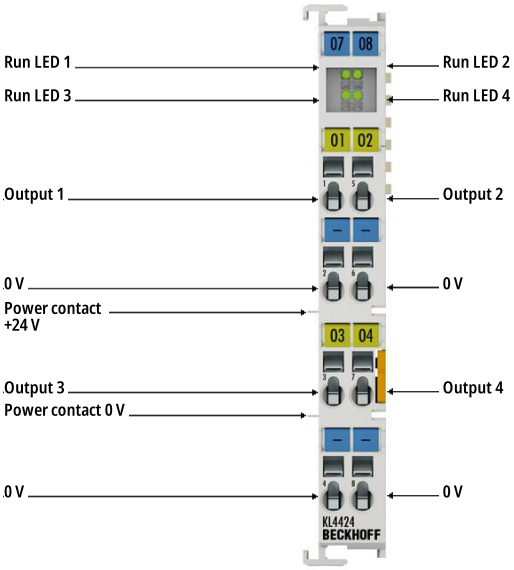
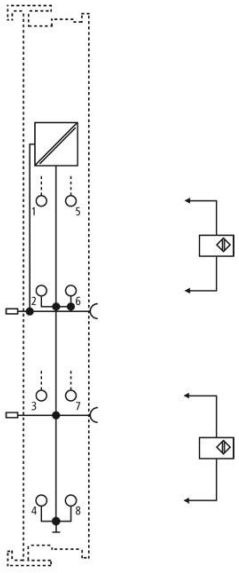
KL4424 | Bus Terminal, 4-channel analog output, current, 4...20 mA, 12 bit, single-ended



Top view



Contact assembly

Product status: Regular delivery

The KL4424 analog output terminal generates signals in the range between 4 to 20 mA. The power is supplied to the process level with a resolution of 12 bits and is electrically isolated. The output stage is powered by the 24 V supply. In the KL4424, the four outputs are 2-wire versions.

The Bus Terminal has a common ground potential. The power contacts are connected through. The reference ground of the outputs is the 0 V power contact. The LEDs indicate the data exchange with the Bus Coupler.

Product information

Technical Data

Technical data	KL4424, KS4424
Technology	single-ended
Number of outputs	4
Power supply	24 V DC via power contacts (alternative 15 V DC with power supply terminal KL9515)
Signal current	4...20 mA
Load	< 350 Ω (short-circuit proof)
Output error	< ±0.1 % (relative to end value)
Resolution	12 bit
Conversion time	~ 4 ms

Electrical isolation	500 V (K-bus/signal voltage)
Current consumption power contacts	typ. 60 mA + load
Current consumption K-bus	typ. 20 mA
Bit width in the process image	output: 4 x 16 bit data (4 x 8 bit control/status optional)
Weight	approx. 75 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/markings	CE, UL, ATEX, DNV GL, IECEx, cFMus
Ex marking	ATEX: II 3 G Ex nA IIC T4 Gc IECEx: Ex nA IIC T4 Gc Ex tc IIIC T135 °C Dc cFMus: Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx 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	
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	
KL4424	Bus Terminal, 4-channel analog output, current, 4...20 mA, 12 bit, single-ended
KS4424	Bus Terminal, 4-channel analog output, current, 4...20 mA, 12 bit, single-ended, pluggable wiring