



KL3102 | 2-channel analog input terminal -10...+10 V

The KL3102 analog input terminal handles signals in the range from -10 to +10 V. The voltage is digitised to a resolution of 16 bits and is transmitted, electrically isolated, to the higher-level automation device. The input channels of one Bus Terminal have differential inputs and possess a common, internal ground potential. The KL3102 combines two channels in one housing. The two light emitting diodes give an indication of the data exchange with the Bus Coupler.

Technical data	KL3102 KS3102
Number of inputs	2
Power supply	via the K-bus
Signal voltage	-10...+10 V
Technology	differential input
Internal resistance	> 70 k Ω
Common-mode voltage U_{cm}	max. 35 V
Resolution	16 bit (for 0...10 V range: resolution 15 bit)
Conversion time	140 ms, configurable to 2 ms
Filter	50 Hz, configurable
Measuring error	< ± 0.3 % (relative to full scale value)
Electrical isolation	500 V (K-bus/signal voltage)
Current consumption power contacts	– (no power contacts)
Current consumption K-bus	typ. 65 mA
Bit width in the process image	input: 2 x 16 bit data (2 x 8 bit control/status optional)
Configuration	no address or configuration setting
Weight	approx. 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
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
Approvals	CE, UL, Ex

Special terminals	
KL3102-0050	Siemens S7 format