



Figure similar

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 mm ² (AWG 14) |
| Digital inputs, max. | 1.5 mm ² (AWG 16) |
| Digital inputs/outputs, max. | 1.5 mm ² (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