SIEMENS

Data sheet

6AG2241-1CH32-1XB0



SIPLUS S7-1200 CM 1241 RS422/485 T1 rail based on 6ES7241-1CH32-0XB0 with conformal coating, -25...+60 °C, OT1 with ST1/2 (+70 °C für 10 minutes), communications module CM 1241, RS-422/485, 9-pole D-sub (pin), supports Freeport

Figure similar

Product type designation CM 1241 RS 422 / 485 based on 6EST241-1CH32-0XB0 Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) permissible as library function		
Based on BEST241-1CH32-0XBB Supply voltage Supple s	General information	
Rated value (DC) 24 V permissible range, lower limit (DC) 28.8 V nput current Current consumption, max. 220 mA; From backplane bus 5 V DC Zever loss. V Power loss, typ. 1.1 W Interfaces Interfaces/bus type RS 422 / 485 (X 27) Number of large protocols Freeport Yes — Number of stop bits — Parity — Parity — Bits per character — Number of stop bits — Parity — Parity — Ascrim server — No server — No server — Sis per character — Number of stop bits — Parity — Parity — Ascrim server — No server — No server — Sis per character — Number of stop bits — Parity — Ascrim server — No server — Address area — I through 49 99 (Standard Modbus addressing) — max. number of devices — 247: slave numbers 1 through 247, per MODBUS network segment maximum 32 devices, additional repeaters needed to expand the network to maximum configuration		
Rated value (DC) 24 V permissible range, lower limit (DC) 20.4 V permissible range, upper limit (DC) 28.8 V Power loss Power loss Power loss, typ. 1.1 W nterfaces Interfaces/bus type RS 422 / 485 (X.27) Number of interfaces ACOUNT INSERT POWER PRONTON PRINTED PRI		6ES7241-1CH32-0XB0
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Current consumption, max. 220 mA; From backplane bus 5 V DC Power loss	permissible range, lower limit (DC)	20.4 V
Current consumption, max. 220 mA; From backplane bus 5 V DC Power loss. Power loss, typ. Interfaces Interfaces/bus type RS 422 / 485 (X.27) Number of interfaces Point-to-point connection Cable length, max. Integrated protocol driver — Freeport — ASCII — Modbus RTU master — Modbus RTU device — USS — Parity — Bits per character — Number of stop bits — Parity — Bits per character — Number of stop bits — Parity — Bits per character — Number of stop bits — Parity — Rist per character — Number of stop bits — Parity — Alson and a signal signary (standard); even, uneven, mark (parity bit always 1); space (parity bit always 0) Modbus RTU master — Address area — Address area — 1 through 49 999 (Standard Modbus addressing) — max. number of devices 247; slave numbers 1 through 247, per MODBUS network segment maximum 32 devices, additional repeaters needed to expand the network to maximum configuration	permissible range, upper limit (DC)	28.8 V
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protocols / Modbus RTU device / header	— max. number of devices	32 devices, additional repeaters needed to expand the network to maximum
	protocols / Modbus RTU device / header	

A d do	4 through 40 000 (Others hand Mandaus and described)
— Address area Interrupts/diagnostics/status information	1 through 49 999 (Standard Modbus addressing)
Diagnostics function	Yes
Diagnostics indication LED	103
• for status of the outputs	Yes
Isolation	
Isolation tested with	750 V DC (type test) and according to EN 50155 (routine test)
Degree and class of protection	
IP degree of protection	IP20
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 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 OT1, 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	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	OF SO. Tarin (incl. and demoking (fresh)
• min.	-25 °C; = Tmin (incl. condensation/frost)
max.vertical installation, min.	60 °C; = Tmax; +70 °C for 10 min (OT1, ST1/ST2 acc. to EN 50155) -25 °C; = Tmin
vertical installation, min. vertical installation, max.	50 °C; = Tmax
Ambient temperature during storage/transportation	30 G, - Illiax
• 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	Vac Class 2D2 model francis and describe and
to biologically active substances according to EN 60721-3-3 To sharpically active substances according to EN.	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	Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna);
to biologically active substances according to EN 60721-3-5 to chemically active substances according to EN	Class 5B3 on request Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity
to chemically active substances according to EN to mechanically active substances according to EN	degree 3); * Yes; Class 5S3 incl. sand, dust; *
60721-3-5	. 50, Glado GOO IIIGI. Galia, adot,
Usage in industrial process technology — Against chemically active substances acc. to EN	Yes; Class 3 (excluding trichlorethylene)
60654-4 — 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 * The supplied plug covers must remain in place over the unused interfaces conditions acc. to EN 60721, EN 60654-4 and during operation! ANSI/ISA-71.04 Conformal coating • Coatings for printed circuit board assemblies acc. to EN Yes; Class 2 for high reliability 61086 • 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 Yes; Discoloration of coating possible during service life • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Yes; Conformal coating, Class A Compound for Printed Board Assemblies according to IPC-CC-830A Width 30 mm 100 mm Height Depth 75 mm Weights Weight, approx. 155 g Note: for use in railway applications, also observe the product information "SIPLUS extreme RAIL" A5E37661960A, Online Support article 109736776 Version Classification eClass 14 27-24-22-08 27-24-22-08 eClass 12 eClass 9.1 27-24-22-08 eClass 9 27-24-22-08 8 27-24-22-08 eClass 27-24-22-08 eClass 7 1 eClass 6 27-24-22-08 **ETIM** 9 EC001423 **ETIM** 8 EC001423 **ETIM** 7 EC001423 3564 IDEA 4 UNSPSC 32-15-17-05 15 Approvals / Certificates **General Product Approval EMV Miscellaneous** Manufacturer Declaration Railway Confirmation

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