



SIPLUS S7-1200 SB 1223 2DI/2DO based on 6ES7223-0BD30-0XB0 with conformal coating, -40...+60 °C, start up -25 °C, digital input/output 2 DI 24 V DC/2 DO 24 V DC

General information	
Product type designation	SB 1223, DI 2x24 V DC/DO 2x24 V DC
based on	6ES7223-0BD30-0XB0
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	see entry ID: 109746275
Supply voltage	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Power loss	
Power loss, typ.	1 W
Digital inputs	
Number of digital inputs	2
Input current	
• for signal "1", typ.	7 mA
Cable length	
• shielded, max.	50 m
Digital outputs	
Number of digital outputs	2
Short-circuit protection	No
Cable length	
• shielded, max.	50 m
Ambient conditions	
Ambient temperature during operation	
• min.	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C
• max.	60 °C; = Tmax
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m
• Ambient air temperature-barometric pressure-altitude	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	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request																																							
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *																																							
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *																																							
Use on ships/at sea																																								
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request																																							
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *																																							
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *																																							
Usage in industrial process technology																																								
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)																																							
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	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	Yes; Class 2 for high reliability																																							
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection																																							
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life																																							
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A																																							
Dimensions																																								
Width	38 mm																																							
Height	62 mm																																							
Depth	21 mm																																							
Classifications																																								
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Maritime application																																								



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