SIEMENS

Data sheet 6ES7321-1EL00-0AA0



Figure similar

spare part SIMATIC S7-300, digital input SM 321, isolated, 32 DI, 120 V AC, 1x 40-pole

Supply voltage	
Load voltage L1	
● Rated value (AC)	120 V
Input current	
from backplane bus 5 V DC, max.	16 mA
Power loss	
Power loss, typ.	4 W
Digital inputs	
Number of digital inputs	32
Input characteristic curve in accordance with IEC 61131, type 2	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 40 °C, max.	32
— up to 60 °C, max.	24
vertical installation	
— up to 40 °C, max.	32
Input voltage	
● Type of input voltage	AC
● Rated value (AC)	120 V; 47 ... 63 Hz
● for signal "0"	0 to 20V
● for signal "1"	74 to 132V
Input current	
● for signal "1", typ.	21 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", max.	15 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.	4 mA
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Alarms	

Subject to change without notice
© Copyright Siemens

● Diagnostic alarm	No
● Hardware interrupt	No
Diagnostics indication LED	
● Group error SF (red)	No
● Status indicator digital input (green)	Yes; per channel
Potential separation	
Potential separation digital inputs	
● between the channels	No
● between the channels, in groups of	8
● between the channels and backplane bus	Yes; Optocoupler
Isolation	
Isolation tested with	2 500 V DC
connection method	
required front connector	40-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	300 g

Classifications

	Version	Classification
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Miscellaneous

EMV

EMV

For use in hazardous locations

FM

Maritime application

Maritime application

NK / Nippon Kaiji Kyokai

CCS (China Classification Society)

Subject to change without notice
© Copyright Siemens

last modified: 4/7/2025

Subject to change without notice
© Copyright Siemens