Data sheet

SIPLUS S7-1200 SB1223 2DI/2DO -40...+60°C start up -25°C with conformal coating based on 6ES7223-0BD30-0XB0 . Digital input/output 2 DI 24 V DC/2 DO 24 V DC



General information	
Product type designation	SB 1223, DI 2x24 V DC/DQ 2x24 V DC
Power loss	
Power loss, typ.	1 W
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	100 %; RH incl. condensation / frost (no commissioning in	
IEC 60068-2-38, max.	bedewed state), horizontal installation	
Resistance Coolants and lubricants		
Resistant to commercially available	Yes; Incl. diesel and oil droplets in the air	
coolants and lubricants	res, mo. deserand on dropiets in the an	
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, 	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas	
measuring and control systems acc. to ANSI/ISA-71.04	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 availability	
 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	

last modified:

08/27/2019