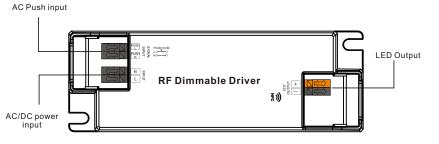
45W RF NFC Enabled LED Driver(Constant Current)

Important: Read All Instructions Prior to Installation

Function introduction



Product Data

	LED Channel	1
	DC Voltage	6-54V, Max. 60V
	Current	500-1400mA via NFC setting; Min.current gear lower to 0.1mA
Output	Current Accuracy	±3%(±1%@Certain full load) @ full load
	Rated Power	Max. 45W
	Voltage Range	220-240VAC/220-240VDC
	Absolute Voltage Range	196-264VAC/196-264VDC
	Frequency Range	0/50/60Hz
	Power Factor (Typ.)	> 0.95 @ 230VAC Full load
	Total Harmonic Distortion	THD ≤ 12% (@ full load / 230VAC)
Input	Efficiency (Typ.)	> 75% @ 230VAC full load
	AC Current (Typ.)	0.3A Max.
	Inrush Current (Typ.)	Max. 8.56A at 230VAC; 88µs duration
	Leakage Current	< 5mA /230VAC
	Anti Surge	L-N:2KV
	Dimming Interface	RF(Sub-G)
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 action and	Max. Case Temp.	Tc=85°C
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℃ / 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	145x45x28mm (L*W*H)
	Warranty	5 Years

• Dimmable LED driver. Max. output power 45W

• 500-1400mA current selectable via NFC program tool. Min.current gear lower to 0.1mA

• Dimming curves/Target current/Power-on behavior settings via NFC program tool.

 \bullet Class ${\rm I\!I}$ power supply, full isolated plastic case

• High power factor and efficiency

• Radio Frequency : Default 869.5/916.5(1009 Version), Available 868/434mhz(2504 Version)

• To switch and dim LED lighting fixtures

 \bullet Amplitude/CCR dimming, smooth and deep dimming

Compatible with a variety of RF remotes

 \bullet 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.

Pairing devices with RF remote

1.Do wiring according to connection diagram.

2. Pair RF Driver with RF remote: please refer to the instruction of the remote that you would like to pair with.

With NFC Programming devices

Note

1) Do wiring according to the wiring diagram.

- 2) Recommend setting parameters without power-on the RF 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.

Cancel	Add configuration	Save
Device Type	e	RF CCT
Product Id	0x0	05000002
Hardware v	resion	1 (0x01)
Software ve	ersion	1 (0x01)
Dimming cu	urve DAL	.I Standard
Power on st	tate	Latest
On off trans	sition time	5
Target curre	ent	300.0mA
Minimum cu	urrent compensation	0.00%
Enable pair	ing	Ignore



Configurations	+
15W CCT RF CCT	>

Step 3: Unlock device, enter parameters configuring page.

< 15W CC	т 🙆		< 15W C	ா மீ		<u> </u>	Options
Device Type	RF CCT	Locked	Device Type	RF CCT	Unlock it	0	Hardware version Software version
Product Id	0x05000002		Product Id	0x05000002		0	Dimming curve
Hardware version	1 (0x01) 1 (0x01)		Options	>		0	Power on state
Dimming curve	DALI Standard		Hardware version	1 (0x01) >			transition time
Power on state	Latest		Dimming curve	DALI Standard >			
On off transition time	5		Power on state	Latest >		0	Target current
Target current	300.0mA		On off transition time	5 >		0	Minimum current compensation
Minimum current compen	sation 0.00%		Target current	300.0mA >		0	Enable pairing
Enable pairing	Ignore		Minimum current compe	nsation 0.00% >			
			Enable pairing	Ignore >			
Set All Attr			Set All Attr	ibutes			Jnselect All Select 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.

< 15W	и сст 🛛 🗗
Device Type	RF CCT
Product Id	0x05000002
Options	>
Hardware version	1 (0x01) >
Software version	1 (0x01) >
Dimming curve	DALI Standard >
Power on state	Latest >
On off transition time	5 >
Target current	300.0mA >
Minimum current con	npensation 0.00% >
Enable pairing	lanore >
Set All A	
< 15W	и сст б
< 15W	
	v сст б
Device Type	N CCT 🗗 RF CCT
Device Type Product Id	RF CCT 0x05000002
Device Type Product Id Options	v cct යි RF CCT 0x05000002 >
Device Type Product Id Options Hardware version	v cct d RF cCT 0x05000002 > 1(0x01) >
Device Type Product Id Options Hardware version Software version Dimming curve	V CCT C RF CCT 0x05000002 0x05000002 > 1 (0x01) > > 1 (0x01) > 1 DALI Standard > >
Device Type Product Id Options Hardware version Software version Dimming curve Power on state	VCCT B RF CCT 0x05000002 1(0x01) > 1 1(0x01) > DALI Standard > DALL Standard > Latest >
Device Type Product Id Options Hardware version Software version Dimming curve	v cct & & RF ccT Ox05000002 > 1(0x01) > 1(0x01) > DALI Standard > Lattest > 5 >
Device Type Product Id Options Hardware version Software version Dimming curve Power on state	VCCT B RF CCT 0x05000002 1(0x01) > 1 1(0x01) > DALI Standard > DALL Standard > Latest >
Device Type Product Id Options Hardware version Software version Dimming curve Power on state On off transition time	VCCT C RF CCT 0x05000002 0x05000002 > 1(0x01) > > 1(0x01) > DALI Standard > DALI Standard >
Device Type Product Id Options Hardware version Software version Dimming curve Power on state On off transition time Target current	VCCT C RF CCT 0x05000002 0x05000002 > 1(0x01) > > 1(0x01) > DALI Standard > DALI Standard >

 We bring well-praised "DALI" dimming curve to this product, to ensure you have the smooth dimming performance in RF NFC drivers.

 Besides that, we have the other dimming curves available with intutive graphs, enables you shall find your ideal one.

1) Off: Always Off after power on.

2) On: Always On after power on

3) Latest: Restore to last light level after power on

15W (ст б	Cancel	transition time
Device Type	RF CCT		_
Product Id	0x05000002	3	
options	>	_0	
lardware version	1 (0x01) >	No fade	
Software version	1 (0x01) >	Default	
Dimming curve	DALI Standard >	Deleon	
Power on state	Latest >		
On off transition time	5 >		
Target current	300.0mA >		
Minimum current comp	ensation 0.00% >		
Enable pairing	lanore >		
Set All At	tributes	Read	

1) 0(No fade): Fatest transition
2) 15: Longest transition
3) 3(Default): Soft transition

< 15W 0	ст 🗗	
Device Type	RF CCT	
Product Id	0x05000002	
Options	>	
Hardware version	1 (0x01) >	
Software version	1 (0x01) >	
Dimming curve	DALI Standard >	
Power on state	Latest >	1) Ena
On off transition time	5 >	2) Cle
Target current	300.0mA >	3) Ign the de
Minimum current comp	ensation 0.00% >	the de
Enable pairing	Iqnore >	

Cancel	Enable pairing	Save
Enable pair	ing	
Clear all pa	ired devices	
Ignore		\checkmark

e Pairing: The driver will enter the pairing mode and work with RF remote all paired devices: Cleaning paired devices (Seldom use)

e: When you about to set other parameter please select this, otherwise es statues shall be re-write which is not your willing.

Device Type RF CCT Product Id 0x05000002 Options 1 (0x01) > Hardware version 1 (0x01) > Software version DALI Standard > Dimming curve Power on state Latest > On off transition time 5 > Target current 300.0mA > Minimum current compensation 0.00% > Enable pairing lanore >

Cancel	Target current	Save
3000		300.0mA 1=0.1mA
Value range 10	00-50000	

Read

Read

Input the working current of the LED.

Min.0.1mA per gear as a option.

Which massively free the options among different luminaries specification

Tips

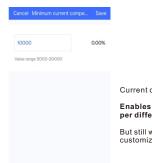
1. NFC function doesn't require any power driver.

2. Many functions can be configured by NFC. Kindly check your desired functions.

3. All of our RF NFC drivers are in the best performance within OUR Remotes.

4. Read before you Move.

<	15W CCT	đ	
Device Type	RF O	ст	
Product Id	0x050000	02	
Options		>	
Hardware version	1 (0x01)	>	
Software version	1 (0x01)	>	
Dimming curve	DALI Standard	>	
Power on state	Latest	>	
On off transition t	ime 5	>	
Target current	300.0mA	>	
Minimum current	compensation 0.00%	>	
Enable pairing	lanore	>	
Set	All Attributes		



Write

Write

Current compensation setting:

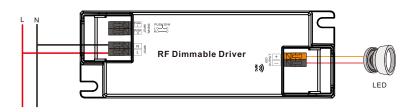
Enables you achieve the best dimming performance per different current gear.

But still we gave the options to customers which enable customized setting.

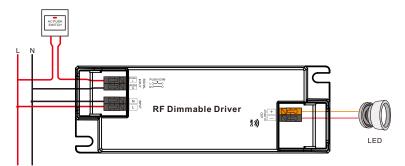
Wiring Diagram

1. Work as Pure RF driver

1.1 With single color LED luminarie



2. Work with Pure RF driver and AC PUSH function

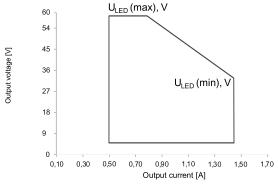


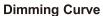
AC Push Function

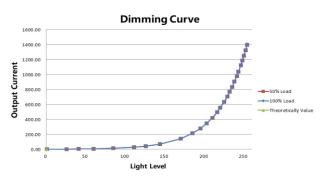
1) Click the button to switch ON/OFF

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%.



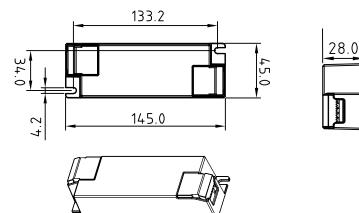






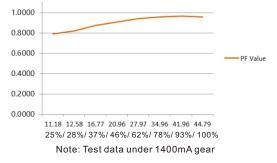
Note: Test data under 1400mA gear

Product Dimension

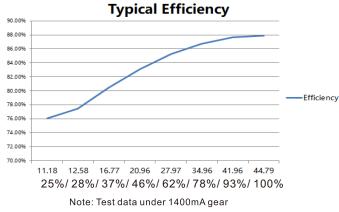


Driver Performance

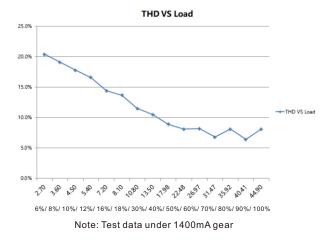
Typical Power Factor



Driver Performance



Driver Performance



Expected Lifetime

Module Number	Output current	Та	30 °C	40 °C	45 °C •	•
SRP-1009N-45CC500-1400 SRP-1009N-45CC500-1400	500 – 1400 mA	Тс	50 °C	60 °C	68 °C •	• 85 °C
SRP-2504N-45CCT500-1400 SRP-2504N-45CCT500-1400	500 – 1400 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-1009N-45CC500-1400 SRP-2504N-45CC500-1400	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80
SRP-1009N-45CCT500-1400 SRP-2504N-45CCT500-1400	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80

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
2024-7-26	V1.0	Initial Version	Romeo

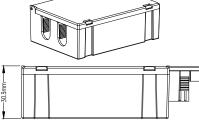
Note: Subject to change without notice. Please contact us if you have any questions.

Quick Connector Box (Optional for Order)

SRP-Loopbox-01

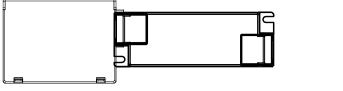
Loop in & Loop Out design 1x DALI Loop in 1x AC Loop in 1x DALI Loop out 1x AC Loop out

108.9mm



Wiring capability:

0.5-2.5mm²(AWG 14-20)

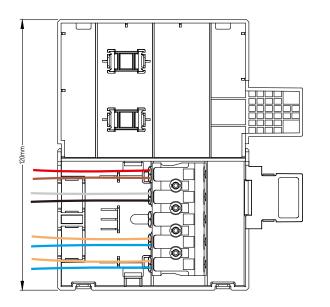


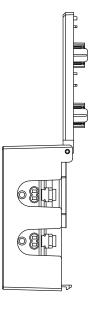
Combined(Top View)

Combined(Side View)

(Å

Note: Because the height of the 45W enclosure is slightly lower than that of the Loop box (Due to its own compact design), it may be necessary to add a gasket on the plane (to maintain balance), not necessarily depending on site conditions.



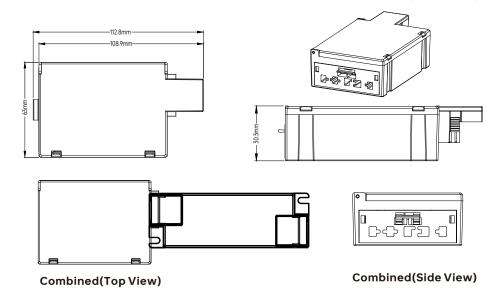


Quick Connector Box (Optional for Order)

SRP-Loopbox-02

Plug & Play design (Wago Terminal)

Wiring capability: 0.5-2.5mm²(AWG 14-20)



Note: Because the height of the 45W enclosure is slightly lower than that of the Loop box (Due to its own compact design), it may be necessary to add a gasket on the plane (to maintain balance), not necessarily depending on site conditions.

