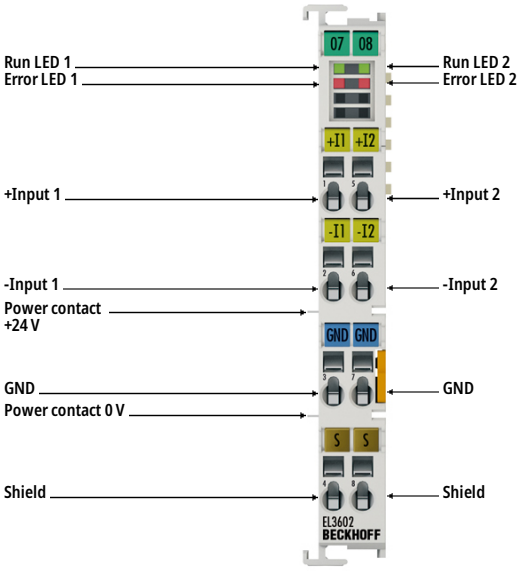
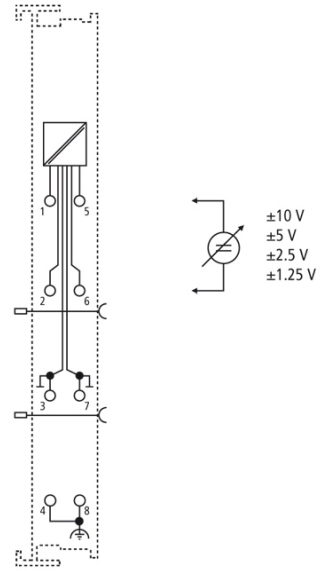
EL3602 | EtherCAT Terminal, 2-channel analog input, voltage, ±10 V, ±5 V, ±2.5 V, ±1.25 V, 24 bit, high-precision



Top view



Contact assembly

Product status: Regular delivery

The EL3602 analog input terminal handles signals in the ranges ±10 V, ±5 V, ±2.5 V and ±1.25 V. The voltage is digitized to a resolution of 24 bits, and is transmitted, electrically isolated, to the higher-level automation device. The input channels of the EtherCAT Terminal have differential inputs and possess a common, internal ground potential. The signal state of the EtherCAT Terminal is indicated by light emitting diodes.

Product information

Technical Data

Technical data	EL3602, ES3602
Number of inputs	2 (differential)
Power supply	via the E-bus
Technology	differential input
Signal voltage	-10...+10 V, -5...+5 V, -2.5...+2.5 V, -1.25...+1.25 V (parameterizable)
Oversampling factor	–
Distributed clocks	–
Distributed clock precision	–
Internal resistance	> 200 kΩ
Input filter limit frequency	3 kHz

Common-mode voltage UCM	max. 35 V
Resolution	24 bit (incl. sign)
Conversion time	20 ms default setting, 1...400 ms configurable
Input signal bandwidth	–
Measuring error	< ±0.01 % at 25 °C, 50 Hz filter (relative to full scale value)
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 190 mA
Crosstalk attenuation	> 60 dB
Special features	various filter times, limit value monitoring, high precision
Weight	approx. 60 g
Operating/storage temperature	-25...+60 °C/-40...+85 °C
Relative humidity	95 %, no condensation
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Protect. rating/installation pos.	IP20/variable
Pluggable wiring	for all ESxxxx 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 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*: 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_{max}: 10 A	

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

Ordering Information

Ordering information	
EL3602	EtherCAT Terminal, 2-channel analog input, voltage, ±10 V, ±5 V, ±2.5 V, ±1.25 V, 24 bit, high-precision
ES3602	EtherCAT Terminal, 2-channel analog input, voltage, ±10 V, ±5 V, ±2.5 V, ±1.25 V, 24 bit, high-precision, pluggable wiring