



Figure similar

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

General information	
based on	6ES7972-0AA02-0XA0
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	
• 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	2 terminal blocks																																													
Dimensions																																														
Width	45 mm																																													
Height	128 mm																																													
Depth	67 mm																																													
Weights																																														
Weight, approx.	350 g																																													
Classifications																																														
	<table><tr><th></th><th>Version</th><th>Classification</th></tr><tr><td>eClass</td><td>16</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>14</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>12</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>9.1</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>9</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>8</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>7.1</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>6</td><td>27-24-26-08</td></tr><tr><td>ETIM</td><td>10</td><td>EC001604</td></tr><tr><td>ETIM</td><td>9</td><td>EC001604</td></tr><tr><td>ETIM</td><td>8</td><td>EC001604</td></tr><tr><td>ETIM</td><td>7</td><td>EC001604</td></tr><tr><td>IDEA</td><td>4</td><td>3564</td></tr><tr><td>UNSPSC</td><td>15</td><td>32-15-17-05</td></tr></table>		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
	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



[Manufacturer Declaration](#)



[China RoHS](#)



General Product Approval

EMV

For use in hazardous locations

[China RoHS](#)



For use in hazardous locations

[CCC-Ex](#)

last modified:

5/29/2024