

# EL4002 | EtherCAT Terminal, 2-channel analog output, voltage, 0...10 V, 12 bit

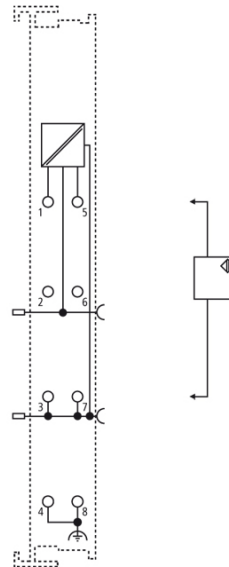
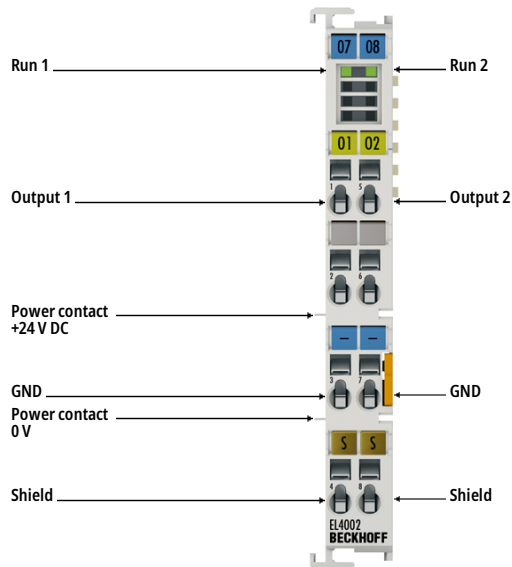
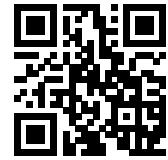


Image similar, may contain optional accessories

**i** **Product status:** regular delivery

The EL4002 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 EL4002 combines two channels in one housing. 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	EL4002
Number of outputs	2
Power supply	24 V DC via power contacts
Signal voltage	0...10 V
Distributed clocks	yes
Distributed clock precision	<< 1 $\mu$ s
Load	> 5 k $\Omega$ (short-circuit proof)
Resolution	12 bit
Output error	< 0.1% (relative to end value)

Electrical isolation	500 V (E-bus/signal voltage)
Conversion time	~ 150 µs
Current consumption power contacts	typ. 40 mA
Current consumption E-bus	typ. 140 mA
Bit width in the process image	2 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 temperature	-25...+60°C
Storage temperature	-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
Plug-in wiring level	for all ESxxxx terminals
Approvals/markings	CE, CCC, UL, 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 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 <sup>2</sup> , st*: 0.08...2.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>	s*: 0.08...1.5 mm <sup>2</sup> , st*: 0.08...1.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>
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 <sub>max</sub> : 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	
EL4002	EtherCAT Terminal, 2-channel analog output, voltage, 0...10 V, 12 bit
ES4002	EtherCAT Terminal, 2-channel analog output, voltage, 0...10 V, 12 bit, pluggable wiring level

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