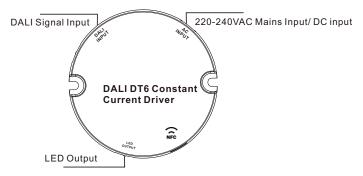
# 10W DALI DT8 NFC Round LED Driver(Constant Current)



Important: Read All Instructions Prior to Installation

## **Function introduction**



### **Product Data**

	LED Channel	2						
	DC Voltage	3-42V						
	Current	100-500mA via NFC tool; Min.current gear lower to 0.1mA, default 250mA						
Output	Current Accuracy	±3%( ±1%@Certain full load) @ full load						
	Rated Power	Max. 10W						
	Voltage Range	220-240VAC/220-240VDC						
	Absolute Voltage Range	198-264VAC/198-264VDC						
	Frequency Range	0/50/60Hz						
	Power Factor (Typ.)	> 0.95 @ 230VAC Full load						
	Total Harmonic Distortion	THD ≤ 8% (@ full load / 230VAC)						
Input	Efficiency (Typ.)	> 80% @ 230VAC full load						
	AC Current (Typ.)	0.1A @ 230VAC						
	Inrush Current (Typ.)	Max. 3.16A at 230VAC; 72µs duration						
	Leakage Current	< 5mA /230VAC						
	Standby Power Consumption	< 0.5W						
	Anti Surge	L-N:2KV						
	Dimming Interface	DALI Device Type 8 (DALI consumption < 2mA)/ AC Push						
Control	Dimming Range	0.01%-100%@ Max current						
Control	Dimming Method	Amplitude/CCR dimming						
	Dimming Curve	Linear/ Logarithmic optional						

Protection	Short Circuit	Yes, recovers automatically after fault condition is removed						
	Over Current	Yes, recovers automatically after fault condition is removed						
	Over Temperature	Yes, recovers automatically after temperature drop						
	Working Temp.	-25°C ~+60°C						
Environment	Max. Case Temp.	Tc=85°C						
Environment	Working Humidity	10% ~ 95% RH non-condensing						
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH						
	Safety Standards	EN61347-1, EN61347-2-13						
	Withstand Voltage	I/P-O/P: 3.75KVAC						
Safety & EMC	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH						
	EMC Emission	En55015, EN61000-3-2, EN61000-3-3						
	EMC Immunity	En61547, EN61000-4-2,3,4,5,6,8,11						
Others	MTBF	191470H, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature						
Others	Dimension	φ57x24mm (D*H)						
	Warranty	5 Years						

- In compliance with IEC 62386-101:2014, IEC 62386-102:2014, IEC 62386-207 Ed2, IEC 62386-209
- Built-in DALI-2 interface, DALI DT8 device
- Dimmable LED driver. Max. output power 10W
- 100-500mA current selectable via NFC program tool. Min.current gear lower to 0.1mA
- DALI Address/Group/Scene setting via NFC program tool.
- ullet Class  ${\ensuremath{\mathbb{I}}}$  power supply, full isolated plastic case
- High power factor and efficiency
- ON/OFF, Dimming and Tunable White control
- Amplitude/CCR dimming, smooth and deep dimming
- Compatible with universal DALI masters that support DT8 commands
- CLO function for a further upgraded experience
- IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

## Safety & Warnings

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

## Operation

With DALI master

#### 1. DALI Address

1 DALI address for 2 channels output are assigned by DALI Master controller automatically, please refer to user manuals of compatible DALI Masters for specific operations.

## With NFC Programming devices

#### Note

- 1) Do wiring according to the wiring diagram and power on the DALI system.
- 2) Recommend setting parameters without power-on the DALI devices .
- 2) Please make sure your mobile phone has NFC function and enable it .

## Working with "SR NFC Tool" APP

Step 1: Download the APP (searching "SR NFC Tool" from App Store and Google Play) . Then open the APP .



- Note: 1. Please Make sure that you have enabled NFC function with your mobile phone/ tablet .
  - 2. Please Make sure that the "NFC position" is matched.
  - 3. Please do not power on the device before setting.
  - 4. If you can't download "SR NFC Tool". Please contact with us.

Step 2: Add device, and name it as you wish.





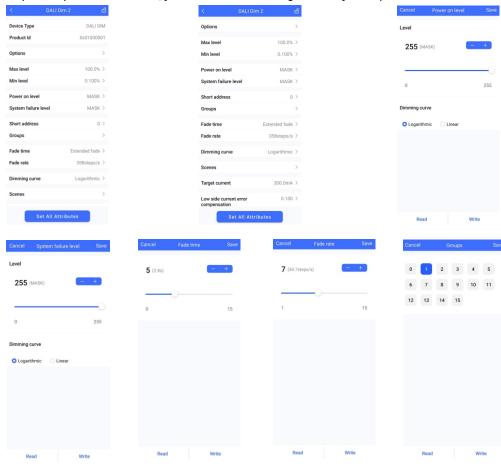


Step 3: Unlock device, enter parameters configuring page.

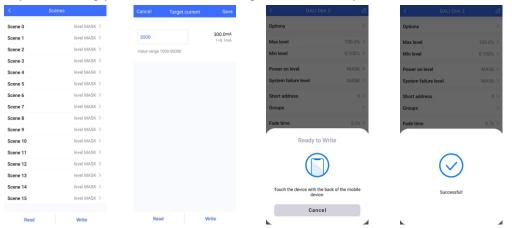


- Note: 1. You have to unlock the device then do some settings
  - 2. Only when the corresponding function is selected, the function interface will be displayed.

Step 4: Few parameter interface, you can choose the setting based on your requirements.



Step 5: After setting, please save the selected configuration via NFC and power on the device.



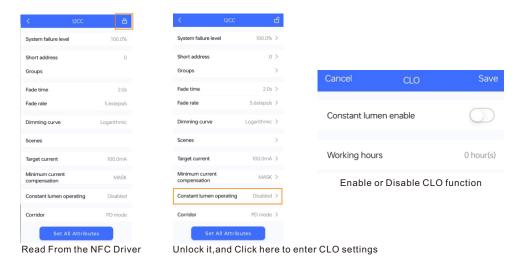
## Tips

- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ DALI IoT gateway.

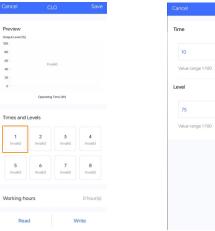
Note: Within Our NFC tech design, you shall probably have one of the largest NFC sensing area. The More sensitive you're able to touch, the more convenient you can have.

## **CLO AND CORRIDOR DIM(CD) FUNCTION INSTRUCTION**

## 1. Open APP, and Find the CLO/CD functions



## 2.Enter CLO Setting homepage







Enable CLO function

Click "1", and set its time and level

Set your desired time and levels.
Graphic display

#### Tips:

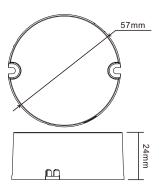
Working hours: Ability to calculate the working hours of a single driver.

## **Additional Remarks**



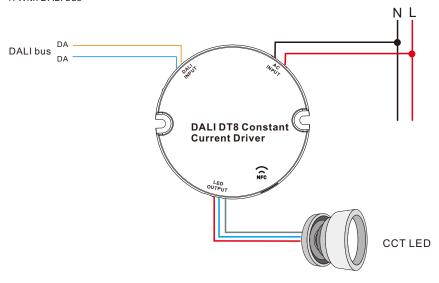
- 1. Please make sure your APP version is 1.0.10 or higher.
- Please make sure NFC driver's firmware is available with CLO functions.

## **Product Dimension**

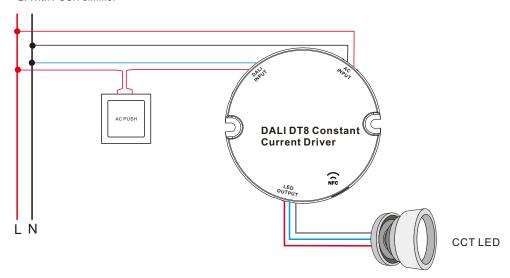


## **Wiring Diagram**

#### 1. With DALI bus



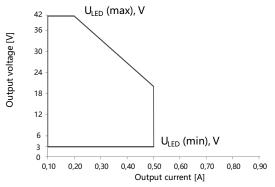
#### 2. With PUSH dimmer



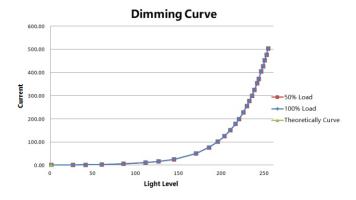
## **AC Push Function**

- 1) Click the button to switch ON/OFF
- 2) Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction. The dimming range is from 1% to 100%.

## **Operating window**



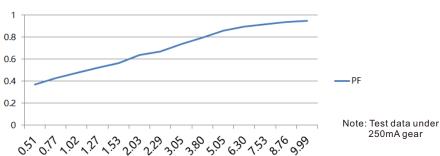
## **Dimming Curve**



Note: Test data under 500mA gear

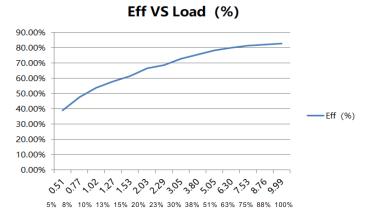
## **Driver Performance**

# **PF VS Load**



5% 8% 10% 13% 15% 20% 23% 30% 38% 51% 63% 75% 88% 100%

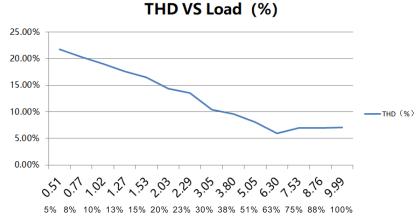
## **Driver Performance**



## **Driver Performance**

TUD VC Local (0)

Note: Test data under 250mA gear



Note: Test data under 250mA gear

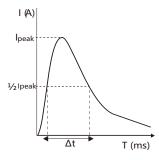
## **Expected Lifetime**

Module Number	Output current	Та	30 °C	40 °C	45 °C	•••	60 °C
SRPY-2305N-10CC100-500	100 – 500 mA	Тс	50 °C	60 °C	70 °C	•••	85 ℃
SRPY-2309N-10CCT100-500	0 100 – 500 mA	Lifetime	> 100,000 h	> 80,000 h	> 60,000 l	h	> 40,000 h

The LED driver is designed for a lifetime stated above under reference conditions . The relation of tc to ta temperature depends also on the luminaire design.

## **MCB Load Quantity**

Module Number	lpeak	Twidth				Max	.qua	ntity	of L	ED D	rivei	per	мсв				
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRPY-2305N-10CC100-500	3.16A	72µs	60	78	96	120	150	70	91	112	140	175	80	104	128	160	200
SRPY-2309N-10CCT100-500	3.16A	72µs	60	78	96	120	150	70	91	112	140	175	80	104	128	160	200



#### Note:

- 1. Those MCB parameters are based on ABB S200 series circuit breakers.
- For different brands and models of miniature circuit breakers, the quantity of drivers will have difference.
- Please do not exceed the above-mentioned quantity during on-site installation, and the specific load quantity shall be subject to on-site installation.
- 4. When the installation environment temperature of MCBs exceeds 30°C or when multiple MCBs are installed side by side, the number of mounted drives will be reduced, which requires recalculation.
- 5. Type C MCB's are strongly recommended to use with LED lighting

#### Update log

Date	Version	Update content	Update by
2023-8-4	V1.2	Update PF/THD/Eff/MCB Load/ Lifetime	Romeo

Note: Subject to change without notice. Please contact us if you have any questions.