SIEMENS

Data sheet

6AG1246-0BA22-2FA0



SIPLUS G120 CU250S-2 PN -20...+50 °C With conformal coating Based on 6SL3246-0BA22-1FA0 . Integrates PROFINET Supports vector control Basic positioner EPOS via License extended functions 4 configurable DI/DQ 6 DI (3 F-DI), 5 DI 3 DQ (1 F-DQ) 2 AI, 2 AQ Safety Integrated STO, SBC, SS1 Encoder interface: D-CLiQ+HTL/TTL/SSI Resolver/HTL via terminal Degree of protection IP20

Figure similar

General information	
Product type designation	CU250S-2 PN
Product function	
 V/f control with linear/square parameterization capability 	Yes
 V/f control with ECO mode linear/square 	Yes
 V/f control with flux current control 	Yes
 Vector control with encoder 	No
Vector control without encoder	Yes
Supply voltage	
Operating voltage from Power Module	24 V
Operating voltage from external power supply, min.	20.4 V
Operating voltage from external power supply, max.	28.8 V
Input current	
Current consumption, max.	1.5 A
Power loss	
Power loss, max.	12 W
Digital inputs	
Number of digital inputs	11; Optically isolated, free reference potential (own potential group), NPN/PNP-logic selectable via wiring
With fail-safe	1; Use of 2x DI Standard
Digital outputs	
Number of digital outputs	
 As transistor 	4
 As relay change-over contact 	3
Analog inputs	
Number of analog inputs	2; the differential analog inputs can be configured as supplementary digital inputs
Type of analog input	Differential input
Input voltage with signal "0" to "1"	4 V
Input voltage with signal "1" to "0"	1.6 V
Analog outputs	
Number of analog outputs	2
Analog value generation for the inputs	
A/D resolution	13 bit
Interfaces	
Number of PROFINET interfaces	2
Number of RS 485 interfaces	0

Protocols	
PROFIBUS	No
Isolation	
Type of protective insulation	PELV according to EN 50178, safe disconnection from the mains by
Type of processive measure.	double/reinforced isolation
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
Certificate of suitability	CE / TÜV
Ambient conditions	
Ambient temperature during operation	
• min.	-20 °C; = Tmin
• max.	50 °C; = Tmax
• min. [°F]	-4 °F
max. [°F]	122 °F
 Remark 	A derating of 3 K/1 000 m has to be applied to the Control Units from an
	installation altitude of 1 000 m above sea level
Ambient temperature during storage/transportation	40 °C
Storage, min. Storage, max.	-40 °C 70 °C
Storage, max.Storage, min. [°F]	-40 °F
• Storage, min. [F] • Storage, max. [°F]	158 °F
Relative humidity	100 1
With condensation, tested in accordance with IEC	100 %; RH incl. condensation/frost (no commissioning when
60068-2-38, max.	condensation present), vertical mounting position
Resistance	
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 	No
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
Dimensions	
Width	73 mm
Height	199 mm
Depth	63 mm
Weights	
Weight (without packaging)	0.49 kg
last modified:	4/14/2021 🖸