KL3458 | Bus Terminal, 8-channel analog input, current, 4...20 mA, 12 bit, single-ended
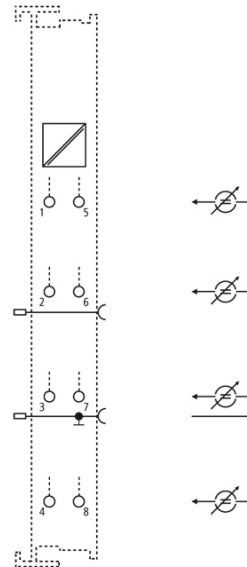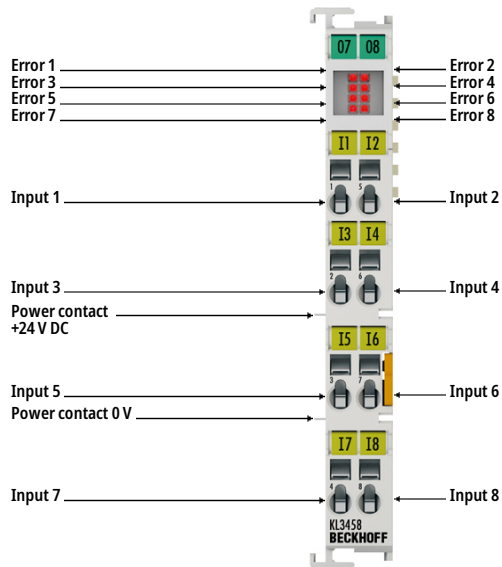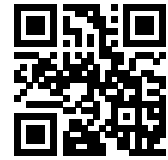

Error 1
Error 3
Error 5
Error 7

07 08

Error 2
Error 4
Error 6
Error 8

I1 I2

Input 1

Input 2

I3 I4

Input 3

Input 4

Power contact
+24 V DC

I5 I6

Input 5

Input 6

Power contact 0 V

I7 I8

Input 7

Input 8

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ⓘ Image similar, may contain optional accessories

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. The KL3458 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. 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	KL3458
Number of inputs	8
Power supply	via the K-bus
Signal current	4...20 mA
Technology	single-ended
Internal resistance	< 85 Ω
Common-mode voltage U_{CM}	–

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Conversion time	~ 4 ms
Resolution	12 bit
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	–
Current consumption K-bus	typ. 105 mA
Bit width in the process image	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. 55 g
Operating temperature	0...55°C
Storage temperature	-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. rating/installation pos.	IP20/variable
Approvals/markings	CE, CCC, UL, ATEX, IECEx, DNV GL
Pluggable wiring	for all KSxxxx Bus Terminals
Ex marking	ATEX: II 3 G Ex ec IIC T4 Gc IECEx: Ex ec 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	
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 BZxxxx series	
Wiring	solid conductor (s), flexible conductor (st) and ferrule (f): 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*: AWG28...14, st*: AWG28...14, f*: AWG26...16	s*: AWG28...16, st*: AWG28...16, f*: AWG26...16

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Stripping length	8...9 mm	9...10 mm
Current load power contacts	I_{max}: 10 A	
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm	

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

Ordering information

Ordering information	
KL3458	Bus Terminal, 8-channel analog input, current, 4...20 mA, 12 bit, single-ended
KS3458	Bus Terminal, 8-channel analog input, current, 4...20 mA, 12 bit, single-ended, pluggable wiring

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