30W DALI D4i DT6 NFC LED Driver(Constant Current)

Important: Read All Instructions Prior to Installation

Function introduction



Product Data

	LED Channel	1
	DC Voltage	10-54V
	Current	250-850mA via NFC setting; Min.current gear lower to 0.1mA,Default 700mA
Output	Current Accuracy	±3%(±1%@Certain full load) @ full load
	Rated Power	Max. 30W
	Voltage Range	220-240VAC/ 176-280VDC
	Frequency Range	0/50/60Hz
	Power Factor (Typ.)	> 0.97 @ 230VAC Full load
	Total Harmonic Distortion	THD ≤ 3% (@ full load / 230VAC)
	Efficiency (Typ.)	> 87% @ 230VAC full load
Input	AC Current (Typ.)	0.2A @ 230VAC
	Inrush Current (Typ.)	Max. 6.04A at 230VAC; 72µs 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
Quarteral	Dimming Range	0.01%-100%@ Max current
Control	Dimming Method	Amplitude/CCR dimming
	Dimming Curve	Linear/ Logarithmic optional

	Short Circuit	Yes, recovers automatically after fault condition is removed			
Protection	Over Current	Yes, recovers automatically after fault condition is removed			
	Over Temperature	Yes, recovers automatically after temperature drop			
	Working Temp.	-25°C ~ +60°C			
	Max. Case Temp.	TC=90°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			
0.11	MTBF	191350H, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature			
Others	Dimension	243x30x21mm (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 30W

• 250-850mA 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, isolated design

• 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

• DALI-250/251/252/253 Enabled, DALI data inside.

• Integrated Max.56mA DALI BUS supplu, enabled to powered DALI-2 sensors.

• 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.

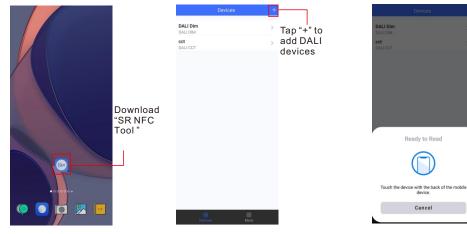
With NFC Programming devices

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.



Add confi	guration
Cancel	Save

DALI DIM DALI DIM oct 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 Tar	get current Save	< DALI DI	m 2 🗗	< DALI Dim	2 රි
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 1000-500	00	Min level	0.100% >	Min level	
Scene 3	level MASK >						
icene 4	level MASK >			Power on level	MASK >	Power on level	MASK >
Scene 5	level MASK >			System failure level	MASK >	System failure level	MASK >
Scene 6	level MASK >			Short address	0 >	Short address	
Scene 7	level MASK >			Groups	>	Groups	
Scene 8	level MASK >			Fade time	5.78 >	Fade time	
Scene 9	level MASK >			r dae unie	0.707	r due unie	0.70 7
Scene 10	level MASK >			Ready to	Write		
Scene 11	level MASK >					\sim	
Scene 12	level MASK >			())	(\checkmark))
Scene 13	level MASK >					\mathbf{C}	·
Scene 14	level MASK >			Touch the device with the		Successfu	
Scene 15	level MASK >			device	b.	00000010	
				Cance	el		
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/ gateway.

2.Enter CLO Setting homepage

Cancel C	LO	Save
Preview Output Level (%)		
100 80 60	alid	
40 - 20 - 0	and	
Operatin	g Time (kh)	
Times and Levels		
1 Invalid	3 Invalid	4 Invalid
5 6 Invalid	7 Invalid	8 Invalid
Working 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.

CLO AND CORRIDOR DIM(CD) FUNCTION INSTRUCTION

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

< 12CC	۵	< 12CC	: é
System failure level	100.0%	System failure level	100.0% >
Short address	0	Short address	0 >
Groups		Groups	>
Fade time	2.0s	Fade time	2.0s >
Fade rate	5.6steps/s	Fade rate	5.6steps/s >
Dimming curve	Logarithmic	Dimming curve	Logarithmic >
Scenes		Scenes	>
Target current	100.0mA	Target current	100.0mA >
Minimum current compensation	MASK	Minimum current compensation	MASK >
Constant lumen operating	g Disabled	Constant lumen operating	g Disabled >
Corridor	PD mode	Corridor	PD mode >
Set All Attri	ibutes	Set All Attr	ibutes
Read From the		r Unlock it and	Click horo

3.Corridor dim(CD) function

۲ ۱	12CC 🔒	< t	2CC 🗗
System failure level	100.0%	System failure level	100.0% >
Short address	0	Short address	0 >
Groups		Groups	>
Fade time	2.0s	Fade time	2.0s >
Fade rate	5.6steps/s	Fade rate	5.6steps/s >
Dimming curve	Logarithmic	Dimming curve	Logarithmic >
Scenes		Scenes	>
Target current	100.0mA	Target current	100.0mA >
Minimum current compensation	MASK	Minimum current compensation	MASK >
Constant lumen oper	rating Disabled	Constant lumen oper	rating Disabled >
Corridor	PD mode	Corridor	PD mode >
Set All	Attributes	Set All A	Attributes
Read From	the NFC Drive	er Unlock it, an	d Click here t

1

Read From the NFC Driver

Unlock it, and Click here to enter CLO settings

4.Enter CD Setting homepage

Cancel	Corridor	Save
Mode		
O CD	O PD	
re∨iew		
(NJ		
0 Fade in	Occupied Fade out Prolonge	d Dim to off
de in tim	e	
	s	
alue range (
ccupied t	ime	
Rea	d V	Vrite

Cancel	Corridor	Save	
Prolonged tin	ne		
60		s	
Value range 0-6	0,000		
Infinite			
Prolonged lev	vel		
20		%	
Value range 0-1	00		
Dim to off tin	ne		
5		s	
Value range 0-1	00		
Read		Write	
Set you	r desire	d time an	dleve

Graphic display

Enter CD mode

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



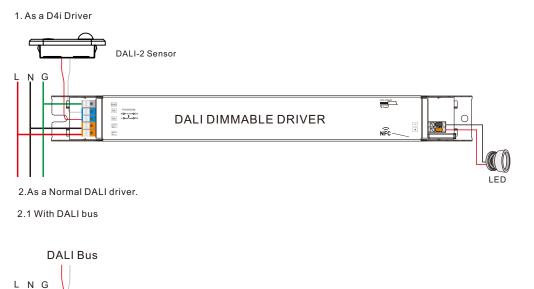
 Please make sure your APP version is 1.0.10 or higher.
Please make sure NFC driver's firmware is available with CLO / CD functions.

Product Dimension





Wiring Diagram

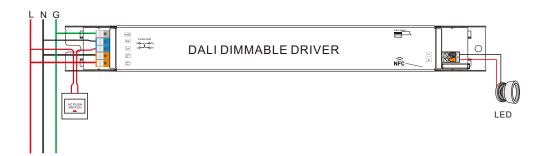


Littless'

NFC-

LED

2.2 With PUSH dimmer



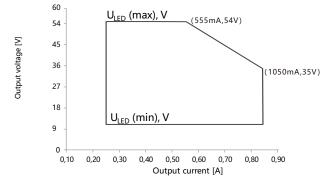
DALI DIMMABLE DRIVER

AC Push Function

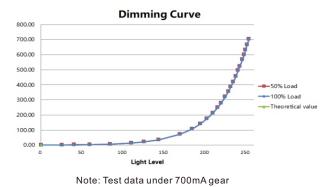
1) Click the button to switch ON/OFF

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

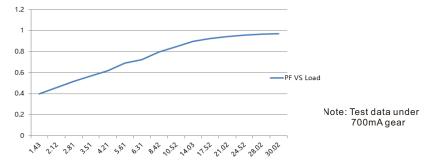






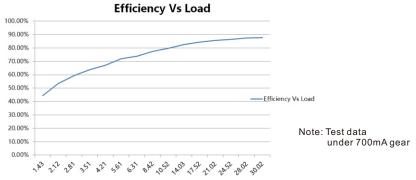


PF VS Load



5% / 7% / 9% /12% /14% /18% / 21% /28% /35% / 46% / 58% / 70% / 82% /93 / 100%

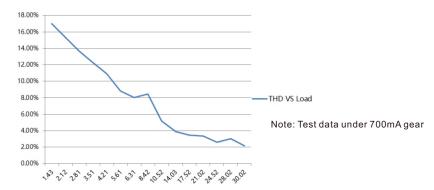
Driver Performance



5% / 7% / 9% /12% /14% /18%/ 21% /28% /35%/ 46%/ 58%/ 70%/ 82% /93/ 100%

Driver Performance

THD VS Load



5% / 7% / 9% /12% /14% /18%/ 21% /28% /35%/ 46%/ 58%/ 70%/ 82% /93/ 100%

Expected Lifetime

Module Number	Output current	Та	30 °C	40 °C	45 °C	•••	60 °C
SRPL-2305iN-30CC250-850	250 – 850 mA	Тс	46 °C	55 °C	61 °C	•••	90 °C(max)
SRPL-2309iN-30CCT250-85	0 250 – 850 mA	Lifetime	> 100,000 h	> 100,000 h	> 80,000 ł	ı	> 30,000 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
SRPL-2305iN-30CC250-850	6.04A	72µs	30	39	48	60	75	35	45	56	70	87	40	52	64	80	100
SRPL-2309iN-30CCT250-850	6.04A	72µs	30	39	48	60	75	35	45	56	70	87	40	52	64	80	100

I (A) Ipeak 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		
2023-9-1	V1.5	Parameter Update	Romeo		

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