



Figure similar

SIMATIC S7-300, Digital input SM 321, Isolated 16 DI, 120/230 V AC, 1x 20-pole

Supply voltage	
Load voltage L1	
• Rated value (AC)	230 V; 120/230 V AC; all load voltages must have the same phase.
Input current	
from backplane bus 5 V DC, max.	29 mA
Power loss	
Power loss, typ.	4.9 W
Digital inputs	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 40 °C, max.	16
— up to 60 °C, max.	16
vertical installation	
— up to 40 °C, max.	16
Input voltage	
• Type of input voltage	AC
• Rated value (AC)	230 V; 120/230 V AC (47 ... 63 Hz)
• for signal "0"	0 to 40V
• for signal "1"	79 to 264V
Input current	
• for signal "1", typ.	6.5 mA; (120 V, 60 Hz), 16 mA (230 V, 50 Hz)
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", min.	25 ms
— at "0" to "1", max.	25 ms
— at "1" to "0", max.	25 ms
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.	2 mA
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No

Alarms	
• Diagnostic alarm	No
• Hardware interrupt	No
Diagnostics indication LED	
• Group error SF (red)	No
• Status indicator digital input (green)	Yes
Potential separation	
Potential separation digital inputs	
• between the channels	No
• between the channels, in groups of	4
• between the channels and backplane bus	Yes; Optocoupler
Isolation	
Isolation tested with	4 000 V DC
connection method	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	240 g

last modified:

8/16/2023 