



2-channel solid state load relay up to 230 V_{AC/DC}

The KL2702 output terminal uses an electronic load relay to switch a mains voltage of up to 230 V_{AC/DC}. The switching element is a high-power MOSFET, which is connected to the power contact potential. As a semiconductor switch, it is not subject to wear. The KL2702 terminal has two independent outputs. Its signal state is indicated by means of light emitting diodes.

Technical data	KL2702-0000	KL2702-0020	KL2702-0002
Number of outputs	2 make contacts		
Outputs mutually locked	no	no	yes
Connection technology	2-, 3, or 4-wire		
Rated load voltage	0...230 V _{AC/DC} (DC ... 100 Hz)		
Load type	ohmic, inductive		
Output current per channel	max. 0.3 A	max. 1.5 A	max. 2 A
Surge voltage protection	from 400 V _{AC}		
Peak current	0.5 A (20 s), 1.5 A (100 ms)	2.5 A (20 s), 7.5 A (100 ms)	2.5 A (20 s), 7.5 A (100 ms)
Contact resistance	typ. 2,1 Ω, max. 3,2 Ω	typ. 0,3 Ω, max. 0,4 Ω	typ. 0,3 Ω, max. 0,4 Ω
Switch-on time	4...6 ms	0.2...0.4 ms	0.2...0.4 ms
Switch-off time	0.05...0.1 ms	5...8 ms	5...8 ms
Switch-on delay	320 μs		
Switch-off delay	6.2 ms		
Electrical isolation	500 V (K-Bus / field potential), 2500 V _{DC} (1 min.)		
Leakage current	<< 1 mA (OFF state)		
Current consumption from Power Contacts	only leakage and load current		
Current consumption from K-Bus	typ. 10 mA	typ. 50 mA	typ. 50 mA
Bit with in the process image	2 output bits		

Technical data		KL2702-0000	KL2702-0020	KL2702-0002
Configuration		no address or configuration setting		
Weight		app. 55 g		
Dimensions (w x h x d)		15mm x 100mm x 70mm (aligned width 12mm)		
permissible ambient temperature range	during operation	-0°C ... +55°C		
	during storage	-25°C ... +70°C		
permissible relative humidity		5% ... 95%, no condensation		
Vibration/shock resistance		conforms to EN60068-2-6 / EN60068-2-27, EN60068-2-29		
EMC resistance burst/ESD		conforms to EN61000-6-2 / EN61000-6-4		
permissible mounting position		variable		
Protection class		IP20		
Pluggable wiring		KS2702-0000	-	-
Approval		CE, UL, GL, ATEX	CE	CE

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!
---	---

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