SIEMENS

Data sheet 6AG2590-0BD00-4AA0



Figure similar

SIPLUS S7-1500 act. backplane 4 slot rail based on: 6ES7590-0BD00-0AA0 with conformal coating, -40…+70 °C . active backplane bus 4 slots for inserting S7-1500 I/O modules for hot swapping for use in the ET 200MP with IM 155-5 PN HF (from FW V4.4.1); S7-1500 mounting rail and slot covers to to be ordered separately

General information	
Product type designation	Active Backplane ST 1+4 Slot
Firmware version	
● FW update possible	Yes
based on	6ES7590-0BD00-0AA0
Product function	
● I&M data	Yes; I&M0 to I&M3
● Isochronous mode	Yes
● Prioritized startup	Yes
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	see entry ID: 109746275
Power	
Power consumption from the backplane bus	2 W
Power loss	
Power loss, typ.	2 W
Hardware configuration	
Slots	
● Grid size	35 mm; Utilization of 25 mm-wide modules possible
● Number of slots	5
— of which for CPU, max.	0
— of which for IM, max.	1
— of which for PS, max.	2; Max. 2 PS per station
— of which for IO/CM/CP/TM, max.	4
— of which for F-IO, max.	4
● Number of single-width slots, max.	4
Isolation	
Isolation tested with	750 V DC (type test) and according to EN 50155 (routine test)
Standards, approvals, certificates	
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)

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● 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.	40 °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.	2 000 m
● Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Relative humidity	
● With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance	
Coolants and lubricants	
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
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 land craft, rail vehicles and special-purpose vehicles	
— 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; *
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
● Electronic equipment on rolling stock acc. to EN 50155	Yes; class PC2 protective coating acc. to EN 50155
● 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
Dimensions	
Width	154 mm
Height	99 mm
Depth	14 mm
Weights	
Weight, approx.	127 g
Other	
Note:	for use in railway applications, also observe the product information "SIPLUS

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extreme RAIL" A5E37661960A, Online Support article 109736776

Classifications

	Version	Classification
eClass	16	27-24-22-03
eClass	14	27-24-22-03
eClass	12	27-24-22-03
eClass	9.1	27-24-22-03
eClass	9	27-24-22-03
eClass	8	27-24-22-03
eClass	7.1	27-24-22-03
eClass	6	27-24-22-03
ETIM	10	EC000810
ETIM	9	EC000810
ETIM	8	EC000810
ETIM	7	EC000810

Approvals / Certificates

General Product Approval

China RoHS

China RoHS

General Product Approval	EMV	Maritime application	Railway
			Confirmation

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