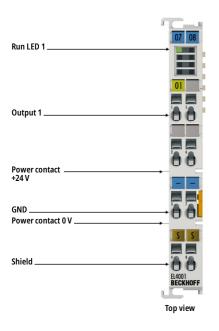
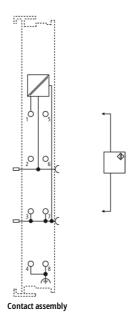
EL4001

# EL4001 | EtherCAT Terminal, 1-channel analog output, voltage, 0...10 V, 12 bit







#### Product status: Regular delivery

The EL4001 analog output terminal generates signals in the range between 0 and 10 V. The voltage is supplied to the process level with a resolution of 12 bits and is electrically isolated. The output channels of the EtherCAT Terminal have a common ground potential. The EL4001 is the single-channel variant which when combined with the EL95xx is particularly suitable for signals with electrically isolated ground potentials. The output stages are powered by the 24 V supply. The signal state of the EtherCAT Terminal is indicated by light emitting diodes.

### **Product information**

#### **Technical Data**

Technical data	EL4001, ES4001
Connection technology	2-wire, single-ended
Number of outputs	1
Power supply	24 V DC via power contacts
Signal voltage	010 V
Distributed clocks	yes
Distributed clock precision	<< 1 μs
Load	$> 5 \text{ k}\Omega$ (short-circuit proof)
Output error	< 0.1 % (relative to end value)
Resolution	12 bit



EL4001 https://www.beckhoff.com/el4001

Electrical isolation	500 V (E-bus/signal voltage)
Conversion time	~ 100 µs
Current consumption power contacts	typ. 25 mA
Current consumption E-bus	typ. 140 mA
Bit width in the process image	1 x 16 bit AO output
Special features	Optional watchdog: user-specific output value with ramp; user synchronization can be activated.
Weight	approx. 60 g
Operating/storage temperature	-25+60 °C/-40+85 °C
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Relative humidity	95 %, no condensation
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*: 0.082.5 mm <sup>2</sup> , st*: 0.082.5 mm <sup>2</sup> , f*: 0.141.5 mm <sup>2</sup>	s*: 0.081.5 mm², st*: 0.081.5 mm², f*: 0.141.5 mm²
Connection cross-section AWG	s*: AWG 2814, st*: AWG 2814, f*: AWG 2616	s*: AWG 2816, st*: AWG 2816, f*: AWG 2616
Stripping length	89 mm	910 mm
Current load power contacts	I <sub>max</sub> : 10 A	

<sup>\*</sup>s: solid wire; st: stranded wire; f: with ferrule

## **Ordering Information**

Ordering information	
EL4001	EtherCAT Terminal, 1-channel analog output, voltage, 010 V, 12 bit



EL4001 https://www.beckhoff.com/el4001

ES4001

EtherCAT Terminal, 1-channel analog output, voltage, 0...10 V, 12 bit, pluggable wiring