SIEMENS

## Data sheet 6AG1055-1NB10-7BA2



Figure similar

SIPLUS LOGO! DM16 24R based on 6ED1055-1NB10-0BA2 with conformal coating, -40…+70 °C, start up -25 °C, expansion module, power supply / I/O: 24 V DC/24 V DC/relay, 8 DI/8 DQ, 4 MW for LOGO! 8

| | |
|---|---|
| **General information** | |
| based on | 6ED1055-1NB10-0BA2 |
| **Installation type/mounting** | |
| Mounting | on 35 mm DIN rail, 4 spacing units wide |
| **Supply voltage** | |
| Rated value (DC) | |
| ● 24 V DC | Yes |
| permissible range, lower limit (DC) | 20.4 V |
| permissible range, upper limit (DC) | 28.8 V |
| Rated value (AC) | |
| ● 24 V AC | No |
| **Digital inputs** | |
| Number of digital inputs | 8 |
| Input voltage | |
| ● Type of input voltage | DC |
| ● for signal "0" | < 5 V DC |
| ● for signal "1" | > 12 V DC |
| Input current | |
| ● for signal "0", max. (permissible quiescent current) | 0.85 mA |
| ● for signal "1", typ. | 2 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — at "0" to "1", max. | 1.5 ms |
| — at "1" to "0", max. | 1.5 ms |
| **Digital outputs** | |
| Number of digital outputs | 8; Relays |
| Short-circuit protection | No |
| Controlling a digital input | Yes |
| Switching capacity of the outputs | |
| ● on lamp load, max. | 1 000 W |
| Output current | |
| ● for signal "1" rated value | 5 A |
| ● for signal "1" minimum load current | 100 mA |
| Parallel switching of two outputs | |
| ● for uprating | No |
| Switching frequency | |
| ● with resistive load, max. | 2 Hz |
| ● with inductive load, max. | 0.5 Hz |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| ● mechanical, max. | 10 Hz |
| Relay outputs | |
| Switching capacity of contacts | |
| — with inductive load, max. | 3 A |
| — with resistive load, max. | 5 A |
| **EMC** | |
| Emission of radio interference acc. to EN 55 011 | |
| ● Limit class B, for use in residential areas | Yes |
| **Degree and class of protection** | |
| IP degree of protection | IP20 |
| **Standards, approvals, certificates** | |
| Ecological footprint | |
| ● environmental product declaration | Yes |
| Global warming potential | |
| — global warming potential, (total) [CO2 eq] | 59.1 kg |
| — global warming potential, (during production) [CO2 eq] | 5.82 kg |
| — global warming potential, (during operation) [CO2 eq] | 53.6 kg |
| — global warming potential, (after end of life cycle) [CO2 eq] | -0.373 kg |
| **Ambient conditions** | |
| Ambient temperature during operation | |
| ● min. | -40 °C; = Tmin; Startup @ -25 °C |
| ● max. | 70 °C; = Tmax; Tmax > +55 °C max. load 3 A per relay |
| ● At cold restart, min. | -25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions) |
| 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) 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 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 | * The supplied plug covers must remain in place over the unused interfaces |


© Copyright Siemens

| | |
|---|---|
| conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 | 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 | 71.5 mm |
| Height | 90 mm |
| Depth | 58 mm |

**Classifications**

| | Version | Classification |
|---|---|---|
| eClass | 16 | 27-24-22-04 |
| eClass | 14 | 27-24-22-04 |
| eClass | 12 | 27-24-22-04 |
| eClass | 9.1 | 27-24-22-04 |
| eClass | 9 | 27-24-22-04 |
| eClass | 8 | 27-24-22-04 |
| eClass | 7.1 | 27-24-22-04 |
| eClass | 6 | 27-24-22-04 |
| ETIM | 10 | EC001419 |
| ETIM | 9 | EC001419 |
| ETIM | 8 | EC001419 |
| ETIM | 7 | EC001419 |
| IDEA | 4 | 3566 |
| UNSPSC | 15 | 32-15-17-05 |

**Approvals / Certificates**

**General Product Approval**

Manufacturer Declaration

China RoHS

| General Product Approval | EMV | Environment |
|---|---|---|

China RoHS

**last modified:** 6/18/2025


Subject to change without notice
© Copyright Siemens