



SIMATIC S7-300, DIGITAL OUTPUT SM 322,
OPTICALLY ISOLATED, 8 DO, DC 48-125V,
1.5A, 1 X 20 PIN

Supply voltage	
Load voltage L+	
Rated value (DC)	48 V ; 48 to 125 V DC
permissible range, lower limit (DC)	40 V
permissible range, upper limit (DC)	140 V
Input current	
from load voltage L+ (without load), max.	2 mA
from backplane bus 5 V DC, max.	100 mA
Power losses	
Power loss, typ.	7.2 W
Digital outputs	
Number of digital outputs	8
Limitation of inductive shutdown voltage to	M (-1 V)
Switching capacity of the outputs	
Lamp load, max.	15 W ; 15 W (48 V) or 40 W (125 V)
Output voltage	
for signal "1", min.	L+ (-1.2 V)
Output current	

for signal "1" rated value	1.5 A
for signal "1" permissible range for 0 to 40 °C, max.	1.5 A
for signal "1" minimum load current	10 mA
for signal "1" permissible surge current, max.	3 A ; for 10 ms
for signal "0" residual current, max.	0.5 mA
Switching frequency	
with resistive load, max.	25 Hz
with inductive load, max.	0.5 Hz
on lamp load, max.	10 Hz
Aggregate current of 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	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
Interrupts/diagnostics/status information	
Alarms	
Diagnostic alarm	No
Diagnostic messages	
Diagnostics	No
Wire break	No
Short circuit	No
Fuse blown	No
Missing load voltage	No
Diagnostics indication LED	
Rated load voltage PWR (green)	No
Fuse OK FSG (green)	No
Galvanic isolation	
Galvanic isolation digital outputs	
between the channels, in groups of	4
between the channels and the backplane bus	Yes ; Optocoupler
Isolation	
Isolation checked with	1500 V AC
Connection method	

required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	250 g
Status	Sep 2, 2013