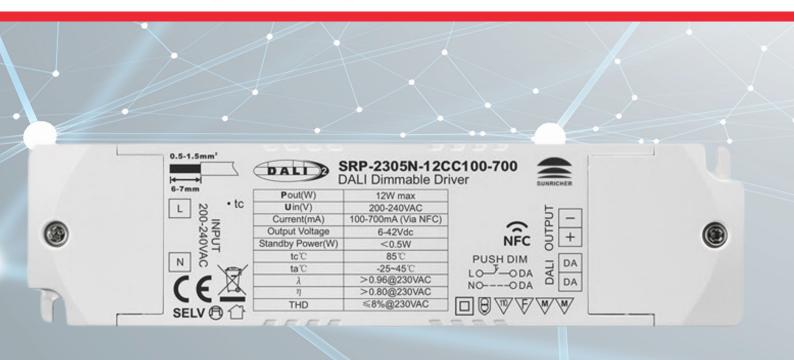


SUNRICHER



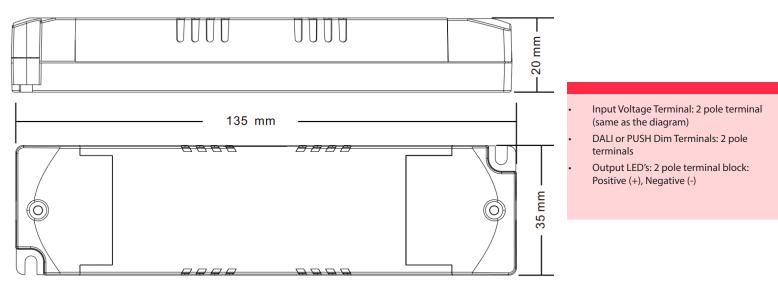
12W Compact Constant Current LED Driver with DALI-2 NFC



Specification

| | | SRP-2305N-12CC100-700 |
|----------------|---|--|
| | DC Voltage Range | 6~42V |
| 0.1.1 | Rated current | 100-700mA via NFC setting; Min.current gear lower to 0.1mA |
| Output | Current Accuracy | ±3%(±1%@Certain full load) @ full load |
| | Rated power | 12W |
| | Voltage Range | 220-240VAC |
| | Frequency range | 50/60Hz |
| | Power Factor (Typ.) | > 0.96@230VAC Full load |
| | Total Harmonic Distortion | THD ≤ 8% (@ full load / 230VAC) |
| Input | Efficiency (Typ.) | >80% @ 230VAC full load |
| 1 | AC Current (Max) | 0.1A @ 230VAC |
| | Inrush Current (Typ.) | Max. 3.96A at 230VAC; 90µs duration |
| | Leakage current | < 5mA/230VAC |
| | Standby Power Consumption | <0.5W |
| | Anti Surge | L-N: 2KV |
| | Dimming Interface | DALI Device Type 6 (DALI consumption < 2mA)/ AC Push |
| | Dimming Range | 0.01%-100%@ Max current |
| Control | 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~+45°C |
| Further was at | Max. Case Temp | TC=85°C (Ta="45°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: 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 |
| | Size | 135*35*20 mm (L*W*H) |
| Others | Weight | 0.15kgs |
| | Warranty | 5 Years |
| Notes | 1. DO NOT install with power applied 2. DO NOT expose the device to mois | |

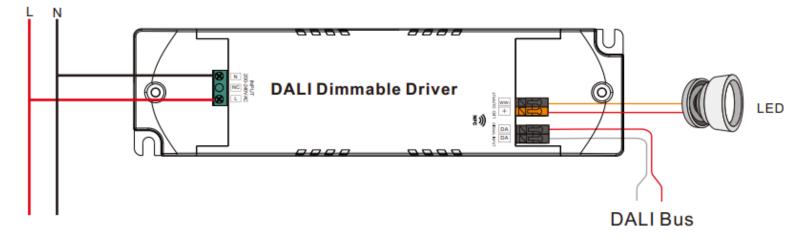
Mechanical Specification



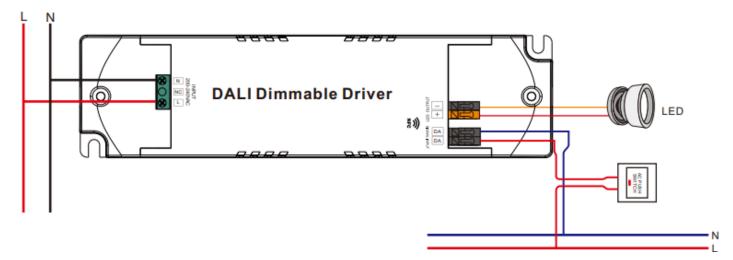
Document name: SRP-2305N-12CC100-700 Data Sheet 14-10-2024

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

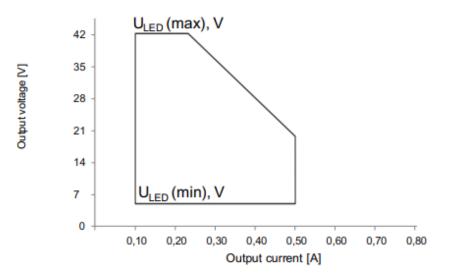
With NFC Programming Devices:

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
- 3. Please make sure your mobile phone has NFC function and enable it

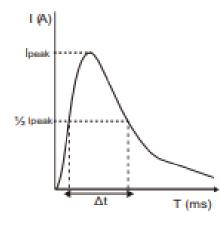
Wiring Diagrams & Dimming

Operating Window



MCB Load Quality

| Module Number | lpeak | Twidth | | | | Max | .qua | ntity | of L | ED D | river | per | мсв | l | | | |
|------------------------|-------|--------|-----|-----|-----|-----|------|-------|------|------|-------|-----|-----|-----|-----|-----|-----|
| | | | B10 | B13 | B16 | B20 | B25 | C10 | C13 | C16 | C20 | C25 | D10 | D13 | D16 | D20 | D25 |
| SRP-2305N-10CC100-500 | 4.32A | 80µs | 34 | 45 | 55 | 69 | 86 | 57 | 75 | 920 | 115 | 144 | 80 | 104 | 128 | 160 | 200 |
| SRP-2309N-10CCT100-500 | 4.32A | 80µs | 34 | 45 | 55 | 69 | 86 | 57 | 75 | 92 | 115 | 144 | 80 | 104 | 128 | 160 | 200 |



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.

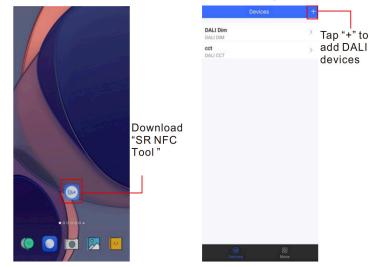
3. Please do not exceed the above-mentioned quantity during on-site installation, and the specific load quantity shall be subject to on-site installation.

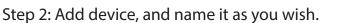
4. When the installation environment temperature of MCBs exceeds 30°C or when multiple MCBs are installed side by side, the number of mounted drives will be reduced, which requires recalculation.

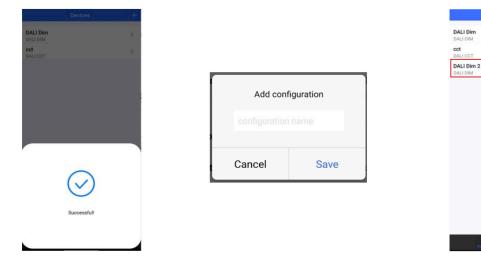
5.Type C MCB's are strongly recommended to use with LED lighting

Operation - Working with 'SR NFC Tool' App

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







Step 3: Unlock device, enter parameters configuring page.

| < | DALI Dim 2 | 3 | < | DALI Dim 2 | đ | | < | Options |
|----------------|------------------|--------|----------------|------------------|------------|---------------|---|--|
| Device Type | DALI DI | Locked | Device Type | | DALI DIM | Unlock it | • | Max level Min level |
| Product Id | 0x010000 | 1 | Product Id | | 0x01000001 | OTHOCK IL | | Will level |
| Target current | 300.0m | A | Options | | > | | 0 | Power on level System failure level |
| | | | Target current | | 300.0mA > | | 0 | Short address Groups |
| | | | | | | | • | Fade time Fade rate |
| | | | | | | | 0 | Dimming curve |
| | | | | | | | • | Scenes |
| | | | | | | | 0 | Target current |
| | | | | | | | • | Low side current error compensation |
| _ | | | | | | | | |
| Set | t All Attributes | | Se | et All Attribute | s | | | Unselect All Select All |
| | | | | | | | | |

Note:

Ready to Read

Cancel

rice with the back of the mobil

- 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
- 5. Please refer to QR code below





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.

| < | DALI Dim 2 🗗 | < DALI Dim | 2 🗗 | Cancel | Power on level | Save | Cancel | System failure level | Save | Cancel Fa | de rate | Save | Cancel | 15 | Gr | oups | s | ave |
|------------------|-------------------|--|-----------------|-------------------------------|----------------|---------|------------|----------------------|------|-----------------|---------|------|--------|------|----|------|-------|-----|
| Device Type | DALI DIM | Options | > | Level | | | Level | | | | _ | _ | | _ | | | | |
| Product Id | 0x01000001 | Max level | 100.0% > | 255 (MA | sk) | - 1 - + | 255 (M | | + | 7 (44.7steps/s) | - | + | 0 | 1 | 2 | 3 | 4 5 | |
| Options | > | Min level | 0.100% > | 200 (| | | 233 (14 | (ASN) | | <u> </u> | | | 6 | 7 | 8 | 9 | 10 11 | |
| Max level | 100.0% > | Power on level | MASK > | _ | | -0 | | | -0 | 1 | | 15 | 12 | 13 | 14 | 15 | | |
| Min level | 0.100% > | System failure level | MASK > | 0 | | 255 | 0 | | 255 | | | | | | | | | |
| Power on level | MASK > | Short address | 0 > | | | | | | | | | | | | | | | |
| System failure I | level MASK > | Groups | > | Dimming curv | re | | Dimming cu | rve | | | | | | | | | | |
| Short address | 0 > | Fade time | Extended fade > | Logarithm | ic 🔿 Linear | | O Logarith | mic 🔿 Linear | | | | | | | | | | |
| Groups | > | Fade rate | 358steps/s > | | | | | | | | | | | | | | | |
| Fade time | Extended fade > | Dimming curve | Logarithmic > | | | | | | | | | | | | | | | |
| Fade rate | 358steps/s > | Scenes | > | | | | | | | | | | | | | | | |
| Dimming curve | Logarithmic > | Target current | 300.0mA > | | | | | | | | | | | | | | | |
| Scenes | > | Low side current error compensation | 0.100 > | | | | | | | | | | | | | | | |
| Se | et All Attributes | Set All Attri | butes | Read | w | rite | Rea | d Wr | rite | Read | Write | | | Read | | | Write | |

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

| | Scenes | Cancel | Target current | Save | < DALI | Dim 2 ත් | < |
|-------|--------------|-------------|----------------|--------------------|----------------------|------------------------------|------------------|
| ne O | level MASK > | | | | Options | × | Options |
| ne 1 | level MASK > | 3000 | | 300.0mA 1=0.1mA | Max level | 100.0% > | Max level |
| ne 2 | level MASK > | Value range | 1000-50000 | | Min level | 0.100% > | Min level |
| e 3 | level MASK > | | | | | | |
| e 4 | level MASK > | | | | Power on level | MASK > | Power on level |
| e 5 | level MASK > | | | | System failure level | MASK > | System failure l |
| ne 6 | level MASK > | | | | Short address | 0 > | Short address |
| 7 | level MASK > | | | | Groups | > | Groups |
| e 8 | level MASK > | | | | Fade time | 5.7s > | Fade time |
| 9 | level MASK > | | | | | | Tode time |
| 10 | level MASK > | | | | Ready | to Write | |
| 11 | level MASK > | | | | 6 | | |
| e 12 | level MASK > | | | | (| | |
| 13 | level MASK > | | | | | | |
| e 14 | level MASK > | | | | | the back of the mobile vice. | |
| ne 15 | level MASK > | | | | der | nue. | |
| | | | | | Car | ncel | |
| Read | Write | Rea | ad | Write | | | • |

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

System f Short ad Groups Fade tim

larget c

| | 6 | · < 1 | 2CC E | 5 |
|---------------------|-------------|------------------------------|----------------|--------------------------------|
| ilure level | 100.0% | System failure level | 100.0% | |
| tress | o | Short address | 0 3 | > |
| | | Groups | | Cancel CLO |
| | 2.0s | Fade time | 2.0s 2 | CEO |
| | 5.6steps/s | Fade rate | 5.6steps/s | |
| curve | Logarithmic | Dimming curve | Logarithmic | Constant lumen enable |
| | | Scenes | | |
| rrent | 100.0mA | Target current | 100.0mA 3 | Working hours 0 ho |
| current ation | MASK | Minimum current compensation | MASK 3 | Enable or Disable CLO functior |
| lumen operating | Disabled | Constant lumen oper | ating Disabled | |
| | PD mode | Corridor | PD mode 3 | 5 |
| Cot All Attailuitos | | Set All | Attributor | |

Read From the NFC Driver

Unlock it, and Click here to enter CLO settings

Step 2: Enter CLO Setting homepage

| Preview | | | |
|------------------|--------------|--------------|--------------|
| Sutput Level (%) | | | |
| 00 | | | |
| 80 | | | |
| 60 | Invi | | |
| 40 | Invi | 51id | |
| 20 | | | |
| 0 | | | |
| | | | |
| | Operating | Time (kh0 | |
| Times and L | 2 Invalid | 3 Invalid | 4 Invalid |
| 5 | 6 | 7 | 8 |
| Invalid | Invalid | Invalid | Invalid |
| Working ho | urs | | 0 hour(s) |
| Read | 1 E | w | /rite |

| Cancel | 1 | Done |
|-------------------|----|------|
| Time | | |
| 10 | kh | |
| Value range 1-100 | | |
| Level | | |
| 75 | % | |
| Value range 1-100 | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Enable CLO function

Click "1", and set its time and level

System failure level

Short address Groups

Fade time

Fade rate

Scenes

Dimming curve

Target current

Minimum current

Constant lumen operating

compensation

Corridor



Note:

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

Set your desired time and levels. Graphic display

100.0% >

0 >

2.0s >

5.6steps/s >

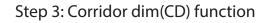
Logarithmic >

100.0mA >

MASK >

Disabled >

PD mode >



| System failure level | 100.0% |
|---------------------------------|-------------|
| Short address | 0 |
| Groups | |
| Fade time | 2.0s |
| Fade rate | 5.6steps/s |
| Dimming curve | Logarithmic |
| Scenes | |
| Target current | 100.0mA |
| Minimum current compensation | MASK |
| Constant lumen operating | Disabled |
| Corridor | PD mode |



Unlock it, and Click here to enter Corridor mode

Cancel

Mode

O CD

PD: PUSH DIM

CD: Corridor DIM

Corridor

O PD

Save

Operation

Step 4: Enter CD Setting homepage

| Cancel Corridor Save | Cancel Corridor | Save | Cancel Corr |
|--|----------------------|------|--------------------------------------|
| de | Occupied time | | Prolonged time |
| CD OPD | 120 s | ; | 60 |
| view | Value range 0-60,000 | | Value range 0-60,000 |
| | Occupied level | |) Infinite |
| | 100 9 | 6 | |
| Fade in Occupied Fade out Prolonged Dim to off | Value range 0-100 | | Prolonged level |
| | Fade out time | | 20 |
| | 1000 000 000 | | |
| le in time | 5 5 | | Value range 0-100 |
| | | i . | Value range 0-100 Dim to off time |
| 5 s | 5 Value range 0-100 | | |
| s s s s s s s s s s s s s s s s s s s | 5 5 | | Dim to off time |

Notes:

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

Additional Information



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