

SIMATIC S7-1200, Digital output SM 1226, F-DQ 4x 24 V DC 2A, PROFIsafe, 70 mm overall width, up to PL E (ISO 13849-1)/ SIL3 (IEC 61508)



| General information                 |                        |
|-------------------------------------|------------------------|
| Product type designation            | SM 1226 F-DQ 4x 24 VDC |
| 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.     | 125 mA                 |
| Digital outputs                     |                        |
| • from load voltage L+, max.        | 170 mA                 |
| Power loss                          |                        |
| Power loss, typ.                    | 8 W                    |
| Digital outputs                     |                        |
| Number of digital outputs           | 4                      |
| • in groups of                      | 1                      |
| Short-circuit protection            | Yes                    |
| Switching capacity of the outputs   |                        |
| • with resistive load, max.         | 30 Hz                  |

|                                                                                    |                                                      |
|------------------------------------------------------------------------------------|------------------------------------------------------|
| • on lamp load, max.                                                               | 10 Hz                                                |
| Output voltage                                                                     |                                                      |
| • Rated value (DC)                                                                 | 24 V                                                 |
| Output current                                                                     |                                                      |
| • for signal "1" rated value                                                       | 2 A                                                  |
| • for signal "1" permissible range, max.                                           | 10 mA to 2.4 A                                       |
| • for signal "0" residual current, max.                                            | P-switch: 0.5 mA, maximum; M-switch: 0.5 mA, maximum |
| 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                                                 |                                                      |
| CE mark                                                                            | Yes                                                  |
| cULus                                                                              | Yes                                                  |
| FM approval                                                                        | Yes                                                  |
| 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                                           |
| Ambient conditions                                                                 |                                                      |
| Free fall                                                                          |                                                      |
| • Fall height, max.                                                                | 0.3 m; five times, in product package                |
| Ambient temperature during operation                                               |                                                      |
| • min.                                                                             | 0 °C                                                 |
| • max.                                                                             | 55 °C                                                |
| • 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.                                                          | 1 080 hPa                                            |
| Relative humidity                                                                  |                                                      |

- Operation at 25 °C without condensation, max. 95 %

#### Mechanics/material

Enclosure material (front)

- Plastic

Yes

#### Dimensions

Width

70 mm

Height

100 mm

Depth

75 mm

#### Weights

Weight, approx.

270 g

**last modified:**

10/29/2020 