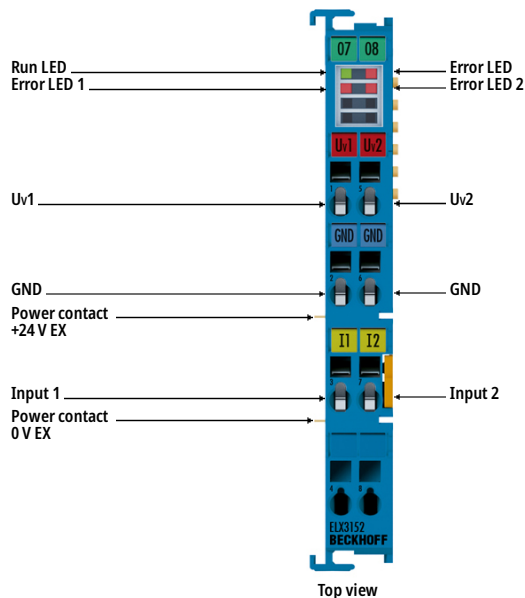
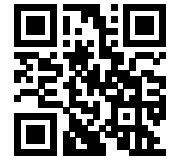


ELX3152 | EtherCAT Terminal, 2-channel analog input, current, 0/4...20 mA, 16 bit, single-ended, Ex i



i Product status: Regular delivery

The ELX3152 analog input terminal allows the direct connection of intrinsically safe field devices located in hazardous areas classified Zone 0/20 or 1/21. It supplies measuring transducers located in the field and transmits their analog measuring signals electrically isolated to the automation device. The measuring range can be switched between 0...20 mA and 4...20 mA by software. With a technical measuring range of $\pm 107\%$ of the nominal range, the terminal also supports commissioning with sensor values in the limit range and evaluation according to NAMUR NE43. The error LEDs indicate an overload condition and wire breakage.

EtherCAT terminals of the ELX series must always be operated in conjunction with the ELX9560 power supply terminal. This terminal generates an electrically isolated output voltage (24 V EX) from the input voltage (24 V DC) for supplying the subsequent ELX terminals. If a new power supply is required, the combination of an ELX9410 and an ELX9560 can be used so that further ELX terminals can be added. The ELX terminal string must be terminated with one ELX9012 or two ELX9410.

Product information

Technical data

Technical data	ELX3152
Technology	current input
Signal current	0/4...20 mA
Number of inputs	2 (single-ended)
Connection method	2-, 3-wire

Resolution	16 bit (incl. sign)
Measuring error	< ±0.3 % (relative to full scale value)
Measuring resistance	typ. 100 Ω
Input filter limit frequency	5 kHz
Conversion time	typ. 1 ms
Supply voltage electronics	24 V DC (via power contacts), ELX9560 power supply
Current consumption power contacts	typ. 10 mA + load
Current consumption E-bus	typ. 85 mA
Distributed clocks	yes
Special features	standard and compact process image, activatable FIR/IIR filters, limit value monitoring, NE43 NAMUR
Weight	approx. 60 g
Operating/storage temperature	-25...+60 °C/-40...+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/see documentation
Approvals/markings	CE, UL, ATEX, IECEx, cFMus, CCC
Ex marking	<p>ATEX: II 3(1)G Ex ec [ia Ga] IIC T4 Gc II (1)D [Ex ia Da] IIIC I (M1) [Ex ia Ma] I</p> <p>IECEx: Ex ec [ia Ga] IIC T4 Gc [Ex ia Da] IIIC [Ex ia Ma] I</p> <p>cFMus: AIS Class I, II, III, Division 1, Groups A thru G Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx ec [ia Ga] IIC T4 Gc [AEx ia Da] IIIC T4</p>

Housing data	ELX-12-8pin
Design form	compact terminal housing with signal LEDs
Material	polycarbonate, blue
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 ² , st*: 0.08...2.5 mm ² , f*: 0.14...1.5 mm ²

Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16
Stripping length	8...9 mm
Power contacts	2 blade/spring contacts

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