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Data sheet 6ES7223-1HF22-0XA0



Spare part SIMATIC S7-200, Digital I/O EM 223, only for S7-22X CPU, 4 DI/4 DO relay, 5-30 V DC, 250 V AC

Supply voltage	
Load voltage L+	
● Rated value (DC)	24 V
● permissible range, lower limit (DC)	5 V
● permissible range, upper limit (DC)	30 V
Load voltage L1	
● Rated value (AC)	230 V; 24V AC to 230V AC
● permissible range, lower limit (AC)	5 V
● permissible range, upper limit (AC)	250 V
Input current	
from external supply (24 V DC), max.	72 mA
from backplane bus 5 V DC, max.	40 mA
from coil current, max.	9 mA; for each output on signal "1"
Power loss	
Power loss, typ.	2 W
Digital inputs	
Number of digital inputs	4
Input voltage	
● Type of input voltage	AC/DC
● Rated value (DC)	24 V
● for signal "0"	0 to 5 V
● for signal "1"	15 V DC to 30 V DC
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
Digital outputs	
Number of digital outputs	4; Relays
Short-circuit protection	No
Output voltage	
● for signal "0", max.	0.1 V; with 10 kOhm load
● for signal "1", min.	L+/L1
Output current	
● for signal "1" rated value	2 000 mA
Total current of the outputs (per group)	
all mounting positions	
— Current per conductor/group, max.	8 A
Relay outputs	

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● Number of operating cycles, max.	10 000 000; mechanically 10 million, at rated load voltage 100 000
Switching capacity of contacts	
— with inductive load, max.	0.75 A; each output
— on lamp load, max.	200 W; 30 W with DC, 200 W with AC
— with resistive load, max.	0.75 A; each output
Cable length	
● shielded, max.	500 m
● unshielded, max.	150 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
Potential separation digital outputs	
● Potential separation digital outputs	Yes; Relays
● between the channels, in groups of	4
Isolation	
Isolation tested with	500 V AC
Connection method	
Plug-in I/O terminals	Yes
Dimensions	
Width	46 mm
Height	80 mm
Depth	62 mm
Weights	
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 hazard-ous locations
CE EG-Konf.	Miscellaneous	EAC	China RoHS	Manufacturer Declara-tion	FM

Maritime application

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Maritime application

CCS (China Classification Society)

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