

## **SUNRICHER**



Constant Current Round LED Driver with DALI-2 NFC

# Features of the: SRPY-2305N-36CC600-1200

CC Constant Current



PushDimming (VAC)





In built applications



NFC Compatible



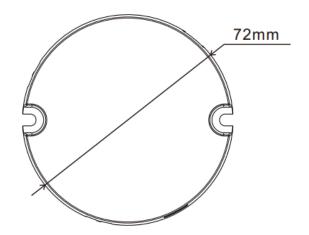
Class II Power Supply

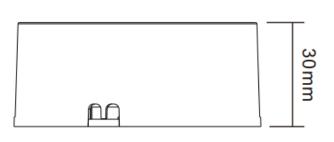


# Specification

|              |                                      | SRPY-2305N-36CC600-1200   |  |  |  |  |  |  |  |
|--------------|--------------------------------------|---|--|--|--|--|--|--|--|
|              | DC Voltage Range                     | 20 ~ 42V  |  |  |  |  |  |  |  |
| Outout       | Rated current                        | 600-1200mA via NFC tool; Min.current gear lower to 0.1mA, default 900mA |  |  |  |  |  |  |  |
| Output       | Current Accuracy                     | ±3% (±%@Certain full load) @ full load                                  |  |  |  |  |  |  |  |
|              | Rated power                          | 36W   |  |  |  |  |  |  |  |
| Input        | Voltage Range                        | 220-240VAC  |  |  |  |  |  |  |  |
|              | Frequency range                      | 50/60Hz   |  |  |  |  |  |  |  |
|              | Power Factor (Typ.)                  | > 0.98@230VAC Full load   |  |  |  |  |  |  |  |
|              | Total Harmonic Distortion            | THD ≤ 7% (@ full load / 230VAC)   |  |  |  |  |  |  |  |
|              | Efficiency (Typ.)                    | >86% @ 230VAC full load   |  |  |  |  |  |  |  |
|              | AC Current (Max)                     | 0.3A @ 230VAC   |  |  |  |  |  |  |  |
|              | Inrush Current (Typ.)                | Max. 10.46A at 230VAC; 189µs duration                                   |  |  |  |  |  |  |  |
|              | Leakage current                      | < 5mA/230VAC  |  |  |  |  |  |  |  |
|              | Standby Power Consumption            | <0.5W   |  |  |  |  |  |  |  |
|              | Anti Surge                           | L-N: 2KV  |  |  |  |  |  |  |  |
| Control      | Dimming Interface                    | DALI Device Type 6 (DALI consumption < 2mA)/ AC Push                    |  |  |  |  |  |  |  |
|              | Dimming Range                        | 0.01%-100%@ Max current   |  |  |  |  |  |  |  |
|              | Dimming Method                       | Amplitude/CCR dimming   |  |  |  |  |  |  |  |
|              | Dimming Curve                        | Linear/Logarithmic optional   |  |  |  |  |  |  |  |
|              | Short Circuit                        | Yes, recovers automatically after fault condition is removed            |  |  |  |  |  |  |  |
| Protection   | 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   |  |  |  |  |  |  |  |
| Safety & EMC | Withstand voltage                    | I/P-O/P: 3.75KVAC   |  |  |  |  |  |  |  |
|              | Isolation resistance                 | I/P-O/P: 100MΩ/500VDC/25°C/70% RH                                       |  |  |  |  |  |  |  |
|              | EMC emissions                        | EN55015, EN61000-3-2, EN61000-3-3                                       |  |  |  |  |  |  |  |
|              | EMC Immunity                         | EN61547, EN61000-4-2,3,4,5,6,8,11                                       |  |  |  |  |  |  |  |
| Others       | Size                                 | φ72*30 (D*H)  |  |  |  |  |  |  |  |
|              | Weight                               | 0.20kgs   |  |  |  |  |  |  |  |
|              | Warranty                             | 5 Years   |  |  |  |  |  |  |  |
| Notes        | 1. DO NOT install with power applied | to the device.  |  |  |  |  |  |  |  |
| 110103       | 2. DO NOT expose the device to moi   | sture.  |  |  |  |  |  |  |  |

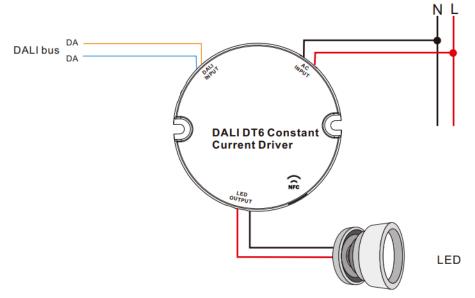
# **Mechanical Specification**



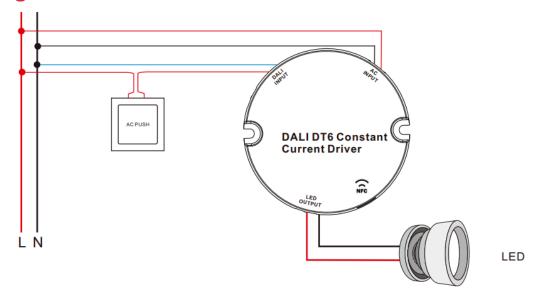


## Wiring Diagrams & Dimming

## DALI



# **Push Dimming**



# Operation

#### With DALI Master:

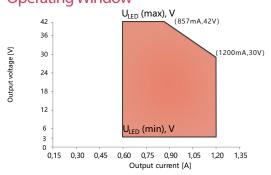
- 1. DALI Address
- 1 DALI address for 1 channel output are assigned by DALI Master controller automatically, please refer to user manuals of compatible DALI Masters for specific operations

#### With NFC Programming Devices:

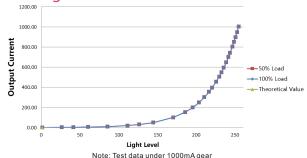
- 1. Do wiring according to the wiring diagram and power on the DALI system
- 2. Recommend setting parameters without power-on the DALI devices
- 3. Please make sure your mobile phone has NFC function and enable it

## Wiring Diagrams & Dimming

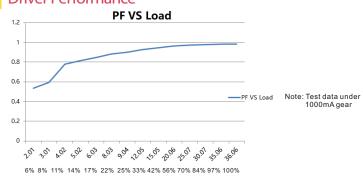
## **Operating Window**



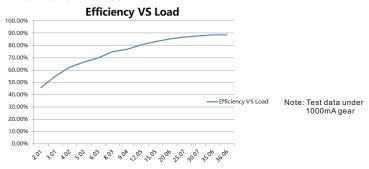
#### **Dimming Curve**



### Driver Performance

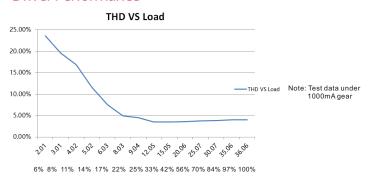


#### **Driver Performance**



6% 8% 11% 14% 17% 22% 25% 33% 42% 56% 70% 84% 97% 100%

#### **Driver Performance**



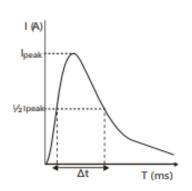
#### **Expected Lifetime**

| Module Number            | Output current | Та       | 30 °C       | 40 °C      | 45 °C      | ••• | 60 °C      |
|--------------------------|----------------|----------|-------------|------------|------------|-----|------------|
| SRPY-2305N-36CC60-1200   | 600 – 1200 mA  | Тс       | 53 °C       | 65 °C      | 72 °C      | ••• | 90 °C      |
| SRPY-2309N-36CCT600-1200 | 600 – 1200 mA  | Lifetime | > 100,000 h | > 80,000 h | > 60,000 h | 1   | > 30,000 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 Quality

| Module Number            | lpeak | Twidth | Max.quantity of LED Driver per MCB |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------------------|-------|--------|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                          |       |        | B10                                | B13 | B16 | B20 | B25 | C10 | C13 | C16 | C20 | C25 | D10 | D13 | D16 | D20 | D25 |
| SRPY-2305N-36CC600-1200  | 7.56A | 32µs   | 30                                 | 39  | 48  | 60  | 75  | 35  | 46  | 56  | 70  | 88  | 40  | 52  | 64  | 80  | 100 |
| SRPY-2309N-36CCT600-1200 | 7.56A | 32µs   | 30                                 | 39  | 48  | 60  | 75  | 35  | 46  | 56  | 70  | 88  | 40  | 52  | 64  | 80  | 100 |

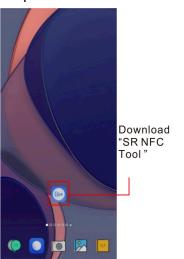


#### Note:

- 1. Those MCB parameters are based on ABB S200 series circuit breakers.
- 2. For different brands and models of miniature circuit breakers, the quantity of drivers will have difference.
- 3. 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

# Operation - Working with 'SR NFC Tool' App

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



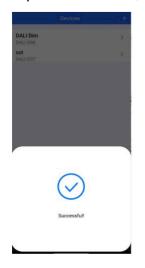


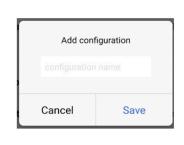


#### Note:

- Please make sure that you have enabled NFC function with your mobile phone/ tablet.
- Please make sure that the "NFC position" is matched.
- Please do not power on the device before setting.
- Please If you can't download "SR NFC Tool". Please contact with us
- Please refer to QR code below

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



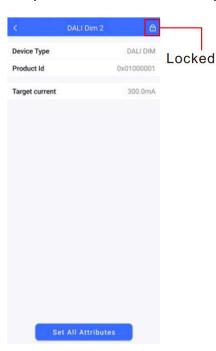


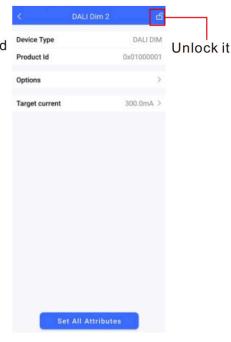


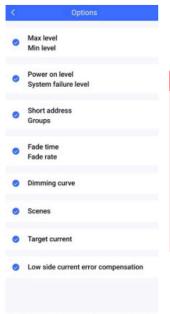
**Apple QR Code:** 



Step 3: Unlock device, enter parameters configuring page.





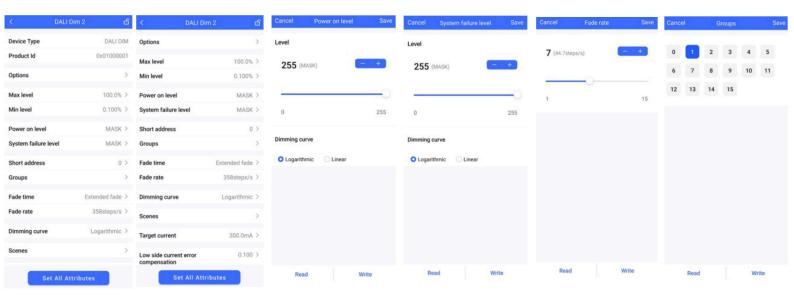


#### Notes:

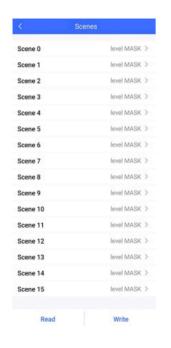
- You have to unlock the device then do some settings
- Only when the corresponding function is selected, the function interface will be displayed.

# Operation

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







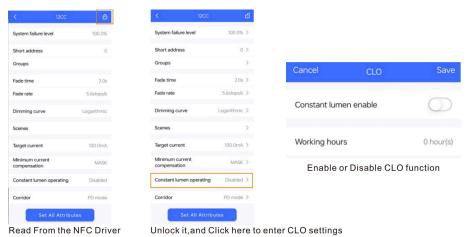


#### Notes:

- 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

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



Step 2: Enter CLO Setting homepage







Note:

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

Enable CLO function

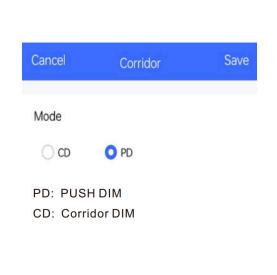
Click "1", and set its time and level

Set your desired time and levels.
Graphic display

#### Step 3: Corridor dim(CD) function







Read From the NFC Driver

Unlock it, and Click here to enter Corridor mode

# Operation

## Step 4: Enter CD Setting homepage







#### Notes:

- You should select either CD mode or PD mode, but not both.
- Under CD mode, you can realize it with normal (3rd party) AC sensor.

# **Additional Information**



- 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 / CD functions