

Power supply unit terminal for the K-Bus

The KL9400/KS9400 power supply unit terminal is used to refresh the K-bus. Data is exchanged between the Bus Coupler and Bus Terminal over the K-Bus. Each Bus Terminal draws a certain amount of current from the K-Bus (see Current Consumption from the K-bus in the technical data). This current is fed into the K-Bus by the relevant Bus Coupler's power supply unit. The standard couplers (BKxx00, BCxx00) makes 1.75 A available to the K-Bus, while the Economy Coupler (BKxx10) and the Low Cost Coupler (LCxx00) provide 0.5 A. In configurations with a large number of Bus Terminals it is possible to use the KL9400/KS9400 in order to supply an extra 2 A to the K-Bus.

Technical Data	KL9400, KS9400
Input voltage	24 V _{DC}
Output voltage (K-Bus)	5 V _{DC}
Output current (K-Bus)	max. 2 A
Power contact voltage	24 V _{DC}
Power contact current load	max. 10 A
Configuration	no address setting or configuration needed
Bits width in process image	0
Electrical isolation	500 V (K-Bus / field voltage)
Weight	app. 65 g
Dimensions (w x h d)	15 mm x 100 mm x 70 mm (width aligned: 12 mm)
Mounting	on 35 mm mounting rail conforms to EN 50022
Installation position	variable
Pluggable wiring	for all KSxxxx Bus Terminals
Permissible ambient	-25°C +60°C (extended temperature range)
temperature	0°C +55°C (according to cULus for Canada and USA)
	0°C +55°C (according to ATEX, see special conditions)
	-40°C +70°C (on storage)
Permissible relative humidity	5% 95%, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6 / EN 60068-2-27, EN 60068-2-29
EMC resistance burst/ESD	conforms to EN 61000-6-2 / EN 61000-6-4

Technical Data	KL9400, KS9400
Protection class	IP20
Approval	CE, cULus, ATEX, GL

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°C 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)!

Note

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 download area of the Beckhoff homepage http://www.beckhoff.com!