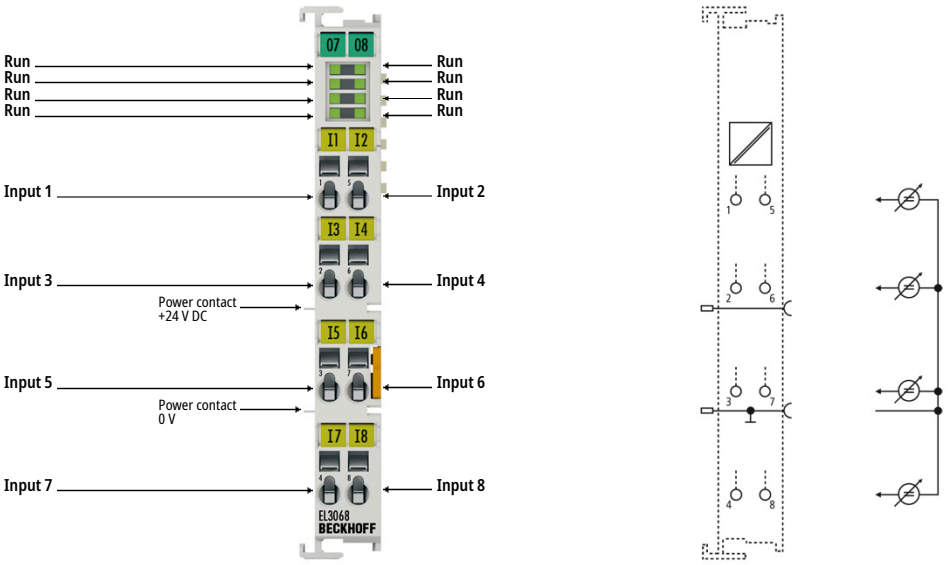
EL3068 | EtherCAT Terminal, 8-channel analog input, voltage, 0...10 V, 12 bit, single-ended

Image similar, may contain optional accessories



EL3068 | EtherCAT Terminal, 8-channel analog input, voltage, 0...10 V, 12 bit, single-ended

Product status: regular delivery

The EL3068 analog input terminal processes signals in the range between 0 and 10 V. The voltage is digitized with a resolution of 12 bits and is transmitted (electrically isolated) to the higher-level automation device. The EL3068 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	EL3068
Number of inputs	8 (single-ended)
Power supply	via the E-bus
Signal voltage	0...10 V
Distributed clocks	–
Internal resistance	> 130 kΩ
Input filter cut-off frequency	1 kHz
Dielectric strength	max. 30 V

Technical data	EL3068
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
Special features	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
Pluggable wiring level	for all ESxxxx terminals
Protect. rating/installation pos.	IP20/variable
Approvals/markings	CE, CCC, UL, ATEX, IECEx, cFMus
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	
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 BZxxxx 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

Housing data	EL-12-8pin	ES-12-8pin
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

Ordering information	
EL3068	EtherCAT Terminal, 8-channel analog input, voltage, 0...10 V, 12 bit, single-ended
ES3068	EtherCAT Terminal, 8-channel analog input, voltage, 0...10 V, 12 bit, single-ended, pluggable wiring level

Material Compliance

Material compliance	EL3068
REACH SVHC	no
POP	compliant
RoHS	compliant with exemption
RoHS exemption	7c-I: Lead-containing electrical and electronic components in glass and ceramic materials, excluding dielectric ceramics in capacitors
China-RoHS	www.beckhoff.com/china-rohs-io
CA Prop65	www.beckhoff.com/prop65
Disclaimer	This statement and the information contained above are, to the best of our knowledge and belief, accurate, based on the information we have received from our suppliers. This information is in line with the current standard of technology and our suppliers' technical documentation. The absence of the substances is not verified by Beckhoff Automation by means of analytical tests. When addressed to our customers any information contained in this document is subject to the terms and conditions expressed in the governing customer agreement. Our general terms and conditions apply.