DT-C

DALI AC Triac Dimmer

DALI+ Triac

- AC phase-cut mosfet DALI dimmer, one DALI address, one channel output.
- Trailing edge dimmer.
- The minimum brightness is adjustable.
- DALI-2 certified, in accordance with DALI standard protocol 101, 102, 205 (IEC 62386) and in compliance with DALI products from other international incorporation.
- DALI address can be automatically assigned by DALI master.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
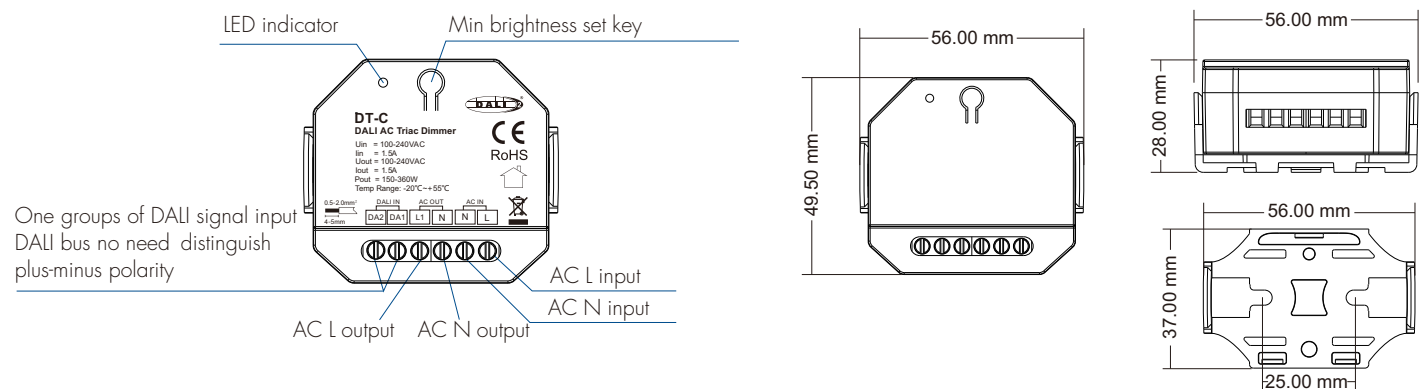- Over-heat protection, Overload protection, recover automatically.

DALI CE RoHS emc LVD RED

Technical Parameters

Input and Output		Dimming date		Safety and EMC	
Input voltage	100-240VAC	Input signal	DALI, AC Push	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Output voltage	100-240VAC	Dimming level	256 level		
Input current	1.5A	Dimming range	0-100%	Safety standard (LVD)	EN 62368-1:2020+A11:2020
Output current	1.5A			Radio Equipment (RED)	ETSI EN 300 328 V2.2.2
Output power	150-360W	Environment		Certification	DALI-2, CE, EMC, LVD, RED
Warranty and Protection		Operation temperature	Ta: -20℃ ~ +55℃	Package	
Warranty	5 years	Case temperature (Max.)	Tc: +85℃	Size	L60 x W60 x H40mm
Protection	Over-heat, Over-load	IP rating	IP20	Gross weight	0.059kg

Compatible Load Types

Load Type	Maximum Load	Remarks
Dimmable LED lamps	200W @ 220V 100W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
Triac Dimmable LED drivers	200W @ 220V 100W @ 110V	Maximum permitted number of drivers is 200W divided by driver nameplate power rating, and make sure the surge current is no more than 2 times 65A.
Incandescent lighting, HV Halogen lamps	400W @ 220V 200W @ 110V	

Mechanical Structures and Installations

LED indicator   Min brightness set key

DT-C
DALI AC Triac Dimmer
Uin = 100-240VAC
Iin   = 1.5A
Uout = 100-240VAC
Iout = 1.5A
Pout = 150-360W
Temp Range: -20℃~+55℃

One groups of DALI signal input
DALI bus no need distinguish
plus-minus polarity

AC L input
AC N input

AC L output   AC N output

56.00 mm
49.50 mm

56.00 mm
28.00 mm

56.00 mm
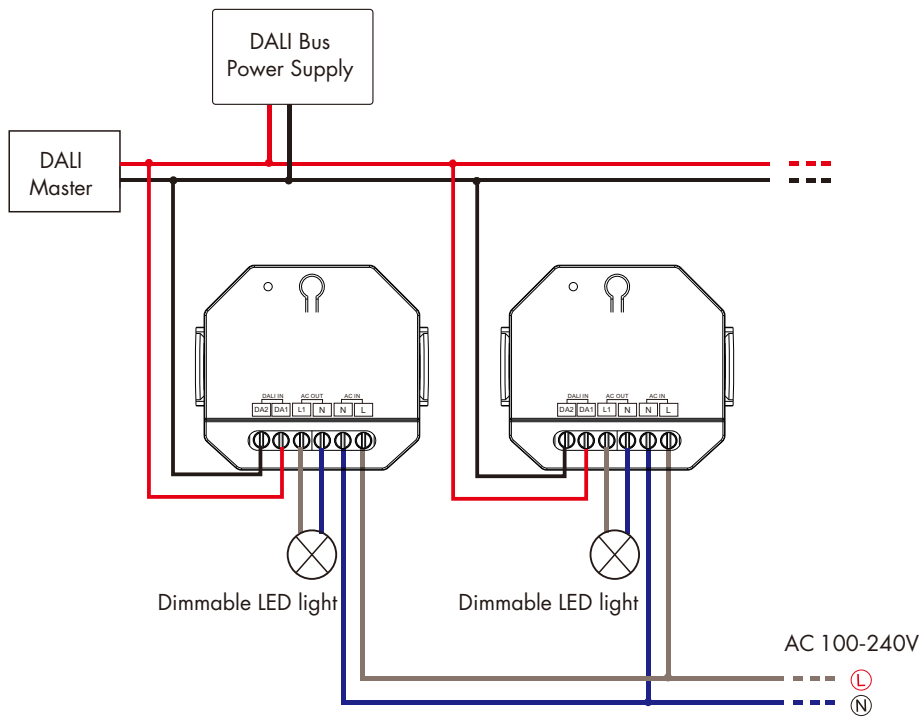37.00 mm
25.00 mm

Installation way
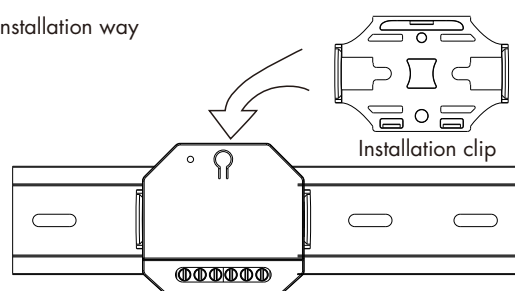
Installation clip

Note:
1. DO NOT install with power applied to device.
2. The installation must be installed or removed by a professional electrician.
3. Please keep the device out of the reach of children.
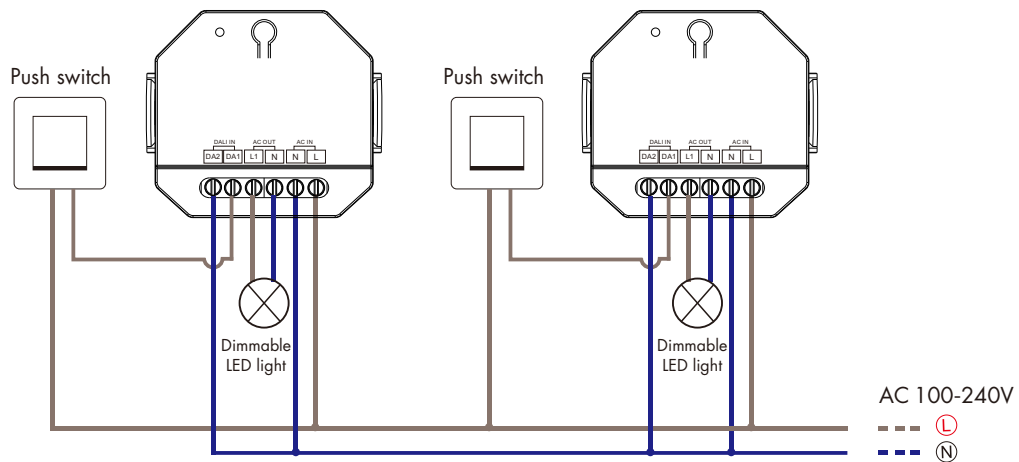4. Please keep away from water, humid or hot environment.

Wiring Diagram

⚠️**Caution:** Please carefully ensure all wire connections and polarities are correct and secure before applying power, otherwise this controller will be damaged.

● DT-C connect with DALI master

DALI Bus
Power Supply

DALI
Master

DALI IN
DA2 DA1
AC OUT
L1 N
AC IN
N L

DALI IN
DA2 DA1
AC OUT
L1 N
AC IN
N L

Dimmable LED light　　　Dimmable LED light

AC 100-240V
Ⓛ
Ⓝ

● DT-C connect with AC push switch

Push switch

DALI IN
DA2 DA1
AC OUT
L1 N
AC IN
N L

Dimmable
LED light

Push switch

DALI IN
DA2 DA1
AC OUT
L1 N
AC IN
N L

Dimmable
LED light

AC 100-240V
Ⓛ
Ⓝ

Indicator status:

When the dimmer is working normally, the LED indicator light is green.

When the internal temperature of the dimmer is too high (≥120℃) or the load exceeds maximum power, the LED indicator light is red, after removing the fault, the LED indicator light return green.

When the dimmer receives DALI signal, the LED indicator light flashes once.

Note:

1. DALI interface and AC PUSH interface are compatible, DALI and AC PUSH can only be connected to one, not at the same time.
   When connecting to the AC PUSH switch, note that the fire wire (L) and zero wire (N) are connected to DA1 and DA2 respectively, and cannot be connected to DA1 or DA2 at the same time.
2. When calculating the maximum number of load lamps or drivers, the input power or input current parameters of a single lamp or driver must be used, the output power parameters can not be used.
   In addition, the maximum surge current of the dimmer is 65A, the sum of surge current of multiple dimmable LED drivers should not exceed 2 times. otherwise, the product will be overloaded and damaged.

Minimum brightness setting

Minimum brightness setting

The minimum brightness of the device can be set or deleted by press the Min brightness set key on the dimmer.

● Recall minimum brightness:
Short press the Min brightness set key on the dimmer, LED indicator flash one, the light output the minimum brightness.

● Setting minimum brightness:
Adjust the brightness to a desired minimum level, then press and hold down the Min brightness set key 2s until the LED indicator flash one, the current brightness is set as the minimum brightness.
The light can only be dimmable between this minimum brightness and maximum brightness.

● Delete minimum brightness:
Adjust the brightness to maximum level, then press and hold down the Min brightness set key 2s until the LED indicator flash one, the minimum brightness setting is deleted.

Push-Dim Function

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching(momentary) wall switchs.

● Short press:
   Turn on or off light.
● Long press (1-6s):
   Press and hold to step-less dimming,
   With every other long press, the light level goes to the opposite direction.
● Dimming memory:
   Light returns to the previous dimming level when switched off and on again, even at power failure.
● Synchronization:
   If more than one controller are connected to the same push switch, do a long press for more
   than 10s,then the system is synchronized and all lights in the group dim up to 100%.
   This means there is no need for any additional synchrony wire in larger installations.
   We recommend the number of controllers connected to a push switch does not exceed 25
   pieces, The maximum length of the wires from push to controller should be no more than 20 meters.

DALI address assigned by DALI masters

DALI address can also be assigned by DALI Master controller automatically.
Please refer to user manuals of compatible DALI Masters for specific operations.

Safety & Warnings

● DO NOT install with power applied to device.
● DO NOT expose the device to moisture.