



Figure similar

SIMATIC S7-300, Digital output SM 322, isolated, 16 DO, 24 V DC, 0.5A, 1x 20-pole, Total current 4 A/group (8 A/module)

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	80 mA
from backplane bus 5 V DC, max.	80 mA
Power loss	
Power loss, typ.	4.9 W
Digital outputs	
Number of digital outputs	16
Short-circuit protection	Yes; Electronic
• Response threshold, typ.	1 A
Limitation of inductive shutdown voltage to	L+ (-53 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
• upper limit	4 kΩ
Output voltage	
• for signal "1", min.	L+ (-0.8 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range for 0 to 40 °C, min.	5 mA
• for signal "1" permissible range for 0 to 40 °C, max.	0.6 A
• for signal "1" permissible range for 40 to 60 °C, min.	5 mA
• for signal "1" permissible range for 40 to 60 °C, max.	0.6 A
• for signal "1" minimum load current	5 mA
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	100 μs
• "1" to "0", max.	500 μs
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	100 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, DC13), max.</li> </ul>	0.5 Hz	
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	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.	3 A	
vertical installation		
— up to 40 °C, max.	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>		
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	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>Classifications</b>		
	<b>Version</b>	<b>Classification</b>
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05
<b>Approvals / Certificates</b>		
General Product Approval	EMV	

[Manufacturer Declaration](#)



EMV

For use in hazardous locations



[EM](#)



For use in hazardous locations

Marine / Shipping



[Miscellaneous](#)

[CCC-Ex](#)



Marine / Shipping



LRS

[NK / Nippon Kaiji Kyokai](#)



PRS



RINA

[CCS \(China Classification Society\)](#)

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