



Figure similar

spare part SIMATIC S7-300, digital output SM 322, isolated, 8 DO, 24 V DC, 0.5 A (1x 8 DO), short-circuit protection diagnostics, 1x 20-pole

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	90 mA
from backplane bus 5 V DC, max.	70 mA
Power loss	
Power loss, typ.	5 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes; Electronic
• Response threshold, typ.	0.75 to 1.5 A
Limitation of inductive shutdown voltage to	L+ (-45 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
• upper limit	3 kΩ
Output voltage	
• for signal "1", min.	L+ (-0.8 to -1.6 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range for 0 to 40 °C, min.	10 mA
• for signal "1" permissible range for 0 to 40 °C, max.	0.6 A
• for signal "1" permissible range for 40 to 60 °C, min.	10 mA
• for signal "1" permissible range for 40 to 60 °C, max.	0.6 A
• for signal "1" minimum load current	10 mA
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	180 μs
• "1" to "0", max.	245 μs
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Outputs with series diodes only
Switching frequency	

<ul style="list-style-type: none"> with resistive load, max. 	100 Hz	
<ul style="list-style-type: none"> with inductive load, max. 	2 Hz	
<ul style="list-style-type: none"> with inductive load (acc. to IEC 60947-5-1, DC13), max. 	2 Hz	
<ul style="list-style-type: none"> on lamp load, max. 	10 Hz	
Total current of the outputs (per group)		
horizontal installation		
— up to 40 °C, max.	4 A	
— up to 60 °C, max.	3 A	
vertical installation		
— up to 40 °C, max.	4 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		
Diagnostics function	Yes; Parameterizable	
Alarms		
<ul style="list-style-type: none"> Diagnostic alarm 	Yes; Parameterizable	
Diagnoses		
<ul style="list-style-type: none"> Diagnostic information readable 	Yes	
<ul style="list-style-type: none"> Wire break 	Yes	
<ul style="list-style-type: none"> Short-circuit 	Yes	
<ul style="list-style-type: none"> Fuse blown 	No	
<ul style="list-style-type: none"> Missing load voltage 	Yes	
Diagnostics indication LED		
<ul style="list-style-type: none"> Rated load voltage PWR (green) 	No	
<ul style="list-style-type: none"> Fuse OK FSG (green) 	No	
<ul style="list-style-type: none"> Group error SF (red) 	Yes	
<ul style="list-style-type: none"> Status indicator digital output (green) 	Yes; per channel	
<ul style="list-style-type: none"> Channel fault indicator F (red) 	Yes	
Potential separation		
Potential separation digital outputs		
<ul style="list-style-type: none"> between the channels, in groups of 	8	
<ul style="list-style-type: none"> between the channels and backplane bus 	Yes; Optocoupler	
Isolation		
Isolation tested with	500 V DC	
Connection method		
required front connector	20-pin	
Dimensions		
Width	40 mm	
Height	125 mm	
Depth	120 mm	
Weights		
Weight, approx.	210 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	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419

IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval



[Manufacturer Declaration](#)

[Miscellaneous](#)



General Product Approval | EMV



[Manufacturer Declaration](#)

[China RoHS](#)



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For use in hazardous locations | Maritime application

[CCC-Ex](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application



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