SIEMENS

Data sheet 6ES7221-1BH22-0XA0



Figure similar

Spare part SIMATIC S7-200, Digital input EM 221, only for S7-22X CPU, 16 DI, 24 V DC, sinking-sourcing

Input current	
from backplane bus 5 V DC, max.	70 mA
Power loss	
Power loss, typ.	3 W
Digital inputs	
Number of digital inputs	16
Sourcing/sinking input	Yes
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
● Type of input voltage	DC
● Rated value (DC)	24 V
● for signal "0"	0 to 5 V
● for signal "1"	+15 to +30 V
Input current	
● for signal "1", typ.	4 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	4.5 ms
Cable length	
● shielded, max.	500 m
● unshielded, max.	300 m
Encoder	
Connectable encoders	
● 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1 mA
Potential separation	
Potential separation digital inputs	
● Potential separation digital inputs	Yes; Optocoupler
● between the channels, in groups of	4
Isolation	
Isolation tested with	500V AC for 1 minute
Connection method	
Plug-in I/O terminals	Yes
Dimensions	
Width	71.2 mm
Height	80 mm
Depth	62 mm
Weights	

Subject to change without notice
© Copyright Siemens

Weight, approx.	160 g

Classifications

	Version	Classification
eClass	16	27-24-22-04
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					For use in hazardous locations
Miscellaneous	CE EG-Konf.	EAC	Manufacturer Declaration	China RoHS	Ex ATEX

For use in hazardous locations	Maritime application				
FM	BUREAU VERITAS	DNV	GL	LRS	RMRS

Maritime application
CCS (China Classification Society)

last modified: 8/24/2025

Subject to change without notice
© Copyright Siemens