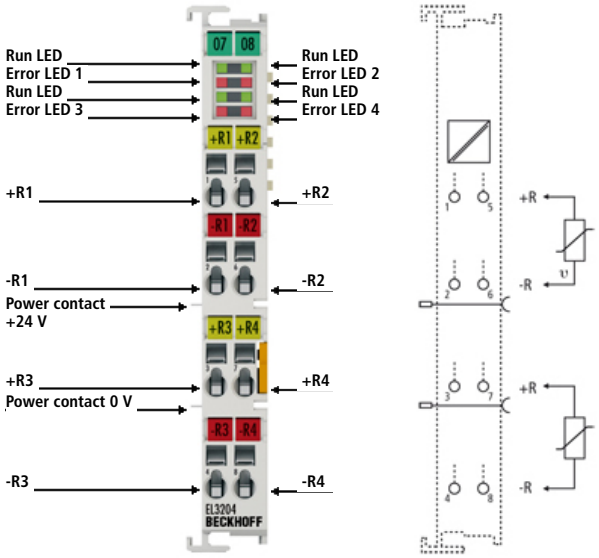
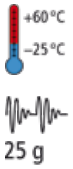


Top view | Contact assembly



EL3204 | 4-channel input terminal PT100 (RTD)

The EL3204 analog input terminal allows resistance sensors to be connected directly. The EtherCAT Terminal circuit can operate sensors using the 2-wire technique. A microprocessor handles linearisation across the whole temperature range, which is freely selectable. The EtherCAT Terminal's standard settings are: resolution 0.1 °C in the temperature range of PT100 sensors. Sensor malfunctions such as broken wires are indicated by error LEDs.

Technical data	EL3204 | ES3204
Number of inputs	4
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
Resolution	0.1 °C per digit
Conversion time	approx. 85 ms default setting, 2…800 ms configurable
Temperature range	-200…+850 °C (PT sensors); -60…+250 °C (Ni sensors)
Measuring current	< 0.5 mA (load-dependent)
Measuring error	< ±0.5 °C for PT sensors
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	4 x 32 bit RTD input
Special features	integrated digital filter, limit value monitoring
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
Pluggable wiring	for all ESxxxx terminals
Approvals/markings	CE, UL, ATEX
Ex-Marking	II 3 G Ex nA IIC T4 Gc

Special terminals	
EL3204-0200	4-channel universal input terminal for RTD up to 240 kΩ, NTC 20 k, 16 bit

We reserve the right to make technical changes.