EL3058 | EtherCAT Terminal, 8-channel analog input, current, 4...20 mA, 12 bit, single-ended
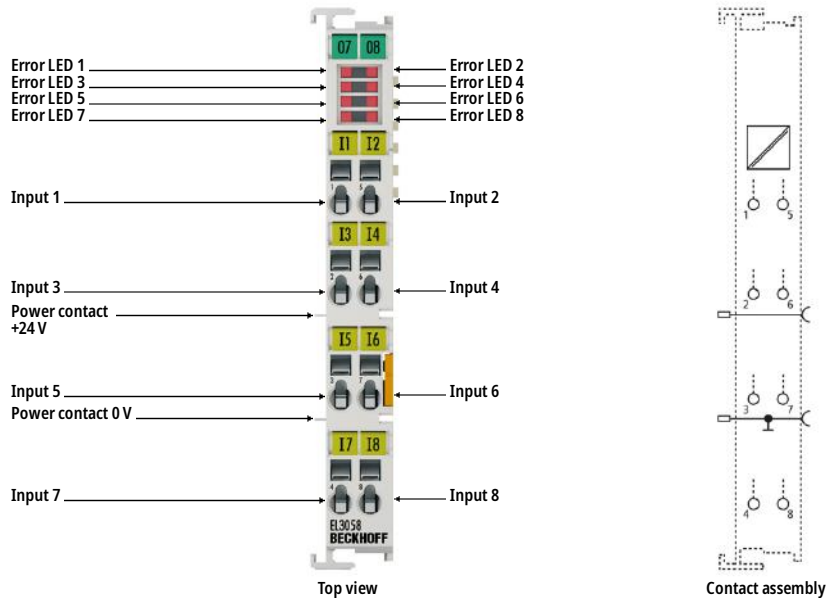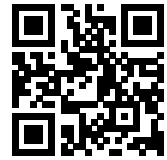

Top view

Contact assembly

ⓘ Image similar, may contain optional accessories

ℹ **Product status:** regular delivery

The EL3058 analog input terminal processes signals in the range between 4 and 20 mA. The current is digitized to a resolution of 12 bits and is transmitted (electrically isolated) to the higher-level automation device. The input electronics are independent of the supply voltage of the power contacts. The EL3058 EtherCAT Terminal combines eight channels in one housing. The power contacts are connected through. The 0 V power contact is used as reference ground connection for the inputs. The signal state of the EtherCAT Terminal is indicated by light emitting diodes. The error LEDs indicate an overload condition and a broken wire.

Product information

Technical data

Technical data	EL3058
Number of inputs	8 (single-ended)
Signal current	4...20 mA
Distributed clocks	–
Internal resistance	typ. 85 Ω
Input filter limit frequency	1 kHz
Dielectric strength	max. 30 V

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Conversion time	1.25 ms default setting, configurable, multiplex
Resolution	12 bit (16 bit presentation 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. 130 mA
Bit width in the process image	inputs: 32 byte
Configuration	no address or configuration setting required
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
Protect. rating/installation pos.	IP20/variable
Ex marking	ATEX: II 3 G Ex ec IIC T4 Gc IECEx: Ex 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	
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

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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	
EL3058	EtherCAT Terminal, 8-channel analog input, current, 4...20 mA, 12 bit, single-ended
ES3058	EtherCAT Terminal, 8-channel analog input, current, 4...20 mA, 12 bit, single-ended, pluggable wiring

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