



SIMATIC S7-1200, Digital I/O SB 1223, 2 DI/2 DQ, 24 V DC 200 kHz



Figure similar

General information	
Product type designation	SB 1223, DI 2x24 V DC/DQ 2x24 V DC 200 kHz
Input current	
from backplane bus 5 V DC, typ.	35 mA
Power loss	
Power loss, typ.	0.5 W
Digital inputs	
Number of digital inputs	2; Current-sourcing
• in groups of	2
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	2
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	(L+ minus 5.0 V DC) ... L+
• for signal "1"	0 V ... (L+ minus 10 V DC)
Input current	
• for signal "0", max. (permissible quiescent current)	1.4 mA
• for signal "1", min.	2.9 mA
• for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 μs; 0.05 / 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 ms
for interrupt inputs	
— parameterizable	Yes
for technological functions	
— parameterizable	Yes
Cable length	
• shielded, max.	50 m; shielded, twisted pair
Digital outputs	
Number of digital outputs	2; MOSFET, solid-state (current-sinking/current-sourcing)
• in groups of	2
Short-circuit protection	No
Switching capacity of the outputs	

• with resistive load, max.	0.1 A	
Output voltage		
• Rated value (DC)	24 V	
• for signal "0", max.	1 V	
• for signal "1", min.	L+ (-1.5 V)	
Output current		
• for signal "1" rated value	0.1 A	
• for signal "1" permissible range, max.	0.1 A	
Cable length		
• shielded, max.	50 m	
Interrupts/diagnostics/status information		
Diagnostics indication LED		
• for status of the inputs	Yes	
• for status of the outputs	Yes	
Standards, approvals, certificates		
CE mark	Yes	
CSA approval	Yes	
UL approval	Yes	
cULus	Yes	
FM approval	Yes	
RCM (formerly C-TICK)	Yes	
KC approval	Yes	
Marine approval	Yes	
Ambient conditions		
Free fall		
• Fall height, max.	0.3 m; five times, in product package	
Ambient temperature during operation		
• min.	-20 °C	
• max.	60 °C	
• horizontal installation, min.	-20 °C	
• horizontal installation, max.	60 °C	
• vertical installation, min.	-20 °C	
• vertical installation, max.	50 °C	
Ambient temperature during storage/transportation		
• min.	-40 °C	
• max.	70 °C	
Air pressure acc. to IEC 60068-2-13		
• Storage/transport, min.	660 hPa	
• Storage/transport, max.	1 080 hPa	
Relative humidity		
• Operation at 25 °C without condensation, max.	95 %	
Mechanics/material		
Enclosure material (front)		
• Plastic	Yes	
Dimensions		
Width	38 mm	
Height	62 mm	
Depth	21 mm	
Weights		
Weight, approx.	35 g	
Classifications		
	Version	Classification
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04

eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

[Miscellaneous](#)



General Product Approval

EMV

For use in hazardous locations

[China RoHS](#)



[Miscellaneous](#)

For use in hazardous locations

Test Certificates

Maritime application



IECEX

[CCC-Ex](#)

[CCC-Ex](#)

[Type Test Certificates/Test Report](#)



ABS



BUREAU VERITAS

Maritime application

Environment



DNV



LRS

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RINA

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Environment



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