



Contact assembly

KL3172 | 2-channel analog input terminal 0...2 V (accuracy 0.05 %)

The KL3172 analog input terminal processes signals in the range of 0 to 2 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 the Bus Terminal have differential inputs and a common, internal ground potential. With the high measurement accuracy of $\pm 0.05\%$ (relative to full scale value), the terminal is optimised for high-precision control processes, such as dosing, filling, or quality assurance. The Bus Terminal has two channels within a housing. LEDs indicate data exchange with the Bus Coupler.

Technical data	KL3172 KS3172
Number of inputs	2
Power supply	via the K-bus
Signal voltage	0...2 V
Technology	differential input
Internal resistance	> 70 k Ω
Common-mode voltage U_{cm}	max. 35 V
Resolution	16 bit
Conversion time	140 ms, configurable
Filter	50 Hz, configurable
Measuring error	< $\pm 0.05\%$ (relative to full scale value)
Electrical isolation	500 V (K-bus/signal voltage)
Current consumption power contacts	–
Current consumption K-bus	typ. 85 mA
Bit width in the process image	input: 2 x 16 bit data (2 x 8 bit control/status optional)
Special features	increased measuring accuracy
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	
KL3172-0500	2-channel analog input terminal, 0...500 mV