

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



Figure similar

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

Diagnostic messages

- 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

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