

2.2 Technical data

Technical Data	KL3001/KS3001	KL3002/KS3002
Number of inputs	1	2
Power supply for the electronics	via the K-Bus	
Signal voltage	-10 V to +10 V	
Technology	Differential input	
Internal resistance	> 200 kΩ	
Common-mode voltage U_{CM}	35 V max.	
Resolution	12 bits (11 bits for the range between 0 V and 10 V)	
Conversion time	~ 1 ms	~ 2 ms
Measuring error (total measuring range)	< ±0.3 % of the full scale value	< ± 0.30 % (at 0 °C to +55 °C) < ± 0.75 % (when the extended temperature range is used)
Electrical isolation	500 V (K-Bus / signal voltage)	
Current consumption from the K-bus	typically 65 mA	
Bit width in the K-bus I/O	Input: 1 x 16 bits of data (1 x 8 bit control/status optional)	Input: 2 x 16 bits of data (2 x 8 bit control/status optional)
Configuration	No address or configuration settings	
Weight	approx. 70 g	
Dimensions (W x H x D)	approx. 15 mm x 100 mm x 70 mm (width aligned: 12 mm)	
Mounting [► 12]	on 35 mm mounting rail conforms to EN 60715	
Permissible ambient temperature range during operation	0 °C ... + 55°C	-25°C ... +60°C (extended temperature range)
Permissible ambient temperature range during storage	-25°C ... + 85°C	-40°C ... +85°C
Permissible relative air humidity	95%, no condensation	
Vibration / shock resistance	conforms to EN 60068-2-6 / EN 60068-2-27, see also Installation instructions for enhanced mechanical load capacity [► 16]	
EMC immunity / emission	conforms to EN 61000-6-2 / EN 61000-6-4	
Protection class	IP20	
Installation position	variable	
Approvals/Markings*	CE, UKCA, EAC, cULus, ATEX [► 23]	CE, UKCA, EAC, cULus, ATEX [► 24]

*) Real applicable approvals/markings see type plate on the side (product marking).

Ex marking

Standard	Marking
ATEX	II 3 G Ex nA IIC T4 Gc