SIEMENS

Data sheet

6ES7327-1BH00-0AB0



SIMATIC S7-300, Digital module SM 327, isolated, 8DI and 8DX, 24 V DC, 0.5 A 1x 20-pole; 8DX by individual channels Can be parameterized as DI or DO

Figure similar

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.	20 mA
from backplane bus 5 V DC, max.	60 mA
Power loss	
Power loss, typ.	3 W
Digital inputs	
Number of digital inputs	8; 8 hard-wired, 8 others individually parameterizable
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 60 °C, max.	16
vertical installation	
— up to 40 °C, max.	16
Input voltage	
 Type of input voltage 	DC
Rated value (DC)	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	+15 to +30 V
Input current	
● for signal "1", typ.	6 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	1.2 ms
— at "0" to "1", max.	4.8 ms
— at "1" to "0", min.	1.2 ms
— at "1" to "0", max.	4.8 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Digital outputs	
Number of digital outputs	8; can also be parameterized individually as DI
Short-circuit protection	Yes
Response threshold, typ.	1 A
Limitation of inductive shutdown voltage to	L+ (-54 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+ (-1.5 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range, min.	5 mA
• for signal "1" permissible range, max.	0.6 A
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	350 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	100, only outputs of the same group
with resistive load, max.	100 Hz
•	
with inductive load, max. with inductive load (ago to IEC 60047 5.1 DC12), 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)	
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
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
 permissible quiescent current (2-wire sensor), max. 	1.5 mA
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Diagnostics indication LED	
Status indicator digital input (green)	Yes
Status indicator digital output (green)	Yes
Potential separation	
Potential separation digital inputs	
between the channels	No
	110
• between the channels and backplane bus	Vae: Ontocoupler
between the channels and backplane bus Potential separation digital outputs	Yes; Optocoupler
Potential separation digital outputs	
Potential separation digital outputs • between the channels	No
Potential separation digital outputs • between the channels • between the channels and backplane bus	
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation	No Yes; Optocoupler
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation Isolation tested with	No
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation	No Yes; Optocoupler
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation Isolation tested with	No Yes; Optocoupler
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation Isolation tested with connection method	No Yes; Optocoupler 500 V DC
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation Isolation tested with connection method required front connector	No Yes; Optocoupler 500 V DC
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation Isolation tested with connection method required front connector Dimensions	No Yes; Optocoupler 500 V DC 20-pin
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation Isolation tested with connection method required front connector Dimensions Width	No Yes; Optocoupler 500 V DC 20-pin 40 mm
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation Isolation tested with connection method required front connector Dimensions Width Height	No Yes; Optocoupler 500 V DC 20-pin 40 mm 125 mm
Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation Isolation tested with connection method required front connector Dimensions Width Height Depth	No Yes; Optocoupler 500 V DC 20-pin 40 mm 125 mm

last modified: 3/12/2024 **C**