

Technical specifications

CU310-2 Control Unit PROFINET: 6SL3040-1LA01-0AA0 PROFIBUS: 6SL3040-1LA00-0AA0	
Current requirement, max. At 24 V DC, without taking account of digital outputs and DRIVE-CLiQ supply	0.35 A for CU310-2 + 0.5 A for PM340 Power Module
Conductor cross-section, max.	2.5 mm ²
Fuse protection, max.	20 A
Digital inputs	in accordance with IEC 61131-2 Type 1 5 floating digital inputs 8 bidirectional non-floating digital inputs/digital outputs 3 parameterizable, fail-safe digital inputs (isolated) or alternatively 6 parameteriz- able digital inputs (isolated)
• Voltage	-3 ... +30 V
• Low level (an open digital input is interpreted as "low")	-3 ... +5 V
• High level	15 ... 30 V
• Current consumption at 24 V DC, typ.	10 mA
• Delay time of digital inputs ¹⁾ , approx.	
- L → H	50 μs
- H → L	100 μs
• Delay time of high-speed digital inputs ¹⁾ , approx. (high-speed digital inputs can be used for position detection)	
- L → H	5 μs
- H → L	50 μs
• Conductor cross-section, max.	1.5 mm ²
Digital outputs (sustained short-circuit strength)	8 bidirectional non-floating digital outputs/digital inputs
• Voltage	24 V DC
• Load current per digital output ²⁾ , max.	500 mA
• Delay time ¹⁾ , typ./max.	
- L → H	150 μs/400 μs
- H → L	75 μs/100 μs
• Conductor cross-section, max.	1.5 mm ²
Analog input	1 analog input for current or voltage input, switchable
• Voltage	-10 ... +10 V; $R_i > 100 \Omega$
• Current	-20 ... +20 mA; $R_i > 250 \Omega$
• Max. range that can be resolved	-11 ... +11 V
• Common-mode range	±12 V
• Resolution	13 bit (with respect to the maximum range that can be resolved)

CU310-2 Control Unit PROFINET: 6SL3040-1LA01-0AA0 PROFIBUS: 6SL3040-1LA00-0AA0	
Encoder evaluation	• Incremental encoder TTL/HTL • SSI encoder without incremental signals
• Input impedance	
- TTL	570 Ω
- HTL, max.	16 mA
• Encoder supply	24 V DC/0.35 A or 5 V DC/0.35 A
• Encoder frequency, max.	300 kHz
• SSI baud rate	100 ... 250 kBaud
• Resolution absolute position SSI	30 bit
• Cable length, max.	
- TTL encoder	100 m (328 ft) (only bipolar signals permitted) ³⁾
- HTL encoder	100 m (328 ft) for unipolar signals 300 m (984 ft) for bipolar signals ³⁾
- SSI encoder	100 m (328 ft)
Power loss	< 20 W
PE connection	M5 screw
Dimensions	
• Width	73 mm (2.87 in)
• Height	191 mm (7.52 in)
• Depth	75 mm (2.95 in)
Weight, approx.	0.95 kg (2 lb)
Approvals, according to	cULus

Selection and ordering data

Description	Order No.
CU310-2 PN Control Unit Without CompactFlash card	6SL3040-1LA01-0AA0
CU310-2 DP Control Unit Without CompactFlash card	6SL3040-1LA00-0AA0
Accessories	
STARTER commissioning tool	6SL3072-0AA00-0AG0
Accessories for re-ordering	
SINAMICS/SINUMERIK/SIMOTION dust-proof blanking plugs (50 units) For DRIVE-CLiQ port	6SL3066-4CA00-0AA0

For information on connectors and cables, please refer to
Catalog IK PI and the Siemens Industry Mall:
www.siemens.com/industrymall

¹⁾ The specified delay times refer to the hardware. The actual reaction time depends on the time slice in which the digital input or output is processed.

²⁾ In order to use the digital outputs, an external 24 V power supply must be connected to terminal X124.

³⁾ Signal cables twisted in pairs and shielded.