SIEMENS

## Data sheet 6AG2193-6BP20-4BA0



Figure similar

SIPLUS ET 200SP BU15-P16+A10+2B TX rail based on 6ES7193-6BP20-0BA0 with conformal coating, -40…+70 °C, OT4 with ST1/2 (+85 °C for 10 minutes), BU type A0, push-in terminals, with 10 AUX terminals, bridged to the left, WxH: 15 mm x141 mm,

| | |
|---|---|
| **General information** | |
| Product type designation | BU type A0 |
| based on | 6ES7193-6BP20-0BA0 |
| **Supply voltage** | |
| Rated value (DC) | 24 V |
| external protection for power supply lines | Yes; 24 V DC/10 A miniature circuit breaker with type B or C tripping characteristic |
| **Current carrying capacity** | |
| For P1 and P2 bus, max. | 10 A |
| For AUX bus, max. | 10 A |
| For process terminals, max. | 2 A |
| **Hardware configuration** | |
| Formation of potential groups | |
| ● New potential group | No |
| ● Potential group continued from the left | Yes |
| Slots | |
| ● Number of slots | 1; Type A0 |
| **Isolation** | |
| Isolation tested with | 750 V DC (type test) and according to EN 50155 (routine test) |
| **Standards, approvals, certificates** | |
| Railway application | |
| ● EN 50121-3-2 | Yes; EMC for rail vehicles |
| ● EN 50121-4 | Yes; EMC for signal and telecommunications systems |
| ● EN 50121-5 | Yes; EMC for fixed installations and railway power supply equipment |
| ● EN 50124-1 | Yes; Railway applications - overvoltage category OV2; pollution degree PD2; rated surge voltage UNi = 0.5 kV; UNm = 24 V DC |
| ● EN 50125-1 | Yes; Rail vehicles - see ambient conditions |
| ● EN 50125-2 | Yes; Stationary electrical equipment - see ambient conditions |
| ● EN 50125-3 | Yes; Signal and telecommunications systems - see ambient conditions; vibrations and shocks: Application point outside of tracks (1 m to 3 m away from track) |
| ● EN 50155 | Yes; Rail vehicles - temperature class OT4, ST1/ST2, horizontal mounting position |
| ● EN 61373 | Yes; Rail vehicles - vibrations and shocks: Category 1 Class A/B |
| ● Fire protection acc. to EN 45545-2 | Yes; For proof of conformity, see Service & Support |
| **Ambient conditions** | |
| Ambient temperature during operation | |
| ● horizontal installation, min. | -40 °C; = Tmin (incl. condensation/frost) |
| ● horizontal installation, max. | 70 °C; = Tmax; +85 °C for 10 min (OT4, ST1/ST2 acc. to EN 50155) |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| ● vertical installation, min. | -40 °C; = Tmin |
| ● vertical installation, max. | 50 °C; = Tmax |
| Altitude during operation relating to sea level | |
| ● Installation altitude above sea level, max. | 2 000 m |
| ● Ambient air temperature-barometric pressure-altitude | Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 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, * |
| — Against mechanical environmental conditions acc. to EN 60721-3-3 | Yes; Class 3M8 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0) |
| Use on land craft, rail vehicles and special-purpose vehicles | |
| — to biologically active substances according to EN 60721-3-5 | Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request |
| — to chemically active substances according to EN 60721-3-5 | Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * |
| — to mechanically active substances according to EN 60721-3-5 | Yes; Class 5S3 incl. sand, dust; * |
| — Against mechanical environmental conditions acc. to EN 60721-3-5 | Yes; Class 5M2 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0) |
| — against mechanical environmental conditions in agriculture acc. to ISO 15003 | Yes; level 1 (Location LE) using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0) |
| 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 |
| ● Electronic equipment on rolling stock acc. to EN 50155 | Yes; Class PC2 protective coating acc. to EN 50155:2017 |
| ● 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 |
| **Accessories** | |
| Color coding labels | |
| ● for process terminals | CC00 to CC09 |
| ● for AUX terminals | CC71 to CC73 |
| ● for add-on terminals | does not exist |
| **Connection method** | |
| Terminals | |
| ● Terminal type | Push-in terminal |
| ● system-integrated shield connection | Yes; Optional |
| ● Conductor cross-section, min. | 0.14 mm²; AWG 26 |
| ● Conductor cross-section, max. | 2.5 mm²; AWG 14 |
| ● Number of process terminals to I/O module | 16 |
| ● Number of terminals to AUX bus | 10 |


© Copyright Siemens

| | |
|---|---|
| ● Number of add-on terminals | 0 |
| ● Number of terminals with connection to P1 and P2 bus | 2 |
| **Dimensions** | |
| Width | 15 mm |
| Height | 141 mm |
| Depth | 35 mm |
| **Weights** | |
| Weight, approx. | 50 g |
| **Other** | |
| Note: | for use in railway applications, also observe the product information "SIPLUS extreme RAIL" A5E37661960A, Online Support article 109736776 |

**Classifications**

| | Version | Classification |
|---|---|---|
| eClass | 16 | 27-24-26-03 |
| eClass | 14 | 27-24-26-03 |
| eClass | 12 | 27-24-26-03 |
| eClass | 9.1 | 27-24-26-03 |
| eClass | 9 | 27-24-26-03 |
| eClass | 8 | 27-24-26-03 |
| eClass | 7.1 | 27-24-26-03 |
| eClass | 6 | 27-24-26-03 |
| ETIM | 10 | EC001598 |
| ETIM | 9 | EC001598 |
| ETIM | 8 | EC001598 |
| ETIM | 7 | EC001598 |
| IDEA | 4 | 3560 |
| UNSPSC | 15 | 32-15-17-04 |

**Approvals / Certificates**

**General Product Approval**

Manufacturer Declaration

China RoHS

China RoHS

| General Product Approval | EMV | Railway |
|---|---|---|
| | | Confirmation |

**last modified:** 10/23/2025


Subject to change without notice
© Copyright Siemens