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

Supply voltage		
Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC) permissible range, upper limit (AC) permissible range, uper limit (AC) permission and permission AC permission and permission AC permission AC permission AC permission AC pe	Supply voltage	
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Rated value (AC)		30 V
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from external supply (24 V DC), max. from backplane bus 5 V DC, max. 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 • Rated value (DC) • for signal "0" • for signal "1" • for signal "1", typ. Input current • for signal "1", typ. Input delay (for rated value of input voltage) for standard inputs — at "0" to "1", max. Value Number of digital outputs Number of digital outputs Number of digital outputs Number of signal "1", max. 4.5 ms Digital outputs Number of signal "1", max. • for signal "0", max. • for signal "1", min. L+/L1 Output current • for signal "1" rated value 100 mA		250 V
from backplane bus 5 V DC, max. 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 • Rated value (DC) • for signal "0" • for signal "1" 15 V DC to 30 V DC Input current • for signal "1", typ. 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 Short-circuit protection Output voltage • for signal "0", max. • for signal "0", max. • for signal "1", min. L+/L1 Output current • for signal "1", rated value • for signal "1" rated value	Input current	
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Power loss, typ. 6 W Digital inputs Number of digital inputs 16 Input voltage • Type of input voltage • Rated value (DC) • for signal "0" • 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	from backplane bus 5 V DC, max.	150 mA
Power loss, typ. 6 W Digital inputs Number of digital inputs 16 Input voltage • Type of input voltage • 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. 0.1 L+/L1 Output current • for signal "1" rated value 2 000 mA Total current of the outputs (per group) all mounting positions		9 mA; for each output on signal "1"
Digital inputs 16	Power loss	
Number of digital inputs Input voltage Type of input voltage Rated value (DC) of r signal "0" of r signal "1" Type of input voltage of or signal "1" Type of or signal "1" Oto 5 V of or signal "1", typ. Input current of or signal "1", typ. Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. Input delay (for rated value of input voltage) for standard inputs Number of digital outputs Number of digital outputs Number of digital outputs Short-circuit protection No Output voltage of r signal "0", max. of r signal "1", min. Ut-t/L1 Output current of or signal "1" rated value 2 000 mA Total current of the outputs (per group) all mounting positions	Power loss, typ.	6 W
Input voltage • Type of input voltage • Rated value (DC) • for signal "0" • 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. Valuaber of digital outputs Short-circuit protection Output voltage • for signal "0", max. • for signal "0", max. • 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	Digital inputs	
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for signal "1"	Rated value (DC)	24 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 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	• for signal "0"	0 to 5 V
 for signal "1", typ. 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 Short-circuit protection No Output voltage for signal "0", max. 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 	• for signal "1"	15 V DC to 30 V DC
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Number of digital outputs Short-circuit protection Output voltage of or signal "0", max. of or signal "1", min. Output current of or signal "1" rated value 2 000 mA Total current of the outputs (per group) all mounting positions		4.5 ms
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Output current • for signal "1" rated value 2 000 mA Total current of the outputs (per group) all mounting positions	-	0.1 V; with 10 kOhm load
• for signal "1" rated value 2 000 mA Total current of the outputs (per group) all mounting positions	● for signal "1", min.	L+/L1
Total current of the outputs (per group) all mounting positions	Output current	
all mounting positions	-	2 000 mA
<u> </u>		
— Current per conductor/group, max. 8 A	all mounting positions	
	— Current per conductor/group, max.	8 A

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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