EL3152 | EtherCAT Terminal, 2-channel analog input, current, 4...20 mA, 16 bit, single-ended
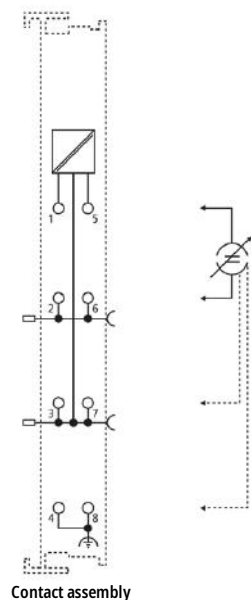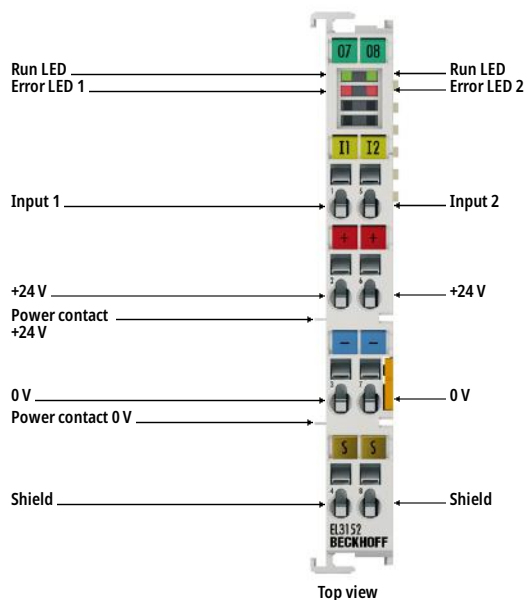

Top view

Contact assembly

ⓘ Image similar, may contain optional accessories

ℹ **Product status:** regular delivery

The job of the EL3152 analog input terminal is to supply power to measuring transducers located in the field and to transmit analog measurement signals with electrical isolation to the automation device. The voltage for the sensors is supplied to the terminals via the power contacts. The power contacts can optionally be supplied with operating voltage in the standard way or via a supply terminal (EL9xxx) with electrical isolation. The input electronics are independent of the supply voltage of the power contacts. The reference potential for the inputs is the 0 V power contact. The EtherCAT Terminal indicates its signal state by means of light emitting diodes. The error LEDs indicate an overload condition and a broken wire.

Product information

Technical data

Technical data	EL3152
Number of inputs	2 (single-ended)
Power supply	via the E-bus
Signal current	4...20 mA
Distributed clocks	yes
Internal resistance	typ. 85 Ω + diode voltage
Input filter limit frequency	5 kHz

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Dielectric strength	max. 30 V
Conversion time	~ 60 µs (fast mode ~ 40 µs)
Resolution	16 bit (incl. sign)
Measurement error/uncertainty	< ±0.3% (relative to full scale value)
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 170 mA
Bit width in the process image	inputs: 8 byte
Special features	standard and compact process image, activatable FIR/IIR filters, limit value monitoring
Operating/storage temperature	-25...+60°C/-40...+85°C
Weight	approx. 60 g
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
Pluggable wiring	for all ESxxxx terminals
Approvals/markings	CE, UL, ATEX, IECEx, cFMus
Protect. rating/installation pos.	IP20/variable
Ex marking	ATEX: II 3G Ex ec IIC T4 Gc IECEx: Ex ec IIC T4 Gc cFMus: Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx ec 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 (s), flexible conductor (st) and ferrule (f): spring actuation by screwdriver	

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Connection cross-section	s*: 0.08…2.5 mm², st*: 0.08…2.5 mm², f*: 0.14…1.5 mm²	s*: 0.08…1.5 mm², st*: 0.08…1.5 mm², f*: 0.14…1.5 mm²
Connection cross-section AWG	s*: AWG28…14, st*: AWG28…14, f*: AWG26…16	s*: AWG28…16, st*: AWG28…16, f*: AWG26…16
Stripping length	8…9 mm	9…10 mm
Current load power contacts	I_{max}: 10 A	

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

Ordering information

Ordering information	
EL3152	EtherCAT Terminal, 2-channel analog input, current, 4…20 mA, 16 bit, single-ended
ES3152	EtherCAT Terminal, 2-channel analog input, current, 4…20 mA, 16 bit, single-ended, pluggable wiring

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