SIEMENS

Data sheet

6AG1241-1AH32-4XB0

SIPLUS S7-1200cm 1241, with conformal coating based on 6ES7241-1AH32-0XB0 . Communication module RS232, 9-pole Dsub (pin), supports Freeport



General information		
Product type designation	CM 1241 RS 232	
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.	220 mA; From L5+; logic	
Power loss		
Power loss, typ.	1.1 W	
Interfaces		
Interfaces/bus type	RS 232C (V.24)	
Number of interfaces	1	
Point-to-point connection		
• Cable length, max.	10 m	
Ambient conditions		
Free fall		

	• Fall height, max.	0.3 m; five times, in product package
• max. 60 °C; = Trax Ambient temperature during storage/transportation -40 °C • min. -40 °C • max. 70 °C Altitude during operation relating to sea level 5000 m • Installation altitude above sea level, max. 5 000 m • Ambient air temperature-barometric pressure- altitude Train Trax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Train (Trax -10 K) at 795 hPa (-2 000 m +3 500 m) // Train (Trax -20 K) at 658 hPa 540 hPa (+2 000 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 coolants and lubricants Coolants and lubricants 100 %; RH incl. condensation conditions) Yes; Incl. diesel and oil droplets in the air Use in stationary industrial systems - to biologically active substances according to EN 60721-33 Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request - to mechanically active substances according to EN 60721-33 Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3);* - to chemically 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 6G3 incl. sand, dust, * Usage	Ambient temperature during operation	
Ambient temperature during storage/transportation -40 °C • max. 70 °C Attitude during operation relating to sea level 5000 m • Installation altitude above sea level, max. 5000 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 00 %; RH incl. condensation/frost (no commissioning under condensation conditions) Resistance 100 %; RH incl. condensation/frost (no commissioning under condensation conditions) Coolants and lubricants 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); * Use on shipSiat sea Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request — to biologically active substances according to EN 60721-3-6 Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6B3 incl. sand, dust; * — 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); *		
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• max. 70 °C Altitude during operation relating to sea level • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure- altitude 5 000 m • Ambient air temperature-barometric pressure- altitude 5 000 m Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 654 hPa (+2 000 m +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 • Resistant to commercially available coolants and lubricants Yes; Incl. diesel and oil droplets in the air • 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 60066-2- 52 (severity degree 3); * • to biologically active substances according to EN 60721-3-6 Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request • to biologically active substances according to EN 60721-3-6 Yes; Class 6C3 incl. sand, dust, * • to biologically active substances according to EN 60721-3-6 Yes; Class 6S3 incl. sand, dust, * • to mechanically active substances according to EN 60721-3-6 Yes; Class 6S3 incl. sand, dust, *		-40 °C
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IEC 60068-2-38, max.condensation conditions)ResistanceCoolants and lubricantsYes; Incl. diesel and oil droplets in the air Resistant to commercially available coolants and lubricantsYes; Incl. diesel and oil droplets in the airUse in stationary industrial systems	Relative humidity	
Coolants and lubricants Yes; Incl. diesel and oil droplets in the air Coolants and lubricants Yes; Incl. diesel and oil droplets in the air Use in stationary industrial systems 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); *		
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— to biologically active substances according to EN 60721-3-3Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request— to chemically active substances according to EN 60721-3-3Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *— to mechanically active substances according to EN 60721-3-3Yes; Class 3S4 incl. sand, dust, *Use on ships/at seaYes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request— to chemically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 6B3 on request— to chemically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *— to mechanically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *Usage in industrial process technologyYes; Class 6S3 incl. sand, dust; *— Against chemically active substances according to EN 60654-4 — Environmental conditions for process,Yes; Class 3 (excluding trichlorethylene)Yes; Level GX group A/B (excluding trichlorethylene; harmful gas	-	Yes; Incl. diesel and oil droplets in the air
to EN 60721-3-3exception of fauna); Class 3B3 on request to chemically active substances according to EN 60721-3-3Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); * to mechanically active substances according to EN 60721-3-3Yes; Class 3S4 incl. sand, dust, *Use on ships/at seaYes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request to biologically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); * to chemically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); * to mechanically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *Usage in industrial process technologyYes; Class 6S3 incl. sand, dust; * Against chemically active substances according to EN 60654-4 - Environmental conditions for process,Yes; Level GX group A/B (excluding trichlorethylene; harmful gas	Use in stationary industrial systems	
to EN 60721-3-352 (severity degree 3); *— to mechanically active substances according to EN 60721-3-3Yes; Class 3S4 incl. sand, dust, *Use on ships/at seaYes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request— to biologically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *— to mechanically active substances according to EN 60721-3-6Yes; Class 6S3 incl. sand, dust; *— to mechanically active substances according to EN 60721-3-6Yes; Class 6S3 incl. sand, dust; *Usage in industrial process technologyYes; Class 3 (excluding trichlorethylene)— Against chemically active substances acc. to EN 60654-4 — Environmental conditions for process,Yes; Level GX group A/B (excluding trichlorethylene; harmful gas		
according to EN 60721-3-3Use on ships/at sea— to biologically active substances according to EN 60721-3-6Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request— to chemically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *— to mechanically active substances according to EN 60721-3-6Yes; Class 6S3 incl. sand, dust; *Usage in industrial process technologyYes; Class 3 (excluding trichlorethylene)— Against chemically active substances acc. to EN 60654-4Yes; Class 3 (excluding trichlorethylene)— Environmental conditions for process,Yes; Level GX group A/B (excluding trichlorethylene; harmful gas	-	
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to EN 60721-3-66B3 on request— to chemically active substances according to EN 60721-3-6Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *— to mechanically active substances according to EN 60721-3-6Yes; Class 6S3 incl. sand, dust; *Usage in industrial process technology-— Against chemically active substances acc. to EN 60654-4Yes; Class 3 (excluding trichlorethylene)— Environmental conditions for process,Yes; Level GX group A/B (excluding trichlorethylene; harmful gas	Use on ships/at sea	
to EN 60721-3-652 (severity degree 3); *— to mechanically active substances according to EN 60721-3-6Yes; Class 6S3 incl. sand, dust; *Usage in industrial process technology— Against chemically active substances acc. to EN 60654-4Yes; Class 3 (excluding trichlorethylene)— Environmental conditions for process,Yes; Level GX group A/B (excluding trichlorethylene; harmful gas		
according to EN 60721-3-6 Usage in industrial process technology — Against chemically active substances acc. to EN 60654-4 — Environmental conditions for process, Yes; Level GX group A/B (excluding trichlorethylene; harmful gas	-	
 Against chemically active substances acc. to EN 60654-4 Environmental conditions for process, Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas 	-	Yes; Class 6S3 incl. sand, dust; *
to EN 60654-4 — Environmental conditions for process, Yes; Level GX group A/B (excluding trichlorethylene; harmful gas	Usage in industrial process technology	
		Yes; Class 3 (excluding trichlorethylene)
ANSI/ISA-71.04 permissible); level LC3 (salt spray) and level LB3 (oil)	measuring and control systems acc. to	concentrations up to the limits of EN 60721-3-3 class 3C4
Remark	Remark	
 Note regarding classification of * The supplied plug covers must remain in place over the unused interfaces during operation! EN 60654-4 and ANSI/ISA-71.04 	environmental conditions acc. to EN 60721,	

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	
Dimensions		
Width	30 mm	
Height	100 mm	
Depth	75 mm	
Weights		
Weight, approx.	150 g	
last modified:	05/15/2020	