# 100W DALI DT8 NFC Enabled LED Driver(Constant Current)



Important: Read All Instructions Prior to Installation

## **Function introduction**



## **Product Data**

	LED Channel	2						
	DC Voltage	50-220V						
	Current	250-1000mA via NFC setting; Min.current gear lower to 0.1mA						
Output	Current Accuracy	±3%@ full load						
	Rated Power	Max. 100W						
	Voltage Range	220-240VAC/VDC						
	Frequency Range	0/50/60Hz						
	Power Factor (Typ.)	> 0.98 @ 230VAC Full load						
	Total Harmonic Distortion	THD ≤ 10% (@ full load / 230VAC)						
	Efficiency (Typ.)	> 90% @ 230VAC full load						
Input	AC Current (Typ.)	0.5A @ 230VAC						
	Inrush Current (Typ.)	Max. 24.2A at 230VAC; 286µs duration						
	Leakage Current	< 5mA/230VAC						
	Standby Power Consumption	< 0.5W						
	Anti Surge	L-N:1KV/ L-N-G: 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						
	Max. Case Temp.	Tc=90°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, GB/T 19510.1-2023, GB/T 19510.213-2023						
	Withstand Voltage	I/P-FG: 1500VAC, I/P-DA: 1500VAC, O/P-DA: 1500VAC						
Safety & EMC	Isolation Resistance	I/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH						
	EMC Emission	EN55015, EN61000-3-2, EN61000-3-3, GB 17625.1-2022, GB/T 17743-2021						
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11						
	MTBF	191350H, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature						
Others	Dimension	285x30x21mm (L*W*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 with linear metal housing. Max. output power 100W
- 250-1000mA current selectable via NFC program tool. Min.current gear lower to 0.1mA
- DALI Address/Group/Scene setting via NFC program tool
- For luminaires of protection class I and protection class II
- High power factor and efficiency. Non-SELV rated driver
- ON/OFF, Dimming, Tunable white
- Amplitude/CCR dimming, smooth and deep dimming
- Compatible with universal DALI masters that support DT6 commands
- DALI-251/252/253 Enabled, DALI data inside
- 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 channel 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.





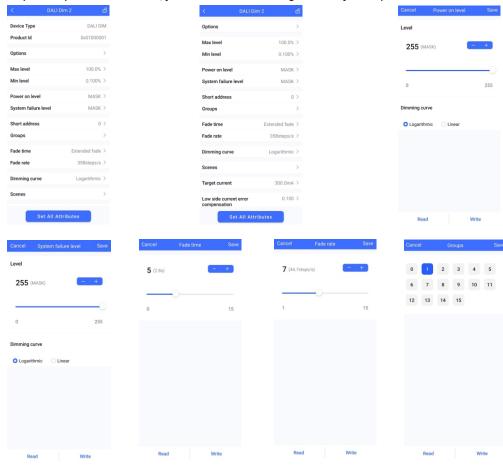


Step 3: Unlock device, enter parameters configuring page.

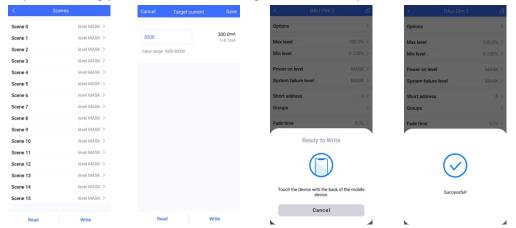


- Note: 1. You have to unlock the device then do some settings
  - 2. Only when the corresponding function is selected, the function interface will be displayed.

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.

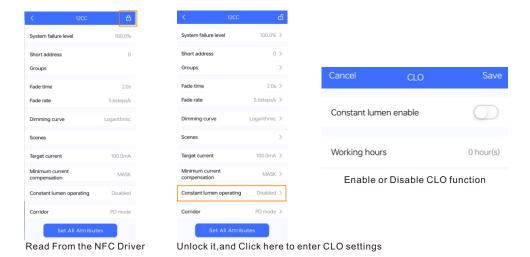


## **Tips**

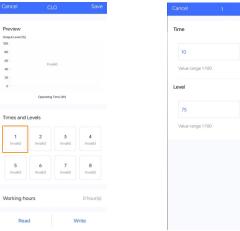
- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ gateway.

## **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.

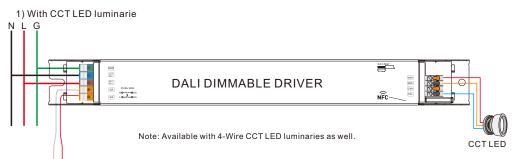
### **Additional Remarks**



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

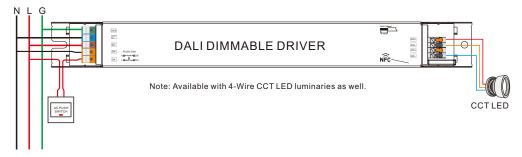
## **Wiring Diagram**

#### 1. With DALI bus



#### 2. With PUSH dimmer

**DALI Bus** 

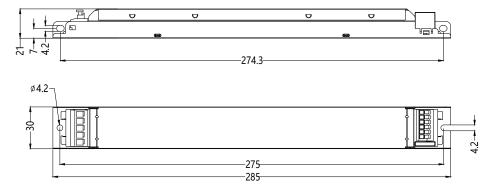


#### **AC Push Function**

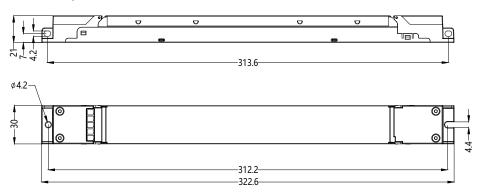
- 1) Click the button to switch ON/OFF
- 2) Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction. The dimming range is from 1% to 100%.
- 3) Double click the button to switch between brightness mode and color temperature mode.
- 4) Press and hold down the button to change color temperature under color temperature mode.

## **Product Dimension**

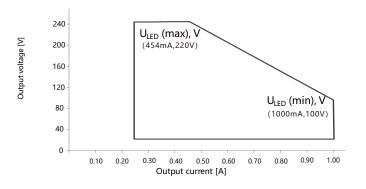
### Without End Cap



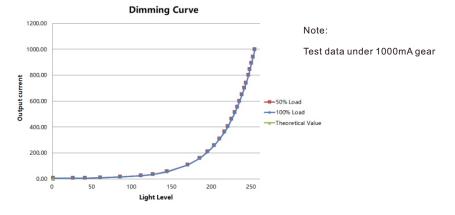
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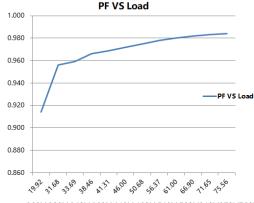
## **Operating window**



# **Dimming Curve**



#### **Driver Performance**



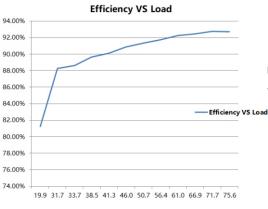
Note: Test data under 350mA gear

\*: Due to its default current setting, the Max.load is 75W.

It is not full-load in this case, we want to deliver 100% realistic data for your reference.

20%/32%/34%/38%/41%/46%/51%/56%/61%/67%/72%/76%

## **Driver Performance**



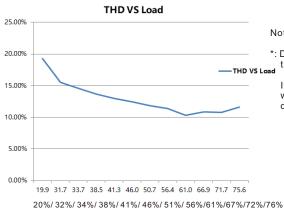
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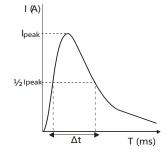
## **Expected Lifetime**

Module Number	Output current	Та	30 °C	40 °C	45 °C	•••	60 °C
SRPL-2305N-100CC250-1000H	250 – 1000 mA	Тс	42 °C	53 °C	60 °C	•••	90 °C(max)
SRPL-2309N-100CCT250-1000	H 250 – 1000 mA	Lifetime	> 100,000 h	> 100,000 h	> 100,000	h	> 45,000 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   Ipeak Twidth		Max.quantity of LED Driver per MCB															
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRPL-2305N-100CC250-1000H	24.2A	286µs	9	12	15	18	23	14	18	22	28	35	16	21	26	32	40
SRPL-2309N-100CCT250-1000H	24.2A	286µs	9	12	15	18	23	14	18	22	28	35	16	21	26	32	40



#### 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  $30^{\circ}\mathcal{C}$  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
2024-3-25	V1.0	Initial Version	Romeo

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