



Figure similar

SIMATIC S7-300, Digital output SM 322, isolated, 32 DO, 120 V/230 V AC, 1 A, double-width, 2x 20-pole

Supply voltage	
Load voltage L1	
<ul style="list-style-type: none"> <li>Rated value (AC)</li> </ul>	120 V; 120/230 V AC
<ul style="list-style-type: none"> <li>permissible range, lower limit (AC)</li> </ul>	79 V
<ul style="list-style-type: none"> <li>permissible range, upper limit (AC)</li> </ul>	264 V
<ul style="list-style-type: none"> <li>permissible frequency range, lower limit</li> </ul>	47 Hz
<ul style="list-style-type: none"> <li>permissible frequency range, upper limit</li> </ul>	63 Hz
Input current	
from load voltage L1 (without load), max.	10 mA
from backplane bus 5 V DC, max.	190 mA
Power loss	
Power loss, typ.	25 W
Digital outputs	
Number of digital outputs	32
Short-circuit protection	No
Controlling a digital input	Yes
Size of motor starters according to NEMA, max.	Size 4 according to NEMA
Zero-crossing switch	Yes; Max. 60 V
Switching capacity of the outputs	
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	50 W
Output voltage	
<ul style="list-style-type: none"> <li>for signal "1", min.</li> </ul>	L1 (-0.8 V)
Output current	
<ul style="list-style-type: none"> <li>for signal "1" rated value</li> </ul>	1 A
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 0 to 40 °C, min.</li> </ul>	10 mA
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 0 to 40 °C, max.</li> </ul>	1 A
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 40 to 60 °C, min.</li> </ul>	10 mA
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 40 to 60 °C, max.</li> </ul>	1 A
<ul style="list-style-type: none"> <li>for signal "1" minimum load current</li> </ul>	10 mA
<ul style="list-style-type: none"> <li>for signal "1" permissible surge current, max.</li> </ul>	10 A; per group (for 2 AC cycles)
<ul style="list-style-type: none"> <li>for signal "0" residual current, max.</li> </ul>	2 mA
Output delay with resistive load	
<ul style="list-style-type: none"> <li>"0" to "1", max.</li> </ul>	1 AC cycle
<ul style="list-style-type: none"> <li>"1" to "0", max.</li> </ul>	1 AC cycle
Parallel switching of two outputs	
<ul style="list-style-type: none"> <li>for uprating</li> </ul>	No
<ul style="list-style-type: none"> <li>for redundant control of a load</li> </ul>	Yes; only outputs of the same group
Switching frequency	
<ul style="list-style-type: none"> <li>with resistive load, max.</li> </ul>	10 Hz

<ul style="list-style-type: none"> <li>• with inductive load, max.</li> </ul>	0.5 Hz
<ul style="list-style-type: none"> <li>• with inductive load (acc. to IEC 60947-5-1, AC15), max.</li> </ul>	0.5 Hz
<ul style="list-style-type: none"> <li>• on lamp load, max.</li> </ul>	1 Hz
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	3 A
vertical installation	
— up to 40 °C, max.	4 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	Yes; Fuse blown or load voltage missing
<b>Alarms</b>	
<ul style="list-style-type: none"> <li>• Diagnostic alarm</li> </ul>	No
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>• Group error SF (red)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Status indicator digital output (green)</li> </ul>	Yes; per channel
<b>Potential separation</b>	
Potential separation digital outputs	
<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	4 000 V DC
<b>connection method / header</b>	
required front connector	20-pin
<b>Dimensions</b>	
Width	80 mm
Height	125 mm
Depth	117 mm
<b>Weights</b>	
Weight, approx.	500 g
<b>last modified:</b>	1/16/2021 