



Figure similar

SIPLUS ET 200SP BA 2xRJ45 TX rail based on 6ES7193-6AR00-0AA0 with conformal coating, -40...+70 °C, OT4 with ST1/2 (+85 °C for 10 minutes), BusAdapter 2x RJ45 sockets for PROFINET

General information	
Product type designation	BA 2x RJ45
based on	<a href="#">6ES7193-6AR00-0AA0</a>
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch) 2x RJ45
Supports protocol for PROFINET IO	
• Number of RJ45 ports	2
Cable length	
— Cu conductors	100 m
Standards, approvals, certificates	
Ecological footprint	
• environmental product declaration	Yes
Global warming potential	
— global warming potential, (total) [CO2 eq]	1.14 kg
— global warming potential, (during production) [CO2 eq]	1.2 kg
— global warming potential, (during operation) [CO2 eq]	0 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-0.069 kg
Railway application	
• EN 50121-3-2	Yes; EMC for rail vehicles
• EN 50121-4	Yes; EMC for signal and telecommunications systems
• EN 50121-5	Yes; EMC for fixed installations and railway power supply equipment
• EN 50124-1	Yes; Railway applications - overvoltage category OV2; pollution degree PD2; rated surge voltage UNi = 0.5 kV; UNm = 24 V DC
• EN 50125-1	Yes; Rail vehicles - see ambient conditions
• EN 50125-2	Yes; Stationary electrical equipment - see ambient conditions
• EN 50125-3	Yes; Signal and telecommunications systems - see ambient conditions; vibrations and shocks: Application point outside of tracks (1 m to 3 m away from track)
• EN 50155	Yes; Rail vehicles - temperature class OT4, ST1/ST2, horizontal mounting position
• EN 61373	Yes; Rail vehicles - vibrations and shocks: Category 1 Class A/B
• Fire protection acc. to EN 45545-2	Yes; For proof of conformity, see Service & Support
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	-40 °C; = Tmin (incl. condensation/frost)
• horizontal installation, max.	70 °C; = Tmax; +85 °C for 10 min (OT4, ST1/ST2 acc. to EN 50155)
• vertical installation, min.	-40 °C; = Tmin

• vertical installation, max.	50 °C; = Tmax		
<b>Altitude during operation relating to sea level</b>			
• Installation altitude above sea level, max.	2 000 m		
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)		
<b>Relative humidity</b>			
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation		
<b>Resistance</b>			
<b>Coolants and lubricants</b>			
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air		
<b>Use in stationary industrial systems</b>			
— 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, *		
<b>Use on land craft, rail vehicles and special-purpose vehicles</b>			
— to biologically active substances according to EN 60721-3-5	Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request		
— to chemically active substances according to EN 60721-3-5	Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *		
— to mechanically active substances according to EN 60721-3-5	Yes; Class 5S3 incl. sand, dust; *		
<b>Usage in industrial process technology</b>			
— 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)		
<b>Remark</b>			
— 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!		
<b>Conformal coating</b>			
• 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		
• Electronic equipment on rolling stock acc. to EN 50155	Yes; Class PC2 protective coating acc. to EN 50155:2017		
• 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		
<b>Dimensions</b>			
Width	20 mm		
Height	69.5 mm		
Depth	59 mm		
<b>Weights</b>			
Weight, approx.	46 g		
<b>Other</b>			
Note:	for use in railway applications, also observe the product information "SIPLUS extreme RAIL" A5E37661960A, Online Support article 109736776		
<b>Classifications</b>			
		<b>Version</b>	<b>Classification</b>
	eClass	14	27-24-26-92
	eClass	12	27-24-26-92
	eClass	9.1	27-24-26-92
	eClass	9	27-24-26-92
	eClass	8	27-24-26-92
	eClass	7.1	27-24-26-92
	eClass	6	27-24-26-92

ETIM	10	EC002584
ETIM	9	EC002584
ETIM	8	EC002584
ETIM	7	EC002584
IDEA	4	3552
UNSPSC	15	32-15-17-03

**Approvals / Certificates**

**General Product Approval**

[Manufacturer Declaration](#)



[China RoHS](#)



**General Product Approval**

**EMV**

**Railway**

**Environment**



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[Confirmation](#)



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