## **SIEMENS**

## Data sheet

## 6AG1341-1AH02-7AE0

SIPLUS S7-300, CP 341 -25...+70 °C with conformal coating based on 6ES7341-1AH02-0AE0 . Communications processor with RS232C interface (RS-232-C) incl. configuration package auf CD-ROM



General information	
Product type designation	CP 341
Supply voltage	
Rated value (DC)	
• 24 V DC	Yes
Input current	
from supply voltage L+, max.	100 mA
from backplane bus 5 V DC, max.	70 mA
Power loss	
Power loss, typ.	1.6 W
Power loss, max.	2.4 W
Interferen	
Interfaces	
Number of interfaces	1; Isolated
Interface physics, RS 232C (V.24)	Yes
· · · · ·	0.0.14:3/-
Transmission rate, min.	0.3 kbit/s

Cable length, max.     15 m     supported printers     Sorial printers     Connector type     Sorial printers     Sorial printers     Connector type     Sorial printers     Sorial p	Point-to-point connection	
• Connector type       9-pin sub D connector         Integrated protocol driver	Cable length, max.	15 m
Integrated protocol driver	<ul> <li>supported printers</li> </ul>	Serial printers
- 3964 (R)       Yes         - ASCII       Yes         - RK512       Yes         Telegram length, max.       4 096 byte         - ASCII       4 096 byte         - RK 512       4 096 byte         - with ASCII protocol, max.       115 2 kbit/s         - with ASCII protocol, max.       115 2 kbit/s         - with ASCI protocol, max.       115 2 kbit/s         - with RK 512 protocol, max.       115 2 kbit/s         CE mark       Ves         UL approval       Yes; File E239877         RCM (formerly C-TICK)       Ves         KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       70 °C; = Tmin         Ambient temperature during storage/transportation       -0 °C         • min.       -0 °C         • max.       70 °C;         Altitude during operation relating to sea level       5000 m         • Installation relating to sea level       -0 °C         • Installation attitude above sea level, max. </td <td>Connector type</td> <td>9-pin sub D connector</td>	Connector type	9-pin sub D connector
- ASCII       Yes         - RK512       Yes         Telegram length, max.       4 096 byte         - 3964 (R)       4 096 byte         - ASCII       4 096 byte         - RK 512       4 096 byte         - with 3964 (R) protocol, max.       115.2 kbit/s         - with ASCII protocol, max.       115.2 kbit/s         - with ASCI protocol, max.       115.2 kbit/s         - with RK 512 protocol, max.       115.2 kbit/s         - with RK 512 protocol, max.       115.2 kbit/s         CE mark       Ves         UL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         KC approval       Yes         Anbient temperature during operation	Integrated protocol driver	
- RK512     Yes       Telegram length, max.     4 096 byte       - 3964 (R)     4 096 byte       - ASCII     4 096 byte       - ASCII     4 096 byte       - RK 512     4 096 byte       Transmission speed, RS 232     - with 3964 (R) protocol, max.       - with 3964 (R) protocol, max.     115.2 kbit/s       - with ASCII protocol, max.     115.2 kbit/s       - with ritter driver, max.     115.2 kbit/s       - with RK 512 protocol, max.     115.2 kbit/s       - with RK 512 protocol, max.     115.2 kbit/s       CE mark     Yes       UL approval     Yes: File E239877       RCM (formerly C-TICK)     Yes       KC approval     Yes       Anbient temperature during operation     Yes       min.     -25 °C; = Tmin       • mix.     70 °C; = Tmax; 60 °C @ UL/CUL, ATEX and FM use       Ambient temperature during storage/transportation     -       • min.     -40 °C       • max.     70 °C;       Altitude during operation relating to sea level     -       • Installation altitude above sea level, max.     5000 m       • Ambient air temperature-barometric pressure- altitude     5000 m       • Ambient air temperature-barometric pressure- altitude     5000 m	— 3964 (R)	Yes
Telegran length, max.       4 096 byte         - 3964 (R)       4 096 byte         - ASCII       4 096 byte         - RK 512       4 096 byte         Transmission speed, RS 232       -         - with 3964 (R) protocol, max.       115.2 kbit/s         - with ASCII protocol, max.       115.2 kbit/s         - with ASCI protocol, max.       115.2 kbit/s         - with ASCI protocol, max.       115.2 kbit/s         - with R 512 protocol, max.       115.2 kbit/s         - with R 512 protocol, max.       115.2 kbit/s         - with R 512 protocol, max.       115.2 kbit/s         Standards, approvals, certificates       CE mark         Ves       Yes         CE mark       Yes         U. approval       Yes         CA molient temperature during operation       Yes         Ambient temperature during storage/transportation       -25 °C; = Tmin         • max,       70 °C         Ambient temperature during storage/transportation       -40 °C         • max,       70 °C         Ambient at temperature barometric pressure- atitude       5000 m         • Installation altitude above sea level, max.       5 000 m         • Installation altitude above sea level, max.       5 000 m	— ASCII	Yes
- 3964 (R)       4 096 byte         - ASCII       4 096 byte         - RK 512       4 096 byte         Transmission speed, RS 232       -         - with 3964 (R) protocol, max.       115.2 kbit/s         - with ASCII protocol, max.       115.2 kbit/s         - with ASCI protocol, max.       115.2 kbit/s         - with RK 512 protocol, max.       115.2 kbit/s         Standards, approvals, certificates       CE mark         VL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         Ac Arbient Conditions       Yes         Ambient temperature during operation       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       5 000 m         • Installation altitude above sea level, max.       5 000 m         • Installation altitude above sea level, max.       5 000 m         • Inst	— RK512	Yes
ASCII       4 096 byte         RK 512       4 096 byte         Transmission speed, RS 232       with 3964 (R) protocol, max.         with 3964 (R) protocol, max.       115.2 kbit/s         with ASCII protocol, max.       115.2 kbit/s         with ASCII protocol, max.       115.2 kbit/s         with printer driver, max.       115.2 kbit/s         with RK 512 protocol, max.       115.2 kbit/s         Standards, approvals, certificates       CE         CE mark       Yes         UL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         KC approval       Yes         Ambient conditions       Yes         Ambient temperature during operation       -25 °C; = Tmin         • min.       -25 °C; = Tmin         • max.       70 °C         Altitude during operation relating to sea level       -         • Installation altitude above sea level, max.       5 000 m         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         With condensation, tested in accordance with IEC 60068-2-38, max.       500 m) // Tmin (Tmax + 10 K) at 795 hPa (+1000 m + 2 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m + 5 000	Telegram length, max.	
	— 3964 (R)	4 096 byte
Transmission speed, RS 232         with 3964 (R) protocol, max.         with ASCII protocol, max.         with ASCII protocol, max.         with printer driver, max.         with printer driver, max.         with RK 512 protocol, max.         115.2 kbit/s         with RK 512 protocol, max.         Standards, approvals, certificates         CE mark       Yes         UL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       -25 °C; = Tmin         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during operation       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       -10 °C         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- atitude       5 000 m         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- atitude       5 000 m         • Mith condensation, tested in accordance with IEC 60068-2-38, max.       5000 m	— ASCII	4 096 byte
<ul> <li>with 3964 (R) protocol, max.</li> <li>with ASCII protocol, max.</li> <li>with printer driver, max.</li> <li>115.2 kbit/s</li> <li>with RK 512 protocol, max.</li> <li>115.2 kbit/s</li> <li>with RK 512 protocol, max.</li> <li>115.2 kbit/s</li> <li>with RK 512 protocol, max.</li> <li>115.2 kbit/s</li> <li>Standards, approvals, certificates</li> <li>CE mark</li> <li>Ves</li> <li>UL approval</li> <li>Yes; File E239877</li> <li>RCM (formerly C-TICK)</li> <li>Yes</li> <li>EAC (formerly Gost-R)</li> <li>Yes</li> <li>Ambient conditions</li> <li>Ambient temperature during operation</li> <li>e min.</li> <li>e max.</li> <li>70 °C; = Tmai; 60 °C @ UL/cUL, ATEX and FM use</li> <li>Ambient temperature during storage/transportation</li> <li>min.</li> <li>-40 °C</li> <li>max.</li> <li>70 °C</li> <li>Altitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressure- altitude</li> <li>Installation altitude above sea level, max.</li> <li>Momentary Condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> </ul>	— RK 512	4 096 byte
<ul> <li>with ASCII protocol, max.</li> <li>with ASCII protocol, max.</li> <li>115.2 kbit/s</li> <li>with printer driver, max.</li> <li>115.2 kbit/s</li> <li>with RK 512 protocol, max.</li> <li>115.2 kbit/s</li> <li>with RK 512 protocol, max.</li> <li>115.2 kbit/s</li> <li>Standards, approvals, certificates</li> <li>CE mark</li> <li>Yes</li> <li>UL approval</li> <li>Yes, File E239877</li> <li>RCM (formerly C-TICK)</li> <li>Yes</li> <li>KC approval</li> <li>Yes</li> <li>EAC (formerly Gost-R)</li> <li>Yes</li> <li>Ambient temperature during operation         <ul> <li>nin.</li> <li>-25 °C; = Tmin</li> <li>nmax.</li> <li>70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use</li> </ul> </li> <li>Ambient temperature during storage/transportation         <ul> <li>min.</li> <li>-40 °C</li> <li>nmax.</li> <li>70 °C</li> <li>Altitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressure- altitude</li> <li>Nambient air temperature-barometric pressure- altitude</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul> <li>Resistance</li> </li></ul>	Transmission speed, RS 232	
<ul> <li>with ASCII protocol, max.</li> <li>with printer driver, max.</li> <li>with printer driver, max.</li> <li>115.2 kbit/s</li> <li>with RK 512 protocol, max.</li> <li>115.2 kbit/s</li> <li>Standards, approvals, certificates</li> <li>CE mark</li> <li>Ves</li> <li>UL approval</li> <li>Yes; File E239877</li> <li>RCM (formerly C-TICK)</li> <li>Yes</li> <li>KC approval</li> <li>Yes</li> <li>EAC (formerly Gost-R)</li> <li>Yes</li> <li>Ambient temperature during operation         <ul> <li>nin.</li> <li>25 °C; = Tmin</li> <li>max.</li> <li>70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use</li> </ul> </li> <li>Ambient temperature during storage/transportation         <ul> <li>min.</li> <li>-40 °C</li> <li>max.</li> <li>70 °C;</li> <li>Tmin.</li> <li>max.</li> <li>70 °C</li> </ul> </li> <li>Altitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressureatitude</li> <li>Installation altitude above sea level, max.</li> <li>So00 m</li> <li>Tmin (Tmax - 10 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa 540 hPa (+3 500 m +5 000 m)</li> </ul> <li>Relative humidity     <ul> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul> </li> <li>Resistance</li>		115.2 kbit/s
- with printer driver, max.       115.2 kbit/s         - with RK 512 protocol, max.       115.2 kbit/s         Standards, approvals, certificates       Yes         CE mark       Yes         UL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       Yes         Ambient temperature during operation       - min.         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       - min.         • min.       - 40 °C         • max.       70 °C         Altitude during operation relating to sea level       - S000 m         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 550 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)         Relative humidity       • With condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       Intersection       100 %; RH		115.2 kbit/s
with RK 512 protocol, max.       115.2 kbit/s         Standards, approvals, certificates       Yes         CE mark       Yes         UL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       Yes         Ambient temperature during operation       *         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       *         • min.       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       *         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa (-1 000 m +3 000 m)         Relative humidity       •         • With condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       -       100 %; RH incl. condensation/frost (no commissioning under condensation conditions) <td></td> <td>115.2 kbit/s</td>		115.2 kbit/s
CE mark       Yes         UL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       Yes         Ambient temperature during operation       •         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       •         • max.       70 °C         Altitude during operation relating to sea level       •         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         • Mathemating temperature-barometric pressure- altitude       5 000 m         • Mith condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)	— with RK 512 protocol, max.	115.2 kbit/s
CE mark       Yes         UL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       Yes         Ambient temperature during operation       •         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       •         • max.       70 °C         Altitude during operation relating to sea level       •         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         • Mathemating temperature-barometric pressure- altitude       5 000 m         • Mith condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		
UL approval       Yes; File E239877         RCM (formerly C-TICK)       Yes         KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       Ambient temperature during operation         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       5 000 m         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         • Mith condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		Ves
RCM (formerly C-TICK)       Yes         KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       Ambient temperature during operation         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       -40 °C         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)         Relative humidity       • With condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		
KC approval       Yes         EAC (formerly Gost-R)       Yes         Ambient conditions       Ambient conditions         Ambient temperature during operation       -25 °C; = Tmin         • min.       -25 °C; = Tmix; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       -40 °C         • min.       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       -40 °C         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         Relative humidity       5 000 m         • With condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		
EAC (formerly Gost-R)       Yes         Ambient conditions       Ambient temperature during operation         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       -40 °C         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 10 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)         Relative humidity       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		
Ambient temperature during operation         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       -40 °C         • min.       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       -25 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         • Installation altitude above sea level, max.       -40 °C         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         • Ambient air temperature-barometric pressure- altitude       Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)         Relative humidity       With condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation conditions)       100 %; RH incl. condensation conditions		Yes
Ambient temperature during operation         • min.       -25 °C; = Tmin         • max.       70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         Ambient temperature during storage/transportation       -40 °C         • min.       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       -25 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use         • Installation altitude above sea level, max.       -40 °C         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         • Ambient air temperature-barometric pressure- altitude       Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)         Relative humidity       With condensation, tested in accordance with IEC 60068-2-38, max.       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation conditions)       100 %; RH incl. condensation conditions		
• min25 °C; = Tmin• max.70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM useAmbient temperature during storage/transportation-40 °C• min40 °C• max.70 °CAltitude during operation relating to sea level-5000 m• Installation altitude above sea level, max.5 000 m• Ambient air temperature-barometric pressure- altitude5 000 m• Mathematical ContemporationTmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)Relative humidity100 %; RH incl. condensation/frost (no commissioning under condensation conditions)Resistance100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		
• max.70 °C; = Tmax; 60 °C @ UL/CUL, ATEX and FM useAmbient temperature during storage/transportation• min40 °C• max.70 °CAltitude during operation relating to sea level• Installation altitude above sea level, max.5 000 m• Ambient air temperature-barometric pressure- altitudeTmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +3 000 m)Relative humidity100 %; RH incl. condensation/frost (no commissioning under condensation conditions)Resistance100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		-25 °C = Tmin
Ambient temperature during storage/transportation         • min.       -40 °C         • max.       70 °C         Altitude during operation relating to sea level       5 000 m         • Installation altitude above sea level, max.       5 000 m         • Ambient air temperature-barometric pressure- altitude       5 000 m         • Relative humidity       Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)         Relative humidity       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)         Resistance       100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		
<ul> <li>min.</li> <li>max.</li> <li>Altitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressure- altitude</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> </ul>		
<ul> <li>max.</li> <li>70 °C</li> <li>Altitude during operation relating to sea level</li> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressure- altitude</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 10 K) at 795 hPa 540 hPa (+3 500 m +3 000 m)</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> </ul>		-40 °C
Altitude during operation relating to sea level         • Installation altitude above sea level, max.         • Ambient air temperature-barometric pressure- altitude         • Ambient air temperature-barometric pressure- altitude         • Mith condensation, tested in accordance with IEC 60068-2-38, max.         • With condensation, tested in accordance with IEC 60068-2-38, max.         • Resistance		
<ul> <li>Installation altitude above sea level, max.</li> <li>Ambient air temperature-barometric pressure- altitude</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> </ul>		
<ul> <li>Ambient air temperature-barometric pressure- altitude</li> <li>Ambient air temperature-barometric pressure- altitude</li> <li>Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)</li> <li>Relative humidity</li> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> <li>Resistance</li> <li>100 %; RH incl. condensation/frost (no commissioning under condensation conditions)</li> </ul>		5 000 m
altitudeTmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)Relative humidity100 m)• With condensation, tested in accordance with IEC 60068-2-38, max.100 %; RH incl. condensation/frost (no commissioning under condensation conditions)Resistance		Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) //
With condensation, tested in accordance with IEC 60068-2-38, max.  Resistance      With condensation, tested in accordance with ICC 60068-2-38, max.		Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5
IEC 60068-2-38, max. condensation conditions) Resistance	Relative humidity	
Use in stationary industrial systems	Resistance	
	Use in stationary industrial systems	

<ul> <li>— to biologically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
<ul> <li>— to chemically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *
<ul> <li>— to mechanically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
<ul> <li>to biologically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
<ul> <li>to chemically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *
<ul> <li>— to mechanically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6S3 incl. sand, dust; *
Remark	
<ul> <li>— Note regarding classification of environmental conditions acc. to EN 60721</li> </ul>	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
<ul> <li>Coatings for printed circuit board assemblies acc. to EN 61086</li> </ul>	Yes; Class 2 for high availability
<ul> <li>Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life
<ul> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	Yes; Conformal coating, Class A
Software	
Block	
• FB length in RAM, max.	6 100 byte; Data communication, sending and receiving
Connection method	
Design of electrical connection for supply voltage	3 screw-type terminals: L+, M, GND
Power supply	3 screw-type terminals: L+, M, GND
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	300 g
last modified:	12/25/2018