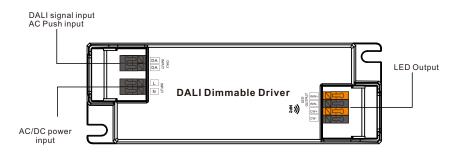
10W DALI DT8 NFC Enabled LED Driver(Constant Current)

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 | 200-240VAC/200-240VDC |
| | Absolute Voltage Range | 176-264VAC/176-280VDC |
| | Frequency Range | 0/50/60Hz |
| | Power Factor (Typ.) | > 0.94 @ 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. 4.32A at 230VAC; 80µs 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℃ |
| F acility and the | Max. Case Temp. | Tc=85°C |
| Environment | Working Humidity | 10% ~ 95% RH non-condensing |
| | Storage Temp. & Humidity | -40℃ ~ +80℃, 10% ~ 95% RH |
| | Safety Standards | EN61347-1, EN61347-2-13 |
| | Withstand Voltage | I/P-O/P: 3.75KVAC |
| Safety & EMC | solation 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 | 191350H, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature |
| Others | Dimension | 101x36x25mm (L*W*H) |
| | Warranty | 5 Years |

• 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 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.
- Class II power supply, full isolated plastic case
- High power factor and efficiency
- To switch and dim CCT LED lighting luminaries
- Amplitude/CCR dimming, smooth and deep dimming
- Compatible with universal DALI masters that support DT8 commands
- Error report function
- 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.

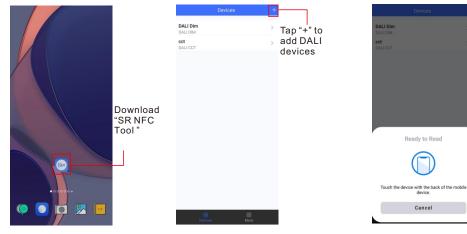
With NFC Programming devices

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.



| Add confi | guration |
|-----------|----------|
| | |
| Cancel | Save |

| DALI DIM DALI DIM cct DALI CCT | Devices | |
|---|------------------------|--|
| | | |
| | | |
| DALI Dim 2 DALI DIM | DALI Dim 2 DALI DIM | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Step 3: Unlock device, enter parameters configuring page.

| < D | ALI Dim 2 🔒 | | < | DALI Dim 2 | ර | | | < | Options | ŝ |
|----------------|---------------|--------|----------------|-------------------|------------|----------|---|---|--|--------------|
| Device Type | DALI DIM | Locked | Device Type | | DALI DIM | Unlock i | ŧ | • | Max level Min level | |
| Product Id | 0x01000001 | Looked | Product Id | | 0x01000001 | UNIOCKI | L | | Will level | |
| Target current | 300.0mA | | Options | | > | | | 0 | Power on level System failure level | |
| | | | Target current | | 300.0mA > | | | 0 | Short address Groups | |
| | | | | | | | | 0 | Fade time Fade rate | |
| | | | | | | | | 0 | Dimming curve | |
| | | | | | | | | 0 | Scenes | |
| | | | | | | | | 0 | Target current | |
| | | | | | | | | 0 | Low side current error | r compensati |
| | | | | | | | | | | |
| Set A | ll Attributes | | Se | et All Attributes | | | | | Unselect All | Select Al |

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.

| | Dim 2 🖬 |
|------------------------|-----------------|
| vice Type | DALI DIM |
| duct Id | 0x01000001 |
| ins | > |
| H | 100.0% > |
| vel | 0.100% > |
| r on level | MASK > |
| em failure level | MASK > |
| lress | 0 > |
| | > |
| e | Extended fade > |
| | 358steps/s > |
| irve | Logarithmic > |
| | > |
| Set All A System fa | |
| el | |
| 5 (MASK) | - + |
| | |
| | 0 |
| | |
| | 255 |
| ing curve | 255 |

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

| < | Scenes | Cancel Target current | Save | < DALI Dim | 2 🖆 | < DALI Dim 2 | ර |
|----------|--------------|------------------------|--------------------|-----------------------------|-------------------|----------------------|--------|
| Scene 0 | level MASK > | | | Options | > | Options | |
| Scene 1 | level MASK > | 3000 | 300.0mA 1=0.1mA | Max level | 100.0% > | Max level | |
| Scene 2 | level MASK > | Value range 1000-50000 | | Min level | 0.100% > | Min level | |
| cene 3 | level MASK > | | | D | | | |
| cene 4 | level MASK > | | | Power on level | MASK > | Power on level | MASK > |
| cene 5 | level MASK > | | | System failure level | MASK > | System failure level | |
| Scene 6 | level MASK > | | | Short address | 0 > | Short address | |
| icene 7 | level MASK > | | | Groups | > | Groups | |
| cene 8 | level MASK > | | | Fade time | 5.7s > | Fade time | |
| cene 9 | level MASK > | | | roce and | | Tade time | 5.75 7 |
| icene 10 | level MASK > | | | Ready to V | Irite | | |
| cene 11 | level MASK > | | | \sim | | \sim | |
| cene 12 | level MASK > | | | |) | (\checkmark) | |
| cene 13 | level MASK > | | | | · | \odot | |
| cene 14 | level MASK > | | | Touch the device with the b | ack of the mobile | Successfull | |
| icene 15 | level MASK > | | | device. | | Succession | |
| | | | | Cancel | | | |
| Read | Write | Read | Write | | | • | |

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 "power on CCT" 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 "power on CCT" 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

| < 12CC | â |
|------------------------------|-------------|
| 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 |
| | |
| Set All Attribu | utes |

2.Enter CLO Setting homepage

| Cancel C | _0 | Save |
|---------------------|--------------|--------------|
| view « Level (%) | | |
| | ald | |
| and Levels | Time (kh) | |
| 1 2 alid Invalid | 3 Invalid | 4 Invalid |
| 5 6 Invalid | 7 Invalid | 8 Invalid |
| ing hours | | 0 hour(s) |
| Read | w | frite |

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



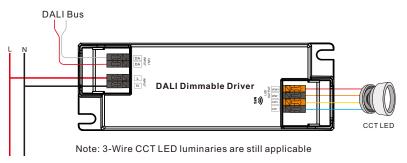
1. Please make sure your APP version is 1.0.10 or higher. 2. Please make sure NFC driver's firmware is available with **CLO functions.**

Read From the NFC Driver

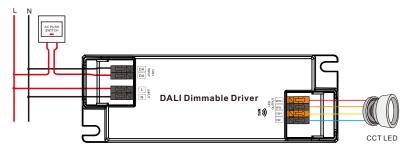
Unlock it, and Click here to enter CLO settings

Wiring Diagram

- 1. With DALI bus
- 1) With single color LED luminarie



2. With PUSH dimmer



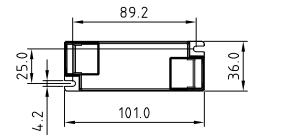
AC Push Function

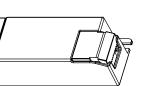
1) Click the button to switch ON/OFF

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%.

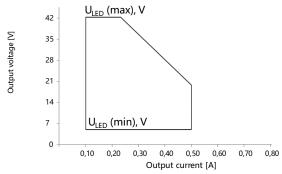
25.0

Product Dimension

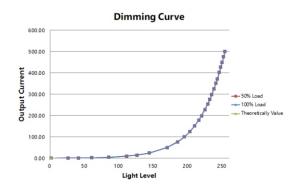




Operating window

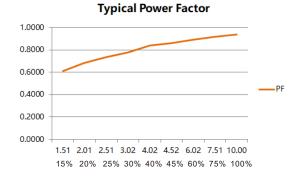




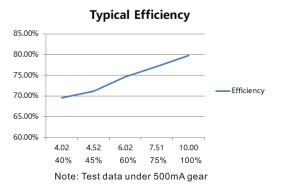


Note: Test data under 500mA gear

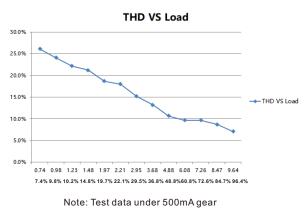
Driver Performance



Note: Test data under 500mA gear



Driver Performance



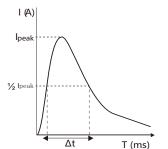
Expected Lifetime

| Module Number | Output current | Та | 30 °C | 40 °C | 45 °C | ••• | |
|------------------------|----------------|----------|---------------|-------------|-----------|-----|------------|
| SRP-2305N-10CC100-500 | 100 – 500 mA | Тс | 50 °C | 60 °C | 65 °C | ••• | 85 °C |
| SRP-2309N-10CCT100-500 | 100 – 500 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 | | | | Мах | .qua | ntity | ofL | ED D | rive | . per | мсв | | | | |
|------------------------|-------|--------|-----|-----|-----|-----|------|-------|-----|------|------|-------|-----|-----|-----|-----|-----|
| | | | 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

Update log

| Date | Version | Update content | Update by |
|-----------|---------|---------------------|-----------|
| 2023-6-17 | V1.6 | Update CLO function | Romeo |

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