

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; 24V AC to 230V 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 sensor current supply or external current supply (24 V DC), max.	72 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	
<ul style="list-style-type: none"> Type of input voltage 	AC/DC
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> for signal "0" 	0 to 5 V
<ul style="list-style-type: none"> for signal "1" 	15 V DC to 30 V DC
Input current	
<ul style="list-style-type: none"> for signal "1", typ. 	4 mA
Input delay (for rated value of input voltage)	
for standard inputs	
<ul style="list-style-type: none"> at "0" to "1", max. 	4.5 ms
Digital outputs	
Number of digital outputs	16; Relays
Short-circuit protection	No
Output voltage	
<ul style="list-style-type: none"> for signal "0", max. 	0.1 V; with 10 kOhm load
<ul style="list-style-type: none"> for signal "1", min. 	L+/L1
Output current	
<ul style="list-style-type: none"> for signal "1" rated value 	2 000 mA
Total current of the outputs (per group)	
all mounting positions	
<ul style="list-style-type: none"> Current per conductor/group, max. 	8 A
Relay outputs	
<ul style="list-style-type: none"> Number of operating cycles, max. 	10 000 000; mechanically 10 million, at rated load voltage 100 000
Switching capacity of contacts	
<ul style="list-style-type: none"> with inductive load, max. 	0.75 A; each output
<ul style="list-style-type: none"> on lamp load, max. 	200 W; 30 W with DC, 200 W with AC
<ul style="list-style-type: none"> with resistive load, max. 	0.75 A; each output
Cable length	
<ul style="list-style-type: none"> shielded, max. 	500 m
<ul style="list-style-type: none"> unshielded, max. 	150 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> 2-wire sensor 	Yes
<ul style="list-style-type: none"> permissible quiescent current (2-wire sensor), max. 	1 mA
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> Potential separation digital inputs 	Yes; Optocoupler
<ul style="list-style-type: none"> 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	
Plug-in I/O terminals	Yes
Dimensions	
Width	137.5 mm
Height	80 mm
Depth	62 mm
Weights	
Weight, approx.	400 g
last modified:	03/16/2017