

Data sheet for SINAMICS S120 control unit CU310-2 PN



MLFB-Ordering data

6SL3040-1LA01-0AA0

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

Item no.: Consignment no.: Project :

	Inputs / outputs		
Digital inputs		Digital I/O	
Number of potential-free inputs	11	Number of bidirectional, not free inputs	
Voltage	-3 +30 V	As input	
Low level	-3 +5 V	Voltage	
High level	15 30 V	Low level	
Power consumption at 24 V DC, typ.	3.5 mA	High level	
Delay time L→H, typ.	50 μs		
Delay time H→L, typ.	150 μs	Power consumption at 24 \	
Analog inputs		Delay time L→H	
Number 1)	1	Delay time H→L	
	1	As output	
As voltage input		Voltage	
Voltage	-10 +10 V	Load current per digital ou	
	12 bit + sign (with respect to	Delay time L→H, typ./ max	
Resolution	the maximum range that can be resolved -11 +11 V)	Delay time H→L, typ./ max	
		belay time H 7L, typ., max	
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)		
R _i	>250 Ω		

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

Number of bidirectional, not potential- free inputs	8	
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→L, typ./ max.	75 μs / 100 μs	



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Electrical data		Amb	Ambient 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 d	uring	
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		Connections		
	0.95 kg (2.09 lb)	PE connection	1 (M5 screw)	
On-board encoder interface		DRIVE-CLIQ	1	
max. load current at 24 V encoder supply	0.35 A	PROFINET	2	
		PROFIBUS		
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	
	2017	Measuring sockets	3	
SSI absolute position resolution	30 bit	Number of slots		
ine length, max.				
TTL encoder	100 m (328.08 ft)	Flash card	1	
HTL encoder unipolar signal	100 m (328.04 ft)			
HTL encoder bipolar signal	300 m (984.25 ft)	Cor	Communication	
SSI encoder	100 m (328.08 ft)	Communication	PROFINET, EtherNet/IP	
			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