SIEMENS

## Data sheet 6AG1131-4BD01-2AA0



SIPLUS ET 200S EM 4DI (1 PU=5 units) based on 6ES7131-4BD01-0AA0 with conformal coating, -25…+60 °C, electronic module 24 V DC 15 mm width, 5 units per packing unit

| | |
|---|---|
| **Supply voltage** | |
| Rated value (DC) | 24 V; From power module |
| Reverse polarity protection | Yes |
| **Input current** | |
| from supply voltage L+, max. | Dependent on encoder |
| from backplane bus 3.3 V DC, max. | 10 mA |
| **Encoder supply** | |
| Type of output voltage | min. L+ (-0.5 V), under load |
| Output current | |
| ● nominal | 500 mA |
| ● permissible range, lower limit | 0 mA |
| ● permissible range, upper limit | 500 mA |
| **Power loss** | |
| Power loss, typ. | 0.7 W |
| **Address area** | |
| Address space per module | |
| ● Address space per module, max. | 1 byte |
| ● with packing | 4 bit |
| **Digital inputs** | |
| Number of digital inputs | 4 |
| Input characteristic curve in accordance with IEC 61131, type 1 | Yes |
| Input voltage | |
| ● Type of input voltage | DC |
| ● Rated value (DC) | 24 V |
| ● for signal "0" | -30 to +5 V |
| ● for signal "1" | +15 to +30 V |
| Input current | |
| ● for signal "1", typ. | 7 mA; at 24 V |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — parameterizable | No |
| — at "0" to "1", min. | 2 ms; typically 3 ms |
| — at "0" to "1", max. | 4.5 ms |
| — at "1" to "0", min. | 2 ms; typically 3 ms |
| — at "1" to "0", max. | 4.5 ms |
| Cable length | |
| ● shielded, max. | 1 000 m |
| ● unshielded, max. | 600 m |
| **Encoder** | |


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| | |
|---|---|
| Connectable encoders | |
| ● 2-wire sensor | Yes |
| — permissible quiescent current (2-wire sensor), max. | 1.5 mA |
| **Interrupts/diagnostics/status information** | |
| Diagnostics function | No |
| Diagnostics indication LED | |
| ● Group error SF (red) | No |
| ● Status indicator digital input (green) | Yes; per channel |
| **Potential separation** | |
| Potential separation digital inputs | |
| ● between the channels | No |
| ● between the channels and backplane bus | Yes |
| **Isolation** | |
| Isolation tested with | 500 V DC |
| **Standards, approvals, certificates** | |
| CE mark | Yes |
| **Ambient conditions** | |
| Ambient temperature during operation | |
| ● min. | -25 °C; = Tmin |
| ● max. | 60 °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 permitted (no commissioning in bedewed state) |
| Resistance | |
| 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! |
| **Dimensions** | |
| Width | 15 mm |
| Height | 81 mm |
| Depth | 52 mm |
| **Weights** | |
| Weight, approx. | 35 g |
| **Classifications** | |

| | Version | Classification |
|---|---|---|
| eClass | 16 | 27-24-26-04 |


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| | | |
|---|---|---|
| eClass | 14 | 27-24-26-04 |
| eClass | 12 | 27-24-26-04 |
| eClass | 9.1 | 27-24-26-04 |
| eClass | 9 | 27-24-26-04 |
| eClass | 8 | 27-24-26-04 |
| eClass | 7.1 | 27-24-26-04 |
| eClass | 6 | 27-24-26-04 |
| ETIM | 10 | EC001599 |
| ETIM | 9 | EC001599 |
| ETIM | 8 | EC001599 |
| ETIM | 7 | EC001599 |
| IDEA | 4 | 3566 |
| UNSPSC | 15 | 32-15-17-05 |

## Approvals / Certificates

### General Product Approval




Manufacturer Declaration




China RoHS






### EMV






### For use in hazardous locations







CCC-Ex

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