



Article No. : 6SL3040-0JA01-0AA0

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

Item no. :
Consignment no. :
Project :

Inputs / outputs	
Digital inputs	
Number	5
Voltage	-3 ... 30 V
Low level	-3 ... 5 V
High level	15 ... 30 V
Power consumption at 24 V DC, typ.	6.0 mA
Delay time L→H, typ. ¹⁾	15 µs
Delay time H→L, typ. ¹⁾	55 µs
Fail-safe digital inputs	
Number ²⁾	3
Digital I/O	
Number ³⁾	4
As input	
Voltage	-3 ... 30 V
Low level	-3 ... 5 V
High level	15 ... 30 V
Power consumption at 24 V DC, typ.	6.0 mA
Delay time L→H ¹⁾	5 µs
Delay time H→L ¹⁾	5 µs
As output	
Continuous short-circuit proof	Yes
Voltage	DC 24 V
Load current per digital output, max.	100 mA
Delay time, approx.	150 µs
As fail-safe digital output	
Number	1
Analog inputs	
Number	1
Voltage	-10 ... 10 V
Resolution	12 bit + sign
Internal resistor	15 kOhm

Electrical data	
Power supply voltage	DC 24 V -15 % + 20 %
Max. power consumption ⁵⁾	0.8 A
Power loss, max.	20 W
Protection, max.	20 A

Communication	
Communication	PROFINET

On-board encoder interface	
Encoder evaluation	optional incremental encoder TTL/HTL or encoder SSI without incremental signals
Current consumption at 24 V DC	0.35 A
Current consumption at 5 V DC	0.35 A
Encoder frequency, max.	500 kHz
SSI baudrate	100 ... 250 kBaud The baud rate depends on cable length
SSI absolute position resolution	30 bit
Line length, max.	
TTL encoder ⁶⁾	100 m (328.08 ft)
HTL encoder unipolar signal	100 m (328.08 ft)
HTL encoder bipolar signal	300 m (984.25 ft)
SSI encoder	100 m (328.08 ft)

Environmental conditions	
Installation altitude	1,000 m (3,280.84 ft)
Ambient temperature during	
Operation	0 ... 55 °C (32 ... 131 °F)
Storage	-25 ... 70 °C (-13 ... 158 °F)
Transport	-40 ... 70 °C (-40 ... 158 °F)
Relative humidity during	
Transport, max.	95 % at 40 °C (104 °F)

Connections	
PE connection	M5 screw
Supply voltage, max.	2.5 mm² (AWG 14)
Digital inputs, max.	1.5 mm² (AWG 16)
Digital inputs/outputs, max.	1.5 mm² (AWG 16)

Mechanical data	
Net weight	0.95 kg (2.09 lb)
Dimensions	
Width	73.0 mm (2.87 in)
Height	195.0 mm (7.68 in)
Depth	71.0 mm (2.80 in)

Standards	
Compliance with standards	cULus

Data sheet for SINAMICS S110 Control Unit CU305 PN

Article No. : 6SL3040-0JA01-0AA0



Figure similar

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.

²⁾ 3 parameterizable, fail-safe digital inputs (floating), or alternatively 6 parameterizable digital inputs (floating)

³⁾ can be parameterized - as DI - as DO

⁵⁾ Power requirement 0.8 A for CU305 incl. 350 mA for HTL encoder + 0.5 A for PM340

⁶⁾ TTL only bipolar signals; for bipolar signals, the signal lines must be twisted in pairs and shielded