

# SINAMICS S120

## Supplementary system components

### TB30 Terminal Board

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#### Overview



The TB30 Terminal Board supports the addition of digital inputs/digital outputs and analog inputs/analog outputs to the CU320 and SIMOTION D Control Units.

#### Design

The following are located on the TB30 Terminal Board:

- Power supply for digital inputs/digital outputs
- 4 digital inputs
- 4 digital outputs
- 2 analog inputs
- 2 analog outputs

The TB30 Terminal Board plugs into the option slot on a Control Unit.

A shield connection for the signal cable shield is located on the Control Unit.

#### Technical specifications

##### TB30 Terminal Board

Max. current requirement (at 24 V DC) via CU320 Control Unit without taking account of digital outputs	0.05 A
Max. connectable cross section	2.5 mm <sup>2</sup>
Max. fuse protection	20 A
Digital inputs	
• Voltage	– 3 V to + 30 V
• Low level (an open digital input is interpreted as "low")	– 3 V to + 5 V
• High level	15 V to 30 V
• Current consumption (at 24 V DC)	Type 10 mA
• Signal propagation delays for digital inputs <sup>1)</sup>	L → H: approx. 50 μs H → L: approx. 100 μs
• Max. connectable cross section	0.5 mm <sup>2</sup>
Digital outputs (continued-short-circuit-proof)	
• Voltage	24 V DC
• Max. load current per digital output	500 mA
• Max. connectable cross section	0.5 mm <sup>2</sup>
Analog inputs (difference)	
• Voltage range (an open analog input is interpreted as 0 V)	– 10 V to + 10 V
• Internal resistance $R_i$	65 kOhm
• Resolution	13 bit, + sign
• Max. connectable cross section	0.5 mm <sup>2</sup>
Analog outputs (continued-short-circuit-proof)	
• Voltage range	– 10 V to + 10 V
• Max. load current	– 3 mA to + 3 mA
• Resolution	11 bit, + sign
• Max. connectable cross section	0.5 mm <sup>2</sup>
Power loss	< 3 W
Weight, approx.	0.1 kg (0.2 lb)
Approvals	cULus (File No.: E164110)

#### Selection and ordering data

Description	Order No.
<b>TB30 Terminal Board</b>	<b>6SL3055-0AA00-2TA0</b>

<sup>1)</sup> The specified signal propagation delays refer to the hardware. The actual reaction time depends on the time slot in which the digital input is processed.