



i KL3222 | 2-channel input terminal PT100 (RTD) for 4-wire connection, high-precision

The KL3222 analog input terminal allows resistance sensors to be connected directly. The Bus Terminal's circuitry can operate the sensors using 2-, 3- or 4-wire connection techniques. Linearisation over the full temperature range is realised with the aid of a microprocessor. The temperature range can be selected freely. The Bus Terminal's standard settings are: resolution 0.01 °C in the temperature range of PT100 sensors in 4-wire connection. The run LEDs give an indication of the data exchange with the Bus Coupler. The error LEDs indicate sensor faults (e.g. a broken wire).

Technical data	KL3222 KS3222
Number of inputs	2
Power supply	via the K-bus
Sensor types	PT100, PT200, PT500, PT1000, Ni100, Ni120, Ni1000 resistance measurement (e.g. potentiometer, 10 Ω...1.2/5 kΩ)
Connection method	2-, 3-, 4-wire (default: 4-wire)
Temperature range	-200...+850 °C (PT sensors); -60...+250 °C (Ni sensors); -200...+320 °C (high-precision)
Conversion time	typ. 50 ms
Measuring current	typ. 0.5 mA
Resolution	0.01 °C per digit
Measuring error	0.1 °C at 40 °C ambient temperature, 4-wire connection, PT100 sensors and 50 Hz filter
Electrical isolation	500 V _{rms} (K-bus/signal voltage)
Current consumption K-bus	typ. 60 mA
Bit width in the process image	input: 2 x 16 bit data (2 x 8 bit control/status optional)
Configuration	no address setting, configuration via Bus Coupler or controller
Weight	70 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 60068-2-27/29
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Pluggable wiring	for all KSxxxx Bus Terminals

i **Product announcement** estimated market release 4th quarter 2009