



Figure similar

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

Supply voltage	
Rated value (DC)	24 V; 1L+
Reverse polarity protection	Yes
Load voltage L+	
• Rated value (DC)	24 V; 2L+, 3L+
• Reverse polarity protection	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)
Switching capacity of the outputs	
• on lamp load, max.	5 W
Output voltage	
• for signal "1", min.	L+ (-1.0 V)
Output current	
• 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
Switching frequency	
• with resistive load, max.	30 Hz
• with inductive load, max.	2 Hz
• on lamp load, max.	10 Hz
Total current of the outputs (per group)	
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
Cable length	

• shielded, max. • unshielded, max.	200 m; 200 m for SIL 3, AK 6, Cat 4 200 m																																							
Interrupts/diagnostics/status information																																								
Alarms																																								
• Diagnostic alarm	Yes; Parameterizable																																							
Diagnoses																																								
• Diagnostic information readable	Yes																																							
Diagnostics indication LED																																								
• Fail-safe operation • Group error SF (red)	Yes Yes																																							
Potential separation																																								
Potential separation digital outputs																																								
• between the channels • between the channels, in groups of • between the channels and backplane bus • between the channels and the power supply of the electronics	Yes 4 Yes 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																																							
Classifications																																								
	<table><tr><td></td><td>Version</td><td>Classification</td></tr><tr><td>eClass</td><td>14</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>12</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>9.1</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>9</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>8</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>7.1</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>6</td><td>27-24-22-04</td></tr><tr><td>ETIM</td><td>9</td><td>EC001419</td></tr><tr><td>ETIM</td><td>8</td><td>EC001419</td></tr><tr><td>ETIM</td><td>7</td><td>EC001419</td></tr><tr><td>IDEA</td><td>4</td><td>3566</td></tr><tr><td>UNSPSC</td><td>15</td><td>32-15-17-05</td></tr></table>		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	9	EC001419	ETIM	8	EC001419	ETIM	7	EC001419	IDEA	4	3566	UNSPSC	15	32-15-17-05
	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	9	EC001419																																						
ETIM	8	EC001419																																						
ETIM	7	EC001419																																						
IDEA	4	3566																																						
UNSPSC	15	32-15-17-05																																						
Approvals / Certificates																																								
General Product Approval	EMV																																							
Miscellaneous  EG-Konf.   UL  RCM  RCM																																								
For use in hazardous locations																																								



[FM](#)



[Miscellaneous](#)

For use in hazardous locations	Functional Safety	Maritime application
--------------------------------	-------------------	----------------------

[CCC-Ex](#)



[Type Examination Certificate](#)



Maritime application



[NK / Nippon Kaiji Kyokai](#)



[CCS \(China Classification Society\)](#)

last modified:

4/7/2025