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CU310 DP Control Unit

Technical specifications

Order No.	6SL3040-0LA00-0AA1
Product name	CU310 DP Control Unit
Current requirement at 24 V DC, max. excluding digital outputs and DRIVE-CLiQ supply	0.35 A for CU310 DP + 0.5 A for PM340 Power Module
Conductor cross-section, max.	2.5 mm^2
Fuse protection, max.	20 A
Digital inputs	4 floating digital inputs 4 bidirectional non-floating digital inputs/digital outputs
• 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, approx.[1]	
- L → H	50 µs
- H → L	100 µs
• Delay time of high-speed digital inputs, approx.[1] (high-speed digital inputs can be used for position detection)	
- L → H	5 µs
- H → L	50 µs
• Conductor cross-section, max.	0.5 mm^2
Digital outputs (continued-short-circuit-proof)	4 bidirectional non-floating digital inputs/digital outputs
• Voltage	24 V DC
• Load current per digital output, max.[2]	500 mA
• Delay time, approx.[1]	150 µs
• Conductor cross-section, max.	0.5 mm^2
Encoder evaluation	TTL or HTL incremental encoders (with adjustable parameters)
• Cut-off frequency	500 kHz
• Cable length with TTL incremental encoder, max.	100 m (328 ft) (only bipolar signals permitted)
• Cable length with HTL incremental encoder, max.	100 m (328 ft) for unipolar signals 300 m (984 ft) for bipolar signals
Power loss	< 20 W
PE connection	On housing with M5 screw
Dimensions	
• Width	73 mm (2.87 in)
• Height	183.2 mm (7.21 in)
• Depth	89.6 mm (3.53 in)
Weight, approx.	0.95 kg (2.09 lb)
Approvals	cULus (File No.: E164110)

Selection and Ordering Data

Designation	Order No.
CU310 DP Control Unit Without CompactFlash card	**6SL3040-0LA00-0AA1**

Accessories

Designation	Order No.
PROFIBUS connector	
• Without programming device/ PC connection	**6ES7972-0BA41-0XA0**
• With programming device/ PC connection	**6ES7972-0BB41-0XA0**
STARTER drive/commissioning tool	**6SL3072-0AA00-0AG0**

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