



SIPLUS DP diagnostic repeaters based on 6ES7972-0AB01-0XA0 with conformal coating, 0...+60 °C,

General information	
based on	6ES7972-0AB01-0XA0
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Power loss	
Power loss, typ.	4 W
Interfaces	
PROFIBUS DP	
• Transmission rate, max.	12 Mbit/s; 9.6 kbit/s to 12 Mbit/s
Degree and class of protection	
IP degree of protection	IP20
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C; = Tmin (incl. condensation/frost)
• 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 under condensation conditions)
Resistance	
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		
Connection method				
Design of electrical connection for supply voltage		Terminal module		
Design of electrical connection for PROFIBUS cables		FastConnect insulation displacement, 10 clamping cycles possible		
Dimensions				
Width		80 mm		
Height		125 mm		
Depth		67.5 mm		
Weights				
Weight, approx.		300 g		
Classifications				
			Version	Classification
		eClass	16	27-24-26-08
		eClass	14	27-24-26-08
		eClass	12	27-24-26-08
		eClass	9.1	27-24-26-08
		eClass	9	27-24-26-08
		eClass	8	27-24-26-08
		eClass	7.1	27-24-26-08
		eClass	6	27-24-26-08
		ETIM	10	EC001604
		ETIM	9	EC001604
		ETIM	8	EC001604
		ETIM	7	EC001604
		IDEA	4	3564
		UNSPSC	15	32-15-17-05
Approvals / Certificates				
General Product Approval				
 EG-Konf. Manufacturer Declaration  CCC  China RoHS  UL				
General Product Approval			EMV	For use in hazardous locations



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For use in hazardous locations

[CCC-Ex](#)

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