



ELX3204 | 4-channel analog input terminal RTD, 2-wire connection, 16 bit, Ex i



The ELX3204 analog input terminal allows the direct connection of RTDs located in hazardous areas classified Zone 0/20 or 1/21. The circuitry of the ELX3204 can operate sensors with 2-wire technology. Linearisation is carried out over the entire freely selectable temperature range. By default the terminal is set to PT100 sensors with 2-wire technology. The ELX3204 terminal indicates signal state and sensor malfunctions (e.g. wire breakage) by means of LEDs.

Technical data	ELX3204
Technology	temperature measurement
Sensor types	PT100, PT200, PT500, PT1000, Ni100, Ni120, Ni1000 resistance measurement (10 Ω...4 kΩ), KT(Y) sensors
Number of inputs	4 (differential)
Connection method	2-wire
Temperature range	-200...+850 °C (PT sensors); -60...+250 °C (Ni sensors), for further types and details see documentation
Resolution	0.1 °C per digit
Measuring current	< 1 mA (depending on sensor and measuring range)
Measuring error	< ±0.5 °C for PT and Ni sensors
Internal resistance	typ. ≥ 10 kΩ (differential)
Input filter limit frequency	typ. 1 kHz
Conversion time	10...800 ms (adjustable, default: 50 ms)
Supply voltage electronics	24 V DC (via power contacts), ELX9560 power supply
Current consumption power contacts	typ. 10 mA
Current consumption E-bus	typ. 70 mA
Special features	limit value monitoring, digital filter and characteristic curve linearisation integrated, connection method freely configurable
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/see documentation
Approvals	CE, Ex, IECEx

further Ex components	
ELXxxxx	EtherCAT Terminals with intrinsic safe in- and output
ELXxxxx-0090	EtherCAT Terminals with intrinsic safe in- and output and TwinSAFE SC
CPXxxxx	Multi-touch Panel PCs and multi-touch Control Panels for use in hazardous areas, Zone 2/22