



SIMATIC S7-300, Digital output SM 322, isolated, 8 DO, 48-125 V DC, 1.5A, 1x 20-pole

Figure similar

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> Rated value (DC) 	48 V; 48 V DC to 125 V DC
<ul style="list-style-type: none"> permissible range, lower limit (DC) 	40 V
<ul style="list-style-type: none"> permissible range, upper limit (DC) 	140 V
<ul style="list-style-type: none"> Reverse polarity protection 	Yes; through fuse
Input current	
from load voltage L+ (without load), max.	2 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	7.2 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes; Electronic
<ul style="list-style-type: none"> Response threshold, typ. 	4.4 A
Limitation of inductive shutdown voltage to	M (-1 V)
Controlling a digital input	Yes
Spare fuses	6.3 A / 250 V, quick-response, 5x 20 mm
Switching capacity of the outputs	
<ul style="list-style-type: none"> on lamp load, max. 	15 W; 15 W (48 V) or 40 W (125 V)
Output voltage	
<ul style="list-style-type: none"> for signal "1", min. 	L+ (-1.2 V)
Output current	
<ul style="list-style-type: none"> for signal "1" rated value 	1.5 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. 	1.5 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. 	1.5 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. 	3 A; for 10 ms
<ul style="list-style-type: none"> for signal "0" residual current, max. 	0.5 mA
Output delay with resistive load	
<ul style="list-style-type: none"> "0" to "1", max. 	2 ms
<ul style="list-style-type: none"> "1" to "0", max. 	15 ms
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. 	25 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, DC13), max. 	0.5 Hz
<ul style="list-style-type: none"> • on lamp load, max. 	10 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	6 A
— up to 50 °C, max.	4 A
— up to 60 °C, max.	3 A
vertical installation	
— up to 40 °C, max.	4 A
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	1 000 m
<ul style="list-style-type: none"> • unshielded, max. 	600 m
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	No
Diagnoses	
<ul style="list-style-type: none"> • Wire-break 	No
<ul style="list-style-type: none"> • Short-circuit 	No
<ul style="list-style-type: none"> • Fuse blown 	No
<ul style="list-style-type: none"> • missing load voltage 	No
Diagnostics indication LED	
<ul style="list-style-type: none"> • Rated load voltage PWR (green) 	No
<ul style="list-style-type: none"> • Fuse OK FSG (green) 	No
<ul style="list-style-type: none"> • Group error SF (red) 	Yes
<ul style="list-style-type: none"> • Status indicator digital output (green) 	Yes
Potential separation	
Potential separation digital outputs	
<ul style="list-style-type: none"> • between the channels 	Yes
<ul style="list-style-type: none"> • between the channels, in groups of 	4
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes; Optocoupler
Isolation	
Isolation tested with	1 500 V AC
connection method / header	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	250 g
last modified:	1/16/2021 