

Four channel, digital input terminals, 24 V_{DC}

The KL1104 and KL1114 digital input terminals acquire the binary control signals from the process level and transmit them, in an electrically isolated form, to the higher-level automation unit. The KL1104 and KL1114 versions have input filters of different speeds. The Bus Terminals contain four channels that indicate their signal state by means of light emitting diodes. The KL1104 and KL1114 are particularly useful for space-saving use in control cabinets.

Technical data	KL1104/KS1104	KL1114/KS1114	
Connection technology	2-3-wire		
Number of inputs	4		
Nominal voltage	24 V _{DC} (-15% / +20%)		
"0" signal voltage	-3 V +5 V		
"1" signal voltage	15 V 30 V		
Input filter	3 ms	0,2 ms	
Input current	typ. 5 mA		
Current consumption from K-bus	typ. 5 mA		
Electrical isolation	500 V (K-Bus/field potential)		
Bit width in the process image	4 input bits		
Configuration	no address-or configuration settings required		
Dimensions (w x h x d)	15mm x 100mm x 70mm (connected width: 12mm)		
Weight	app. 55 g		
Permissible ambient temperature	-25 °C +60 °C during operation		
range	0 °C +55 °C (according to cULus, for Canada and USA)		
	0 °C +55 °C (according to ATEX, see special conditions)		
	-40 °C +85 °C during storage		
Permissible relative humidity	5% 95%, no condensation		
Vibration / shock resistance	conforms to EN 60068-2-6 / EN 60068-2-27		
EMC resistance/emission	conforms to EN 61000-6-2 / EN 61000-6-4		
Installation position	variable		

Technical data	KL1104/KS1104	KL1114/KS1114
Protection class	IP20	
Approvals	CE, cULus, ATEX, GL	
Pluggable wiring	at all KSxxxx series terminals	

ATEX - Special conditions



Observe the special conditions for the intended use of Beckhoff fieldbus components in potentially explosive areas (directive 94/9/EU)!

- The certified components are to be installed in a suitable housing that guarantees a
 protection class of at least IP54 in accordance with EN 60529! The environmental
 conditions during use are thereby to be taken into account!
- If the temperatures during rated operation are higher than 70 °C at the feed-in points of cables, lines or pipes, or higher than 80 °C at the wire branching points, then cables must be selected whose temperature data correspond to the actual measured temperature values!
- Observe the permissible ambient temperature range of 0 55 ℃ for the use of Beckhoff fieldbus components in potentially explosive areas!
- Measures must be taken to protect against the rated operating voltage being exceeded by more than 40% due to short-term interference voltages!
- The individual terminals may only be unplugged or removed from the Bus Terminal system if the supply voltage has been switched off or if a non-explosive atmosphere is ensured!
- The connections of the certified components may only be connected or disconnected if the supply voltage has been switched off or if a non-explosive atmosphere is ensured!
- The fuses of the KL92xx power feed terminals may only be exchanged if the supply voltage has been switched off or if a non-explosive atmosphere is ensured!
- Address selectors and ID switches may only be adjusted if the supply voltage has been switched off or if a non-explosive atmosphere is ensured!



Operation of the Bus Terminal System in potentially explosive areas (ATEX)!

Pay also attention to the continuative documentation

Notes about operation of the Bus Terminal System in potentially explosive areas (ATEX)

that is available in the <u>download area</u> of the Beckhoff homepage <u>http://www.beckhoff.com!</u>