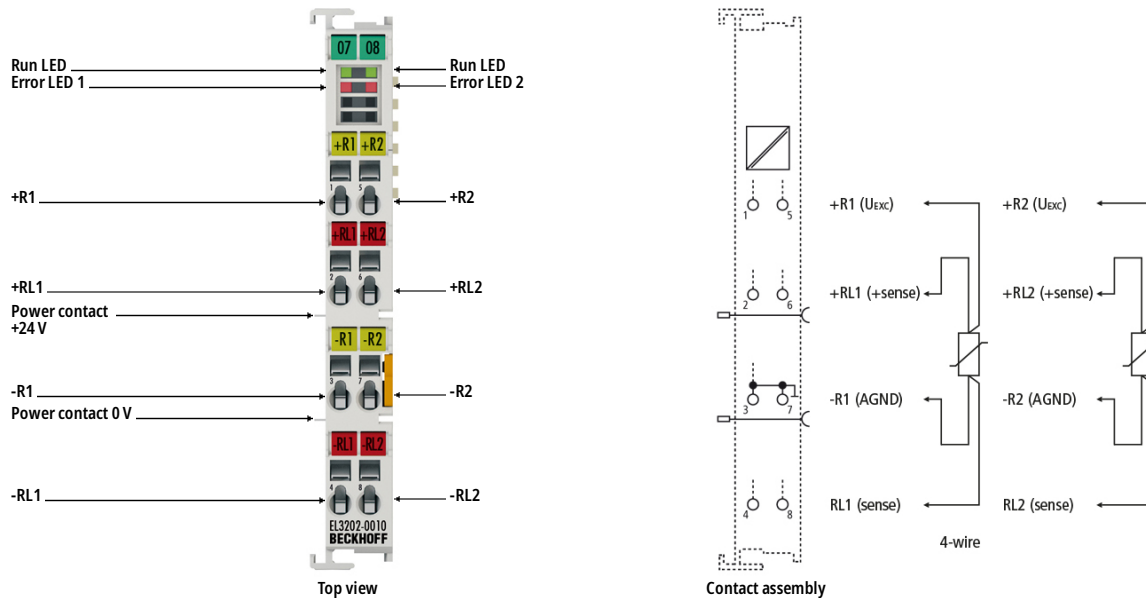
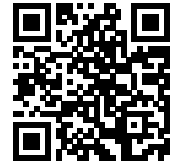


EL3202-0010 | EtherCAT Terminal, 2-channel analog input, temperature, RTD (Pt100), 16 bit, high-precision



i Product status: Regular delivery

The EL3202-0010 is the high-precision version of the EL3202. The EL3202-0010 analog input terminal facilitates the direct connection of two resistance sensors. The measured resistance value can either be output directly in ohms or transformed into a temperature. If the temperature at the measuring point is of interest, the conversion from resistance to temperature can be carried out in the terminal according to various sensor characteristics (Pt100, Pt1000, NI120, NI1000, KTY types, etc.). The EL3202-0010 can operate sensors in 4-wire technology, external bridges must be set for the 2- and 3-wire connection. This terminal must be operated using 4-wire technology for maximum accuracy. The EtherCAT Terminals indicate their measurement capability by means of light emitting diodes and status bits in the EtherCAT process image.

The EL3202-0010 is also available as a calibrated version with a factory calibration certificate (EL3202-0020) or optionally with a DAkS or ISO 17025 certificate (EL3202-0030) from an accredited service provider in cooperation with Beckhoff.

Product information

Technical Data

Technical data	EL3202-0010
Number of inputs	2
Power supply	via the E-bus
Technology	4-wire
Distributed clocks	-
Input filter limit frequency	typ. 1 kHz

Sensor types	Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni1000, resistance measurement (e.g. potentiometer, 10 Ω...1/4 kΩ), KTY sensors (types see documentation)
Connection method	4-wire
Measuring range	-200...+850 °C (Pt sensors); -60...+250 °C (Ni sensors); -200...+320 °C (high-precision)
Resolution	0.01 °C per digit
Conversion time	approx. 85 ms default setting, 2...800 ms configurable
Temperature range	-200...+320 °C (Pt sensors)
Measuring current	< 0.5 mA (load-dependent)
Measuring error	< ±0.1 °C at 40 °C ambient temperature, 4-wire connection, Pt100 sensors (measuring range: -200...+320 °C) and 50 Hz filter
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 190 mA
Bit width in the process image	2 x 32 bit RTD input
Special features	integrated digital filter, limit value monitoring, variable connection technology
Weight	approx. 60 g
Operating/storage temperature	-25...+60 °C/-40...+85 °C
Relative humidity	95 %, no condensation
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Protect. rating/installation pos.	IP20/variable
Approvals/markings	CE, UL, ATEX
Ex marking	II 3 G Ex nA IIC T4 Gc

Housing data	EL-12-8pin
Design form	compact terminal housing with signal LEDs
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*: 0.08...2.5 mm ² , st*: 0.08...2.5 mm ² , f*: 0.14...1.5 mm ²
Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16
Stripping length	8...9 mm

Current load power contacts I_{max} : 10 A

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