

Data sheet for SINAMICS S120 control unit CU310-2 DP



MLFB-Ordering data

6SL3040-1LA00-0AA0

Client order no. :
Order no. :
Offer no. :
Remarks :

Inputs / outputs

Item no.:

Project :

Consignment no.:

	Inputs / o		
Digital inputs			
Number of potential-free inputs	11		
Voltage	-3 +30 V		
Low level	-3 +5 V		
High level	15 30 V		
Power consumption at 24 V DC, typ.	3.5 mA		
Delay time L \rightarrow H, typ.	50 μs		
Delay time H→L, typ.	150 μs		
Analog inputs			
Number 1)	1		
As voltage input			
Voltage	-10 +10 V		
Resolution	12 bit + sign (with respect to the maximum range that can be resolved -11 +11 V)		
R _i	>100 kΩ		
As current input			
Current	-20 +20 mA		
Resolution	11 bit + sign (with respect to - 22 22 mA); Maximum range that can be resolved -44 +44 mA)		
\mathbf{R}_{i}	>250 Ω		

1) The analog input can be switched between current and voltage input.

Digital I/O

Number of bidirectional, not potential-free inputs			
As input			
Voltage	-3 +30 V		
Low level	-3 +5 V		
High level	15 30 V		
Power consumption at 24 V DC, typ.	3.5 mA		
Delay time L→H	5 μs		
Delay time H→L	50 μs		
As output			
Voltage	DC 24 V		
Load current per digital output, max.	500 mA		
Delay time L→H, typ./ max.	150 μs / 400 μs		
Delay time $H \rightarrow L$, typ./ max.	75 μs / 100 μs		



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Electri	ectrical data Ambient conditions		ient conditions		
Electronics power supply	DC 24 V (20.4 28.8 V)	Installation altitude	2000 m (6561.68 ft)		
Max. power consumption ²⁾	0.80 A	Ambient temperature du	Ambient temperature during		
Power loss, max.	20 W	Operation	0 55 °C (32 131 °F)		
Mechanical data		Storage	-25 55 °C (-13 131 °F)		
Dimensions		Transport	-40 70 °C (-40 158 °F)		
Width	73 mm (2.87 in)	Relative humidity			
Height	191 mm (7.52 in)	Transport, max.	95 %		
Depth	75 mm (2.95 in)		at 40 °C (104 °F)		
Net weight	0.051. (0.0011)	C	Connections		
	0.95 kg (2.09 lb)	PE connection	1 (M5 screw)		
On-board en	coder interface	DRIVE-CLiQ	DRIVE-CLIQ 1		
max. load current at 24 V encoder supply	0.35 A	PROFINET			
		PROFIBUS	1		
max. load current at 5 V encoder supply	0.35 A	RS232			
		Ethernet	1		
Encoder frequency, max.	300 kHz	Temperature sensor	1		
SSI baudrate	100 1000 kBaud	24 V	1		
SSI absolute position resolution	30 bit	Measuring sockets	3		
·	30 bit	Number of slots			
Line length, max.	100 m (328.08 ft)	Flash card	1		
TTL encoder		i iasii Caiu			
HTL encoder unipolar signal	100 m (328.04 ft)				
HTL encoder bipolar signal	300 m (984.25 ft)		Communication		
SSI encoder	100 m (328.08 ft)	Communication	Profibus DP		
			Standards		

²⁾ without taking into account digital outputs. Option slot extension, DRIVE-CLiQ supply and Power Module PM340

CE, KC, cULus, EAC, C-Tick (RCM)

Compliance with standards