



Product data sheet
6ES7223-1PH30-0XB0

SIMATIC S7-1200, DIGITAL I/O SM 1223, 8DI / 8DO, 8DI DC 24 V, SINK/SOURCE, 8DO, RELAY 2A

Supply voltages

Rated value

DC 24 V	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Short-circuit protection	0.0000000000000000E+00
Voltage supply to the transducers	
present	Yes
Current consumption	
from backplane bus DC 5 V, max.	145 mA
Current consumption/power loss	
Power loss, typ.	5.5 W
Connection point	
required front connectors	Yes
Digital inputs	
Number of digital inputs	8
	2
Number of simultaneously controllable inputs	
[nicht versorgt: TAK_ABP289_001_000]	
Number of simultaneously controllable inputs, up to 40 °C	8
horizontal installation	
up to 40 °C, max.	8
up to 50 °C, max.	8
vertical installation	
up to 40 °C, max.	8
Input characteristic curve to IEC 1131, Typ 1	Yes
Input voltage	
Rated value, DC	24 V

for signal "0"	5 VDC at 1 mA
for signal "1"	15 VDC at 2.5 mA
Input current	
for signal "0", max. (permissible quiescent current)	1 mA
for signal "1", min.	2.5 mA
for signal "1", typ.	4 mA ; Typical
Input delay (for rated value of input voltage)	
for standard inputs	
programmable	Yes ; 0.2, 0.4, 0.8, 1.6, 3.2, 6.4, and 12.8 ms, selectable in groups of four
for interrupt inputs	
programmable	Yes
Cable length	
cable length, shielded, max.	500 m
Cable length unshielded, max.	300 m
Digital outputs	
Number of digital outputs	8 2
Short-circuit protection of the output	No ; to be provided externally
Switching capacity of the outputs	
with resistive load, max.	2 A
on lamp load, max.	30 W DC; 200 W AC
Output voltage	
Rated value (AC)	5 to 250 VAC
Rated value (DC)	5 to 30 VDC
Output current	
for signal "1" permissible range, max.	2 A
Output delay with resistive load	
"0" to "1", max.	10 ms
"1" to "0", max.	10 ms
Aggregate current of the outputs (per group)	
horizontal installation	
up to 50 °C, max.	10 A ; Current per mass
Cable length	
cable length, shielded, max.	500 m

Cable length unshielded, max.	150 m
Relay outputs	
Number of relay outputs	8
Rated input voltage of relay L+ (DC)	24 V
Number of operating cycles	mechanically 10 million, at rated load voltage 100,000
Switching capacity of the contacts	
with inductive load, max.	2 A
on lamp load, max.	30 W DC; 200 W AC
with resistive load, max.	2 A
Interrupts/diagnostics/status information	
Alarms	
Alarms	Yes
Diagnostic alarm	Yes
Diagnoses	
Diagnostic functions	Yes
Monitoring the voltage supply to the electronics	Yes
Diagnostics indication LED	
Status indicator digital output (green)	Yes
Status indicator digital input (green)	Yes
Isolation	
Galvanic isolation, digital inputs	
between the channels, in groups of	2
Isolation, digital outputs	
between the channels	Relays
between the channels, in groups of	2
between the channels and the backplane bus	1500 VAC for 1 minute (
Permissible potential difference	
between different circuits	750 VAC for 1 minute
Degree of protection	
IP 20	Yes
Standards, approvals, certificates	
CE symbol	Yes
C-TICK	Yes
FM approval	Yes
Mechanics	

Plastic	Yes
Dimensions and weight	
Dimensions and weight	
Width	45 mm
Height	100 mm
Depth	75 mm
Weight	
Weight, approx.	230 g
Status	Aug 31, 2009