



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

Figure similar

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

<ul style="list-style-type: none"> <li>Number of operating cycles, max.</li> </ul>	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)
<b>Switching capacity of contacts</b>	
<ul style="list-style-type: none"> <li>with inductive load, max.</li> </ul>	2 A; 2 A (230 V AC), 2 A (24 V DC)
<ul style="list-style-type: none"> <li>with resistive load, max.</li> </ul>	2 A; 2 A (230 V AC), 2 A (24 V DC)
<ul style="list-style-type: none"> <li>Thermal continuous current, max.</li> </ul>	2 A
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>shielded, max.</li> </ul>	1 000 m
<ul style="list-style-type: none"> <li>unshielded, max.</li> </ul>	600 m
<b>Interrupts/diagnostics/status information</b>	
Alarms	No
Diagnostics function	No
<b>Alarms</b>	
<ul style="list-style-type: none"> <li>Diagnostic alarm</li> </ul>	No
<b>Diagnoses</b>	
<ul style="list-style-type: none"> <li>Wire-break</li> </ul>	No
<ul style="list-style-type: none"> <li>Short-circuit</li> </ul>	No
<ul style="list-style-type: none"> <li>Fuse blown</li> </ul>	No
<ul style="list-style-type: none"> <li>missing load voltage</li> </ul>	No
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>Rated load voltage PWR (green)</li> </ul>	No
<ul style="list-style-type: none"> <li>Fuse OK FSG (green)</li> </ul>	No
<ul style="list-style-type: none"> <li>Status indicator digital output (green)</li> </ul>	Yes
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
<ul style="list-style-type: none"> <li>between the channels</li> </ul>	Yes
<ul style="list-style-type: none"> <li>between the channels, in groups of</li> </ul>	8
<ul style="list-style-type: none"> <li>between the channels and backplane bus</li> </ul>	Yes; Optocoupler
<b>Isolation</b>	
Isolation tested with	1 500 V AC
<b>connection method / header</b>	
required front connector	20-pin
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	120 mm
<b>Weights</b>	
Weight, approx.	250 g
<b>last modified:</b>	1/16/2021 