



Figure similar

SIPLUS S7-1200 SB 1223 I/O based on 6ES7223-3AD30-0XB0 with conformal coating, -40...+60 °C, start up -25 °C, digital input/output 2 DI/2 DQ, 5 V DC 200 kHz

General information	
Product type designation	SB 1223, DI 2x5 V DC/DQ 2x5 V DC 200 kHz
based on	6ES7223-3AD30-0XB0
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	see entry ID: 109746275
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
Input voltage	
• Rated value (DC)	5 V
• for signal "0"	(L+ minus 1.0 V DC) ... L+
• for signal "1"	0 V ... (L+ minus 2.0 V DC)
Input current	
• for signal "0", max. (permissible quiescent current)	2.2 mA
• for signal "1", min.	5.1 mA
• for signal "1", typ.	15 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
Load resistance range	
• upper limit	7 Ω
Output voltage	

- Rated value (DC) - for signal "0", max. - for signal "1", min. - for signal "1", max.	5 V 0.2 V L+ minus 0.7 V DC 6 V
Output current	
- for signal "1" rated value - for signal "1" permissible range, max.	0.1 A 0.1 A
Cable length	
shielded, max.	50 m
Interrupts/diagnostics/status information	
Diagnostics indication LED	
- for status of the inputs - for status of the outputs	Yes Yes
Ambient conditions	
Free fall	
Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
- min. - max.	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C 60 °C; = Tmax
Ambient temperature during storage/transportation	
- min. - max.	-40 °C 70 °C
Altitude during operation relating to sea level	
- Installation altitude above sea level, max. - Ambient air temperature-barometric pressure-altitude	5 000 m Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance	
Coolants and lubricants	
Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
- to biologically active substances according to EN 60721-3-3 - to chemically active substances according to EN 60721-3-3 - to mechanically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
- to biologically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
- Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
- Coatings for printed circuit board assemblies acc. to EN 61086 - Protection against fouling acc. to EN 60664-3 - Military testing according to MIL-I-46058C, Amendment 7 - Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A

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			EMV
 EG-Konf.	Manufacturer Declaration		China RoHS
			 UL
			KC
EMV	For use in hazardous locations		Maritime application
 RCM	 IECEX	 ATEX	 CCC
			 DNV

last modified:

7/30/2025

