Analog input | 4...20 mA

Technical data Signal current Resolution	1-channel analog input terminal, 420 mA, 12 bits, differential input KL3021 KS3021 420 mA	2-channel analog input terminal, 420 mA, 12 bits, differential input	4-channel analog input terminal, 420 mA, 12 bits, single-ended KL3054 KS3054	4-channel analog input terminal, 420 mA, 12 bits, single-ended KL3454 KS3454
Technology	differential input	differential input	single-ended	single-ended
Conversion time	~ 1 ms	~ 2 ms	~ 4 ms	~ 2 ms
Number of inputs	1	2	4	4
	The KL3021 analog input terminal is characterised by its fine granularity and electrical isolation. The input channels of the Bus Terminal have differential inputs and possess a common, internal ground potential.	The KL3022 analog input terminal combines two differential inputs with a common internal ground potential in one housing.	The KL3054 analog input terminal has four inputs, which are implemented in 2-wire technique. The common reference ground of the inputs is the internal ground.	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.
Measuring error	< ±0.3 % (relative to full scale value)	< ±0.3 % (relative to full scale value)	< ±0.3 % (relative to full scale value)	< ±0.3 % (relative to full scale value)
Current consum. pow.cont.	– (no power contacts)	– (no power contacts)	– (no power contacts)	only load
Current consumpt. K-bus	typ. 60 mA	typ. 60 mA	typ. 75 mA	typ. 85 mA
Internal resistance	80 Ω + 0.7 V	80 Ω + 0.7 V	80 Ω + 0.7 V	< 85 Ω
Common-mode voltage Ucm	35 V max.	35 V max.	-	_
Surge voltage resistance	35 V DC	35 V DC	35 V max.	30 V DC
Special features	-	-	for 2-wire sensors	-
Operating temperature	0+55 °C	-25+60 °C	0+55 °C	-25+60 °C
Approvals	CE, UL, Ex, GL	CE, UL, Ex, GL	CE, UL, Ex, GL	CE, UL, Ex, GL
Weight	approx. 70 g	approx. 70 g	approx. 70 g	approx. 75 g
Further information	www.beckhoff.com/KL3021	www.beckhoff.com/KL3022	www.beckhoff.com/KL3054	www.beckhoff.com/KL3454
Special terminals		KL3022-00xx	KL3054-0050	
Distinguishing features		special terminals see 617	Siemens S7 format	