80W DALI DT6 NFC Enabled LED Driver(Constant Current)



Important: Read All Instructions Prior to Installation

Function introduction



Product Data

	LED Channel	1					
	DC Voltage	50-220V					
	Current	100-550mA via NFC setting; Min.current gear lower to 0.1mA					
Output	Current Accuracy	±3%@ full load					
	Rated Power	Max. 80W					
	Voltage Range	220-240VAC/VDC					
	Frequency Range	0/50/60Hz					
	Power Factor (Typ.)	> 0.98 @ 230VAC Full load					
	Total Harmonic Distortion	THD ≤ 12% (@ full load / 230VAC)					
	Efficiency (Typ.)	> 92% @ 230VAC full load					
Input	AC Current (Typ.)	0.43A @ 230VAC					
	Inrush Current (Typ.)	Max. 23.5A at 230VAC; 350µs duration					
	Leakage Current	< 5mA/230VAC					
	Standby Power Consumption	< 0.5W					
	Anti Surge	L-N:1KV/ L-N-G: 2KV					
	Dimming Interface	DALI Device Type 6 (DALI consumption < 2mA)/ AC Push					
0 4 1	Dimming Range	0.1%-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						
Environment	Working Temp.	-25℃ ~ +60℃						
	Max. Case Temp.	Tc=90°C						
	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	245x30x21mm (L*W*H)						
	Warranty	5 Years						

- In compliance with IEC 62386-101:2014, IEC 62386-102:2014, IEC 62386-207 Ed2
- Built-in DALI-2 interface, DALI DT6 device
- Dimmable LED driver with linear metal housing. Max. output power 80W
- 100-550mA 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
- To switch and dim LED lighting luminaries
- 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 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 .
- 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.





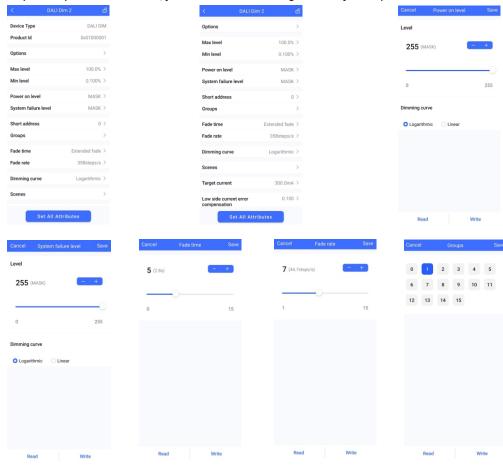


Step 3: Unlock device, enter parameters configuring page.

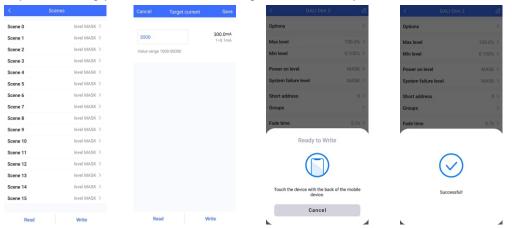


- Note: 1. You have to unlock the device then do some settings
 - 2. Only when the corresponding function is selected, the function interface will be displayed.

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.

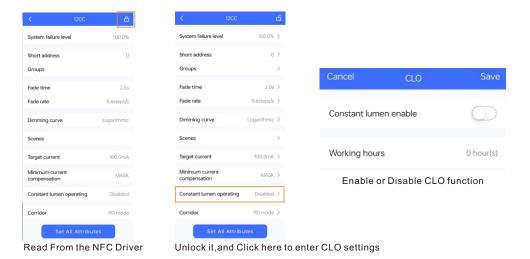


Tips

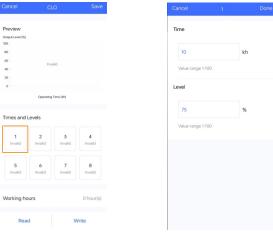
- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ gateway.

CLO AND CORRIDOR DIM(CD) FUNCTION INSTRUCTION

1. Open APP, and Find the CLO/CD functions



2.Enter CLO Setting homepage







Enable CLO function

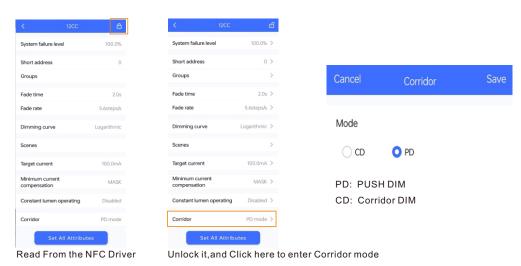
Click "1".and set its time and level

Set your desired time and levels. Graphic display

Tips:

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

3.Corridor dim(CD) function



4.Enter CD Setting homepage







Enter CD mode

Set your desired time and levels. Graphic display

Tips:

- 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.
- 3. Default mode: PD mode.

Additional Remarks



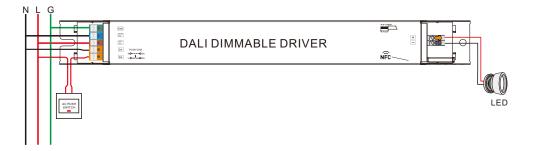
- 1. Please make sure your APP version is 1.0.10 or higher.
- 2. Please make sure NFC driver's firmware is available with CLO / CD functions.

Wiring Diagram

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



2. With PUSH dimmer

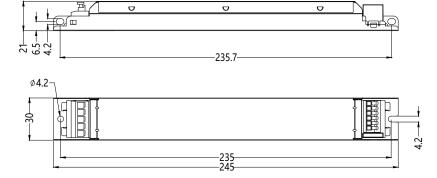


AC Push Function

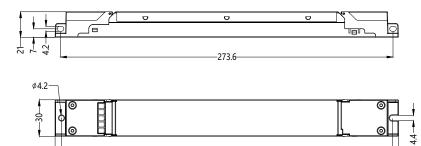
- 1) Click the button to switch ON/OFF
- 2) Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction. The dimming range is from 1% to 100%.

Product Dimension

Without End Cap



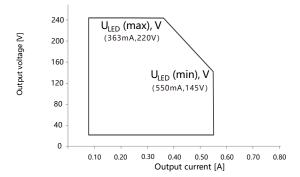
With End Cap



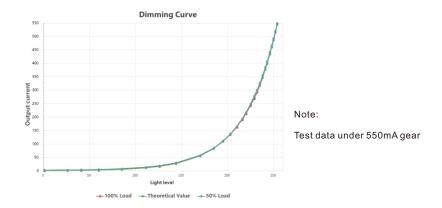
-272.2-

-282.6

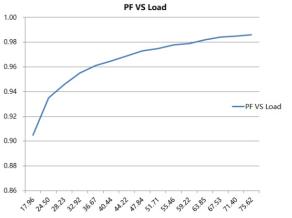
Operating window



Dimming Curve



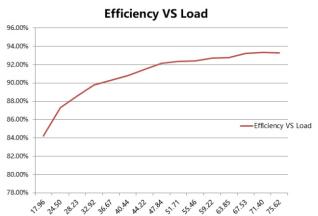
Driver Performance



Note: Test data under 350mA gear

2% / 31% / 35% /41% /46%/ 51% /55% /60%/ 65%/ 69%/ 74%/ 80% /84%/89%/ 95%

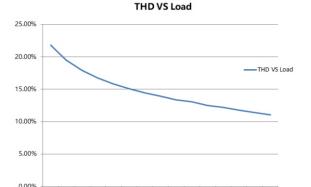
Driver Performance



Note: Test data under 350mA gear

22% / 31% / 35% /41% /46%/ 51% /55% /60%/ 65%/ 69%/ 74%/ 80% /84%/89%/ 95%

Driver Performance



Note: Test data under 350mA gear

22% / 31% / 35% /41% /46%/ 51% /55% /60%/ 65%/ 69%/ 74%/ 80% /84%/89%/ 95%

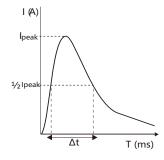
Expected Lifetime

Module Number	Output current	Та	30 °C	40 °C	45 °C	•••	60 °C
SRPL-2305N-80CC100-55	50H 100 – 550 mA	Тс	44 °C	56 °C	62 °C	•••	90 °C(max)
SRPL-2309N-80CCT100-55	50H 100 – 550 mA	Lifetime	> 100,000 h	> 100,000 h	> 80,000	h	> 26,000 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	Max.quantity of LED Driver per MCB														
SRPL-2305N-80CC100-550H	23.5A	350µs	7	9	11	14	18	12	15	19	24	30	19	24	30	37	47
SRPL-2309N-80CCT100-550H	23.5A	350µs	7	9	11	14	18	12	15	19	24	30	19	24	30	37	47



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.
- 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
2024-3-21	V1.0	Initial Version	Romeo

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