# 45W DALI DT8 NFC LED Driver (Constant Current) VALO-DRIVER-DALI-45W-CCT-mA

Important: Read All Instructions Prior to Installation

## **Function introduction**



# **Product Data**

	LED Channel	2					
Output	DC Voltage	6-54V					
	Current	500-1400mA via NFC setting; Min.current gear lower to 0.1mA					
	Current Accuracy	±3%( ±1%@Certain full load) @ full load					
	Rated Power	Max. 45W					
	Voltage Range	200-240VAC/176-280VDC					
Input	Frequency Range	0/50/60Hz					
	Power Factor (Typ.)	> 0.95 @ 230VAC Full load					
	Total Harmonic Distortion	THD $\leq$ 10% (@ full load / 230VAC)					
	Efficiency (Typ.)	> 89% @ 230VAC full load					
	AC Current (Typ.)	0.25A @ 230VAC					
	Inrush Current (Typ.)	Max. 8.56A at 230VAC; 88µs 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					
	Dimming Range	0.01%-100%@ Max current					
Control	Dimming Method	Amplitude/CCR dimming					
	Dimming Curve	Linear/ Logarithmic optional					

	Short Circuit							
	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						
O	)ver Temperature	Yes, remove the fault conditions and re-power the device						
	Working Temp.	-25°C ~ +45°C						
	Max. Case Temp.	TC=85°C (Ta="45°C")						
Environment V	Vorking Humidity	10% ~ 95% RH non-condensing						
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH						
S	Safety Standards	EN61347-1, EN61347-2-13						
W	Vithstand Voltage	I/P-O/P: 3.75KVAC						
Safety & Iso EMC	plation 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	145x45x28mm (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 45W
- 500-1400mA 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
- ON/OFF, Dimming and Tunable White control
- Amplitude/CCR dimming, smooth and deep dimming
- Compatible with universal DALI masters that support DT8 commands
- Error report function

LED

- 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.

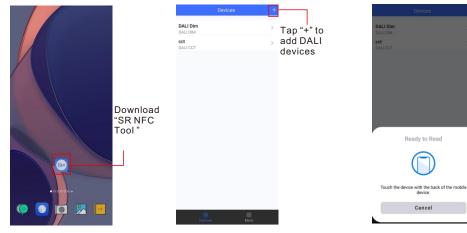
With NFC Programming devices

## 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	iguration
Cancel	Save

DALI Dim DALI DIM oct DALI CCT
DALI Dim 2 DALI DIM

#### Step 3: Unlock device, enter parameters configuring page.

<	DALI Dim 2		<	DALI Dim 2	ර			<	
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			Target current		300.0mA >			•	Short address Groups
								•	Fade time Fade rate
								0	Dimming curve
								0	Scenes
								0	Target current
									Low side curre
Se	t All Attributes		Se	et All Attributes					Unselect All

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.

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

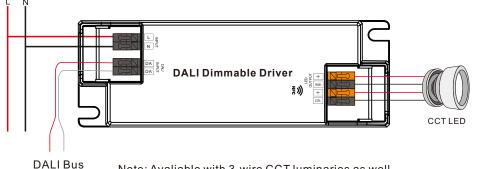


## Tips

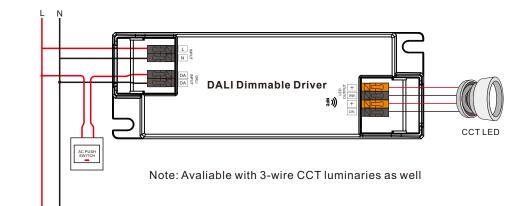
- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ DALI IoT gateway.
- 4. This is a 2-channel output product, so we recommend ensuring that 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.

# **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

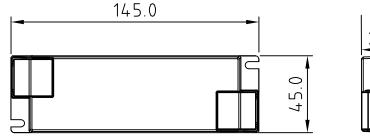
2) Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation

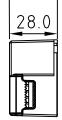
to adjust light intensity to opposite direction. The dimming range is from 1% to 100%.

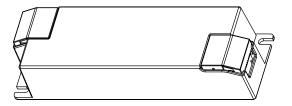
3) Double click the button to switch between brightness mode and color temperature mode.

4) Press and hold down the button to change color temperature under color temperature mode.

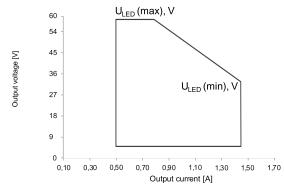
## **Product Dimension**



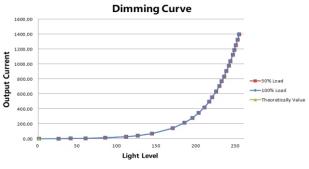




# **Operating window**







Note: Test data under 1400mA gear

# **Driver Performance**





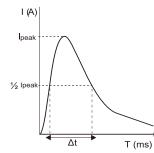
**Driver Performance** 



Note: Test data under 1400mA gear

# **MCB Load Quantity**

Module Number	Ipeak	Twidth				Max	.qua	ntity	ofL	ED D	river	. per	мсв				
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRP-2305N-45CC500-1400	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80
SRP-2309N-45CCT500-1400	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80



## 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

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