

SIPLUS S7-1200 CM1241 -40...+70 °C with conformal coating based on 6ES7241-1CH32-0XB0. Communication module CM 1241, RS422/485, 9-pole D-sub (pin) supports Freeport



General information

| | |
|--------------------------|----------------------|
| Product type designation | CM 1241 RS 422 / 485 |
|--------------------------|----------------------|

Supply voltage

| | |
|-------------------------------------|--------|
| Rated value (DC) | Yes |
| • 24 V DC | |
| permissible range, lower limit (DC) | 20.4 V |
| permissible range, upper limit (DC) | 28.8 V |

Power loss

| | |
|------------------|-------|
| Power loss, typ. | 1.2 W |
|------------------|-------|

Interfaces

| | |
|--|-----|
| Number of interfaces | 1 |
| Interface (physical) RS 422/485 (X.27) | Yes |

Point-to-point connection

| | |
|----------------------|---------|
| • Cable length, max. | 1 000 m |
|----------------------|---------|

Integrated protocol driver

| | |
|---------|------------------------------------|
| — ASCII | Yes; Available as library function |
| — USS | Yes; Available as library function |

Ambient conditions

| | |
|--|---|
| Free fall | |
| <ul style="list-style-type: none"> • Fall height, max. | 0.3 m; five times, in product package |
| Ambient temperature during operation | |
| <ul style="list-style-type: none"> • min. • max. | -40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C 70 °C; Tmax > 60 °C, derating: Max. one module may be configured; this module must be the last module on the CM bus; minimum clearance on the left side of at least 45 mm |
| Ambient temperature during storage/transportation | |
| <ul style="list-style-type: none"> • min. • max. | -40 °C 70 °C |
| Altitude during operation relating to sea level | |
| <ul style="list-style-type: none"> • Installation altitude above sea level, max. • 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 | |
| <ul style="list-style-type: none"> • Operation at 25 °C without condensation, max. • With condensation, tested in accordance with IEC 60068-2-38, max. | 95 % 100 %; RH incl. condensation/frost (no commissioning under condensation conditions) |
| Resistance | |
| Coolants and lubricants | |
| — Resistant to commercially available coolants and lubricants | Yes; Incl. diesel and oil droplets in the air |
| Use in stationary industrial systems | |
| — to biologically active substances according to EN 60721-3-3 | Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request |
| — to chemically active substances according to EN 60721-3-3 | Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * |
| — to mechanically active substances according to EN 60721-3-3 | Yes; Class 3S4 incl. sand, dust, * |
| Use on ships/at sea | |
| — to biologically active substances according to EN 60721-3-6 | Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request |
| — to chemically active substances according to EN 60721-3-6 | Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * |
| — to mechanically active substances according to EN 60721-3-6 | Yes; Class 6S3 incl. sand, dust; * |
| Usage in industrial process technology | |
| — Against chemically active substances acc. to EN 60654-4 | Yes; Class 3 (excluding trichlorethylene) |

— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04

Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)

Remark

— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04

* The supplied plug covers must remain in place over the unused interfaces during operation!

Conformal coating

- Coatings for printed circuit board assemblies acc. to EN 61086
- 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

Yes; Class 2 for high availability

Yes; Type 1 protection

Yes; Discoloration of coating possible during service life

Yes; Conformal coating, Class A

Dimensions

| | |
|--------|--------|
| Width | 30 mm |
| Height | 100 mm |
| Depth | 75 mm |

Weights

Weight, approx. 155 g

last modified: 08/27/2019