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## Data sheet 6AG1590-0BL00-7AA0

SIPLUS S7-1500 act. backplane 12 slot based on: 6ES7590-0BL00-0AA0 with conformal coating, -40…+70 °C . active backplane bus 12 slots for inserting S7-1500 I/O modules for hot swapping; for use in the ET 200MP with IM 155-5 PN HF (from FW V4.4.1); S7-1500 mounting rail and slot covers to to be ordered separately



Figure similar

| | |
|---|---|
| **General information** | |
| Product type designation | Active backplane ST 1+12 slot |
| Firmware version | |
| ● FW update possible | Yes |
| based on | 6ES7590-0BL00-0AA0 |
| Product function | |
| ● I&M data | Yes; I&M0 to I&M3 |
| ● Isochronous mode | Yes |
| ● Prioritized startup | Yes |
| Engineering with | |
| ● STEP 7 TIA Portal configurable/integrated from version | see entry ID: 109746275 |
| **Power** | |
| Power consumption from the backplane bus | 2 W |
| **Power loss** | |
| Power loss, typ. | 2 W |
| **Hardware configuration** | |
| Slots | |
| ● Grid size | 35 mm; Utilization of 25 mm-wide modules possible |
| ● Number of slots | 13 |
| — of which for CPU, max. | 0 |
| — of which for IM, max. | 1 |
| — of which for PS, max. | 12; Max. 2 PS per station |
| — of which for IO/CM/CP/TM, max. | 12 |
| — of which for F-IO, max. | 12 |
| ● Number of single-width slots, max. | 12 |
| **Ambient conditions** | |
| Ambient temperature during operation | |
| ● horizontal installation, min. | -40 °C; = Tmin (incl. condensation/frost) |
| ● horizontal installation, max. | 70 °C; = Tmax |
| ● vertical installation, min. | -40 °C; = Tmin |
| ● vertical installation, max. | 40 °C; = Tmax |
| 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 ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) |


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| | |
|---|---|
| | 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 in bedewed state), horizontal installation |
| 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, fungal and dry rot spores (excluding fauna) |
| — 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 | Yes; Class 2 for high reliability |
| ● Protection against fouling acc. to EN 60664-3 | Yes; Type 1 protection |
| ● Military testing according to MIL-I-46058C, Amendment 7 | Yes; Discoloration of coating possible during service life |
| ● Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A | Yes; Conformal coating, Class A |
| **Dimensions** | |
| Width | 434 mm |
| Height | 99 mm |
| Depth | 14 mm |
| **Weights** | |
| Weight, approx. | 352 g |

**Classifications**

| | Version | Classification |
|---|---|---|
| eClass | 14 | 27-24-22-03 |
| eClass | 12 | 27-24-22-03 |
| eClass | 9.1 | 27-24-22-03 |
| eClass | 9 | 27-24-22-03 |
| eClass | 8 | 27-24-22-03 |
| eClass | 7.1 | 27-24-22-03 |
| eClass | 6 | 27-24-22-03 |
| ETIM | 10 | EC000810 |
| ETIM | 9 | EC000810 |
| ETIM | 8 | EC000810 |
| ETIM | 7 | EC000810 |

**Approvals / Certificates**

| General Product Approval | EMV | For use in hazard- |
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