Data sheet 6ES7322-1BL00-0AA0



SIMATIC S7-300, Digital output SM 322, isolated, 32 DO, 24 V DC, 0.5A, 1x 40-pole, Total current 4 A/group (16 A/module)

0	
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.	160 mA
from backplane bus 5 V DC, max.	110 mA
Power loss	
Power loss, typ.	6.6 W
Digital outputs	
Number of digital outputs	32
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; only outputs of the same group
Switching frequency	
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
Total current of the outputs (per group)	10112
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
Cable length	
shielded, max.	1 000 m
• unshielded, max.	600 m
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Alarms	
Diagnostic alarm	No
Diagnoses	
Diagnostic information readable	No
Wire-break	No
Short-circuit	No
missing load voltage	No
Diagnostics indication LED	
Rated load voltage PWR (green)	No
• Fuse OK FSG (green)	No
Group error SF (red)	No
Status indicator digital output (green)	Yes; per channel
Channel fault indicator F (red)	No
Potential separation	
Potential separation digital outputs	
between the channels	Yes
 between the channels, in groups of 	8
between the channels and backplane bus	Yes; Optocoupler
Isolation	
Isolation tested with	500 V DC
connection method	
required front connector	40-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	260 g
- A - L.L	

last modified:

3/12/2024