## SIEMENS

## Data sheet

## 6AG1972-0AA02-7XA0



SIPLUS DP RS-485 repeater based on 6ES7972-0AA02-0XA0 with conformal coating, -25...+70 °C, for connection of PROFIBUS/MPI bus systems with max. 31 nodes max. baud rate 12 Mbps, degree of protection IP20

<b>Figure similar</b>	
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Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption, max.	100 mA; 100 mA without loads at PG/OP socket; 130 mA load at PG/OP socket (5 V/90 mA); 200 mA load at PG/OP socket (24 V/100 mA)
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.	-25 °C; = Tmin (incl. condensation/frost)
• max.	70 °C; = Tmax
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	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	
<ul> <li>— to biologically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
<ul> <li>— to chemically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
<ul> <li>— to mechanically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
<ul> <li>to biologically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
<ul> <li>to chemically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
<ul> <li>— to mechanically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6S3 incl. sand, dust; *

Usage in industrial process technology		
<ul> <li>Against chemically active substances acc. to EN 60654-4</li> </ul>	Yes; Class 3 (excluding trichlorethylene)	
<ul> <li>Environmental conditions for process, measuring and control systems acc. to ANSI/ISA- 71.04</li> </ul>	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		
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> </ul>	* The supplied plug covers must remain in place over the unused interfaces during operation!	
Conformal coating		
<ul> <li>Coatings for printed circuit board assemblies acc. to EN 61086</li> </ul>	Yes; Class 2 for high reliability	
<ul> <li>Protection against fouling acc. to EN 60664-3</li> </ul>	Yes; Type 1 protection	
<ul> <li>Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life	
<ul> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	Yes; Conformal coating, Class A	
connection method / header		
Design of electrical connection for supply voltage	Terminal module	
Design of electrical connection for PROFIBUS cables	2 terminal blocks	
Dimensions		
Width	45 mm	
Height	128 mm	
Depth	67 mm	
Weights		
Weight, approx.	350 g	
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