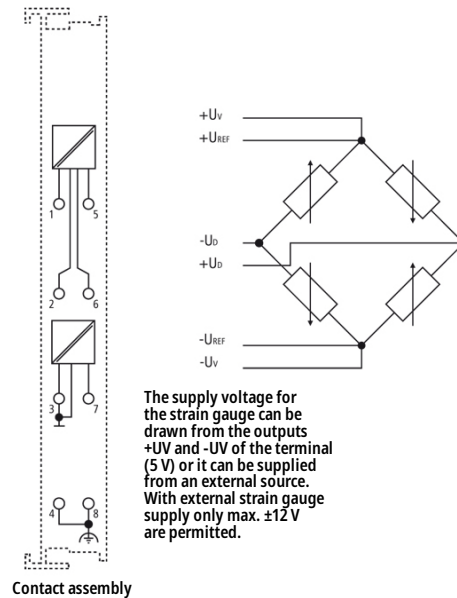
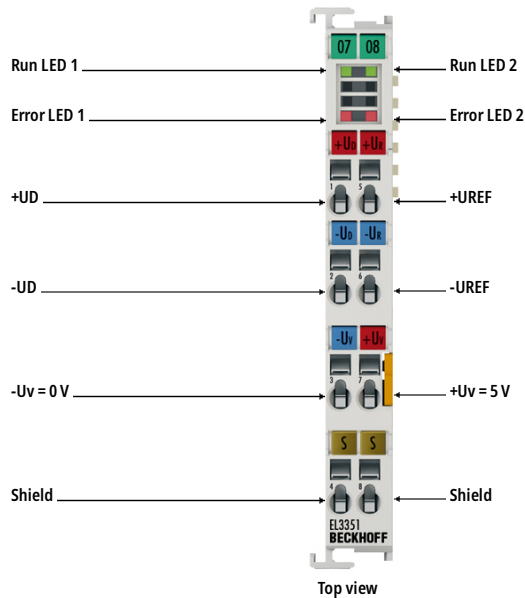


# EL3351 | EtherCAT Terminal, 1-channel analog input, measuring bridge, full bridge, 16 bit



**i** **Product status:** Regular delivery

The EL3351 analog input terminal permits direct connection of a resistor bridge. The bridge voltage, UD, and the supply voltage, UREF, to the bridge are digitized with a 16 bit resolution, and are transmitted along an electrically isolated channel to the supervising automation system. The input channels are available in the form of two 16 bit values for further processing. The resulting measurement can be calculated from the formula: measurement = UD/UREF. Precise acquisition of the supply voltage along with the bridge voltage compensates for long-term and temperature drift.

## Product information

### Technical Data

Technical data	EL3351, ES3351
Number of inputs	2, for 1 resistor bridge in full bridge technology
Power supply	via the E-bus
Technology	resistor bridge, strain gauge
Signal type	differential
Distributed clocks	–
Measuring range UD	max. -20...+20 mV
Measuring range UREF	max. -12...+12 V
Internal resistance	> 200 k $\Omega$ (UREF), > 1 M $\Omega$ (UD)
Input filter limit frequency	50 Hz default setting, parameterizable

Conversion time	2.5...800 ms, configurable, max. 400 samples/s
Power supply UV	5 V, max. 20 mA
Resolution	16 bit, 32 bit presentation
Filter	50 Hz, configurable
Measuring error	< ±0.1 % (relative to full scale value, 50 Hz filter)
Current consumption power contacts	–
Current consumption E-bus	typ. 170 mA
Supported nominal sensitivity	calculated in PLC, freely selectable
Special features	integrated 5 V DC bridge supply
Weight	approx. 60 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. rating/installation pos.	IP20/variable
Pluggable wiring	for all ESxxx terminals
Approvals/markings	CE, UL, ATEX
Ex marking	II 3 G Ex nA IIC T4 Gc

Housing data	EL-12-8pin	ES-12-8pin
Design form	compact terminal housing with signal LEDs	terminal housing with pluggable wiring level
Material	polycarbonate	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	
Installation	on 35 mm DIN rail, conforming to EN 60715 with lock	
Side by side mounting by means of	double slot and key connection	
Marking	labeling of the BZxxx series	
Wiring	solid conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver	
Connection cross-section	s*: 0.08...2.5 mm <sup>2</sup> , st*: 0.08...2.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>	s*: 0.08...1.5 mm <sup>2</sup> , st*: 0.08...1.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>
Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16	s*: AWG 28...16, st*: AWG 28...16, f*: AWG 26...16
Stripping length	8...9 mm	9...10 mm
Current load power contacts	I <sub>max</sub> : 10 A	

\*s: solid wire; st: stranded wire; f: with ferrule

## Ordering Information

Special terminals	
EL3351	EtherCAT Terminal, 1-channel analog input, measuring bridge, full bridge, 16 bit
ES3351	EtherCAT Terminal, 1-channel analog input, measuring bridge, full bridge, 16 bit, pluggable wiring

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