

SIMATIC S7, Digital output SM 326, F-DO 8x24 V DC/2A PM fail-safe digital output Switching to P-M potential up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE (ISO13849), 1x 40-pole



Figure similar

Supply voltage	
Rated value (DC)	24 V; 1L+
Reverse polarity protection	Yes
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V; 2L+, 3L+
<ul style="list-style-type: none"> <li>Reverse polarity protection</li> </ul>	No
Input current	
from supply voltage 1L+, max.	75 mA
from load voltage 2L+ (without load), max.	100 mA
from load voltage 3L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	12 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes

Limitation of inductive shutdown voltage to	L+ (-33 V)
<b>Switching capacity of the outputs</b>	
• on lamp load, max.	5 W
<b>Output voltage</b>	
• for signal "1", min.	L+ (-1.0 V)
<b>Output current</b>	
• for signal "1" rated value	2 A
• for signal "1" permissible range for 0 to 40 °C, min.	7 mA
• for signal "1" permissible range for 0 to 40 °C, max.	2 A; 2 A for horizontal installation, 1 A for vertical installation
• for signal "1" permissible range for 40 to 60 °C, min.	7 mA
• for signal "1" permissible range for 40 to 60 °C, max.	1 A; for horizontal installation
• for signal "0" residual current, max.	0.5 mA
<b>Switching frequency</b>	
• with resistive load, max.	30 Hz
• with inductive load, max.	2 Hz
• on lamp load, max.	10 Hz
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 40 °C, max.	7.5 A
— up to 60 °C, max.	5 A
vertical installation	
— up to 40 °C, max.	5 A
<b>Cable length</b>	
• shielded, max.	200 m; 200 m for SIL 3, AK 6, Cat 4
• unshielded, max.	200 m
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Diagnostic alarm	Yes; Parameterizable
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
<b>Diagnostics indication LED</b>	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
• between the channels	Yes
• between the channels, in groups of	4
• between the channels and backplane bus	Yes

- between the channels and the power supply of the electronics

Yes

### Isolation

Isolation tested with 500 V DC/350 V AC

### Standards, approvals, certificates

Highest safety class achievable in safety mode

- acc. to EN 954
- Performance level according to ISO 13849-1
- SIL acc. to IEC 61508

Cat. 4

e

SIL 3

### Connection method

required front connector 40-pin

### Dimensions

Width 80 mm

Height 125 mm

Depth 120 mm

### Weights

Weight, approx. 465 g

**last modified:** 06/09/2020