



SIPLUS ET 200SP IM155-6DP HF based on 6ES7155-6BA01-0CN0 with conformal coating, -40...+70 °C, bundle PROFIBUS IM, max. 32 I/O modules and 16 ET 200AL modules, multi hot swap, bundle consists of: interface module (6AG1155-6BU01-7CN0), server module (6AG1193-6PA00-7AA0), PROFIBUS plug

| General information | |
|---|--|
| Product type designation | IM 155-6 DP HF |
| Product function | |
| <ul style="list-style-type: none"> I&M data Module swapping during operation (hot swapping) Isochronous mode | Yes; I&M0 to I&M3 Yes; Multi-hot swapping No |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version | see entry ID: 109746275 |
| Configuration control | |
| via dataset | Yes |
| Supply voltage | |
| Rated value (DC) | 24 V |
| permissible range, lower limit (DC) | 19.2 V |
| permissible range, upper limit (DC) | 28.8 V |
| Reverse polarity protection | Yes |
| Mains buffering | |
| <ul style="list-style-type: none"> Mains/voltage failure stored energy time | 10 ms |
| Input current | |
| Current consumption, max. | 335 mA |
| Inrush current, max. | 1.6 A |
| I^2t | 0.038 A ² ·s |
| Power loss | |
| Power loss, typ. | 1.5 W |
| Address area | |
| Address space per module | |
| <ul style="list-style-type: none"> Address space per module, max. | 32 byte; per input / output |
| Address space per station | |
| <ul style="list-style-type: none"> Address space per station, max. | 244 byte; per input / output |
| Hardware configuration | |
| Rack | |
| <ul style="list-style-type: none"> Modules per rack, max. | 32; + 16 ET 200AL modules |
| Interfaces | |
| Number of PROFIBUS interfaces | 1 |
| 1. Interface | |
| Interface types | |
| <ul style="list-style-type: none"> RS 485 Output current of the interface, max. | Yes 90 mA |
| Protocols | |

| | |
|---|---|
| • PROFIBUS DP slave | Yes |
| Interface types | |
| RS 485 | |
| • Transmission rate, max. | 12 Mbit/s |
| Protocols | |
| Open IE communication | |
| • TCP/IP | No |
| PROFIBUS DP | |
| Services | |
| — SYNC capability | Yes |
| — FREEZE capability | Yes |
| — DPV0 | Yes |
| — DPV1 | Yes |
| Interrupts/diagnostics/status information | |
| Status indicator | Yes |
| Alarms | Yes |
| Diagnostics function | Yes |
| Diagnostics indication LED | |
| • RUN LED | Yes; green LED |
| • ERROR LED | Yes; red LED |
| • MAINT LED | Yes; Yellow LED |
| • Monitoring of the supply voltage (PWR-LED) | Yes; green PWR LED |
| • Connection display DP | Yes; green DP LED |
| Potential separation | |
| between backplane bus and electronics | No |
| between PROFIBUS DP and all other circuit components | Yes |
| between supply and all other circuits | No |
| Permissible potential difference | |
| between different circuits | Safety extra low voltage SELV |
| Isolation | |
| Isolation tested with | 707 V DC (type test) |
| 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 (incl. condensation/frost) |
| • vertical installation, max. | 50 °C; = Tmax |
| 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) 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, * |
| — 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 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; * |
| — Against mechanical environmental conditions acc. to EN 60721-3-6 | Yes; Class 6M4 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 | |
| <ul style="list-style-type: none"> • 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 | <p>Yes; Class 2 for high reliability</p> <p>Yes; Type 1 protection</p> <p>Yes; Discoloration of coating possible during service life</p> <p>Yes; Conformal coating, Class A</p> |
| connection method / header | |
| ET-Connection | |
| <ul style="list-style-type: none"> • via BU/BA Send | Yes; + 16 ET 200AL modules |
| Dimensions | |
| Width | 50 mm |
| Height | 117 mm |
| Depth | 74 mm |
| Weights | |
| Weight, approx. | 150 g |
| last modified: | 11/11/2021  |