SIEMENS

Data sheet 6AG1246-0BA22-2FA0

SIPLUS G120 CU250S-2 PN based on 6SL3246-0BA22-1FA0 with conformal coating, -20…+50 °C, integrates PROFINET supports vector control basic positioner EPOS via license extended functions 4 configurable DI/DO modules 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

General information	
Product type designation	CU250S-2 PN
based on	6SL3246-0BA22-1FA0
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
Remark	switchable between voltage (-10 ... +10 V) and current (0 ... 20 mA) using a DIP switch
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 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	
● Storage, min.	-40 °C
● Storage, max.	70 °C
● Storage, min. [°F]	-40 °F
● Storage, max. [°F]	158 °F
Relative humidity	
● With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning when 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
connection method	
Type of electrical connection for signal line	
● Connectable conductor cross-section for signal line, min.	0.05 mm²
● Connectable conductor cross-section for signal line, max.	1.5 mm²
● Connectable conductor cross-section for AWG cables, min.	30
● Connectable conductor cross-section for AWG cables, max.	16
Dimensions	
Width	73 mm
Height	199 mm
Depth	63 mm
Weights	
Weight (without packaging)	0.49 kg

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