



Figure similar

Article No. : 6SL3040-1LA01-0AA0

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

Item no. :
Consignment no. :
Project :

Inputs / outputs

Digital inputs

Number	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→H, typ. ¹⁾	50 µs
Delay time H→L, typ. ¹⁾	150 µs

Digital I/O

Number of bidirectional, not potential-free inputs ³⁾	8
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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 ¹⁾	5 µs
Delay time H→L ¹⁾	50 µs

As output

Continuous short-circuit proof	Yes
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

Analog inputs

Number ⁴⁾	1
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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

Voltage	-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

Electrical data

Electronics power supply	DC 24 V (20.4 ... 28.8 V)
Max. power consumption ⁵⁾	0.8 A
Power loss, max.	20 W
Protection, max.	20 A

Communication

Communication	PROFINET, EtherNet/IP
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On-board encoder interface

Encoder evaluation	optical incremental encoder TTL/HTL or encoder SSI without incremental signals
max. load current at 24 V encoder supply	0.35 A
max. load current at 5 V encoder supply	0.35 A
Encoder frequency, max.	300 kHz
SSI baudrate	100 ... 1,000 kBaud
SSI absolute position resolution	30 bit
Line length, max.	
TTL encoder ⁶⁾	100 m (328.08 ft)
HTL encoder unipolar signal	100 m (328.04 ft)
HTL encoder bipolar signal	300 m (984.25 ft)
SSI encoder	100 m (328.08 ft)

Environmental conditions

Installation altitude	2,000 m (6,561.68 ft)
Ambient temperature during	
Operation	0 ... 55 °C (32 ... 131 °F)
Storage	-25 ... 55 °C (-13 ... 131 °F)
Transport	-40 ... 70 °C (-40 ... 158 °F)
Relative humidity during	
Transport, max.	95 % at 40 °C (104 °F)

Data sheet for SINAMICS S120 control unit CU310-2 PN



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Connections	
PE connection	1 (M5 screw)
Supply voltage, max.	2.5 mm ² (AWG 14)
Digital inputs, max.	1.5 mm ² (AWG 16)
Digital inputs/outputs, max.	1.5 mm ² (AWG 16)
DRIVE-CLiQ	1
PROFINET	2
PROFIBUS	--
RS232	--
Ethernet	1
Temperature sensor	1
24 V	1

Measuring sockets	3
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Number of slots

Flash card	1
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Mechanical data

Net weight	0.95 kg (2.09 lb)
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Dimensions

Width	73.0 mm (2.87 in)
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Height	191.0 mm (7.52 in)
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Depth	75.0 mm (2.95 in)
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Standards

Compliance with standards	CE, KC, cULus, EAC, C-Tick (RCM)
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¹⁾The specified delay times refer to the hardware. The actual reaction time depends on the time slot in which the digital input or output is processed.

³⁾ can be parameterized - as DI - as DO

⁴⁾The analog input can be switched between current and voltage input.

⁵⁾ without taking into account digital outputs. Option slot extension, DRIVE-CLiQ supply and Power Module PM340

⁶⁾Signal cables twisted in pairs and shielded