KL6821 | Bus Terminal, 1-channel communication interface, DALI/DALI-2, master/power supply

Run LED	Error LED 2
Send LED	Receive LED
+24 V Power LED	DALI Power LED
Input 1	Input 2
+24 V	0 V
Input 1	Input 2
DALI+	DALI+
DALI-	DALI-

Top view

Contact assembly

DALI device

ℹ Product status: Regular delivery

The KL6821 enables the connection of up to 64 DALI/DALI 2 slaves and 64 DALI 2 input devices. The KS2000 software enables simple configuration via a PC that is directly coupled with the bus coupler via an RS232 interface or via the fieldbus. Operation is done exclusively via TwinCAT function blocks. The KL6821 contains an integrated, switchable DALI bus power supply with galvanically isolated output voltage. No further components are required for the operation of the DALI/DALI 2 devices.

The KL6821 is certified according to DALI-2 standard.

DALI-2 part 101, version 2.0 and part 103, version 2.0

Product information
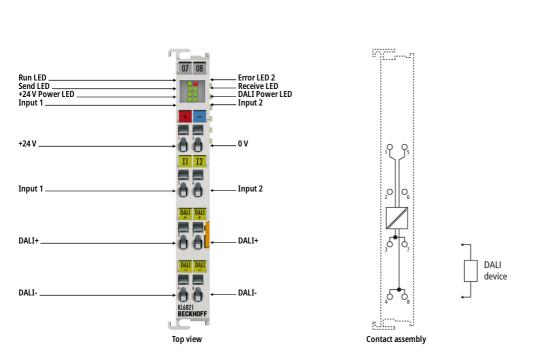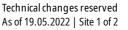
Technical data

Technical data	KL6821
Technology	DALI/DALI-2
Number of channels	1
Slaves/groups	max. 64 DALI/DALI 2 slaves and 64 DALI 2 input devices; max. 16 groups
Data transfer channels	1
Data transfer standard	DALI + DALI-2
Data transfer rates	1200 baud

BECKHOFF New Automation Technology

Current consumption K-bus	typ. 55 mA
Current consumption power contacts	–
Electrical isolation	500 V (K-bus/DALI-bus)
Bit width in the process image	Input/Output: 6 Byte each
Configuration	via the Bus Coupler or the controller
Nominal voltage	24 V DC (-15 %/+20 %)
Input voltage	24 V DC (-15 %/+20 %)
Insulation voltage	DALI-bus/K-bus: 1,500 V DC, DALI-bus/power contacts: 1,500 V DC
DALI power supply	max. 250 mA (can be switched off)
Guaranteed output current	220 mA
Surge voltage resistance	constant load 275 V AC_{rms}
Special features	2 digital inputs for simplified installation; TwinCAT library: TwinCAT PLC DALI
Weight	approx. 80 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. rating/installation pos.	IP20/variable
Approvals/markings	CE

Housing data	KL-12-8pin
Design form	compact terminal housing with signal LEDs
Material	polycarbonate
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm
Installation	on 35 mm DIN rail, conforming to EN 60715 with lock
Side by side mounting by means of	double slot and key connection
Marking	labeling of the BZxxx series
Wiring	solid conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver
Connection cross-section	s*: 0.08...2.5 mm², st*: 0.08...2.5 mm², f*: 0.14...1.5 mm²
Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16
Stripping length	8...9 mm
Current load power contacts	I_{max}: 10 A

*s: solid wire; st: stranded wire; f: with ferrule

BECKHOFF New Automation Technology