

SIPLUS S120 Control Unit CU310-2 DP -20...+55°C with conformal coating based on 6SL3040-1LA00-0AA0 . with PROFIBUS interface without CompactFlash card



### General information

Product type designation	CU310-2 DP
Product function	
<ul style="list-style-type: none"> <li>• V/f control with linear/square parameterization capability</li> </ul>	No
<ul style="list-style-type: none"> <li>• V/f control with ECO mode linear/square</li> </ul>	No
<ul style="list-style-type: none"> <li>• V/f control with flux current control</li> </ul>	No
<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

### 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.	0.3 A
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### Power loss

Power loss, max.	20 W
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## Digital inputs

Number of digital inputs	11; According to IEC 61131-2 type 1, 5 floating digital inputs, 8 bidirectional non-floating digital inputs/outputs, 3 parameterizable failsafe digital inputs (electrically isolated) or, alternatively, 6 parameterizable digital inputs (electrically isolated)
<ul style="list-style-type: none"><li>• With fail-safe</li></ul>	3; Optionally parameterizable as safe inputs

## Digital outputs

Number of digital outputs	
<ul style="list-style-type: none"><li>• As transistor</li></ul>	0
<ul style="list-style-type: none"><li>• As relay change-over contact</li></ul>	0

## Analog inputs

Number of analog inputs	1; The differential analog inputs can be configured as supplementary digital inputs
Type of analog input	Differential input
Input voltage with signal "0" to "1"	0 V

## Interfaces

Number of PROFINET interfaces	0
Number of RS 485 interfaces	1

## Protocols

PROFIBUS	Yes
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## Degree and class of protection

IP degree of protection	IP20
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## Standards, approvals, certificates

Certificate of suitability	CE / TÜV
Verification of suitability for CE marking	Low-Voltage Directive 2014/30/EU and 2014/35/EU

## Ambient conditions

Ambient temperature during operation	
<ul style="list-style-type: none"><li>• min.</li></ul>	-20 °C; = Tmin
<ul style="list-style-type: none"><li>• max.</li></ul>	55 °C; = Tmax
<ul style="list-style-type: none"><li>• min. [°F]</li></ul>	-4 °F
<ul style="list-style-type: none"><li>• max. [°F]</li></ul>	131 °F
<ul style="list-style-type: none"><li>• Remark</li></ul>	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

<ul style="list-style-type: none"><li>• Storage, min.</li></ul>	-40 °C
<ul style="list-style-type: none"><li>• Storage, max.</li></ul>	70 °C
<ul style="list-style-type: none"><li>• Storage, min. [°F]</li></ul>	-40 °F
<ul style="list-style-type: none"><li>• Storage, max. [°F]</li></ul>	158 °F

### 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)
<b>Resistance</b>	
<b>Use in stationary industrial systems</b>	
— 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
<b>Usage in industrial process technology</b>	
— 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)
<b>Remark</b>	
— 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!
<b>Conformal coating</b>	
<ul style="list-style-type: none"> <li>• Coatings for printed circuit board assemblies acc. to EN 61086</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life
<ul style="list-style-type: none"> <li>• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	Yes; Conformal coating, Class A
<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> </ul>	0.05 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• Connectable conductor cross-section for signal line, max.</li> </ul>	1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• Connectable conductor cross-section for AWG cables, min.</li> </ul>	30
<ul style="list-style-type: none"> <li>• Connectable conductor cross-section for AWG cables, max.</li> </ul>	16
<b>Dimensions</b>	
Width	73 mm
Height	191 mm
Depth	75 mm
<b>Weights</b>	
Weight (without packaging)	0.95 kg

last modified:

05/13/2020