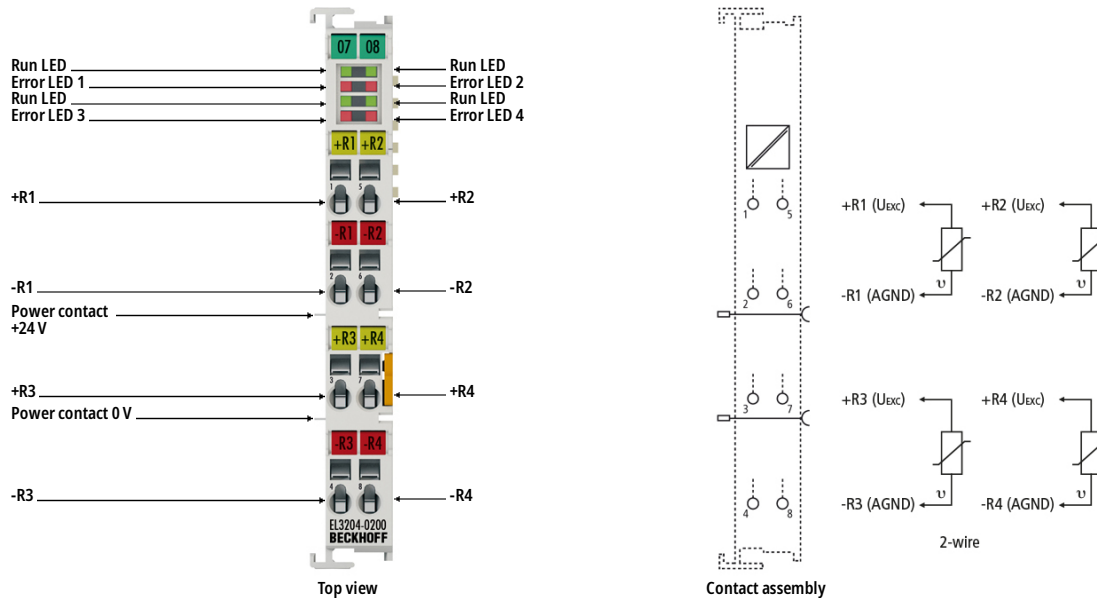
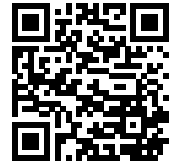


EL3204-0200 | EtherCAT Terminal, 4-channel analog input, temperature, RTD/NTC, 16 bit



i Product status: Regular delivery

The analog EL3204-0200 input terminal enables direct connection of four resistance sensors up to 240 k Ω , so that the usable measuring range is significantly larger compared with the EL3204. The EtherCAT Terminal circuit can operate sensors using the 2-wire technique. The resistance values are converted (linearization) in the terminal either based on preset characteristic curves, conversion formulas with specific material parameters (e.g. according to IEC 60751, Steinhart-Hart equation, B-parameter equation), or a freely programmable conversion table. Sensor malfunctions such as broken wires are indicated by error LEDs.

Product information

Technical Data

Technical data	EL3204-0200
Number of inputs	4
Power supply	via the E-bus
Technology	2-wire
Signal type	single-ended
Distributed clocks	-
Sensor types	Ni/Pt, any RTD in the range of 100 Ω ...240 k Ω , calculation possible on the basis of a table or material constant, resistance measurement
Connection method	2-wire
Conversion time	approx. 24 ms default setting, 4...500 ms configurable

Measuring current	typ. < 0.03 mA
Resolution	0.1 °C per digit
Measuring error	< ±0.3 % relative to full scale value (6 kΩ, 65 kΩ, 240 kΩ)
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 150 mA
Bit width in the process image	4 x 32 bit RTD input
Special features	temperature calculation on the basis of Steinhart-Hart, B parameters, IEC 60751, free table, predefined sensors
Weight	approx. 60 g
Operating/storage temperature	0...+55 °C/-25...+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
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