

EL3048 | EtherCAT Terminal, 8-channel analog input, current, 0...20 mA, 12 bit, single-ended

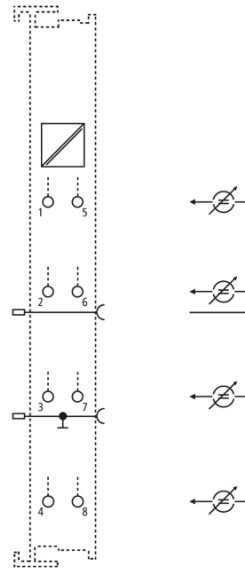
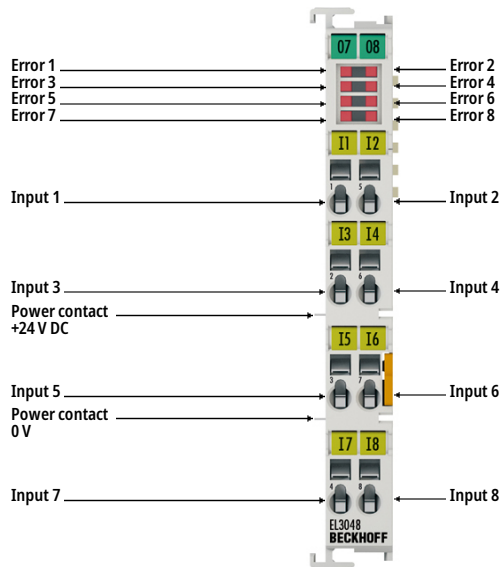
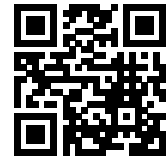


Image similar, may contain optional accessories

i **Product status:** regular delivery

The EL3048 analog input terminal processes signals in the range between 0 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 EL3048 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.

Product information

Technical data

Technical data	EL3048
Number of inputs	8 (single-ended)
Power supply	via the E-bus
Signal current	0...20 mA
Distributed clocks	–
Internal resistance	typ. 85 Ω
Input filter limit frequency	1 kHz
Dielectric strength	max. 30 V

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 E-bus	typ. 130 mA
Current consumption power contacts	–
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
Weight	approx. 60 g
Operating temperature	-25...+60°C
Storage temperature	-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
Plug-in wiring level	for all ESxxx terminals
Protect. rating/installation pos.	IP20/variable
Approvals/markings	CE, CCC, ATEX, IECEx
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	
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 mm ² , st*: 0.08...2.5 mm ² , f*: 0.14...1.5 mm ²	s*: 0.08...1.5 mm ² , st*: 0.08...1.5 mm ² , f*: 0.14...1.5 mm ²
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	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	

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

Ordering information

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EL3048	EtherCAT Terminal, 8-channel analog input, current, 0...20 mA, 12 bit, single-ended
ES3048	EtherCAT Terminal, 8-channel analog input, current, 0...20 mA, 12 bit, single-ended, pluggable wiring level