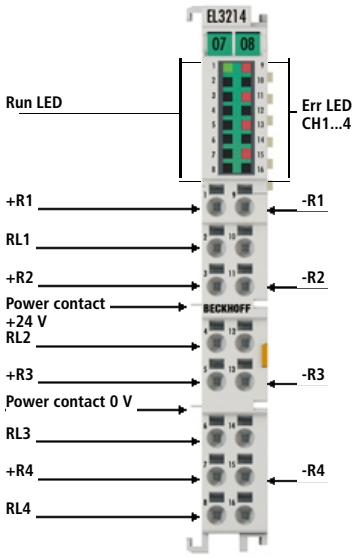
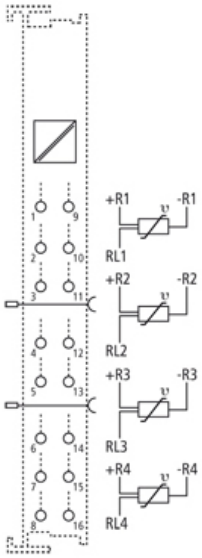
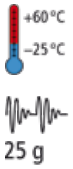


Top view



Contact assembly



EL3214 | 4-channel input terminal PT100 (RTD) for 3-wire connection

The EL3214 analog input terminal allows four resistance sensors to be connected directly. The EtherCAT Terminal circuit can operate sensors using the 3-wire technique in a compact 12 mm housing. A microprocessor handles linearisation across the whole temperature range, which is freely selectable. The EtherCAT Terminal's standard settings are: resolution 0.1 °C. Sensor malfunctions such as broken wires are indicated by error LEDs.

Technical data	EL3214
Number of inputs	4
Power supply	via the E-bus
Technology	Temperature measurement (RTD)
Signal type	differential
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- or 3-wire (default: 3-wire)
Conversion time	approx. 170 ms default setting
Measuring current	< 0.5 mA (load-dependent)
Measuring range	-200…+850 °C (PT sensors); -60…+250 °C (Ni sensors)
Temperature range	-200…+850 °C (PT sensors); -60…+250 °C (Ni sensors)
Resolution	0.1 °C per digit
Measuring error	< ±0.5 °C for PT sensors, 4 x 3-wire connection
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, variable connection technology
Weight	approx. 60 g
Operating/storage temperature	-25…+60 °C/-40…+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. class/installation pos.	IP 20/variable
Approvals/markings	CE, UL

Related products	
EL3214-0090	4-channel input terminal PT100 (RTD) for resistance sensors, 16 bit, 3-wire system, TwinSAFE SC