



SIMATIC S7, digital output SM 326, F-DO10x 24 V DC/2A PP, fail-safe digital output for SIMATIC S7F systems, with diagnostic alarm, LVV, 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+	
<ul style="list-style-type: none"> Rated value (DC) 	24 V; 2L+, 3L+
<ul style="list-style-type: none"> Reverse polarity protection 	No
Input current	
from supply voltage 1L+, max.	100 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.	6 W
Digital outputs	
Number of digital outputs	10
Short-circuit protection	Yes
Switching capacity of the outputs	
<ul style="list-style-type: none"> on lamp load, max. 	5 W
Output voltage	
<ul style="list-style-type: none"> for signal "1", min. 	L+ (-1.0 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 for 0 to 40 °C, min. 	7 mA
<ul style="list-style-type: none"> for signal "1" permissible range for 0 to 40 °C, max. 	2.4 A
<ul style="list-style-type: none"> for signal "1" permissible range for 40 to 60 °C, min. 	7 mA
<ul style="list-style-type: none"> for signal "1" permissible range for 40 to 60 °C, max. 	2.4 A
<ul style="list-style-type: none"> for signal "0" residual current, max. 	0.5 mA
Switching frequency	
<ul style="list-style-type: none"> with resistive load, max. 	25 Hz
<ul style="list-style-type: none"> with inductive load, max. 	25 Hz
<ul style="list-style-type: none"> on lamp load, max. 	10 Hz
Total current of the outputs (per group)	
horizontal installation	
<ul style="list-style-type: none"> up to 40 °C, max. 	10 A
<ul style="list-style-type: none"> up to 60 °C, max. 	6 A
vertical installation	
<ul style="list-style-type: none"> up to 40 °C, max. 	5 A
Cable length	
<ul style="list-style-type: none"> shielded, max. 	1 000 m
<ul style="list-style-type: none"> unshielded, max. 	600 m

Interrupts/diagnostics/status information	
Alarms	
• Diagnostic alarm	Yes
Diagnoses	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
Potential separation	
Potential separation digital outputs	
• between the channels	Yes
• between the channels, in groups of	5
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes
Isolation	
Isolation tested with	370V for 1 min
Standards, approvals, certificates	
Highest safety class achievable in safety mode	
• acc. to DIN VDE 0801	AK 5 and 6
• acc. to EN 954	Cat. 4
• Performance level according to ISO 13849-1	e
• SIL acc. to IEC 61508	SIL 3
connection method	
required front connector	40-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	330 g

Classifications			
		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	For use in hazardous locations



For use in hazardous locations

[EM](#)



[Miscellaneous](#)

[CCC-Ex](#)

Functional Safety

Marine / Shipping



[Type Examination Certificate](#)



Marine / Shipping

[NK / Nippon Kaiji Kyokai](#)



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

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