15W DALI DT6 NFC Enabled LED Driver(Constant Current)



Important: Read All Instructions Prior to Installation

Function introduction



Product Data

	LED Channel	1							
	DC Voltage	6-42V							
	Current	100-700mA via NFC tool; Min.current gear lower to 0.1mA, default 350mA							
Output	Current Accuracy	±3%(±1%@Certain full load) @ full load							
	Rated Power	Max. 15W							
	Voltage Range	200-240VAC/200-240VDC							
	Absolute Voltage Range	176-264VAC/176-280VDC							
	Frequency Range	0/50/60Hz							
	Power Factor (Typ.)	> 0.97 @ 230VAC Full load							
	Total Harmonic Distortion	THD ≤ 10% (@ full load / 230VAC)							
Input	Efficiency (Typ.)	> 81% @ 230VAC full load							
	AC Current (Typ.)	0.1A @ 230VAC							
	Inrush Current (Typ.)	Max. 3.96A at 230VAC; 80µs 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							
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	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						
	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						
	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	135x35x20mm (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. Max. output power 15W
- 100-700mA current selectable via NFC program tool. Min.current gear lower to 0.1mA
- DALI Address/Group/Scene setting via NFC program tool.
- ullet Class ${\ensuremath{\mathbb{I}}}$ power supply, full isolated plastic case
- High power factor and efficiency
- To switch and dim LED lighting luminaries
- Amplitude/CCR dimming, smooth and deep dimming
- Compatible with universal DALI masters that support DT6 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 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.





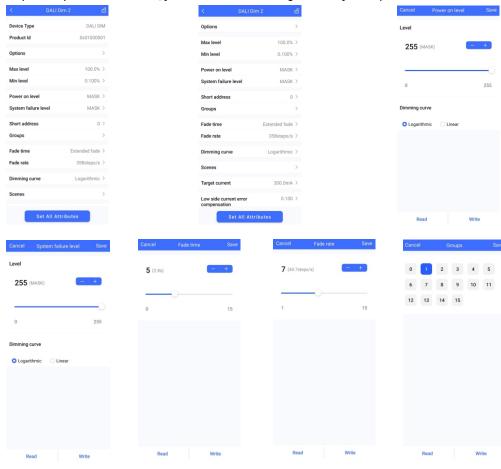


Step 3: Unlock device, enter parameters configuring page.

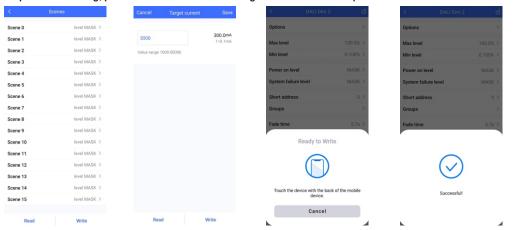


- Note: 1. You have to unlock the device then do some settings
 - 2. Only when the corresponding function is selected, the function interface will be displayed.

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.

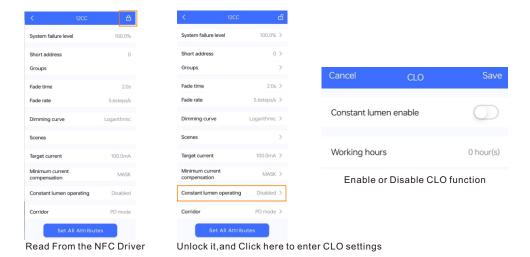


Tips

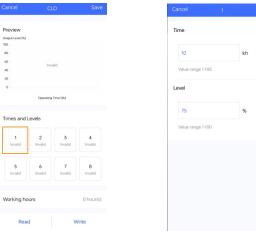
- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ gateway.

CLO AND CORRIDOR DIM(CD) FUNCTION INSTRUCTION

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



2.Enter CLO Setting homepage







Enable CLO function

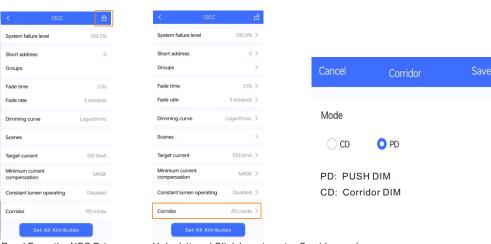
Click "1".and set its time and level

Set your desired time and levels. Graphic display

Tips:

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

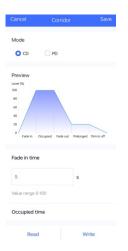
3.Corridor dim(CD) function



Read From the NFC Driver

Unlock it, and Click here to enter Corridor mode

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



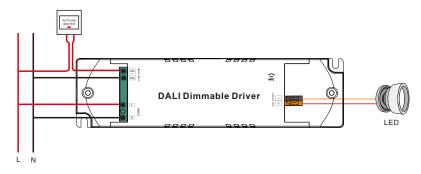
- 1. Please make sure your APP version is 1.0.10 or higher.
- 2. Please make sure NFC driver's firmware is available with ${\tt CLO\,/\,CD\,functions}.$

Wiring Diagram

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

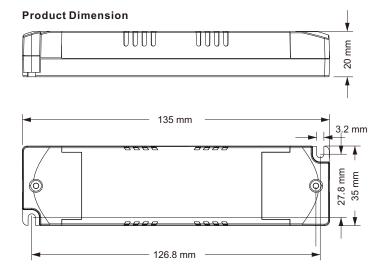


2. With PUSH dimmer

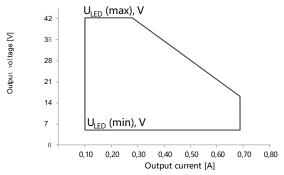


AC Push Function

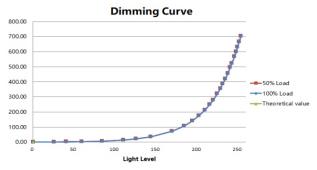
- 1) Click the button to switch ON/OFF
- 2) Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction. The dimming range is from 1% to 100%.



Operating window



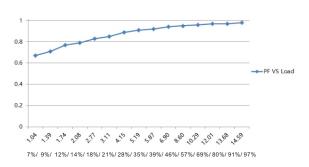
Dimming Curve



Note: Test data under 700mA gear

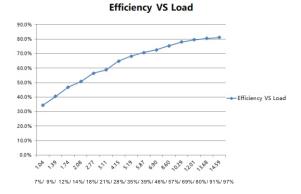
Driver Performance

PF VS Load



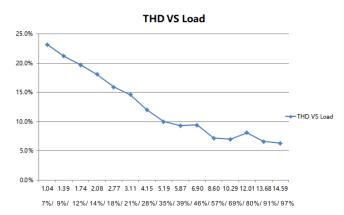
Note: Test data under 700mA gear

Driver Performance



Note: Test data under 700mA gear

Driver Performance



Note: Test data under 700mA gear

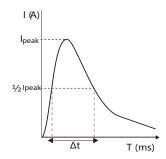
Expected Lifetime

Module Number	Output current	Та	30 °C	40 °C	45 °C	•••	
SRP-2305N-15CC100-700	100 – 700 mA	Тс	50 °C	60 °C	70 °C	•••	85 °C
SRP-2309N-15CCT100-700	100 – 700 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 Ipeak Twidth		Max.quantity of LED Driver per MCB B10 B13 B16 B20 B25 C10 C13 C16 C20 C25 D10 D13 D16 D20 D25															
SRP-2305N-15CC100-700	3.96A	90µs	37	49	60	75	94	63	81	100	125	156	80	104	128	160	200
SRP-2309N-15CCT100-700	3.96A	90µs	37	49	60	75	94	63	81	100	125	156	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.
- 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		
2023-6-17	V1.6	Update CLO/CD function	Romeo		

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