

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
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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
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Digital outputs

<ul style="list-style-type: none"> from load voltage L+, max. 	170 mA
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Power loss

Power loss, typ.	8 W
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Digital outputs

Number of digital outputs	4
<ul style="list-style-type: none"> in groups of 	1
Short-circuit protection	Yes

Switching capacity of the outputs

<ul style="list-style-type: none"> with resistive load, max. 	30 Hz
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• 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:

03/03/2020