

KL3202 | Bus Terminal, 2-channel analog input, temperature, RTD (Pt100), 16 bit

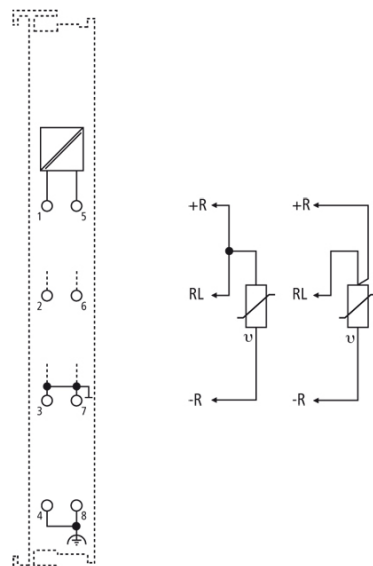
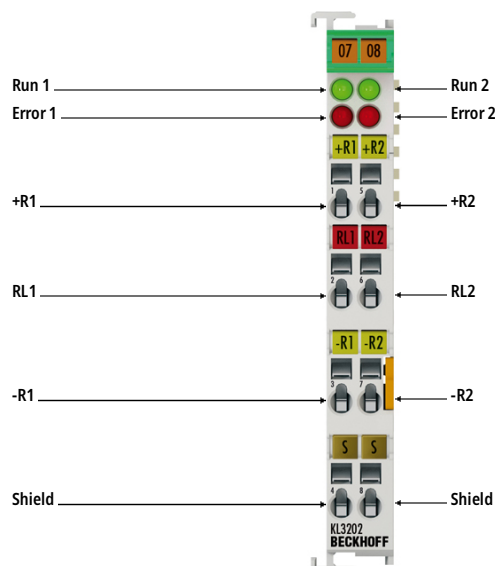


Image similar, may contain optional accessories

i **Product status:** regular delivery

The KL3202 analog input terminal allows resistance sensors to be connected directly. The Bus Terminal's circuitry can operate the sensors using 2-wire or 3-wire connection techniques. Linearization over the full temperature range is realized with the aid of a microprocessor. The temperature range can be selected freely. The Bus Terminal's standard setting is: resolution 0.1°C in the temperature range of Pt100 sensors in 3-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).

Product information

Technical data

Technical data	KL3202
Number of inputs	2
Power supply	via the K-bus
Technology	2-/3-wire
Sensor types	Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni1000, resistance measurement (e.g. potentiometer, 10 Ω...1.2/5 kΩ)
Measuring range	-200...+850°C (Pt sensors); -60...+250°C (Ni sensors)
Connection method	2- or 3-wire (default: 3-wire)

Conversion time	~ 250 ms
Measuring current	typ. 0.5 mA
Resolution	0.1°C per digit
Measurement error/uncertainty	< ±1°C
Electrical isolation	500 V (K-bus/signal voltage)
Current consumption power contacts	– (no power contacts)
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
Special features	open-circuit recognition
Weight	approx. 70 g
Operating temperature	-25...+60°C
Storage temperature	-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. rating/installation pos.	IP20/variable
Approvals/markings	CE, CCC, UL, ATEX, IECEx, DNV GL
Pluggable wiring	for all KSxxxx Bus Terminals
Ex marking	ATEX: II 3 G Ex ec IIC T4 Gc IECEx: Ex ec IIC T4 Gc

Housing data	KL-12-8pin	KS-12-8pin
Design form	compact terminal housing with signal LEDs	terminal housing with pluggable wiring level
Material	polycarbonate	
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 BZxxxx series	
Wiring	solid conductor (s), flexible conductor (st) and ferrule (f): spring actuation by screwdriver	
Connection cross-section	s*: 0.08...2.5 mm ² , st*: 0.08...2.5 mm ² , f*: 0.14...1.5 mm ²	s*: 0.08...1.5 mm ² , st*: 0.08...1.5 mm ² , f*: 0.14...1.5 mm ²

Connection cross-section AWG	s*: AWG28...14, st*: AWG28...14, f*: AWG26...16	s*: AWG28...16, st*: AWG28...16, f*: AWG26...16
Stripping length	8...9 mm	9...10 mm
Current load power contacts	I _{max} : 10 A	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	

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

Ordering information

Ordering information	
KL3202	Bus Terminal, 2-channel analog input, temperature, RTD (Pt100), 16 bit
KS3202	Bus Terminal, 2-channel analog input, temperature, RTD (Pt100), 16 bit, pluggable wiring
KL3202-0010	Bus Terminal, 2-channel analog input, temperature, RTD (Pt200), 16 bit
KL3202-0011	Bus Terminal, 2-channel analog input, temperature, RTD (Pt200), 16 bit, Siemens S5 format
KL3202-0012	Bus Terminal, 2-channel analog input, temperature, RTD (Pt500), 16 bit
KL3202-0013	Bus Terminal, 2-channel analog input, temperature, RTD (Pt500), 16 bit, Siemens S5 format
KL3202-0014	Bus Terminal, 2-channel analog input, temperature, RTD (Pt1000), 16 bit
KL3202-0015	Bus Terminal, 2-channel analog input, temperature, RTD (Pt1000), 16 bit, Siemens S5 format
KL3202-0016	Bus Terminal, 2-channel analog input, temperature, RTD (Ni100), 16 bit
KL3202-0017	Bus Terminal, 2-channel analog input, temperature, RTD (Ni100), 16 bit, Siemens S5 format
KL3202-0020	Bus Terminal, 2-channel analog input, temperature, RTD (0...1.2 kΩ), 16 bit
KL3202-0021	Bus Terminal, 2-channel analog input, temperature, RTD (Pt100), 16 bit, Siemens S5 format
KL3202-0023	Bus Terminal, 2-channel analog input, temperature, RTD (Ni120), 16 bit
KL3202-0024	Bus Terminal, 2-channel analog input, temperature, RTD (Ni120), 16 bit, Siemens S5 format
KL3202-0025	Bus Terminal, 2-channel analog input, temperature, RTD (Ni1000), 16 bit
KL3202-0026	Bus Terminal, 2-channel analog input, temperature, RTD (Ni1000), 16 bit, Siemens S5 format
KL3202-0027	Bus Terminal, 2-channel analog input, temperature, RTD (10...10 kΩ), 16 bit
KL3202-0028	Bus Terminal, 2-channel analog input, temperature, RTD (-40...+128°C), 16 bit, increased resolution 0.01°C
KL3202-0029	Bus Terminal, 2-channel analog input, temperature, RTD (Ni1000), per Landis&Staefa, 16 bit