SIEMENS

Data sheet



SIMATIC S7-300, Digital output SM 322, isolated, 16 DO (solid-state relay), 24-48 V AC/DC; 0.5 A with single rooting, 1x 40-pole

Figure similar

Supply voltage	
Mains buffering	
Mains/voltage failure stored energy time	5 ms
Load voltage L+	
Rated value (DC)	24 V; 24 / 48
 permissible range, lower limit (DC) 	20.4 V
 permissible range, upper limit (DC) 	57.6 V
 Reverse polarity protection 	Yes
Input current	
from supply voltage L+, max.	200 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	2.8 W
Digital outputs	
Number of digital outputs	16
Short-circuit protection	No; to be provided externally
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.	2.5 W
Output voltage	
● for signal "1", min.	L+ (-0.25 V)
Output current	
for signal "1" rated value	0.5 A
 for signal "1" permissible range for 0 to 40 °C, max. 	0.5 A
 for signal "1" permissible range for 40 to 60 °C, max. 	0.5 A
for signal "1" permissible surge current, max.	1.5 A; for 50 ms, 1 A 2 s one-time
◆ for signal "0" residual current, max.	10 μΑ
Output delay with resistive load	
● "0" to "1", max.	6 ms
• "1" to "0", max.	3 ms
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, DC13), max. 	0.5 Hz
on lamp load, max.	0.5 Hz

Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	0.5 A; 8 A per module
— up to 60 °C, max.	0.5 A; 8 A per module
- up to 60°C, max.	0.5 A, 6 A per module
— up to 40 °C, max.	0.5 A; 8 A per module
Cable length	0.5 A, 6 A per module
• shielded, max.	1 000 m
unshielded, max.	600 m
Interrupts/diagnostics/status information	000 111
Diagnostics function	Yes; Parameterizable
Alarms	1 es, 1 alailletelizable
Diagnostic alarm	Yes; Parameterizable
Diagnoses	100, 1 dramotorizable
Diagnostic information readable	Yes
Diagnostics indication LED	
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	1
between the channels and backplane bus	Yes; Optocoupler
between the channels and the power supply of the electronics	Yes
Isolation	
Isolation tested with	1 500 V AC
connection method	
required front connector	40-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	260 g

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