



KL3454, KL3458 | 4-, 8-channel analog input terminals 4...20 mA

The KL3454 and KL3458 analog input terminals process signals in the range between 4 and 20 mA. The current is digitised to a resolution of 12 bits and is transmitted, in an electrically isolated form, to the higher-level automation device. In the KL3454 Bus Terminal, the four inputs are 2-wire versions and have a common ground potential. The 24 V power contact is connected to the terminal, in order to enable the connection of 2-wire sensors without external supply. The KL3458 variant combines eight channels in one housing and is particularly suitable for space-saving installation in control cabinets. The use of single conductor connection technology enables the connection of multi-channel sensor technology with minimum space requirements. In the KL3454 and KL3458, the power contacts are connected through. The reference ground for all inputs is the 0 V power contact. Overload is detected in both variants. The terminal status is relayed to the controller via the K-bus. The run LEDs indicate the data exchange with the Bus Coupler, the error LEDs overload or wire breakage.

Technical data	KL3454 KS3454	KL3458 KS3458
Number of inputs	4	8
Power supply	via the K-bus	
Signal current	4...20 mA	
Technology	single-ended	
Internal resistance	< 85 Ω	
Common-mode voltage U_{cm}	–	
Conversion time	~ 2 ms	~ 4 ms
Resolution	12 bit	
Measuring error	< ±0.3 % (relative to full scale value)	
Surge voltage resistance	30 V DC	
Electrical isolation	500 V (K-bus/signal voltage)	
Current consumption power contacts	only load	–
Current consumpt. K-bus	typ. 85 mA	typ. 105 mA
Bit width in the process image	input: 4 x 16 bit data (4 x 8 bit control/status optional)	input: 8 x 16 bit data (8 x 8 bit control/status optional)
Configuration	no address or configuration setting	
Special features	–	high packing density
Weight	approx. 75 g	
Operating/storage temperature	-25...+60 °C/-40...+85 °C	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, GL	