SIEMENS

Data sheet 6AG1244-0BB12-2BA1

SIPLUS G120 CU240E-2 USS Control Unit CU240E-2 USS - 20...+55°C with conformal coating based on 6SL3244-0BB12-1BA1. Control Unit CU240E-2 Type with Safety integrated STO RS485 interface, USS protocol 6DI, 3 DO, 2AI,2AO, max. 1F-DI PTC/KTY interface USB and SD/MMC interface Degree of protection IP20 without Power Module

General information	
Product type designation	CU240E-2 USS
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

Input 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.	0.5 A

Power loss	
Power loss, max.	5.5 W

Digital inputs	
Number of digital inputs	6; 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	1
• As relay change-over contact	2
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 (0/4 ... 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
Interfaces	
Number of PROFINET interfaces	0
Number of RS 485 interfaces	1
Protocols	
PROFIBUS	No
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
Certificate of suitability	CE / TÜV
Verification of suitability for CE marking	Low-Voltage Directive 2014/35/EU
Ambient conditions	
Ambient temperature during operation	
• min.	-20 °C; = Tmin
• max.	55 °C; = Tmax
• min. [°F]	-4 °F
• max. [°F]	131 °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 under condensation conditions)
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 availability
• 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	46 mm

Weights	
Weight (without packaging)	0.49 kg

last modified: 02/19/2020