



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

General information	
Product type designation	CU310-2 DP
based on	6SL3040-1LA00-0AA0
Product function	
<ul style="list-style-type: none"> • V/f control with linear/square parameterization capability 	No
<ul style="list-style-type: none"> • V/f control with ECO mode linear/square 	No
<ul style="list-style-type: none"> • V/f control with flux current control 	No
<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.	0.3 A
Power loss	
Power loss, max.	20 W
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"> • With fail-safe 	3; Optionally parameterizable as safe inputs
Analog inputs	
Number of analog inputs	1; the differential analog inputs can be configured as supplementary digital inputs
Type of analog input	Differential input
Interfaces	
Number of PROFINET interfaces	0
Number of RS 485 interfaces	1
Protocols	
PROFIBUS	Yes
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 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 reliability
• 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 mm ²
• Connectable conductor cross-section for signal line, max.	1.5 mm ²
• Connectable conductor cross-section for AWG cables, min.	30
• Connectable conductor cross-section for AWG cables, max.	16

Dimensions	
Width	73 mm
Height	191 mm
Depth	75 mm

Weights	
Weight (without packaging)	0.95 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 EMV Functional Safety Test Certificates



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