

# 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 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 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

<b>Digital inputs</b>	
Number/binary inputs	16
<b>Input voltage</b>	
Type of input voltage	AC/DC
Rated value, DC	24 V
for signal "0"	0 to 5 V
for signal "1"	15 to 30 VDC
<b>Input current</b>	
for signal "1", typ.	4 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
at "0" to "1", max.	4.5 ms
<b>Digital outputs</b>	
Number/binary outputs	16 ; Relay
Functionality/short-circuit strength	No ; to be provided externally
<b>Output voltage</b>	
for signal "0", max.	0.1 V ; with 10 kOhm load
for signal "1", min.	L+/L1
<b>Output current</b>	
for signal "1" rated value	2000 mA
<b>Aggregate current of outputs (per group)</b>	
all mounting positions	
maximum current per conductor/group	8 A
<b>Relay outputs</b>	
Number of operating cycles, max.	10000000 ; mechanically 10 million, at rated load voltage 100,000
<b>Switching capacity of contacts</b>	
with inductive load, max.	0.75 A ; each output
on lamp load, max.	200 W ; 30 W DC; 200 W AC
Switching frequency/contacts/at ohmic load/maximum	0.75 A ; each output
<b>Cable length</b>	
Cable length, shielded, max.	500 m
Cable length unshielded, max.	150 m

<b>Encoder</b>	
<b>Connectable encoders</b>	
2-wire sensor	Yes
Permissible quiescent current (2-wire sensor), max.	1 mA
<b>Galvanic isolation</b>	
<b>Galvanic isolation digital inputs</b>	
Galvanic isolation digital inputs	Yes ; Optocoupler
between the channels, in groups of	8
<b>Galvanic isolation digital outputs</b>	
Galvanic isolation digital outputs	Yes ; Relay
between the channels, in groups of	4
<b>Isolation</b>	
Isolation checked with	500 V AC
<b>Connection method</b>	
Plug-in I/O terminals	Yes
<b>Dimensions</b>	
Width	137.5 mm
Height	80 mm
Depth	62 mm
<b>Weight</b>	
Weight, approx.	400 g
Status	Jul 17, 2012