

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	<a href="#">6SL3244-0BB12-1BA1</a>
Product function	
<ul style="list-style-type: none"> <li>• V/f control with linear/square parameterization capability</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• V/f control with ECO mode linear/square</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• V/f control with flux current control</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Vector control with encoder</li> </ul>	No
<ul style="list-style-type: none"> <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
<ul style="list-style-type: none"> <li>• With fail-safe</li> </ul>	1; Use of 2x DI Standard
Digital outputs	
Number of digital outputs	
<ul style="list-style-type: none"> <li>• As transistor</li> </ul>	1
<ul style="list-style-type: none"> <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 ... +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
<b>Protocols</b>	
PROFIBUS	No
<b>Isolation</b>	
Type of protective insulation	PELV according to EN 50178, safe disconnection from the mains by double/reinforced isolation
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Standards, approvals, certificates</b>	
Certificate of suitability	CE / TÜV
<b>Ambient conditions</b>	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> <li>• min. [°F]</li> <li>• max. [°F]</li> <li>• Remark</li> </ul>	<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"> <li>• Storage, min.</li> <li>• Storage, max.</li> <li>• Storage, min. [°F]</li> <li>• Storage, max. [°F]</li> </ul>	<p>-40 °C  70 °C  -40 °F  158 °F</p>
Relative humidity	
<ul style="list-style-type: none"> <li>• With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
<ul style="list-style-type: none"> <li>— to biologically active substances according to EN 60721-3-3</li> <li>— to chemically active substances according to EN 60721-3-3</li> <li>— to mechanically active substances according to EN 60721-3-3</li> </ul>	<p>Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request  Yes; Class 3C4 (RH &lt; 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"> <li>— Against chemically active substances acc. to EN 60654-4</li> <li>— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04</li> </ul>	<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"> <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	
<ul style="list-style-type: none"> <li>• Coatings for printed circuit board assemblies acc. to EN 61086</li> <li>• Military testing according to MIL-I-46058C, Amendment 7</li> <li>• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	<p>Yes; Class 2 for high reliability  Yes; Discoloration of coating possible during service life  Yes; Conformal coating, Class A</p>
<b>Connection method</b>	
Type of electrical connection for signal line	
<ul style="list-style-type: none"> <li>• Connectable conductor cross-section for signal line, min.</li> <li>• Connectable conductor cross-section for signal line, max.</li> <li>• Connectable conductor cross-section for AWG cables, min.</li> <li>• Connectable conductor cross-section for AWG cables, max.</li> </ul>	<p>0.05 mm<sup>2</sup>  1.5 mm<sup>2</sup>  30  16</p>
<b>Dimensions</b>	
Width	73 mm
Height	199 mm
Depth	46 mm

**Weights**

Weight (without packaging)	0.49 kg
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**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
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