DALI-2 BT5
Room Controller

Datasheet
Bluetooth 5.0 Interface

DALI-2 Bluetooth Interface
for commissioning,
configuration and control
of DALI systems using
the smartphone app
DALI Cockpit Mobile

Art.Nr. 87454427

DALI-2 BT5 Room Controller   Bluetooth 5.0 Interface

Overview

- DALI-Bluetooth Interface
- Unit for commissioning, configuration and control of a DALI system via Bluetooth using the Lunatone smartphone application DALI Cockpit Mobile
- Output with DALI power supply (200mA) for the supply of up to 64 DALI devices
- independent control gear (for remote ceiling or integration in luminaires)
- Enables simple room solutions
- Test button for functional testing

Specification, Characteristics

type	DALI-2 BT5 Room Controller
article number	87454427

input: L, N	
input type	supply, mains- voltage
marking terminals	L, N
input voltage range	100Vac … 240Vac
max. input supply current	40mA (@120Vac), 20mA (@240Vac)
input supply frequency	50Hz / 60Hz
max. power consumption	5,3W
startup time	250ms

output: DA+, DA-	
output type	DALI supply
marking terminals	DA+, DA-
voltage range	12Vdc … 20,5Vdc
guaranteed DALI supply current	200mA
open circuit proof	yes
short circuit proof	yes

insulation data:	
impulse voltage category	II
pollution degree	2
rated insulation voltage	250V
insulation DALI (DA+, DA-) / supply (L, N)	reinforced isolation
insulation test voltage DALI-output/mains	3000Vac

environmental conditions:

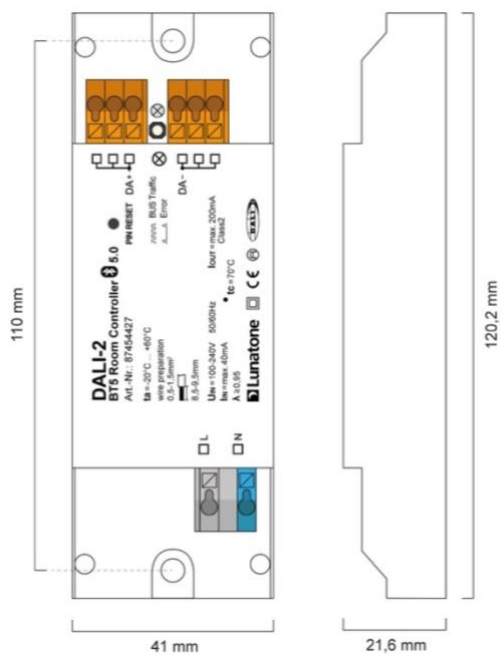|	
storing and transportation temperature	-20°C … +75°C
operational ambient temperature	-20°C … +60°C
rel. humidity, none condensing	15% … 90%

general data:

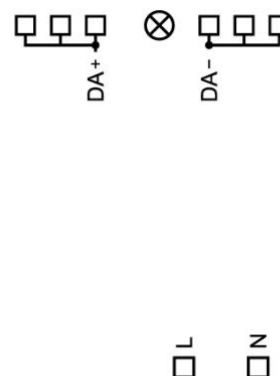|	
dimensions (l x w x h)	120mm x 41mm x 22mm
mounting	remote ceiling integration in class II devices
rated max. temperature tc	70°C
expected life time @tc	50.000 h
protection class	II in intended use
protection degree housing	IP40
protection degree terminals	IP20

terminals:

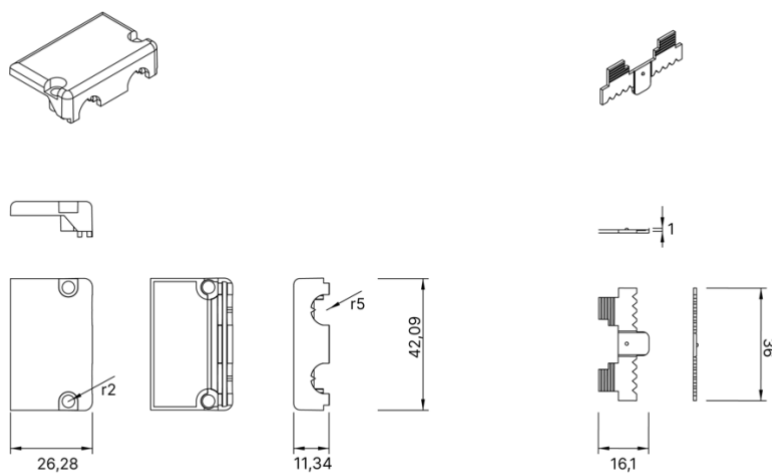|	
connection type	spring terminal connector
wire size solid core	0,5 … 1,5 mm^2 (AWG20 … AWG16)
wire size fine wired	0,5 … 1,5 mm^2 (AWG20 … AWG16)
wire size using wire end ferrule	0,25 … 1 mm^2
stripping length	8,5 … 9,5mm / 0,33 … 0,37inch
locking torque	-
release of wire	push button

standards:

DALI	EN 62386-101
EMV	EN 61547 EN 50015 / IEC CISPR15
safety	EN 61347-2-11 EN 61347-1
markings	CE

dimensions

connection plan

standard strain relief cover for 120x41x22mm

Installation

- Der Room Controller is intended for remote installation in the ceiling or in an enclosure, ensure proper cable relief for installation in protection class II devices

- The wiring should be carried out as a permanent installation in a dry and clean environment.

- Installation may only be carried out in a voltage-free state of the system and by qualified specialists.

- National regulations for setting up electrical systems must be followed.

- connect power supply terminals L and N to mains voltage

- the polarity of the output voltage is marked on the housing (DA+, DA-)

- The DALI-line may be installed within the same cable or as single conductors within the same tube as mains supply

- The DALI-line must not be connected to the mains or other extra low voltage systems

- The DALI wiring can be realised with standard low-voltage installation material. No special cables are required.

- Wiring topology of the DALI-line: Line, Tree, Star

- Wiring check by pressing the test button: the LED is flashing and all luminaires connected to the DALI system will be controlled by a test sequence (on, off,

dimming). To quit the test mode press the test button again.

Attention: The DALI-signal is not classified as SELV circuit. Therefore, the standards for installation in low voltage system apply.

The voltage drop on the DALI-line shall not exceed 2V.

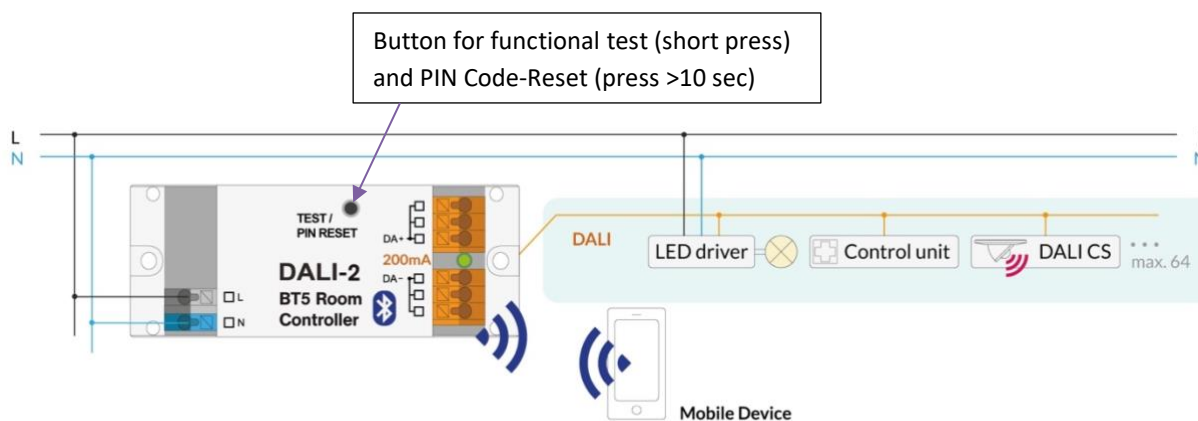**Attention**: an improper DALI power supply can cause damage on DALI devices!

Button for functional test (short press) and PIN Code-Reset (press >10 sec)

Fig. 1 Installation Room Controller – typical Application

Commissioning

- After installation, the DALI-Room Controller is ready for use.

- It must be ensured that the maximum power consumption on the DALI circuit does not exceed the guaranteed output current (200mA) of the DALI Room Controller at any time.

- The DALI Room Controller can be connected to the smartphone application DALI Cockpit Mobile to control and configure the devices on the DALI bus.

- The connection of a smartphone with the DALI Room Controller is possible via Bluetooth.

- Pressing the test / PIN reset button for> 10 seconds, will reset the the pin code set in the smartphone application.

- Status-LED:
  flashing 5Hz, 50% on: identify
  flashing 2Hz, 5% on : error (overload / short circuit)
  flashing 2Hz, 90% on: activity and test mode

Function

The DALI Room Controller serves as an interface between Bluetooth and DALI. Simplified, the packets received via Bluetooth are converted into corresponding DALI commands and vice versa. This means that devices connected to the DALI bus can be operated and configured via the Bluetooth interface.

The Bluetooth Room Controller provides the power supply (200mA) for the DALI bus. Therefore, simple room solutions can be easily implemented with the DALI Room Controller.

The Lunatone smartphone application DALI-Cockpit Mobile offers a clear and simple interface for controlling and configuring the devices on the DALI bus. Communication between the smartphone app and the DALI room controller takes place using the proprietary Lunatone DALI Access Protocol (LDAP). The protocol description is available on request.

Purchase Information

Art.Nr. 87454427: DALI Room Controller,
Bluetooth – DALI interface with integrated bus
power supply, remote ceiling

Additional Information and Equipment

Lunatone datasheets, manuals and software
http://www.lunatone.com/downloads-a-z/

Lunatone DALI products
http://www.lunatone.com

DALI-Cockpit/Mobile App - Google Store
Download
https://play.google.com/store/apps/developer?id=Lunatone+Industrielle+Elektronik+GmbH&hl=de

Contact

Technical Support: support@lunatone.com

Requests: sales@lunatone.com

www.lunatone.com

Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The function in installations with other devices must be tested
for compatibility in advance.