## **SIEMENS**

## **Data sheet**

6AG1244-0BB12-2BA1

SIPLUS G120 CU240E-2 USS based on 6SL3244-0BB12-1BA1 with conformal coating, -20...+55 °C, Control Unit CU240E-2 USS E-type with Safety Integrated STO RS-485 interface, USS protocol 6 DI, 3 DQ, 2 AI, 2 AQ, 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	
<ul> <li>V/f control with linear/square parameterization capability</li> </ul>	Yes
<ul> <li>V/f control with ECO mode linear/square</li> </ul>	Yes
<ul> <li>V/f control with flux current control</li> </ul>	Yes
<ul> <li>Vector control with encoder</li> </ul>	No
<ul> <li>Vector control without encoder</li> </ul>	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.	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
<ul> <li>As relay change-over contact</li> </ul>	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 $\dots$ +10 V) and current (0/4 $\dots$ 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	10 bit
Interfaces	
Number of PROFINET interfaces	0
Number of RS 485 interfaces	1
Protocols	
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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.	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
- Norman	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	outdinotio)
Use in stationary industrial systems  — to biologically active substances according to EN	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna);
60721-3-3 — to chemically active substances according to EN	Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity
60721-3-3  — to mechanically active substances according to EN	degree 3); * No
60721-3-3	
Usage in industrial process technology	
<ul> <li>Against chemically active substances acc. to EN 60654-4</li> </ul>	Yes; Class 3 (excluding trichlorethylene)
<ul> <li>Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04</li> </ul>	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	
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> </ul>	* 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
<ul> <li>Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life
<ul> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC- CC-830A</li> </ul>	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	70 IIIII
	0.40 kg
Weight (without packaging)	0.49 kg
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