



KL2404, KL2424 | 4-channel digital output terminals 24 V DC

The KL2404 and KL2424 digital output terminals connect the binary 24 V control signals electrically isolated with the actuators. The Bus Terminals contain four channels that indicate their signal state by means of LEDs. The variants KL2404 and KL2424 have different maximum output currents. The 4-channel Bus Terminals enable the direct connection of four 2-wire sensors. Four ground connection points are provided.

Technical data	KL2404 / KS2404	KL2424 / KS2424
Connection technology	2-wire	
Number of outputs	4	
Rated voltage	24 VDC (-15% / +20%)	
Load type	ohmic, inductive, lamp load	
Output current max. (per channel)	0.5 A (short-circuit proof)	2.0 A (short-circuit proof)
Short circuit current	< 2 A	< 70 A
Breaking energy	< 150 mJ/channel	< 1.7 J/channel
Reverse voltage protection	yes	
Electrical isolation	500 V (K-Bus/field potential)	
Current consumption K-bus	typ. 9 mA	
Current consumption power contacts	typ. 30 mA + load	
Bit width in process image	4 output bits	
Configuration	no address-or configuration settings required	
Dimensions (W x H x D)	15mm x 100mm x 70mm (connected width: 12mm)	
Weight	approx. 70 g	
Permissible ambient temperature range	-25 °C ... +60 °C in operation	
	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	
Relative humidity	95%, no condensation	

Technical data	KL2404 / KS2404	KL2424 / KS2424
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	
Protection class	IP20	
Approvals	CE,c ULus, ATEX	cULus
Pluggable wiring	at all KSxxxx series terminals	

ATEX - Special conditions

 WARNING	<p>Observe the special conditions for the intended use of Beckhoff fieldbus components in potentially explosive areas (directive 94/9/EU)!</p> <ul style="list-style-type: none"> • 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!
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 Note	<p>Operation of the Bus Terminal System in potentially explosive areas (ATEX)!</p> <p>Pay also attention to the continuative documentation</p> <p><i>Notes about operation of the Bus Terminal System in potentially explosive areas (ATEX)</i></p> <p>that is available in the download area of the Beckhoff homepage http://www.beckhoff.com!</p>
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