blocks (total)</li> <li>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</li> <li>OB</li> <li>Number, max.</li> <li>Limited only by RAM for code</li> </ul>	<ul> <li>Plug-in (SIMATIC Memory Card), max.</li> </ul>	with SIMATIC memory card
<ul> <li>◆ without battery</li> <li>CPU processing times</li> <li>for bit operations, typ.</li> <li>for word operations, typ.</li> <li>for floating point arithmetic, typ.</li> <li>CPU-blocks</li> <li>Number of blocks (total)</li> <li>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</li> <li>OB</li> <li>♦ Number, max.</li> <li>Limited only by RAM for code</li> </ul>	Backup	
CPU processing times  for bit operations, typ.  for word operations, typ.  for floating point arithmetic, typ.  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	• present	Yes; maintenance-free
for bit operations, typ.  for word operations, typ.  for floating point arithmetic, typ.  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  Number, max.  Limited only by RAM for code	<ul><li>without battery</li></ul>	Yes
for word operations, typ.  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	CPU processing times	
for floating point arithmetic, typ.  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	for bit operations, typ.	0.085 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	for word operations, typ.	1.7 μs; / instruction
Number of blocks (total)  DBs, FCs, FBs, counters and timers. The maximum number of addressable blocks ranges from 1 to 65535. There is no restriction, the entire working memory can be used  OB  Number, max.  Limited only by RAM for code		
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	CPU-blocks	
Number, max.     Limited only by RAM for code	Number of blocks (total)	addressable blocks ranges from 1 to 65535. There is no restriction, the
	OB	
Data areas and their retentivity	Number, max.	Limited only by RAM for code
	Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max. 10 kbyte	Retentive data area (incl. timers, counters, flags), max.	10 kbyte
Flag	Flag	

<ul><li>Number, max.</li></ul>	4 kbyte; Size of bit memory address area
Local data	
per priority class, max.	16 kbyte
Address area	,
Process image	
Inputs, adjustable	1 kbyte
Outputs, adjustable	1 kbyte
Hardware configuration	1 hoyte
	2 com modulos, no signal heard can be used. 2 signal modulos
Number of modules per system, max.	3 com. modules, no signal board can be used, 2 signal modules
Time of day	
Clock	N.
Hardware clock (real-time)	Yes
Backup time	480 h; Typical
Digital inputs	
Number of digital inputs	8; Integrated
of which inputs usable for technological functions	4; HSC (High Speed Counting)
Source/sink input	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	8
Input voltage	
<ul><li>Rated value (DC)</li></ul>	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	Yes
for technological functions	
— parameterizable	Single phase: 3 @ 100 kHz & 1 @ 30 kHz, differential: 3 @ 80 kHz & 1 @ 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	6
of which high-speed outputs	4; 100 kHz Pulse Train Output
Limitation of inductive shutdown voltage to	L+ (-48 V)
Switching capacity of the outputs	
with resistive load, max.	0.5 A
on lamp load, max.	5 W
Output voltage	· · ·
• for signal "0", max.	0.1 V; with 10 kOhm load
Output current	V. T., Will To KOMM Jour
for signal "1" rated value	0.5 A
for signal "0" residual current, max.	0.3 A 0.1 mA
Output delay with resistive load	V. I HILL
• "0" to "1", max.	1 μs
• "1" to "0", max.	τ μs 5 μs
Switching frequency	ο μο
	100 kHz
of the pulse outputs, with resistive load, max.  Pelay outputs	TOO KITZ
Relay outputs	0
Number of relay outputs  Cable length	0
Cable length	

<ul><li>shielded, max.</li></ul>	500 m
• unshielded, max.	150 m
Analog inputs	
Number of analog inputs	2
Input ranges	
<ul> <li>Voltage</li> </ul>	Yes
Input ranges (rated values), voltages	
• 0 to +10 V	Yes
<ul><li>— Input resistance (0 to 10 V)</li></ul>	≥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	
<ul> <li>Resolution with overrange (bit including sign), max.</li> </ul>	10 bit
<ul> <li>Integration time, parameterizable</li> </ul>	Yes
Conversion time (per channel)	625 µs
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
1. Interface	
Isolated	Yes
automatic detection of transmission rate	Yes
Autonegotiation	Yes
Autorregoriation	Yes
_	165
Interface types	V
• RJ 45 (Ethernet)	Yes
Protocols	V.
PROFINET IO Controller	Yes
PROFINET IO Device	Yes
Open IE communication	Yes
Web server	Yes
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,</li> </ul>	2
max.	-
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIBUS	Yes; CM 1243-5 required
AS-Interface	Yes
Protocols (Ethernet)	165
	Vac
• TCP/IP	Yes
Open IE communication	V.
• 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	
<ul><li>supported</li></ul>	Yes
• as server	Yes
• as client	Yes
Number of connections	
overall	16; dynamically
Test commissioning functions	
Status/control	
Status/control variable	Yes
Variables	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
Forcing	imputa/outputa, memory bita, bba, distributed 1/03, timera, countera
	Yes
• Forcing	res
Diagnostic buffer	Ves
• present	Yes
Traces	0.11 / 5/0//0 / 1 /
Number of configurable Traces	2; Up to 512 KB of data per trace are possible
Integrated Functions	
Number of counters	4
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 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	
Potential separation digital inputs	
Potential separation digital inputs	500V AC for 1 minute
	000 V / (0 10) 1 minute
	1
between the channels, in groups of	1
between the channels, in groups of  Potential separation digital outputs	
between the channels, in groups of  Potential separation digital outputs      Potential separation digital outputs	Yes
<ul> <li>between the channels, in groups of</li> <li>Potential separation digital outputs</li> <li>Potential separation digital outputs</li> <li>between the channels</li> </ul>	Yes No
<ul> <li>between the channels, in groups of</li> <li>Potential separation digital outputs</li> <li>Potential separation digital outputs</li> <li>between the channels</li> <li>between the channels, in groups of</li> </ul>	Yes
<ul> <li>between the channels, in groups of</li> <li>Potential separation digital outputs</li> <li>Potential separation digital outputs</li> <li>between the channels</li> <li>between the channels, in groups of</li> </ul> EMC	Yes No
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity	Yes No 1
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2	Yes No 1 Yes
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     Test voltage at air discharge	Yes No 1  Yes  kV
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     Test voltage at air discharge     Test voltage at contact discharge	Yes No 1 Yes
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     Test voltage at air discharge	Yes No 1  Yes  kV
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     Test voltage at air discharge     Test voltage at contact discharge	Yes No 1  Yes  kV
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC	Yes No 1  Yes 8 kV 6 kV
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC 61000-4-4     Interference immunity on signal cables acc. to IEC	Yes No 1  Yes 8 kV 6 kV
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC 61000-4-4     Interference immunity on signal cables acc. to IEC 61000-4-4	Yes No 1  Yes 8 kV 6 kV
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference  Interference immunity on supply lines acc. to IEC 61000-4-4  Interference immunity against voltage surge     Interference immunity against voltage surge     Interference immunity on supply lines acc. to IEC 61000-4-5	Yes No 1  Yes 8 kV 6 kV  Yes Yes
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC 61000-4-4     Interference immunity on signal cables acc. to IEC 61000-4-4  Interference immunity against voltage surge     Interference immunity on supply lines acc. to IEC	Yes No 1  Yes 8 kV 6 kV  Yes Yes
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC 61000-4-4     Interference immunity on signal cables acc. to IEC 61000-4-4  Interference immunity against voltage surge     Interference immunity against conducted variable disturbance     Interference immunity against conducted variable disturbance     Interference immunity against high-frequency radiation acc. to IEC 61000-4-6	Yes No 1  Yes 8 kV 6 kV  Yes Yes Yes  Yes
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC 61000-4-4     Interference immunity on signal cables acc. to IEC 61000-4-4  Interference immunity against voltage surge     Interference immunity on supply lines acc. to IEC 61000-4-5  Interference immunity against conducted variable disturbance Interference immunity against high-frequency radiation acc. to IEC 61000-4-6  Emission of radio interference acc. to EN 55 011	Yes No 1  Yes 8 kV 6 kV  Yes Yes  Yes  Yes  Yes
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge     Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC 61000-4-4     Interference immunity on signal cables acc. to IEC 61000-4-4  Interference immunity against voltage surge     Interference immunity against voltage surge     Interference immunity against conducted variable disturbance     Interference immunity against high-frequency 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 No 1  Yes 8 kV 6 kV  Yes Yes Yes Yes Yes Group 1
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC 61000-4-4     Interference immunity on signal cables acc. to IEC 61000-4-4  Interference immunity against voltage surge     Interference immunity on supply lines acc. to IEC 61000-4-5  Interference immunity against conducted variable disturbance Interference immunity against high-frequency radiation acc. to IEC 61000-4-6  Emission of radio interference acc. to EN 55 011	Yes No 1  Yes 8 kV 6 kV  Yes Yes Yes  Yes  Yes  Yes  Yes  Yes
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference  Interference immunity on supply lines acc. to IEC 61000-4-4  Interference immunity on signal cables acc. to IEC 61000-4-4  Interference immunity against voltage surge  Interference immunity against voltage surge  Interference immunity against conducted variable disturbance Interference immunity against high-frequency radiation acc. to IEC 61000-4-6  Emission of radio interference acc. to EN 55 011  Limit class A, for use in industrial areas  Limit class B, for use in residential areas	Yes No 1  Yes 8 kV 6 kV  Yes Yes Yes Yes Yes Group 1
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference     Interference immunity on supply lines acc. to IEC 61000-4-4     Interference immunity on signal cables acc. to IEC 61000-4-4  Interference immunity against voltage surge     Interference immunity against conducted variable disturbance     Interference immunity against conducted variable disturbance     Interference immunity against high-frequency radiation acc. to IEC 61000-4-6  Emission of radio interference acc. to EN 55 011     Limit class A, for use in industrial areas     Limit class B, for use in residential areas	Yes No 1  Yes 8 kV 6 kV  Yes Yes Yes  Yes  Yes  Yes  Yes  Yes
between the channels, in groups of  Potential separation digital outputs     Potential separation digital outputs     between the channels     between the channels, in groups of  EMC  Interference immunity against discharge of static electricity     Interference immunity against discharge of static electricity acc. to IEC 61000-4-2     — Test voltage at air discharge     — Test voltage at contact discharge  Interference immunity to cable-borne interference  Interference immunity on supply lines acc. to IEC 61000-4-4  Interference immunity on signal cables acc. to IEC 61000-4-4  Interference immunity against voltage surge  Interference immunity against voltage surge  Interference immunity against conducted variable disturbance Interference immunity against high-frequency radiation acc. to IEC 61000-4-6  Emission of radio interference acc. to EN 55 011  Limit class A, for use in industrial areas  Limit class B, for use in residential areas	Yes No 1  Yes 8 kV 6 kV  Yes Yes Yes  Yes  Yes  Yes  Yes  Yes

(Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)  Relative humidity  • With condensation, tested in accordance with IEC condensation conditions)  Vibration resistance during operation acc. to IEC 60068-2-6  • Operation, tested according to IEC 60068-2-6  • Operation, tested according to IEC 60068-2-6  • Operation, tested according to IEC 60068-2-7  Resistance  Coclants and lubricants  — Resistant to commercially available coolants and lubricants  — Resistance  Colonal sand lubricants  — Resistance  - to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to hemically active substances according to EN 60721-3-6  — to hemically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-6  — to represent the substances according to EN 60721-3-7  — to represent the substances according to EN 60721-3-7  — to represent the substances according to EN 60721-3-7  — to represent the substances according to EN 60721-3-7  — to represent the substances according to EN 60721-3-7  — to represent the substances according to	Ambient temperature during operation	
digital inputs 4, digital outputs 3, analog inputs 2 (no adjacent points) with horizontal mounting position. Trax > 60° C number of simultaneously switched-or digital inputs 3, digital outputs 2, analog inputs 0 (no adjacent points) with horizontal mounting position 2-25° C  Ambient temperature during storage/transportation  • min.  • max.  70° C  Altitude during operation relating to sea level  • Installation altitude above sea level, max.  • Ambient at iremperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient at iremperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient at iremperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient at iremperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient at iremperature during 0 sea level  • Installation altitude above sea level, max.  • Ambient at iremperature-barometric pressure-altitude  • Installation altitude above sea level, max.  • Ambient at iremperature during 0 sea level  • Installation altitude above sea level, max.  • Ambient at iremperature during 0 sea level  • Installation altitude above sea level, max.  • With condensation, tested above sea level, max.  • With condensation, tested in accordance with IEC 60088-2-8  • Operation, tested in accordance with IEC 60088-2-8  • Operation, tested of unity operation according to IEC 60088-2-8  • Operation, tested according to IEC 60088-2-8  • Operation, tested according to IEC 60088-2-8  • Protendically active substances according to IEC 60088-2-8  • No 180721-3-3  • To the menically active substances according to IEC 60088-2-8  • No 180721-3-3  • To the menically active substances according to IEC 60088-2-8  • No 180721-3-3  • To the menically active substances according to IEC 60088-2-8  • No 180721-3-3  • To the menically active substances according to IEC 60088-2-8  • No 180721-3-3  • To the menically active substances according to IEC 60088-2-8  • No	• min.	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C
Ambient temperature during storage/transportation  in in. — 40 °C		digital inputs 4, digital outputs 3, analog inputs 2 (no adjacent points) with horizontal mounting position; Tmax > +60 °C number of simultaneously switched-on digital inputs 3, digital outputs 2, analog inputs 0 (no adjacent points) with horizontal mounting position
* min.     * min.     * max.     * 70 °C  Aftitude during operation relating to sea level     * Installation altitude above sea level, max.     * Ambient alt remperature-barometric pressure-altitude     * Timin		-25 °C
* max.     * Affitude during operation relating to sea level     * Installation altitude above sea level, max.     * Ambient air temperature-barometric pressure-altitude     * Iffinal and thitude above sea level, max.     * Ambient air temperature-barometric pressure-altitude     * Iffinal and thitude above sea level, max.     * Ambient air temperature-barometric pressure-altitude     * Iffinal and thitude above sea level, max.     * Ambient air temperature-barometric pressure-altitude     * Iffinal and thitude above sea level, max.     * Ambient air temperature-barometric pressure-altitude     * Iffinal and thitude above sea level, max.     * Ambient air temperature-barometric pressure-altitude     * Iffinal and thitude above sea level, max.     * Ambient air temperature-barometric pressure-altitude     * Iffinal and thitude above sea level, max.     * Iffinal and thitude and		40.00
Altitude during operation relating to sea level  Installation altitude above sea level, max.  Ambient air temperature-barometric pressure-altitude  Timin 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 - 10 k) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 10 k) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 10 k) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 10 k) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 10 k) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 10 k) at 50 hPa (+3 500 m +3 500 m) // Tmin (Tmax - 10 k) at 50 hPa (+3 500 m +4 500 m) // Tmin (Tmax - 10 k) at 50 hPa (+3 500 m +5 600 m) // Tmin (Tma		
• Installation altitude above sea level, max.     • Ambient air temperature-barometric pressure-altitude     • Ambient air temperature-barometric pressure-altitude     • With condensation, tested in accordance with IEC 60068-2-38, max.  **Condensation resistance during operation acc. to IEC 60068-2-38, max.  **Vibrations**      • Vibration resistance during operation acc. to IEC 60068-2-6      • Operation, tested according to IEC 60068-2-6      • Operation, tested according to IEC 60068-2-7      • Pessistance  Coolants and lubricants      — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems      — to biologically active substances according to EN 60721-3-3      — to enhermically active substances according to EN 60721-3-3  Use on ships/at sea      — to biologically active substances according to EN 60721-3-4      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active substances according to EN 60721-3-6      — to enhermically active subst		70 C
Ambient air temperature-barometric pressure- altitude    Timin _ Timax at 1 140 kPa 758 kPa (-1 000 m + 2 000 m ) + 3 000 m) // Timin ((Timax - 10 k) at 756 kPa 658 kPa (-2 2 000 m + 3 000 m) // Timin ((Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 3 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 20 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 20 000 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 20 00 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 000 m + 20 00 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 00 m + 20 00 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 00 m + 20 00 m) // Timin (Timax - 20 K) at 658 kPa (-2 2 00 m + 20 00 m) // Timin (Timax - 20 K) at 600 m + 20 00 m) // Timin (Timax - 20 K) at 600 m + 20 00 m) // Timin (Timax - 20 K) at 600 m + 20 00 m) // Timin (Timax - 20 K) at 600 m + 20 00 m) // Timin (Timax - 20 K) at 600 m + 20 00 m) // Timin (Timax - 20 K) at 600 m + 20 00 m) // Timin (Timax - 20 K) at 600 m + 20 00 m + 20 00 m) /		5 000 m
altitude  (Tmax -10 K) at 795 hPa 568 hPa (+2 2000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 200 m +5 500 m) // Tmin (Tmax -20 K) at 60068-2-52 (pack shador ocolditions)  10008-2-35		
With condensation, tested in accordance with IEC 60088-2-38, max.      Vibrations      Vibration resistance during operation acc. to IEC 60088-2-6      Operation, tested according to IEC 60068-2-6      Ves      Shock testing	·	(Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin
### Condensation conditions    *Vibrations	•	
■ Vibration resistance during operation acc. to IEC 60068-2-6     ■ Operation, tested according to IEC 60068-2-6     ■ Operation, tested according to IEC 60068-2-7     ■ Ves  Shock testing     ■ lested according to IEC 60068-2-27     ■ Ves  Coolants and lubricants     ■ Resistant to commercially available coolants and lubricants     ■ Resistant to commercially available coolants and lubricants     ■ In biologically active substances according to EN 60721-3-3     ■ To chemically active substances according to EN 60721-3-3     ■ To mechanically active substances according to EN 60721-3-3     ■ To hiologically active substances according to EN 60721-3-3     ■ To hiologically active substances according to EN 60721-3-6     ■ To hemically active substances according to EN 60721-3-6     ■ To mechanically active substances according to EN 60721-3-6     ■ To mechanically active substances according to EN 60721-3-6     ■ To mechanically active substances according to EN 60721-3-6     ■ To mechanically active substances according to EN 60721-3-6     ■ Usage in industrial process technology     ■ Against chemically active substances acc. to EN 6068-4     ■ Environmental conditions for process, measuring and control systems acc. to EN 60721, EN 6068-4 and ANSI/ISA-71.04  Conformal coating      ■ Coatings for printed circuit board assemblies acc. to EN 60721, EN 6068-4 and ANSI/ISA-71.04  Conformal coating      ■ Coatings for printed circuit board assemblies acc. to EN 6068-3     ■ Willitary testing according to MIL-1-46058C, Amendment 7     ■ Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPP-C-C-830A	60068-2-38, max.	
Shock testing  Itested according to IEC 60068-2-6  Operation, tested according to IEC 60068-2-7  Resistance  Coolants and lubricants  Resistant to commercially available coolants and lubricants  The biologically active substances according to EN 60721-3-3  The one-chanically active substances according to EN 60721-3-6  The one-chanically active substances according to EN 60721-3-6  The one-mically active substances according to EN 60721-3-3 class 324 permissible); test EN 60721-3-3 class 324 permis		
● lested according to IEC 60068-2-27  Pesistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-6  — to chemically active substances according to EN 60721-3-6  — to chemically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to chemically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to b	60068-2-6	
Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  Usage in industrial process technology  — Against chemically active substances acc. to EN 60664-4  — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Remark  — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04  Remark  — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04  Protection against fouling acc. to EN 60664-3  • Military testing according to MILI-46058C, Amendment 7  • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A		Yes
Resistance  Coolants and lubricants  — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60684-4 — Environmental conditions for process, measuring and conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04  Conformal coating  • Coatings for printed circuit board assemblies acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	-	V
Coolants and lubricants  — Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to biologically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to biologically active substances according to EN 60721-3-3  Use on ships/at sea — to biologically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6  Usage in industrial process technology — Against chemically active substances acc. to EN 60684-4 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/SA-71.04  Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/SA-71.04  Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/SA-71.04  Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/SA-71.04  Remark — Note regarding classification of environmental conditions acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A		Yes
- Resistant to commercially available coolants and lubricants  Use in stationary industrial systems  - to biologically active substances according to EN 60721-3-3  - to chemically active substances according to EN 60721-3-3  - to mechanically active substances according to EN 60721-3-3  - to mechanically active substances according to EN 60721-3-3  - to mechanically active substances according to EN 60721-3-6  - to biologically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to chemically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-6  - to mechanically active substances according to EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)  - Coatings for printed circuit board assemblies acc. to EN 60664-3  - Military testing according to MIL-1-46058C, Amendment 7  - Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to PC-CC-830		
Use in stationary industrial systems  — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to biologically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6  Usage in industrial process technology — Against chemically active substances acc. to EN 60684-4 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04  Conformal coating  • Coatings for printed circuit board assemblies acc. to EN 6064-3 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Resistant to commercially available coolants	Yes; Incl. diesel and oil droplets in the air
— to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3  Use on ships/at sea — to biologically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6  Usage in industrial process technology — Against chemically active substances acc. to EN 60654-4 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Remark — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04  Conformal coating  • Coatings for printed circuit board assemblies acc. to EN 60664-3 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-1-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A		
EN 60721-3-3  — to chemically active substances according to EN 60721-3-3  — to mechanically active substances according to EN 60721-3-3  Use on ships/at sea  — to biologically active substances according to EN 60721-3-6  — to chemically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60721-3-6  — to mechanically active substances according to EN 60068-2-52  (severity degree 3): *  Yes; Class 6B3 on request  Yes; Class 6B3 on r		Yes: Class 3R2 mold fungus and dry rot spores (with the exception of
EN 60721-3-3  — to mechanically active substances according to EN 60721-3-6 — to biologically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60068-2-52 (severity degree 3);  Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 incl. sand, dust;  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or request  Yes; Class 6B3 mold and fungal spores (excluding fauna); Class 6B3 or r	EN 60721-3-3	fauna); Class 3B3 on request
Use on ships/at sea  — to biologically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6  Usage in industrial process technology — Against chemically active substances acc. to EN 60654-4 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  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!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied plug covers must remain in place over the unused interfaces during operation!  *The supplied	EN 60721-3-3	(severity degree 3); *
- to biologically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6  Usage in industrial process technology - Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Remark - Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04  Conformal coating  • Coatings for printed circuit board assemblies acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	EN 60721-3-3	Too, Glade de Filiol. Galla, daoi,
- to chemically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6  Usage in industrial process technology - Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  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!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * Yes; Class 2 for high reliability  Yes; Type 1 protection  Yes; Discoloration of coating possible during service life  Yes; Conformal coating, Class A	to biologically active substances according to	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 or request
Usage in industrial process technology  — Against chemically active substances acc. to EN 60654-4  — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Remark  — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04  Conformal coating  • Coatings for printed circuit board assemblies acc. to EN 60864-3  • Military testing according to MIL-I-46058C, Amendment 7  • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A  Yes; Class 3 (excluding trichlorethylene)  Yes; Class 2 for high reliability  Yes; Type 1 protection  Yes; Type 1 protection  Yes; Discoloration of coating possible during service life  Yes; Conformal coating, Class A	,	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52
— Against chemically active substances acc. to EN 60654-4  — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  Remark  — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04  Conformal coating  • Coatings for printed circuit board assemblies acc. to EN 61086  • Protection against fouling acc. to EN 6064-3  • Military testing according to MIL-I-46058C, Amendment 7  • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A  Yes; Class 3 (excluding trichlorethylene)  Yes; Level GX group A/B (excluding trichlorethylene) that is concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * Yes; Class 2 for high reliability  Yes; Type 1 protection  Yes; Discoloration of coating possible during service life  Yes; Conformal coating, Class A		Yes; Class 6S3 incl. sand, dust; *
EN 60654-4  — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04  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!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * Yes; Class 2 for high reliability  Yes; Type 1 protection  • Military testing according to MIL-I-46058C, Amendment 7  • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A  Yes; Conformal coating, Class A	Usage in industrial process technology	
measuring and control systems acc. to ANSI/ISA-71.04  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!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * The supplied plug covers must remain in place over the unused interfaces during operation!  * Yes; Class 2 for high reliability  Yes; Type 1 protection  Yes; Type 1 protection  Yes; Type 1 protection  Yes; Discoloration of coating possible during service life  Yes; Conformal coating, Class A		
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> <li>* The supplied plug covers must remain in place over the unused interfaces during operation!</li> <li>* Conformal coating</li> <li>• Coatings for printed circuit board assemblies acc. to EN 61086</li> <li>• Protection against fouling acc. to EN 60664-3</li> <li>• Military testing according to MIL-I-46058C, Amendment 7</li> <li>• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> <li>* The supplied plug covers must remain in place over the unused interfaces during operation!</li> <li>* Yes; Class 2 for high reliability</li> <li>Yes; Type 1 protection</li> <li>Yes; Discoloration of coating possible during service life</li> <li>Yes; Conformal coating, Class A</li> </ul>	measuring and control systems acc. to ANSI/ISA-	concentrations up to the limits of EN 60721-3-3 class 3C4 permissible);
conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 interfaces during operation!  Conformal coating  Coatings for printed circuit board assemblies acc. to EN 61086  Protection against fouling acc. to EN 60664-3  Military testing according to MIL-I-46058C, Amendment 7  Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A  interfaces during operation!  Yes; Class 2 for high reliability  Yes; Type 1 protection  Yes; Discoloration of coating possible during service life  Yes; Conformal coating, Class A	Remark	
<ul> <li>Coatings for printed circuit board assemblies acc. to EN 61086</li> <li>Protection against fouling acc. to EN 60664-3</li> <li>Military testing according to MIL-I-46058C, Amendment 7</li> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> <li>Yes; Class 2 for high reliability</li> <li>Yes; Type 1 protection</li> <li>Yes; Discoloration of coating possible during service life</li> <li>Yes; Conformal coating, Class A</li> </ul>	conditions acc. to EN 60721, EN 60654-4 and	
<ul> <li>EN 61086</li> <li>Protection against fouling acc. to EN 60664-3</li> <li>Military testing according to MIL-I-46058C, Amendment 7</li> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> <li>Yes; Type 1 protection</li> <li>Yes; Discoloration of coating possible during service life</li> <li>Yes; Conformal coating, Class A</li> </ul>	Conformal coating	
<ul> <li>Military testing according to MIL-I-46058C, Amendment 7</li> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> <li>Yes; Discoloration of coating possible during service life</li> <li>Yes; Conformal coating, Class A</li> </ul>		Yes; Class 2 for high reliability
Amendment 7  • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A  Yes; Conformal coating, Class A	<ul> <li>Protection against fouling acc. to EN 60664-3</li> </ul>	Yes; Type 1 protection
Insulating Compound for Printed Board Assemblies according to IPC-CC-830A		Yes; Discoloration of coating possible during service life
Configuration	Insulating Compound for Printed Board Assemblies	Yes; Conformal coating, Class A
	Configuration	

Programming language	
— LAD	Yes
— FBD	Yes
— SCL	Yes
Cycle time monitoring	
<ul><li>adjustable</li></ul>	Yes
Dimensions	
Width	90 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	370 g

last modified: 1/16/2021 🖸