



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
power supply according to NEC Class 2 required	No
Input current	
from backplane bus 5 V DC, max.	125 mA
Digital outputs	
<ul style="list-style-type: none"> from load voltage L+, max. 	170 mA
Power loss	
Power loss, typ.	8 W
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
<ul style="list-style-type: none"> on lamp load, max. 	10 Hz
Output voltage	
<ul style="list-style-type: none"> Rated value (DC) 	24 V
Output current	
<ul style="list-style-type: none"> for signal "1" rated value 	2 A
<ul style="list-style-type: none"> for signal "1" permissible range, max. 	10 mA to 2.4 A
<ul style="list-style-type: none"> for signal "0" residual current, max. 	P-switch: 0.5 mA, maximum; M-switch: 0.5 mA, maximum
Cable length	
<ul style="list-style-type: none"> shielded, max. 	200 m
<ul style="list-style-type: none"> unshielded, max. 	200 m
Interrupts/diagnostics/status information	
Diagnostics indication LED	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> Performance level according to ISO 13849-1 	Category 4, PL e
<ul style="list-style-type: none"> 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: 8/23/2023 