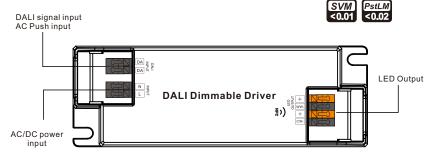
# 36W DALI DT8 NFC Enabled LED Driver(Constant Current)



## Important: Read All Instructions Prior to Installation

## **Function introduction**



#### **Product Data**

	LED Channel	2						
	DC Voltage	6-54V, Max. 60V						
	Current	350-1050mA via NFC tool; Min.current gear lower to 0.1mA, default 800mA						
Output	Current Accuracy	±3%( ±1%@Certain full load) @ full load						
	Rated Power	Max. 36W						
	Voltage Range	220-240VAC/220-240VDC						
	Absolute Voltage Range	196-264VAC/196-264VDC						
	Frequency Range	0/50/60Hz						
	Power Factor (Typ.)	> 0.95 @ 230VAC Full load*						
	Total Harmonic Distortion	THD ≤ 14% (@ full load / 230VAC)*						
Input	Efficiency (Typ.)	> 86% @ 230VAC full load*						
	AC Current (Typ.)	0.25A Max.						
	Inrush Current (Typ.)	Max. 8.56A at 230VAC; 88µs 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						

	Short Circuit	Yes, remove the fault conditions and re-power the device.						
Protection	Over Current	Yes, remove the fault conditions and re-power the device.						
	Over Temperature	Yes, remove the fault conditions and re-power the device.						
	Working Temp.	-25℃ ~ +45℃						
Envisore ent	Max. Case Temp.	Tc=85℃						
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-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, GB 17625.1-2022, GB/T 17743-2021						
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11						
Others	MTBF	191350H, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature						
Others	Dimension	145x45x28mm (L*W*H)						
	Warranty	5 Years						

<sup>\*:</sup> PF/THD/Eff shall be different per different testing setup and equipment.

- In compliance with IEC 62386-101:2014, IEC 62386-102:2014, IEC 62386-207 Ed2, IEC 62386-209:2011
- Built-in DALI-2 interface, DALI DT8 device
- Dimmable LED driver. Max. output power 36W
- 350-1050mA current selectable via NFC program tool. Min.current gear lower to 0.1mA
- DALI Address/Group/Scene setting via NFC program tool.
- Class II 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
- Error report function
- 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 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.





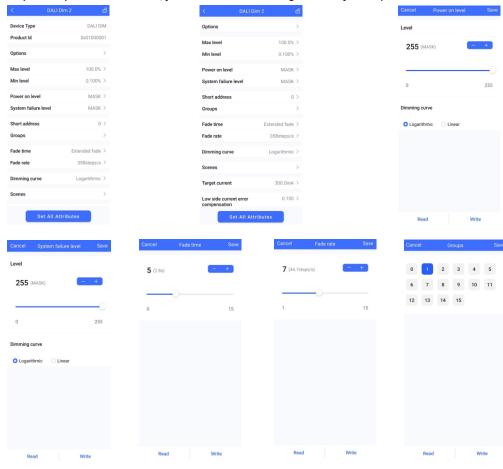


Step 3: Unlock device, enter parameters configuring page.

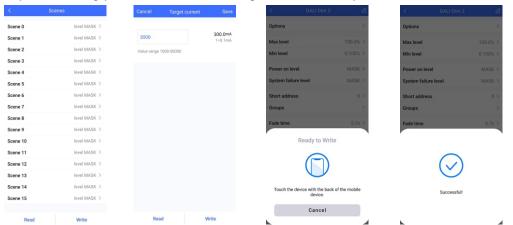


- Note: 1. You have to unlock the device then do some settings
  - 2. Only when the corresponding function is selected, the function interface will be displayed.

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.

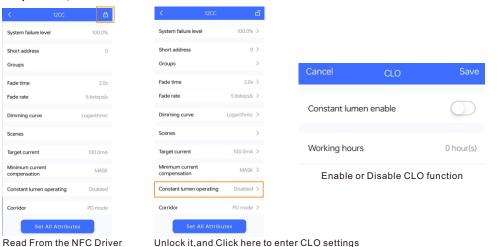


#### Tips

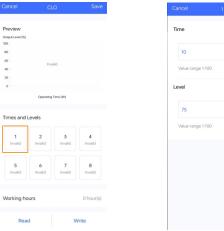
- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ DALI IoT gateway.
- 4.This is a 2-channel output product, so we recommend ensuring that both loads are connected and have the same loads for each channel at the same time during testing.
- 4.1If you have to connect 1 channel to test, please follow the following moves (before powering on).
- 4.1.1If you are connected to "+/WW" (signal channel), please make sure to set <u>"power on CCT"</u> of NFC Driver to 2700k (DALI default value), and write to the device.
- 4.1.2If you are connected to "+/CW" (signal channel), please make sure to set <u>"power on CCT"</u> of NFC Driver to 6500k (DALI default value), and write to the device.

## **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.

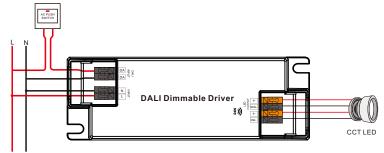
## **Wiring Diagram**

#### 1. With DALI bus



Note: Avaliable with 3-wire CCT luminaries as well

#### 2. With PUSH dimmer

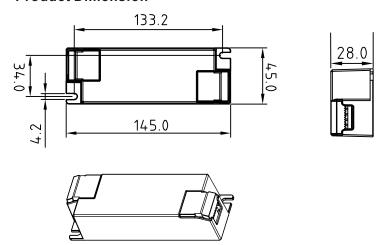


Note: Avaliable with 3-wire CCT luminaries as well

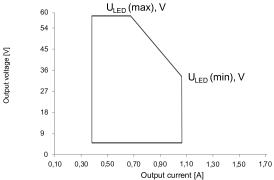
#### **AC Push Function**

- 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.

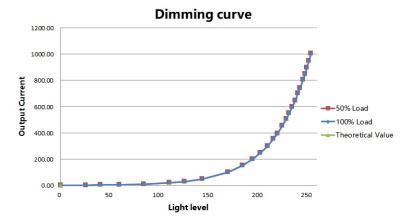
#### **Product Dimension**



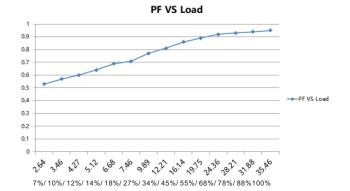
## **Operating window**



## **Dimming Curve**

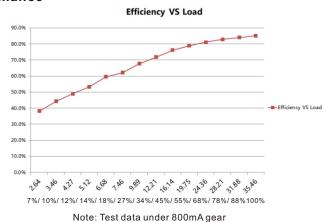


### **Driver Performance**

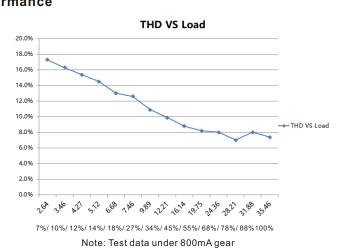


Note: Test data under 800mA gear

#### **Driver Performance**



# Driver Performance



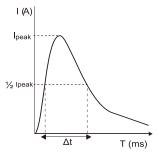
# **Expected Lifetime**

Module Number	Output current	Та	30 °C	40 °C	45 °C	•••	
SRP-2305N-36CC350-1050	350 – 1050 mA	Тс	50 °C	60 °C	66 °C	•••	85 °C
SRP-2309N-36CCT350-1050	350 – 1050 mA	Lifetime	> 100,000 h >	> 100,000 h	> 100,000	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	h Max.quantity of LED Driver per MCB														
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRP-2305N-36CC350-1050	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80
SRP-2309N-36CCT350-1050	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80



#### 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
2023-6-17	V1.3	Update CLO function	Romeo

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

# **Quick Connector Box (Optional for Order)**

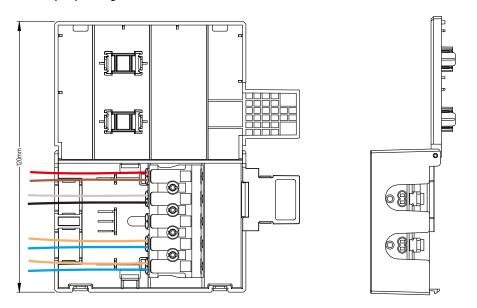
# **SRP-Loopbox-01**

Combined(Top View)

# Loop in & Loop Out design 0.5-2.5mm<sup>2</sup>(AWG 14-20) 1x DALI Loop in 1x AC Loop in 1x DALI Loop out 1x AC Loop out Combined(Side View)

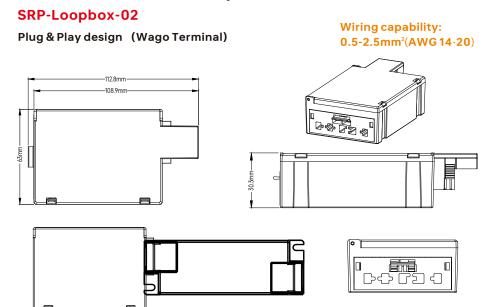
Wiring capability:

Note: Because the height of the 36W enclosure is slightly lower than that of the Loop box (Due to its own compact design), it may be necessary to add a gasket on the plane (to maintain balance), not necessarily depending on site conditions.



# **Quick Connector Box (Optional for Order)**

Combined(Top View)



Note: Because the height of the 36W enclosure is slightly lower than that of the Loop box (Due to its own compact design), it may be necessary to add a gasket on the plane (to maintain balance), not necessarily depending on site conditions.

Combined(Side View)

