

SIPLUS S7-1200 SM 1222 16DQ RLY for medial exposure with conformal coating based on 6ES7222-1HH32-0XB0 . Digital output 16 DQ, relay 2 A

General information

Product type designation SM 1222, DQ 16x relay/2 A

Supply voltage

permissible range, lower limit (DC) 20.4 V

permissible range, upper limit (DC) 28.8 V

Input current

from backplane bus 5 V DC, max. 135 mA

Digital outputs

- from load voltage L+, max. 11 mA/relay coil

Power loss

Power loss, typ. 8.5 W

Digital outputs

Number of digital outputs 16

- in groups of 1

Short-circuit protection No; to be provided externally

Switching capacity of the outputs

- with resistive load, max. 2 A

- on lamp load, max. 30 W with DC, 200 W with AC

Output voltage

- Rated value (DC) 5 V DC to 30 V DC

- Rated value (AC) 5 V AC to 250 V AC

Output current

- for signal "1" rated value 2 A

Output delay with resistive load

- "0" to "1", max. 10 ms

- "1" to "0", max. 10 ms

Total current of the outputs (per group)

horizontal installation

— up to 50 °C, max. 10 A; Current per mass

Relay outputs

- Number of relay outputs 16

- Rated supply voltage of relay coil L+ (DC) 24 V

- Number of operating cycles, max. mechanically 10 million, at rated load voltage 100 000

| | |
|--|---------------------------------------|
| Switching capacity of contacts | |
| — with inductive load, max. | 2 A |
| — on lamp load, max. | 30 W with DC, 200 W with AC |
| — with resistive load, max. | 2 A |
| Cable length | |
| • shielded, max. | 500 m |
| • unshielded, max. | 150 m |
| Interrupts/diagnostics/status information | |
| Alarms | Yes |
| Diagnostic functions | Yes |
| Alarms | |
| • Diagnostic alarm | Yes |
| Diagnostic messages | |
| • Monitoring the supply voltage | Yes |
| Diagnostics indication LED | |
| • for status of the outputs | Yes |
| • for maintenance | Yes |
| Potential separation | |
| Potential separation digital outputs | |
| • between the channels | Relay, dry contact |
| • between the channels, in groups of | 4 |
| • between the channels and backplane bus | 1500 V AC for 1 minute |
| Permissible potential difference | |
| between different circuits | 750 V AC for 1 minute |
| Degree and class of protection | |
| Degree of protection acc. to EN 60529 | |
| • IP20 | Yes |
| Standards, approvals, certificates | |
| CE mark | Yes |
| Ambient conditions | |
| Free fall | |
| • Fall height, max. | 0.3 m; five times, in product package |
| Ambient temperature during operation | |
| • min. | -20 °C; = Tmin; Startup @ 0 °C |
| • max. | 60 °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. | 2 000 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); above 2 000 m max. 132 V AC |
| Relative humidity | |
| • With condensation, tested in accordance with IEC 60068-2-38, max. | 100 %; RH incl. condensation/frost (no commissioning under condensation conditions) |
| Resistance | |
| Coolants and lubricants | |
| — Resistant to commercially available coolants and lubricants | Yes |
| 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; * |
| from supply voltage 1L+ | |
| — Note regarding classification of environmental conditions acc. to EN 60721 | * The supplied plug covers must remain in place over the unused interfaces during operation! |
| Connection method | |
| required front connector | Yes |
| Mechanics/material | |
| Enclosure material (front) | |
| • Plastic | Yes |
| Dimensions | |
| Width | 45 mm |
| Height | 100 mm |
| Depth | 75 mm |
| Weights | |
| Weight, approx. | 260 g |
| last modified: | 05/18/2018 |