

# EL3208 | EtherCAT Terminal, 8-channel analog input, temperature, RTD (Pt100), 16 bit

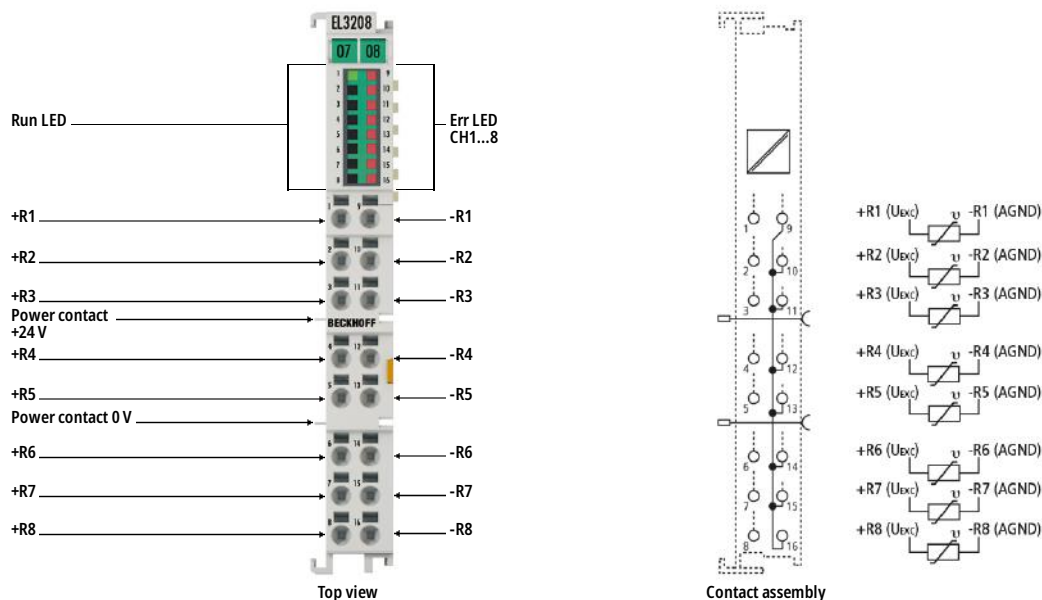


Image similar, may contain optional accessories

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

The EL3208 analog input terminal facilitates the direct connection of eight resistance sensors over a width of 12 mm (high-density housing). 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 EL3208 can operate sensors using 2-wire technology. The EtherCAT Terminals indicate their measurement capability by means of light emitting diodes and status bits in the EtherCAT process image.

## Product information

### Technical data

Technical data	EL3208
Number of inputs	8
Power supply	via the E-bus
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	2-wire

Conversion time	approx. 170 ms default setting, 3...1600 ms configurable
Measuring range	-200...+850°C (Pt sensors); -60...+250°C (Ni sensors)
Measuring current	< 0.5 mA (load-dependent)
Temperature range	-200...+850°C (Pt sensors); -60...+250°C (Ni sensors)
Resolution	0.1°C per digit
Measurement error/uncertainty	< ±0.5°C for Pt sensors
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	–
Current consumption E-bus	typ. 140 mA
Special features	integrated digital filter, limit value monitoring
Operating/storage temperature	-25...+60°C/-40...+85°C
Weight	approx. 60 g
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
Approvals/markings	CE, UL
Protect. rating/installation pos.	IP20/variable

<b>Housing data</b>	<b>EL-12-16pin</b>
Design form	HD (High Density) 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 conductors (s): direct plug-in technique; fine-stranded conductors (st) and ferrule (f): spring actuation by screwdriver
Connection cross-section	s*: 0.08...1.5 mm <sup>2</sup> , st*: 0.25...1.5 mm <sup>2</sup> , f*: 0.14...0.75 mm <sup>2</sup>
Connection cross-section AWG	s*: AWG28...16, st*: AWG22...16, f*: AWG26...19
Stripping length	8...9 mm
Current load power contacts	I <sub>max</sub> : 10 A

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