

SIEMENS

Product data sheet
6ES7223-1PL22-0XA0

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
Supply voltages
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 to 230 V AC

permissible range, lower limit (AC) 5 V

permissible range, upper limit (AC) 250 V

Current consumption

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

Connection method

Plug-in I/O terminals Yes

Digital inputs

Number of inputs 16

Input voltage

Rated value, DC 24 V

for signal "0" 0 to 5 V

for signal "1" 15 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 ; Relay
Short-circuit protection of the output	No ; to be provided externally
Output voltage	
for signal "0" (DC), max.	0.1 V ; with 10 kOhm load
for signal "1", min.	L+/L1
Output current	
for signal "1" rated value	2000 mA
Aggregate current of outputs (per group)	
maximum current per conductor/group	8 A
Cable length	
Cable length, shielded, max.	500 m
Cable length unshielded, max.	150 m
Relay outputs	
Number of operating cycles	10000000 ; 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 DC; 200 W AC
with resistive load, max.	0.75 A ; each output
Encoder	
Connectable encoders	
2-wire BEROS	Yes
permissible quiescent current (2-wire BEROS), max.	1 mA
Isolation	
Isolation checked with	500 V AC
Galvanic isolation	
Galvanic isolation digital inputs	
Galvanic isolation digital inputs	Yes ; Optocoupler
between the channels, in groups of	8
Galvanic isolation digital outputs	
Galvanic isolation digital outputs	Yes ; Relay
between the channels, in groups of	4
Dimensions and weight	

Dimensions

Width	137.5 mm
Height	80 mm
Depth	62 mm
Weight	
Weight, approx.	400 g
Status	Nov 22, 2010