



SIMATIC S7-300, Digital output SM 322, isolated, 8 DO, 24 V DC, 2A, 1x 20-pole

Figure similar

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>permissible range, lower limit (DC)</li> </ul>	20.4 V
<ul style="list-style-type: none"> <li>permissible range, upper limit (DC)</li> </ul>	28.8 V
Input current	
from load voltage L+ (without load), max.	60 mA
from backplane bus 5 V DC, max.	40 mA
Power loss	
Power loss, typ.	6.8 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes; Electronic
<ul style="list-style-type: none"> <li>Response threshold, typ.</li> </ul>	3 A
Limitation of inductive shutdown voltage to	L+ (-48 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	10 W
Load resistance range	
<ul style="list-style-type: none"> <li>lower limit</li> </ul>	12 $\Omega$
<ul style="list-style-type: none"> <li>upper limit</li> </ul>	4 k $\Omega$
Output voltage	
<ul style="list-style-type: none"> <li>for signal "1", min.</li> </ul>	L+ (-0.8 V)
Output current	
<ul style="list-style-type: none"> <li>for signal "1" rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 0 to 40 °C, min.</li> </ul>	5 mA
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 0 to 40 °C, max.</li> </ul>	2.4 A
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 40 to 60 °C, min.</li> </ul>	5 mA
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 40 to 60 °C, max.</li> </ul>	2.4 A
<ul style="list-style-type: none"> <li>for signal "1" minimum load current</li> </ul>	5 mA
<ul style="list-style-type: none"> <li>for signal "0" residual current, max.</li> </ul>	0.5 mA
Output delay with resistive load	
<ul style="list-style-type: none"> <li>"0" to "1", max.</li> </ul>	100 $\mu$ s
<ul style="list-style-type: none"> <li>"1" to "0", max.</li> </ul>	500 $\mu$ s
Parallel switching of two outputs	
<ul style="list-style-type: none"> <li>for uprating</li> </ul>	No

• for redundant control of a load	Yes
<b>Switching frequency</b>	
• with resistive load, max.	100 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.	10 Hz
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 40 °C, max.	4 A
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Interrupts/diagnostics/status information</b>	
Alarms	No
Diagnostics function	No
<b>Alarms</b>	
• Diagnostic alarm	No
<b>Diagnoses</b>	
• Wire-break	No
• Short-circuit	No
• Fuse blown	No
• missing load voltage	No
<b>Diagnostics indication LED</b>	
• Rated load voltage PWR (green)	No
• Fuse OK FSG (green)	No
• Status indicator digital output (green)	Yes; per channel
<b>Potential separation</b>	
Potential separation digital outputs	
• between the channels	Yes
• between the channels, in groups of	4
• between the channels and backplane bus	Yes; Optocoupler
<b>Isolation</b>	
Isolation tested with	500 V DC
<b>Connection method</b>	
required front connector	20-pin
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	120 mm
<b>Weights</b>	
Weight, approx.	190 g
<b>last modified:</b>	1/16/2021 