



Figure similar

spare part SIMATIC S7-300, digital output SM 322, isolated, 32 DO, 120 V/230 V AC, 1 A, double-width, 2x 20-pole

Supply voltage	
Load voltage L1	
• Rated value (AC)	120 V; 120/230 V AC
• permissible range, lower limit (AC)	79 V
• permissible range, upper limit (AC)	264 V
• permissible frequency range, lower limit	47 Hz
• permissible frequency range, upper limit	63 Hz
Input current	
from load voltage L1 (without load), max.	10 mA
from backplane bus 5 V DC, max.	190 mA
Power loss	
Power loss, typ.	25 W
Digital outputs	
Number of digital outputs	32
Short-circuit protection	No
Controlling a digital input	Yes
Size of motor starters according to NEMA, max.	Size 4 according to NEMA
Zero-crossing switch	Yes; Max. 60 V
Switching capacity of the outputs	
• on lamp load, max.	50 W
Output voltage	
• for signal "1", min.	L1 (-0.8 V)
Output current	
• for signal "1" rated value	1 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.	1 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.	1 A
• for signal "1" minimum load current	10 mA
• for signal "1" permissible surge current, max.	10 A; per group (for 2 AC cycles)
• for signal "0" residual current, max.	2 mA
Output delay with resistive load	
• "0" to "1", max.	1 AC cycle
• "1" to "0", max.	1 AC cycle
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes; only outputs of the same group
Switching frequency	

• with resistive load, max. • with inductive load, max. • with inductive load (acc. to IEC 60947-5-1, AC15), max. • on lamp load, max.	10 Hz 0.5 Hz 0.5 Hz 1 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			
• shielded, max.	1 000 m		
• unshielded, max.	600 m		
Interrupts/diagnostics/status information			
Alarms	No		
Diagnostics function	Yes; Fuse blown or load voltage missing		
Alarms			
• Diagnostic alarm	No		
Diagnostics indication LED			
• Group error SF (red)	Yes		
• Status indicator digital output (green)	Yes; per channel		
Potential separation			
Potential separation digital outputs			
• between the channels	Yes		
• between the channels, in groups of	8		
• between the channels and backplane bus	Yes; Optocoupler		
Isolation			
Isolation tested with	4 000 V DC		
Connection method			
required front connector	20-pin		
Dimensions			
Width	80 mm		
Height	125 mm		
Depth	117 mm		
Weights			
Weight, approx.	500 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			



[Miscellaneous](#)

[Manufacturer Declaration](#)

[China RoHS](#)



General Product Approval	EMV	For use in hazardous locations	Maritime application
--------------------------	-----	--------------------------------	----------------------



[EM](#)



Maritime application



[NK / Nippon Kaiji Kyokai](#)



Maritime application

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

last modified:

4/7/2025