



Figure similar

SIMATIC S7-300, Digital output SM 322, isolated, 8 DO, 120/230 V AC, 1 A, 1x 20-pole

Supply voltage	
Load voltage L1	
• Rated value (AC)	230 V; 120/230 V AC
• permissible range, lower limit (AC)	93 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.	2 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	8.6 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes; Fuse 8 A, 250 V; per group
• required current for fuse shutdown, min.	40 A
• Response time, max.	300 ms
Controlling a digital input	Yes
Size of motor starters according to NEMA, max.	5 NEMA compliant
Spare fuses	8 A / quick response
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 (-1.5 V)
• for signal "1" (at max. current), min.	L1 (-1.5 V)
• for signal "1" (at min. current), min.	L1 (-8.5 V)
Output current	
• for signal "1" rated value	2 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.	2 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.	20 A; max. 1 AC cycle
• 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	
Switching frequency			
• with resistive load, max.		10 Hz	
• with inductive load, max.		0.5 Hz	
• with inductive load (acc. to IEC 60947-5-1, AC15), max.		0.5 Hz	
• on lamp load, max.		1 Hz	
Total current of the outputs (per group)			
horizontal installation			
— up to 40 °C, max.		4 A	
— up to 60 °C, max.		2 A	
vertical installation			
— up to 40 °C, max.		2 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	
Diagnoses			
• Wire-break		No	
• Short-circuit		No	
• Fuse blown		Yes	
• missing load voltage		Yes	
Diagnostics indication LED			
• Rated load voltage PWR (green)		Yes	
• Fuse OK FSG (green)		Yes	
• Group error SF (red)		Yes	
• Status indicator digital output (green)		Yes	
Potential separation			
Potential separation digital outputs			
• between the channels		Yes	
• between the channels, in groups of		4	
• 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.		275 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



[Manufacturer Declaration](#)

[Miscellaneous](#)



EMV	For use in hazardous locations	Maritime application
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[FM](#)



Maritime application



[NK / Nippon Kaiji Kyokai](#)



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

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