



SIMATIC S7-300, Digital output SM 322, Isolated 16 DO, 120/230 V AC, 1 A, 1x 20-pole

Figure similar

Supply voltage	
Load voltage L1	
<ul style="list-style-type: none"> Rated value (AC) 	230 V; 120/230 V AC
<ul style="list-style-type: none"> permissible range, lower limit (AC) 	79 V
<ul style="list-style-type: none"> permissible range, upper limit (AC) 	264 V
Input current	
from load voltage L1 (without load), max.	2 mA
from backplane bus 5 V DC, max.	200 mA
Power loss	
Power loss, typ.	8.6 W
Digital outputs	
Number of digital outputs	16
Short-circuit protection	Yes; Fuse 8 A, 250 V; per group
<ul style="list-style-type: none"> required current for fuse shutdown, min. 	40 A
<ul style="list-style-type: none"> Response time, max. 	300 ms
Controlling a digital input	Yes
Size of motor starters according to NEMA, max.	4 NEMA compliant
Spare fuses	8 A / quick response
Switching capacity of the outputs	
<ul style="list-style-type: none"> on lamp load, max. 	50 W
Output voltage	
<ul style="list-style-type: none"> for signal "1" (at max. current), min. 	L1 (-1.5 V)
<ul style="list-style-type: none"> for signal "1" (at min. current), min. 	L1 (-8.5 V)
Output current	
<ul style="list-style-type: none"> for signal "1" rated value 	1 A
<ul style="list-style-type: none"> for signal "1" permissible range for 0 to 40 °C, min. 	10 mA
<ul style="list-style-type: none"> for signal "1" permissible range for 0 to 40 °C, max. 	1 A
<ul style="list-style-type: none"> for signal "1" permissible range for 40 to 60 °C, min. 	10 mA
<ul style="list-style-type: none"> for signal "1" permissible range for 40 to 60 °C, max. 	0.5 A
<ul style="list-style-type: none"> for signal "1" minimum load current 	10 mA
<ul style="list-style-type: none"> for signal "1" permissible surge current, max. 	20 A; with 2 half waves
<ul style="list-style-type: none"> for signal "0" residual current, max. 	2 mA
Parallel switching of two outputs	
<ul style="list-style-type: none"> for uprating 	No
<ul style="list-style-type: none"> for redundant control of a load 	Yes; only outputs of the same group
Switching frequency	
<ul style="list-style-type: none"> with resistive load, max. 	10 Hz
<ul style="list-style-type: none"> with inductive load, max. 	0.5 Hz
<ul style="list-style-type: none"> 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	
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	No
Diagnostics indication LED	
• Rated load voltage PWR (green)	No
• Fuse OK FSG (green)	Yes; Red LED for fuse
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
Potential separation	
Potential separation digital outputs	
• 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	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	275 g

last modified: 3/12/2024 