



## KL3001, KL3002 | 1-, 2-channel analog input terminals -10...+10 V

The KL3001 and KL3002 analog input terminals handle signals in the range from -10 to +10 V. The voltage is digitised to a resolution of 12 bits and is transmitted, electrically isolated, to the higher-level automation device. The input channels of the Bus Terminal have differential inputs and possess a common, internal ground potential. The KL3001 is the single-channel variant with differential input and is characterised by its fine granularity and electrical isolation. The KL3002 version combines two channels in one housing. The light emitting diodes give an indication of the data exchange with the Bus Coupler.

Technical data	KL3001   KS3001	KL3002   KS3002
Number of inputs	1	2
Power supply	via the K-bus	
Signal voltage	-10...+10 V	
Technology	differential input	
Internal resistance	> 200 k $\Omega$	
Common-mode voltage $U_{cm}$	35 V max.	
Resolution	12 bit (for 0...10 V range: resolution 11 bit)	
Conversion time	~ 1 ms	~ 2 ms
Measuring error	< $\pm 0.3$ % (relative to full scale value)	
Electrical isolation	500 V (K-bus/signal voltage)	
Current consumption power contacts	– (no power contacts)	
Current consumpt. K-bus	typ. 65 mA	
Bit width in the process image	input: 1 x 16 bit data (1 x 8 bit control/status optional)	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	-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 KSxxxx Bus Terminals	
Approvals	CE, UL, Ex	

Special terminals	
KL3002-0010	Siemens S5 format
KL3002-0011	fast $\mu$ P, scan time approx. 0.5 ms
KL3002-0050	Siemens S7 format