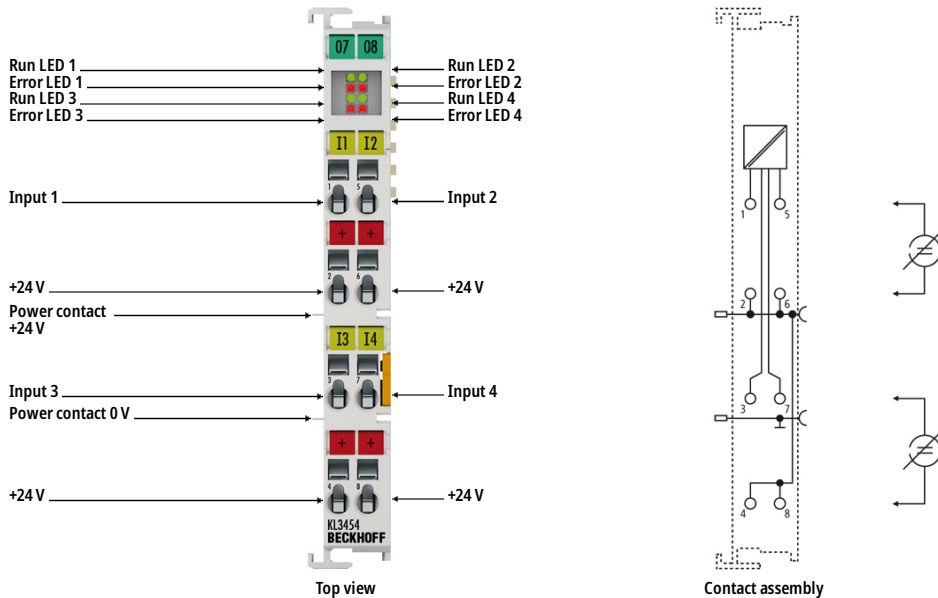
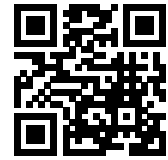


KL3454 | Bus Terminal, 4-channel analog input, current, 4...20 mA, 12 bit, single-ended



i Product status: Regular delivery

The KL3454 analog input terminal processes signals in the range between 4 and 20 mA. The current is digitized 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.

Product information

Technical data

Technical data	KL3454
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
Measurement error/ uncertainty	< ±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	load only
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. rating/installation pos.	IP20/variable
Pluggable wiring	for all KSxxxx Bus Terminals
Approvals/markings	CE, UL, ATEX, DNV GL
Ex marking	II 3 G Ex nA IIC T4 Gc

Housing data	KL-12-8pin	KS-12-8pin
Design form	compact terminal housing with signal LEDs	terminal housing with pluggable wiring level
Material	polycarbonate	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	
Installation	on 35 mm DIN rail, conforming to EN 60715 with lock	
Side by side mounting by means of	double slot and key connection	
Marking	labeling of the BZxxx series	
Wiring	solid conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver	
Connection cross-section	s*: 0.08...2.5 mm ² , st*: 0.08...2.5 mm ² , f*: 0.14...1.5 mm ²	s*: 0.08...1.5 mm ² , st*: 0.08...1.5 mm ² , f*: 0.14...1.5 mm ²
Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16	s*: AWG 28...16, st*: AWG 28...16, f*: AWG 26...16
Stripping length	8...9 mm	9...10 mm
Current load power contacts	I _{max} : 10 A	

*s: solid wire; st: stranded wire; f: with ferrule

Ordering information

Ordering information	
KL3454	Bus Terminal, 4-channel analog input, current, 4...20 mA, 12 bit, single-ended
KS3454	Bus Terminal, 4-channel analog input, current, 4...20 mA, 12 bit, single-ended, pluggable wiring
KL3454-0050	Siemens S7 format