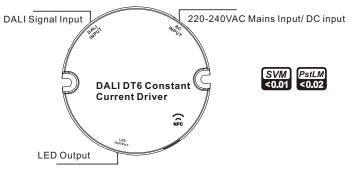
10W DALI DT6 NFC Round LED Driver(Constant Current)

Important: Read All Instructions Prior to Installation

Function introduction



Product Data

	LED Channel	1
	DC Voltage	10-42V, Max.48V
	Current	100-500mA via NFC tool; Min.current gear lower to 0.1mA, default 250mA
Output	Current Accuracy	±3%(±1%@Certain full load) @ full load
	Rated Power	Max. 10W
	Voltage Range	220-240VAC/220-240VDC
	Absolute Voltage Range	198-264VAC/198-264VDC
	Frequency Range	0/50/60Hz
	Power Factor (Typ.)	> 0.945 @ 230VAC Full load*
	Total Harmonic Distortion	THD ≤ 15% (@ full load / 230VAC)*
Input	Efficiency (Typ.)	>74% @ 230VAC full load*
	AC Current (Typ.)	0.1A Max.
	Inrush Current (Typ.)	Max. 3.16A 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
Control	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			
Environment	Max. Case Temp.	Tc=90℃			
Environment	Working Humidity	10% ~ 95% RH non-condensing			
	Storage Temp. & Humidity	-40℃ ~ +80℃, 10% ~ 95% RH			
	Safety Standards	EN61347-1, EN61347-2-13, GB/T 19510.1-2023, GB/T 19510.213-2023			
	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, GB 17625.1-2022, GB/T 17743-2021			
	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	φ57x24mm (D*H)			
	Warranty	5 Years			

*: PF/THD/Eff shall be different per different testing setup and equipment.

• 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 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
- ON/OFF and Dimming control
- Amplitude/CCR dimming, smooth and deep dimming
- Compatible with universal DALI masters that support DT6 commands
- CLO function for a further upgraded experience
- CD(Corridor Mode): auto light on when someone enters
- 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.

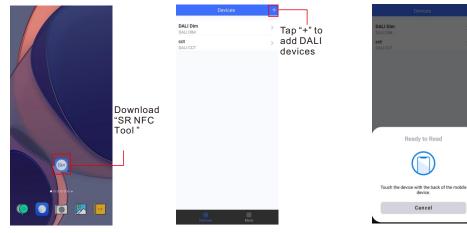
With NFC Programming devices

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.



Add confi	iguration
Cancel	Save

Devices	+
DALI Dim DALI DIM	>
CCT DALI CCT	>
DALI Dim 2 DALI DIM	>

Step 3: Unlock device, enter parameters configuring page.

LI Dim 2 🔒]	< 0	DALI Dim 2 ක්		<	
DALI DIM	Locked	Device Type	DALI DIM	Unlock it	0	Max level Min level
0x01000001	2001104	Product Id	0x01000001	Onioekn		
300.0mA		Options	>		0	Power on level System failure
		Target current	300.0mA >		•	Short address Groups
					•	Fade time Fade rate
					0	Dimming curve
					0	Scenes
					0	Target current
						Low side curre
	0x01000001	0x01000001	0x01000001 Product Id 300.0mA Options	Locked Product Id 0x0100001 300.0mA Options >	Locked Product Id Gx01000001 Unlock it 300.0mA Options >	0x01000001 Unlock it 300.0mA Options

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 🗗
се Туре	DALI DIM
Id	0×01000001
	>
x level	100.0% >
in level	0.100% >
wer on level	MASK >
ystem failure level	MASK >
ort address oups	0 >
de time de rate	Extended fade > 358steps/s >
imming curve	Logarithmic >
enes	>
Set All A Cancel System fi	ilure level Save
_evel	
255 (MASK)	- +
	255
0 mming curve	

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

<	Scenes	Cancel	Target current	Save	< DALI	Dim 2 ස්	< DALI Dim	2 ග්
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 10	000-50000		Min level	0.100% >	Min level	
Scene 3	level MASK >				Power on level	MASK >	Power on level	
cene 4	level MASK >							
ene 5	level MASK >				System failure level	MASK >	System failure level	MASK >
cene 6	level MASK >				Short address	0 >	Short address	
cene 7	level MASK >				Groups	>	Groups	
cene 8	level MASK >				Fade time	5.7s >	Fade time	
cene 9	level MASK >							0.00
cene 10	level MASK >				Ready t	o Write		
cene 11	level MASK >				G		\frown	
cene 12	level MASK >				(])	(~))
cene 13	level MASK >						\bigcirc	
ene 14	level MASK >				Touch the device with		Successful	
cene 15	level MASK >				devi	ce.		
					Can	cel		
Read	Write	Read	L [Write	•		N	

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.
- Note: Within Our NFC tech design, you shall probably have one of the largest NFC sensing area. The More sensitive you're able to touch, the more convenient you can have.

CLO AND CORRIDOR DIM(CD) FUNCTION INSTRUCTION

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

K 12C	c 🔒
System failure level	100.0%
Short address	0
Groups	
Fade time	2.0s
Fade rate	5.6steps/s
Dimming curve	Logarithmic
Scenes	
Target current	100.0mA
Minimum current compensation	MASK
Constant lumen operati	ing Disabled
Corridor	PD mode
Set All Att	tributes
Read From th	

2.Enter CLO Setting homepage

Cancel CI	LO Save	Cancel 1	Done	Cancel	CL	_0	Sav
Preview Output Level (%)		Time		Preview Output Level (%)			
0 10 10 10	aid	10 Value range 1-100	kh	60 40 20			
) Time (kh)	Level 75	%	0 10	20 30 Operating	40 Time (kh)	
Times and Levels	3 Invalid Invalid	Value range 1-100		Times and 1 10kh 75%	2 20kh 80%	3 30kh 85%	4 40kh 90%
5 6 Invalid	7 8 Invalid Invalid			5 Invalid	6 Invalid	7 Invalid	8 Invalid
/orking hours	0 hour(s)			Working ho	ours		0 hour(:
Read	Write			Rea	d	w	/rite

Tips:

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

3.Corridor dim(CD) function

۲ 12	ecc 🔒	< 12CC	6
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 opera	ating Disabled	Constant lumen operating	Disabled >
Corridor	PD mode	Corridor	PD mode >
Set All A	ttributes	Set All Attrib	outes
Read From t	the NFC Drive	r Unlock it, and C	lick here

Read From the NFC Driver

Unlock it, and Click here to enter CLO settings

4.Enter CD Setting homepage

ancel Cr	orridor	Save	Cancel	Corridor
de			Occupied	time
CD OPE)		120	s
view			Value range	0-60,000
×1			Occupied	level
			100	%
Fade in Occupied	Fade out Prolong	ed Dim to off	Value range	0-100
			Fade out t	ime
de in time			5	s
	S		Value range	0.100
lue range 0-100			Prolonged	time
ccupied time			40	

Prolonged time		
60	s	
Value range 0+60,01	00	
O Infinite		
Prolonged level		
20	%	
Value range 0-100		
Dim to off time		
5	s	
Value range 0-100		

Set your desired time and levels.

Graphic display

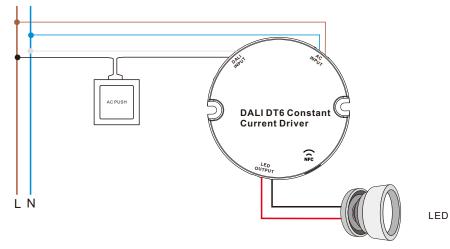
Wiring Diagram

Notes:

Function	Color	Wire Gauge	Wire Length	Strip Length
ACL/DC+	Brown	28 AWG	170 mm	3 mm
ACN/DC-	Blue	28 AWG	170 mm	3 mm
LED+	Red	20 AWG	130 mm	7 mm
LED-	Black	20 AWG	130 mm	7 mm
DA	Black	20 AWG	130 mm	7 mm
DA	White	20 AWG	130 mm	7 mm

1. With DALI bus

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%.

Enter CD mode

Tips:

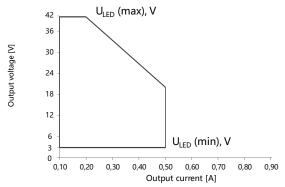
- 1. You should select either CD mode or PD mode, but not both.
- 2. Under CD mode, you can realize it with normal (3rd party) AC sensor.
- 3. Default mode: PD mode.

Additional Remarks

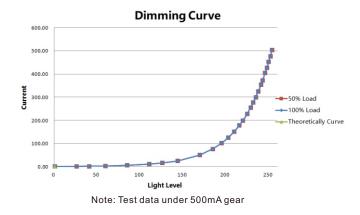


 Please make sure your APP version is 1.0.10 or higher.
Please make sure NFC driver's firmware is available with CLO / CD functions.

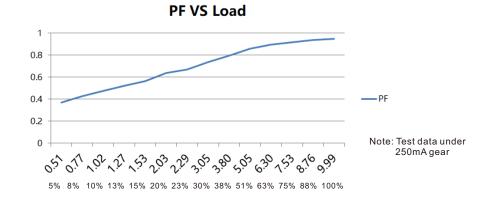
Operating window





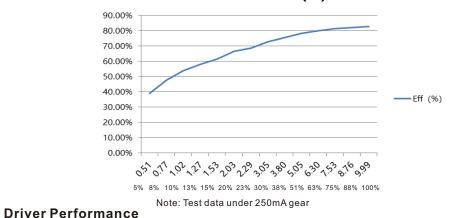




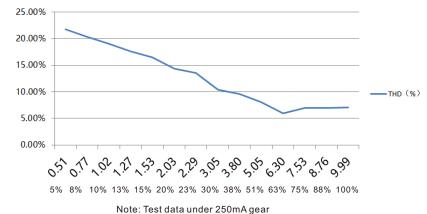


Driver Performance

Eff VS Load (%)



THD VS Load (%)



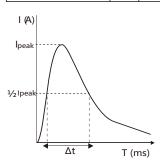
Expected Lifetime

Module Number	Output current	Та	30 °C	40 °C	45 °C	•••	60 °C
SRPY-2305N-10CC100-500	100 – 500 mA	Тс	50 °C	60 °C	70 °C	•••	90 °C
SRPY-2309N-10CCT100-500) 100 – 500 mA	Lifetime	> 100,000 h	> 80,000 h	> 60,000 h	1	> 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	lpeak	Twidth	Max.quantity of LED Driver per MCB														
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRPY-2305N-10CC100-500	3.16A	72µs	60	78	96	120	150	70	91	112	140	175	80	104	128	160	200
SRPY-2309N-10CCT100-500	3.16A	72µs	60	78	96	120	150	70	91	112	140	175	80	104	128	160	200



Note:

1. Those MCB parameters are based on ABB S200 series circuit breakers.

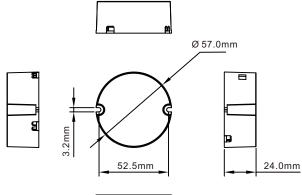
2.For different brands and models of miniature circuit breakers, the quantity of drivers will have difference.

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

Product Dimension





Packaging



Update log

[Date	Version	Update content	Update by
	2023-8-4	V1.2	Update PF/THD/Eff/MCB Load/ Lifetime	Romeo

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