SIEMENS

Data sheet

6AG1222-1BD30-5XB0



SIPLUS S7-1200 SB 1222 4DQ based on 6ES7222-1BD30-0XB0 with conformal coating, -40...+60 °C, start up -25 °C, digital output 4 DQ 24 V DC 200 kHz

Product type designation SB 1222, DQ 4x24 V DC 200 kHz Engineering with • STEP 7 TIA Portal configurable/integrated from version Input current • see entry ID: 109746275 from backplane bus 5 V DC, typ. 50 mA output voltage / header • supply voltage of the transmitter / header • supply current / from supply voltage for transmitter / maximum 4 mA; per channel Power loss • 0.5 W Power loss typ. 0.5 W Digital outputs 4 • in groups of 1 Short-circuit protection No Switching capacity of the outputs • with resistive load, max. • upper limit 10 Ω Output voltage • 24 V • for signal *1", min. L + (-1.5 V) Output voltage 0.1 A Load resistance range • 0.1 A • for signal *1", min. L + (-1.5 V) Output voltage • 4 V • for signal *1", min. L + (-1.5 V) Output voltage • 6 risignal *1", min. • for signal *1", min. L + (-1.5 V) Output voltage • 10 μA Cable length • shielded, max.		
Engineering with • STEP 7 TIA Portal configurable/integrated from see entry ID: 109746275 Input current from backplane bus \$ V DC, typ. 50 mA output voltage / header supply voltage of the transmitter / header • • supply current / from supply voltage for transmitter / maximum 4 mA; per channel Power loss Power loss. Power loss 0.5 W Digital outputs 4 • in groups of 1 Sthot-circuit protection No Switching capacity of the outputs • • upper limit 10 Ω Output voltage 24 V • for signal "0", max. 1, V; with 10 kOhm load • for signal "1", min. L+ (-1.5 V) Output current 0.1 A • for signal "0" residual current, max. 0.1 A • for signal "0" residual current, max. 0.1 A • for signal "1", min. L+ (-1.5 V) Output current 50 m • for signal "0" residual current, max. 50 m • for signal "0" residual current, max. 50 m • for signal "0" residual current, max. 50 m • for signal "0" residual current,	General information	
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version For the version Input current 50 mA from backplane bus 5 V DC, typ. 50 mA output voltage / header supply voltage of the transmitter / header • supply current / from supply voltage for transmitter / maximum 4 mA; per channel Power loss Power loss Power loss, typ. 0.5 W Digital outputs 4 • in groups of 1 Short-circuit protection No Switching capacity of the outputs • • with resistive load, max. 0.1 A Load resistance range • • upper limit 10 Ω Output voltage 24 V • for signal "0", max. 1 V; with 10 kOhm load • for signal "1", min. L + (1.5 V) Output current • • for signal "1" permissible range, max. 0.1 A • for signal "1", min. L + (1.5 V) Output current • • for signal "1" permissible range, max. 0.1 A • for signal "1", min. E • for signal "1" resinstesion frormation Yes	Engineering with	
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Switching capacity of the outputs 0.1 A Load resistance range 0.1 A Output voltage 10 Ω Output voltage 24 V • for signal "0", max. 1 V; with 10 kOhm load • for signal "1", min. L+ (-1.5 V) Output current 0.1 A • for signal "1" permissible range, max. 0.1 A • for signal "0" residual current, max. 10 μA Cable length 50 m • shielded, max. 50 m Interrupts/diagnostics/status information Alarms Yes Diagnostics function LED Yes • for status of the outputs Yes	• in groups of	1
• with resistive load, max. 0.1 A Load resistance range 0 • upper limit 10 Ω Output voltage 24 V • Rated value (DC) 24 V • for signal "0", max. 1 V; with 10 kOhm load • for signal "1", min. L+ (-1.5 V) Output current 0.1 A • for signal "1" permissible range, max. 0.1 A • for signal "0" residual current, max. 10 μA Cable length 50 m • shielded, max. 50 m Interrupts/diagnostics/status information Yes Diagnostics function Yes Diagnostics indication LED • for status of the outputs • for status of the outputs Yes	Short-circuit protection	No
Load resistance range 10 Ω • upper limit 10 Ω Output voltage 24 V • Rated value (DC) 24 V • for signal "0", max. 1 V; with 10 kOhm load • for signal "1", min. L+ (-1.5 V) Output current 0.1 A • for signal "0" residual current, max. 0.1 A • for signal "0" residual current, max. 10 μA Cable length 50 m Interrupts/diagnostics/status information Alarms Yes Diagnostics indication LED Yes • for status of the outputs Yes	Switching capacity of the outputs	
• upper limit 10 Ω Output voltage	 with resistive load, max. 	0.1 A
Output voltage 24 V • Rated value (DC) 24 V • for signal "0", max. 1 V; with 10 kOhm load • for signal "1", min. L+ (-1.5 V) Output current • for signal "1" permissible range, max. 0.1 A • for signal "0" residual current, max. 10 μA Cable length • shielded, max. 50 m Interrupts/diagnostics/status information Alarms Yes Diagnostics function Yes Diagnostics indication LED • for status of the outputs Yes	Load resistance range	
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• for signal "1", min. L+ (-1.5 V) Output current • • for signal "1" permissible range, max. 0.1 A • for signal "0" residual current, max. 10 μA Cable length • • shielded, max. 50 m Interrupts/diagnostics/status information Yes Diagnostics function Yes Diagnostics indication LED • • for status of the outputs Yes Ambient conditions Yes	 Rated value (DC) 	24 V
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• for signal "0" residual current, max. 10 μA Cable length 50 m • shielded, max. 50 m Interrupts/diagnostics/status information 4 Alarms Yes Diagnostics function Yes Diagnostics indication LED • for status of the outputs • for status of the outputs Yes	Output current	
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Interrupts/diagnostics/status information Alarms Yes Diagnostics function Yes Diagnostics indication LED • for status of the outputs Yes Yes Ambient conditions Yes	Cable length	
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Diagnostics indication LED • for status of the outputs Yes Ambient conditions	Alarms	Yes
for status of the outputs Yes Ambient conditions	Diagnostics function	Yes
Ambient conditions	Diagnostics indication LED	
	 for status of the outputs 	Yes
	Ambient conditions	
Ambient temperature during operation	Ambient temperature during operation	
• min40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C	• min.	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C

• max.	60 °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. 	5 000 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	
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 ships/at sea	
 — to biologically 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 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
 — to mechanically active substances according to EN 60721-3-6 	Yes; Class 6S3 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
 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
Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
Dimensions	
Width	38 mm
Height	62 mm
Depth	21 mm
Weights	
Weight, approx.	40 g
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