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Data sheet 6AG2137-6EA00-2BA0

Figure similar

SIPLUS ET 200SP CM CAN rail based on 6ES7137-6EA00-0BA0 with conformal coating, -40…+60 °C, OT2 with ST1/2 (+70 °C für 10 minutes), gateway to CAN Bus or CANopen networks, CAN 2.0A/B, CANopen Manager to CiA301/302, CANopen Slave to CiA301/302, IP20

General information	
Product type designation	CM 1x CAN ST
Firmware version	
● FW update possible	Yes
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC00
Product function	
● I&M data	Yes; I&M0 to I&M3
● Module swapping during operation (hot swapping)	Yes
● Isochronous mode	No
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	see entry ID: 109746275
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, typ.	20 mA
Current consumption, max.	25 mA
Power loss	
Power loss, typ.	0.5 W
Address area	
Address space per module	
● Address space per module, max.	256 byte
1. Interface	
Interface type	CAN according to CiA 303-1
Isolated	Yes; 500 V AC or 707 V DC
Interface types	
● Number of ports	1
● Design of the connection	Push-in terminal
CAN	
● CAN operating modes	CAN Standard CAN 2.0A/B; CANopen Manager / Slave acc. to CiA
● Specification acc. to CiA	CiA 301 & CiA 302
● Transmission rate, min.	10 kbit/s
● Transmission rate, max.	1 000 kbit/s
● Number of slaves, max.	60
● Number of SDOs in parallel	16; Parallel
● Number of PDOs	128; Send / receive

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Services	
— Node/life-guarding	Yes
— Heartbeat	Yes
— SYNC	Yes
Interrupts/diagnostics/status information	
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
● RUN LED	Yes
● ERROR LED	Yes
● MAINT LED	No
● Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
Potential separation	
between backplane bus and interface	Yes
Isolation	
Isolation tested with	750 V DC (type test) and according to EN 50155 (routine test)
Standards, approvals, certificates	
CE mark	Yes
RoHS conformity	Yes
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 (shielded cables required)
● 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 OT2, 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.	60 °C; = Tmax; +70 °C for 10 min (OT1, ST1/ST2 acc. to EN 50155); +70 °C continuously with configured empty slots to the left and right of the module (OT3, ST0 acc. to EN 50155)
● vertical installation, min.	-40 °C; = Tmin
● vertical installation, max.	50 °C; = Tmax
● ceiling installation, min.	-40 °C; = Tmin
● ceiling installation, max.	50 °C; = Tmax
● floor installation, min.	-40 °C; = Tmin
● floor installation, max.	50 °C; = Tmax
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, *

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— Against mechanical environmental conditions acc. to EN 60721-3-3	Yes; Class 3M8 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
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; *
— Against mechanical environmental conditions acc. to EN 60721-3-5	Yes; Class 5M2 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
— against mechanical environmental conditions in agriculture acc. to ISO 15003	Yes; level 1 (Location LE) using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
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 50155:2017
● 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
Decentralized operation	
to SIMATIC S7-300	No
to SIMATIC S7-400	No
to SIMATIC S7-1200	Yes
to SIMATIC S7-1500	Yes
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	32 g
Other	
Note:	for use in railway applications, also observe the product information "SIPLUS extreme RAIL" A5E37661960A, Online Support article 109736776

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