



Figure similar

SIMATIC S7-300, Digital output SM 322, Isolated 16 DO, relay contacts, 1x 20-pole

Supply voltage	
Load voltage L+	
• Rated value (DC)	120 V
Load voltage L1	
• Rated value (AC)	230 V
Input current	
from supply voltage L+, max.	250 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	4.5 W
Digital outputs	
Number of digital outputs	16; Relays
Short-circuit protection	No
Controlling a digital input	Yes
Size of motor starters according to NEMA, max.	Size 5 according to NEMA
Switching capacity of the outputs	
• on lamp load, max.	50 W; 230 V AC
Output current	
• for signal "1" rated value	2 A
• for signal "1" minimum load current	10 mA
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	1 Hz
• with inductive load, max.	0.5 Hz
• With inductive load (to IEC 60947-5-1, DC13/AC15), max.	0.5 Hz
• on lamp load, max.	1 Hz
• mechanical, max.	10 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 60 °C, max.	8 A
vertical installation	
— up to 40 °C, max.	8 A
Relay outputs	
• Rated supply voltage of relay coil L+ (DC)	24 V
• Contact connection (internal)	No
• Number of operating cycles, max.	100 000; 50 000 (24 V DC, at 2 A); 700 000 (120 V AC, at 2 A); 100 000 (230 V AC, at 2 A)

Switching capacity of contacts			
— with inductive load, max.	2 A; 2 A (230 V AC), 2 A (24 V DC)		
— with resistive load, max.	2 A; 2 A (230 V AC), 2 A (24 V DC)		
— Thermal continuous current, max.	2 A		
Cable length			
• shielded, max.	1 000 m		
• unshielded, max.	600 m		
Interrupts/diagnostics/status information			
Alarms	No		
Diagnostics function	No		
Alarms			
• Diagnostic alarm	No		
Diagnoses			
• Wire-break	No		
• Short-circuit	No		
• Fuse blown	No		
• missing load voltage	No		
Diagnostics indication LED			
• Rated load voltage PWR (green)	No		
• Fuse OK FSG (green)	No		
• Status indicator digital output (green)	Yes		
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	1 500 V AC		
connection method			
required front connector	20-pin		
Dimensions			
Width	40 mm		
Height	125 mm		
Depth	120 mm		
Weights			
Weight, approx.	250 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](#)



EMV

For use in hazardous locations

Maritime application



[EM](#)



Maritime application



[NK / Nippon Kaiji Kyokai](#)



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

last modified:

4/7/2025