

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
based on	6SL3244-0BB12-1BA1
Product function	
<ul style="list-style-type: none"> • V/f control with linear/square parameterization capability 	Yes
<ul style="list-style-type: none"> • V/f control with ECO mode linear/square 	Yes
<ul style="list-style-type: none"> • V/f control with flux current control 	Yes
<ul style="list-style-type: none"> • Vector control with encoder 	No
<ul style="list-style-type: none"> • 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.	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
<ul style="list-style-type: none"> • With fail-safe 	1; Use of 2x DI Standard
Digital outputs	
Number of digital outputs	
<ul style="list-style-type: none"> • As transistor 	1
<ul style="list-style-type: none"> • 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
Analog value generation for the inputs	
A/D resolution	10 bit
Interfaces	
Number of PROFINET interfaces	0

Number of RS 485 interfaces	1
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	
<ul style="list-style-type: none"> • min. • max. • min. [°F] • max. [°F] • Remark 	<p>-20 °C; = Tmin 55 °C; = Tmax -4 °F 131 °F</p> <p>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</p>
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> • Storage, min. • Storage, max. • Storage, min. [°F] • Storage, max. [°F] 	<p>-40 °C 70 °C -40 °F 158 °F</p>
Relative humidity	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 	<p>Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * No</p>
Usage in industrial process technology	
<ul style="list-style-type: none"> — Against chemically active substances acc. to EN 60654-4 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 	<p>Yes; Class 3 (excluding trichlorethylene) 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)</p>
Remark	
<ul style="list-style-type: none"> — 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	
<ul style="list-style-type: none"> • Coatings for printed circuit board assemblies acc. to EN 61086 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A 	<p>Yes; Class 2 for high reliability Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A</p>
Connection method	
Type of electrical connection for signal line	
<ul style="list-style-type: none"> • Connectable conductor cross-section for signal line, min. • Connectable conductor cross-section for signal line, max. • Connectable conductor cross-section for AWG cables, min. • Connectable conductor cross-section for AWG cables, max. 	<p>0.05 mm² 1.5 mm² 30 16</p>
Dimensions	
Width	73 mm
Height	199 mm
Depth	46 mm

Weights

Weight (without packaging) 0.49 kg

Classifications

	Version	Classification
eClass	14	27-02-31-50
eClass	12	27-02-31-50
eClass	9.1	27-02-31-50
eClass	9	27-02-31-01
eClass	8	27-02-31-01
eClass	7.1	27-02-31-01
eClass	6	27-02-31-01
ETIM	10	EC001857
ETIM	9	EC001857
ETIM	8	EC001857
ETIM	7	EC001857
IDEA	4	5208
UNSPSC	15	39-12-22-14

Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



[China RoHS](#)



[China RoHS](#)



General Product Approval

Functional Safety

Test Certificates



[TUEV](#)

[TUEV](#)

last modified:

5/29/2024