



KL3454 | 4-channel analog input terminal 4...20 mA

The KL3454 analog input terminal processes 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, 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 power contacts are connected through. The reference ground for all inputs is the 0 V power contact. Overload is detected. 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
Number of inputs	4
Power supply	via the K-bus
Signal current	4...20 mA
Technology	single-ended
Internal resistance	< 85 Ω
Common-mode voltage U_{CM}	–
Resolution	12 bit
Conversion time	~ 2 ms
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 consumption K-bus	typ. 85 mA
Bit width in the process image	input: 4 x 16 bit data (4 x 8 bit control/status optional)
Configuration	no address or configuration setting
Special features	–
Weight	approx. 55 g
Operating/storage temperature	-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, GL

Ordering information	
KL3454-0050	Siemens S7 format