



Figure similar

SIPLUS S7-1200 SM 1226 F-DQ 2x relay based on 6ES7226-6RA32-0XB0 with conformal coating, -25...+55 °C, F-DQ 2x RLY 5A, PROFIsafe, 70 mm width, up to PL e (ISO 13849-1)/ SIL3 (IEC 61508)

| General information                            |  |
|--|--|
| Product type designation                       | SM 1226, F-DQ 2x relay/5 A   |
| based on                                       | <a href="#">6ES7226-6RA32-0XB0</a>   |
| Supply voltage                                 |  |
| permissible range, lower limit (DC)            | 20.4 V   |
| permissible range, upper limit (DC)            | 28.8 V   |
| power supply according to NEC Class 2 required | No   |
| Input current                                  |  |
| from backplane bus 5 V DC, max.                | 120 mA   |
| Digital outputs                                |  |
| • from load voltage L+, max.                   | 300 mA   |
| Power loss                                     |  |
| Power loss, typ.                               | 10 W   |
| Digital outputs                                |  |
| Number of digital outputs                      | 2  |
| Short-circuit protection                       | No   |
| 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" permissible range, max.       | 5 A maximum per circuit and 10 A maximum of all circuits per module                      |
| Relay outputs                                  |  |
| • Number of relay outputs                      | 2; 2 circuits per output   |
| Switching capacity of contacts                 |  |
| — with inductive load, max.                    | 0.1 Hz, accordance with IEC 60947-5-1, DC-13; 2 Hz, accordance with IEC 60947-5-1, AC-15 |
| — with resistive load, max.                    | 2 Hz   |
| Cable length                                   |  |
| • shielded, max.                               | 200 m  |
| • unshielded, max.                             | 200 m  |
| Interrupts/diagnostics/status information      |  |
| Diagnostics indication LED                     |  |
| • for status of the outputs                    | Yes  |
| Degree and class of protection                 |  |
| IP degree of protection                        | IP20   |
| Standards, approvals, certificates             |  |
| Highest safety class achievable in safety mode |  |
| • Performance level according to ISO 13849-1   | Category 4, PL e   |

|   |   |
|---|---|
| • SIL acc. to IEC 61508   | SIL 3   |
| Probability of failure (for service life of 20 years and repair time of 100 hours)                                      |   |
| — Low demand mode: PFDavg in accordance with SIL3   | < 1.00E-05  |
| — High demand/continuous mode: PFH in accordance with SIL3  | < 4.00E-09  |
| <b>Ambient conditions</b>   |   |
| Free fall   |   |
| • Fall height, max.   | 0.3 m; five times, in product package   |
| Ambient temperature during operation  |   |
| • min.  | -25 °C; = Tmin  |
| • max.  | 55 °C; = Tmax   |
| • permissible temperature change  | 5°C to 55°C, 3°C / minute   |
| Ambient temperature during storage/transportation   |   |
| • min.  | -40 °C  |
| • max.  | 70 °C   |
| Air pressure acc. to IEC 60068-2-13   |   |
| • Storage/transport, min.   | 660 hPa   |
| • Storage/transport, max.   | 1 140 hPa   |
| 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 under condensation conditions)   |
| <b>Resistance</b>   |   |
| 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; *  |
| 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!  |
| <b>Conformal coating</b>  |   |
| • 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   |
| <b>Mechanics/material</b>   |   |
| Enclosure material (front)  |   |
| • Plastic   | Yes   |

| Dimensions      |        |
|-----------------|--------|
| Width           | 70 mm  |
| Height          | 100 mm |
| Depth           | 75 mm  |
| Weights         |        |
| Weight, approx. | 300 g  |
| Classifications |        |

|        | Version | Classification |
|--------|---------|----------------|
| 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 | EMV |

[Manufacturer Declaration](#)



[China RoHS](#)



[KC](#)

|     |                   |
|-----|-------------------|
| EMV | Functional Safety |
|-----|-------------------|



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