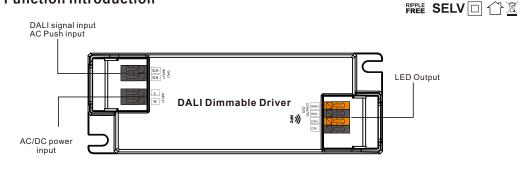
# 10W DALI DT8 NFC LED Driver (Constant Current) VALO-DRIVER-DALI-10W-CCT-mA

Important: Read All Instructions Prior to Installation

## **Function introduction**



# **Product Data**

	LED Channel	2						
	DC Voltage	3-42V						
	Current	100-500mA via NFC setting; Min.current gear lower to 0.1mA						
Output	Current Accuracy	±3%( ±1%@Certain full load) @ full load						
	Rated Power	Max. 10W						
	Voltage Range	200-240VAC/176-280VDC						
Input	Frequency Range	0/50/60Hz						
	Power Factor (Typ.)	> 0.94 @ 230VAC Full load						
	Total Harmonic Distortion	THD ≤ 15% (@ full load / 230VAC)						
	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						

Protection	Short Circuit	Yes, remove the fault conditions and re-power the device
	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°C ~ +45°C
<b>F</b> acility and the	Max. Case Temp.	TC=85℃ (Ta="45℃")
Environment	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH
Safety & EMC	Safety Standards	EN61347-1, EN61347-2-13
	Withstand Voltage	I/P-O/P: 3.75KVAC
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25℃ / 70% RH
	EMC Emission	En55015, EN61000-3-2, EN61000-3-3
	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	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

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.

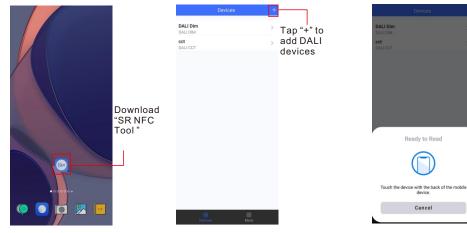
With NFC Programming devices

#### 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			<	
Device Type	DALI DIM	Locked	Device Type		DALI DIM	Unloc	:k it	0	Max level Min level
roduct Id	0x01000001		Product Id		0x01000001	0			Power on level
arget current	300.0mA		Options		>			0	System failure
			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

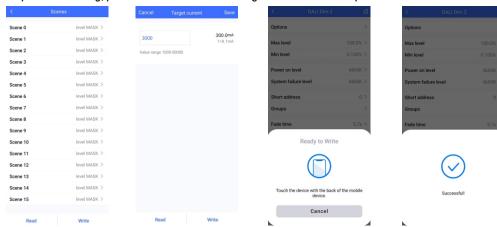
Note: 1. You have to unlock the device then do some settings

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.

duct Id  0x0100001    ons  >    isered  100.0%, >    level  0.10%, >    level  0.10%, >    level  0.10%, >    started  MASK >    system failure level  MASK >    rt address  0 >    rt address  0 >    reite  Extended fade >    reite  358stepu% >    ming curve  Logarithmic >    reite  Stort All Attributes      cor System failure level  Sive    o  15      ning curve  100.0% >	DALI	Dim 2 🖬
idevel 0,00% > level 0,00% > Power on level MASK > System failure level MASK > faddress 0,0 > rated dates 0,0 > rated dates 0,0 > rated dates 0,0 > rate dates 0,0 >	ice Type	DALI DIM
ns > evel 100.0% > svel 0.100% > svel 0.100% > ron level MASK > nn falure level MASK > nn falure level MASK > address 0 > ss 0 > ss 0 > srate 335istepu's > intre Extended fade > rate 335istepu's > intre curvent 200.0mA > ses 0 > Secenes 0 > Target current 300.0mA > Compiled current 300.0mA > Compiled current 300.0mA > Compiled current 300.0mA > Compiled current 300.0mA > Secenes 0 >	uct Id	0x01000001
level  0.100% >    er on level  MASK >    er on level  MASK >    sen failure level  MASK >    rt address  0 >    ups  >    re ne  358stsps/s >    ming curve  Logarithmic >    cet All Attributes  0    et  5 (2.81)    et  5 (2.81)    ming curve  15	tions	>
evel  0.100% >    ro n level  MASK >    m failure level  MASK >    taddress  0 >    ps  >    trime  Extended fade >    rate  358teps/s >    ning curve  Logarithmic >    Est All Attributes  Stere    Logarithmic >  Scenes    Statistic failure level  Save    Logarithmic >  Cancel    Fade time  Scenes    Statistic failure level  Save    Logarithmic >  Scenes    Statistic failure level  Save    Statistic failure level  Save    Statistic failure level  Save    0  15	level	100.0% >
een failure level MASK > rt address 0 > pps 2 > e time Extended fade > re rite 3384spp/s > ming curve Logarithmic > re rite 3384spp/s > MASK > Fade time Extended fade > Fade rate 3584spp/s > Dimming curve Logarithmic > Scenes > Composition 1 Set All Attributes eet System failure level Save Cancel Fade time Save Cancel 5 (2.5e) + 7 (4.7 step/s 0 15 1 255 ming curve	n level	
een failure level MASK > rt address 0 > pre 0 > re itime Extended fade > Fade rate 338steps/s > Dimming curve Logarithmic > Secrets > Composition Set All Attributes eet System failure level Save o 15 1 255 ming curve	wer on level	MASK >
upp  >    e time  Extended fade >    e time  Stateps/s >    ming curve  Logarithmic >    set  All Attributes      eet  System failure level    Save  Cancel    Fade table  Cancel    Stateps/s >  Dimming curve    Logarithmic >  Series    Set All Attributes  Save    eet  System failure level    Save  Cancel    5 (2.8a)  -    0  15    255  (MASK)	stem failure level	
upps    >      e time    Extended fade >      e time    Extended fade >      inning curve    Logarithmic >      scenes    >      insig curve    Logarithmic >      Scenes    >      Target current    300.0mA >      Logarithmic >       Set All Attributes    Set All Attributes      ed    System failure level    Sive      o    15    1      255    (MASK)    -    1      255    (MASK)    -    1	ort address	0 >
e rete 358steps/s > ming curve Logarithmic > nes Set All Attributes eet System failure level Save et System failure level Save o 15 255 ming curve ming curve transpector Secrets Secre	oups	
e rate 358steps/s > ming curve Logarithmic > res > Set All Attributes cet System failure level Save Cancel Fade time Save Cancel Fade st All Attributes Cancel Fade time Save Cancel Fade 5 (2.8s) - * 7 (44.7steps/s) 0 15 1 265 ming curve	de time	Extended fade >
ming curve  Logarithmic >    nes  >    Set All Attributes  Cancel Fade time    cel  System failure level    cel  Signame	de rate	
nes Set All Attributes Cancel Fade time Save Cancel Fade time Cancel Fade time Save Cancel Fade time Save Cancel Fade time Cancel Fade time Save Cancel Fade time Cancel Fade time	imming curve	Logarithmic >
Set All Attributes  Cancel  Fade time  Save  Cancel  Fade time    cel  System failure level  Save  Cancel  Fade time  Save    cel  5 (2.8s)  -+  7 (44.7 steps/s)		Logonomic ,
Set All Attributes      Set All Attributes        cel      System failure level      Save      Cancel      Fade time      Save	cenes	,
cel  System failure level  Save  Cancel  Fade time  Save  Cancel  Fade rate    el  5 (2.8a)  - +  7 (44.7xteps/s)  -    255  0  15  1	Set All A	ttributes
el 5 (2,8s) - + 7 (44.7stopur/s)		
el 5 (2.6s) 7 (44.7stepu/s) 6 255 (MASK) - + 0 15 1 255 ming curve	ancel System fa	ilure level Save
255 (MASK) - + 7 (44.7atops/a) - 0 15 1 255 ming curve		
0 15 1 255 ming curve	evel	
255 ming curve	255 (MASK)	- + +
255 ming curve		
ming curve		0
		255
Logarithmic 🗌 🔿 Linear	imming curve	
	O Logarithmic O L	inear

### 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).

4.1.1lf you are connected to "+/WW" (signal channel), please make sure to set <u>"power on CCT"</u> 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 <u>"power on CCT"</u> of NFC Driver to 6500k (DALI default value), and write to the device.

## Wiring Diagram

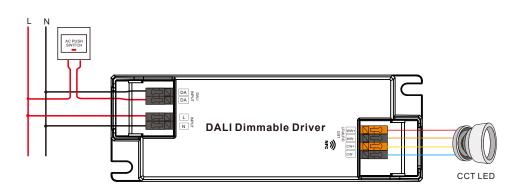
- 1. With DALI bus
- 1) With single color LED luminarie





Note: 3-Wire CCT LED luminaries are still applicable

#### 2. With PUSH dimmer

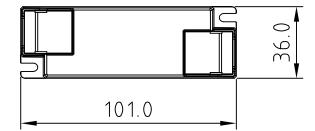


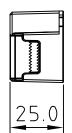
# **AC Push Function**

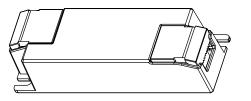
1) Click the button to switch ON/OFF

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**

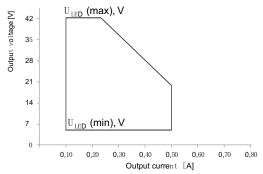


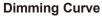


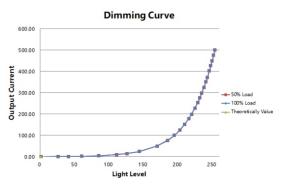


# **Operating Window**

## **Driver Performance**

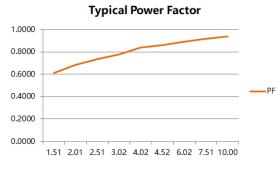




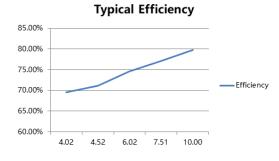


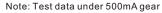
Note: Test data under 500mA gear

# **Driver Performance**



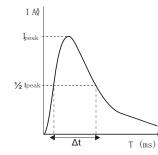
Note: Test data under 500mA gear





# **MCB Load Quantity**

Module Number	lpeak	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-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.
- 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

Lamppukauppa Led Store Oy Mesikukantie 16 01300 VANTAA myynti@ledstore.fi WWW.LEDSTORE.FI

