DALI Push-button Coupler

DALI2 CE FC RoHS COMPLIANT

KE
KEPLER electronics

Important: Read All Instructions Prior to Installation

Function introduction

43.00 mm

49.81 mm

4 channels push button interface

K4 K3 COM K2 K1

DALI Push-button Coupler

DALI2 CE RoHS

DALI INPUT
DA   DA

DALI Input

15.15 mm
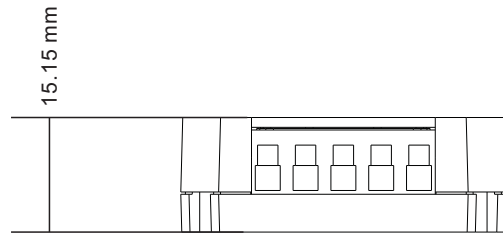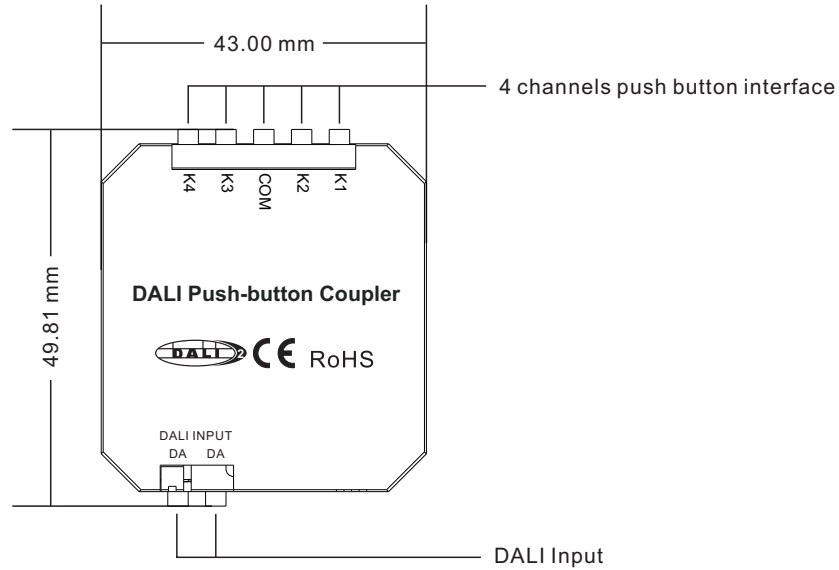
Product Features

- DALI-2 control device that integrates existing push switches into DALI system
- Four DALI-2 pushbutton instances are available for an easy integration
- In compliance with IEC62386-101, IEC62386-103, IEC62386-301
- Suitable for integration and in combination with DALI-2 compliant central control units
- Multimaster capable, multiple modules can be installed on the DALI- line
- DALI bus powered, no extra power supply required
- Easy configuration via DALI-2 compliant central controller USB interface
- Easy installation: the device can be installed in a flush-mounted installation box

Product Data

DALI Interface

Output Type	DALI-2, Multimaster
Marking	DA, DA
Voltage Range	9.5VDC - 22.5VDC (according IEC62368-101)
Typ. Current Consumption DALI (at 16.5V)	2.7mA
Max. Current Consumption DALI (Inrush Current at 22.5V)	3mA
DALI addresses	None
DALI-2 addresses	1

Input

Input for	Potential free button/switch
Number of inputs	4
Marking input terminals	K1, K2, K3, K4, COM
Max wire length	50cm

General Data

Dimensions (L x W x H)	49.8mm x 43mm x 15.1mm
Mounting	back box installation, installation in protection class II devices
Max. casing temperature Tc	75°C
Expected Life Time @Tc	50,000H
Protection Class	II in Intended Use
Protection Degree Housing	IP20
Protection Degree Terminals	IP20

Terminals

Connection Type	Spring terminal connectors
Wire Size Solid Core	0.2 - 1.5mm2 (AWG28 - AWG14)
Wire Size Fine Core	0.2 - 1.5mm2 (AWG28 - AWG14)
Wire Size Using Wire End Ferrule	0.25 - 1.0 mm2
Stripping Length	9 - 10 mm / 0.35 - 0.39 inch
Tightening/ release of wire	Push mechanism

Environment Conditions

Storing Temperature	-20°C~+50°C
Working Ambient Temperature	-20°C~+50°C
Relative Humidity	8%- 80%

Standards

| DALI	IEC62386-101:2014 IEC62386-103:2014 IEC62386-301
EMC	EN 61547 EN 50015 / IEC CISPR15
Safety	EN 61347-2-11 EN 61347-1
Markings	DALI-2, CE

Safety & Warnings

• DO NOT installed with power applied to device.
• DO NOT expose the device to moisture.

Application

Integration in a system with DALI-2 compliant central control unit, push buttons results in input notifications

(event messages)
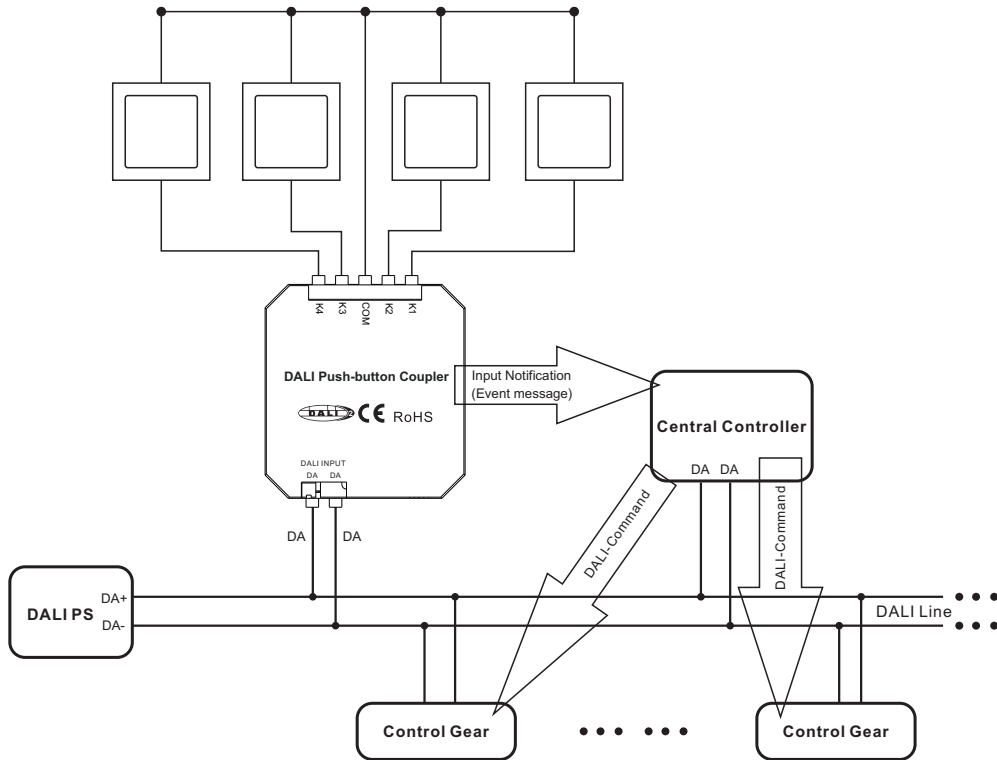
Application and Function

The DALI-2 PBC can be used as input device for the integration in DALI-2 compliant central lighting control systems. In this operating mode, no DALI control commands are sent on the bus, but DALI-2 event messages for DALI-2 compatible central control systems. In this mode each input ("instance") informs about changes by using so called "input notifications". These event-messages can be evaluated by other controllers on the DALI-line e.g. as trigger for commands sent to luminaires.

The DALI-2 PBC supports 4 instances of type 1 (IEC62386-301, Input Devices - Push Button), which are assigned to the 4 button inputs.

Instance 1-4: Push Button, Instance Type 1 (according IEC62386-301, Input Devices – Push Button)

According to the standard the following INPUT NOTIFICATIONs are supported:

Event name	Event Information	Description
Button released	00 0000 0000b	The button is released
Button pressed	00 0000 0001b	The button is pressed
Short press	00 0000 0010b	The button is pressed and released, without being pressed quickly again (in case of double press enabled), or the button is pressed and quickly released (in case of double press is disabled)
Double press	00 0000 0101b	The button is pressed and released, quickly followed by another button press
Long press start	00 0000 1001b	The button is pressed without releasing it
Long press repeat	00 0000 1011b	Following a long press start condition the button is still pressed, the event occurs at regular intervals as long as the condition holds
Long press stop	00 0000 1100b	Following a long press start condition, the button is released
Button free	00 0000 1110b	The button has been stuck and is now released
Button stuck	00 0000 1111b	The button has been pressed for a very long time and is assumed stuck.

Further parameters of the instances 1-4 are: event filter, event timer settings (short timer, double timer, repeat timer, stuck timer), which can be configured according to IEC62386-301.

Installation