



SIMATIC S7-200, DIGITAL I/O EM 223, FOR S7-22X CPU ONLY,
16 DI 24 V DC, SINK/SOURCE 16 DO RELAY, 2A/POINT

Figure similar

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; 24 V AC to 230 V AC
• permissible range, lower limit (AC)	5 V
• permissible range, upper limit (AC)	250 V
Input current	
from backplane bus 5 V DC, max.	150 mA
from coil current, max.	9 mA; for each output on signal "1"
from sensor current supply or external current supply (24 V DC), max.	72 mA
Power losses	
Power loss, typ.	6 W
Digital inputs	
Number of digital inputs	16
Input voltage	
• Type of input voltage	AC/DC
• Rated value (DC)	24 V
• for signal "0"	0 to 5 V
• for signal "1"	15V DC to 30V 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
Aggregate current of outputs (per group)	
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; per output
— on lamp load, max.	200 W; 30 W with DC, 200 W with AC
— with resistive load, max.	0.75 A; per 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 checked with	500 V AC
Connection method	
Plug-in I/O terminals	Yes

Dimensions	
Width	137.5 mm
Height	80 mm
Depth	62 mm
Weights	
Weight, approx.	400 g
last modified:	11.04.2015