SIEMENS

Data sheet

6ES7223-1PL22-0XA0



Spare part SIMATIC S7-200, Digital I/O EM 223, only for S7-22X CPU, 16 DI 24 V DC, Sink/Source, 16 DO relay, 2 A/channel

	Figure	similar
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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.	150 mA	
from coil current, max.	9 mA; for each output on signal "1	"
Power loss		
Power loss, typ.	6 W	
Digital inputs		
Number of digital inputs	16	
Input voltage		
 Type of input voltage 	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	16; 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	
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Relay outputs	
 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 	8
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 / header	
Plug-in I/O terminals	Yes
Dimensions	
Width	137.5 mm
Height	80 mm
Depth	62 mm
Weights	
Weight, approx.	400 g
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