45W 1CH BLE NFC Enabled LED Driver(Constant Current)

Bluetooth® CE RoHS COMPLIANT RIPPLE FREE SELV □ ⌂ ☒

Important: *Read All Instructions Prior to Installation*

Function introduction

AC/DC power input

Bluetooth Dimmable Driver

LED Output

Product Data

Output	LED Channel	1
	DC Voltage	6-54V, Max. 60V
	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
Input	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)
	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
Control	Dimming Interface	Bluetooth® Mesh(BLE 5.2)
	Dimming Range	0.01%-100%@ Max current
	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
Environment	Working Temp.	-25℃ ~ +45℃
	Max. Case Temp.	TC=85℃ (Ta="45℃")
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40℃ ~ +80℃, 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
Others	MTBF	191350H, MIL-HDBK-217F @ 230VAC full load and 25℃ ambient temperature
	Dimension	145x45x28mm (L*W*H)
	Warranty	5 Years

- Bluetooth NFC driver,Bluetooth® mesh network
- Dimmable LED driver. Max. output power 45W
- 500-1400mA current selectable via NFC program tool. Min.current gear lower to 0.1mA
- Dimming curve/Power on state/Soft start/Soft off via NFC program tool.
- Class Ⅱ power supply, full isolated plastic case
- High power factor and efficiency
- PUSH DIM function enabled
- Able to On/Off and control LED lighting luminaries' brightness and color temperature
- Amplitude/CCR dimming, smooth and deep dimming
- Mesh network, which has a much longer control distance, transmits received signals to neighboring devices
- Supporting our kinetic energy switches and EnOcean switches EWSSB and EWSDB
- In typical indoor environment, the typical range for wireless communication is 20m to 25m . Actual range is dependent on field installation.
- On-board antenna
- Waterproof grade: IP20
- 5 years warranty

Safety & Warnings

- DO NOT install with power applied to the device.
- DO NOT expose the device to moisture.

With NFC Programming devices

Note

1) Do wiring according to the wiring diagram .

2) Recommend setting parameters without power-on 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 Playstore) .
Then open the APP .

Download
"SR NFC
Tool "

1) Tap "+" to
add devices.

2) Scan from a
real device.

3) Successful!
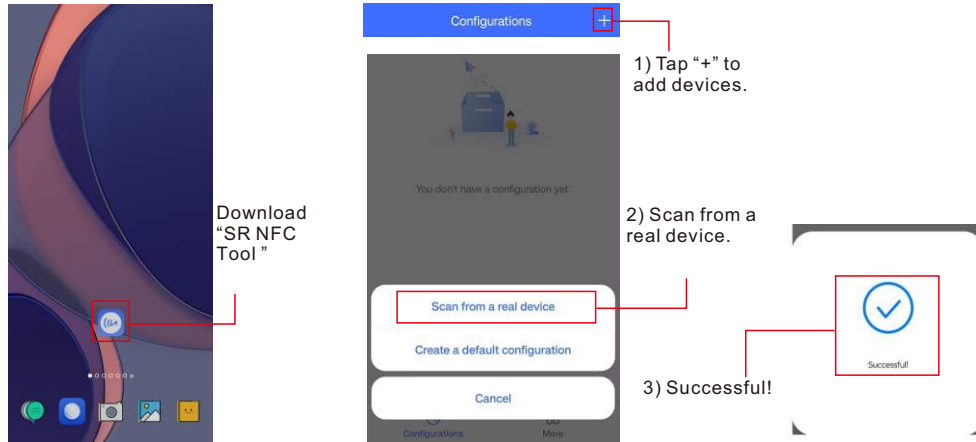
Note: 1. Please Make sure that you have enabled NFC function with your mobile phone/ tablet .

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 configuration

configuration name

Cancel   Save

Step 3: Unlock device, enter parameters configuring page.

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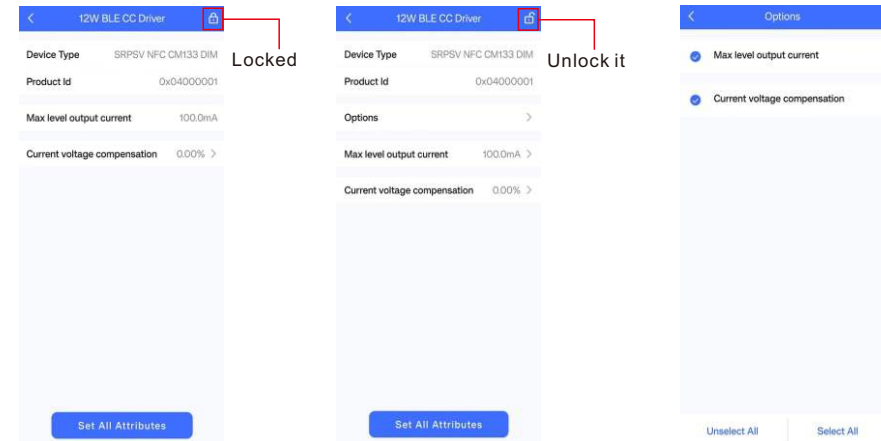
Note: 1. You have to unlock the device then do some settings

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.
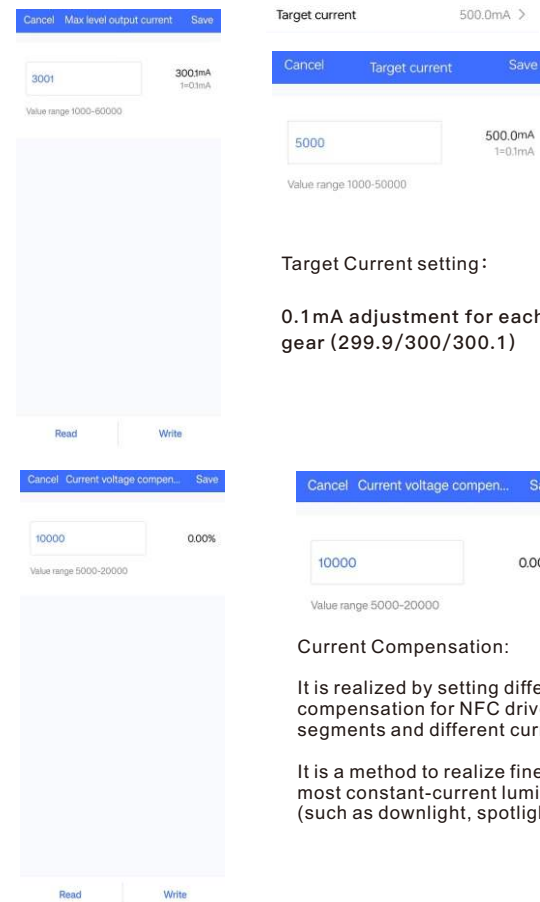

Target Current setting：

0.1mA adjustment for each current
gear (299.9/300/300.1)

Current Compensation:

It is realized by setting different levels of current
compensation for NFC drivers in different power
segments and different currents of the driver.

It is a method to realize fine lighting control for
most constant-current luminaries in the market
(such as downlight, spotlight, panel light, etc.).

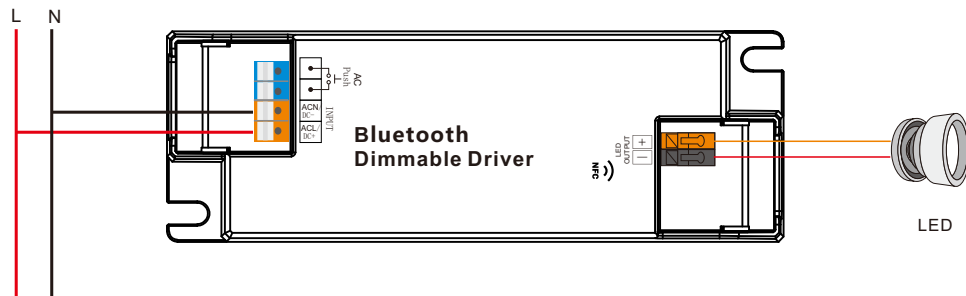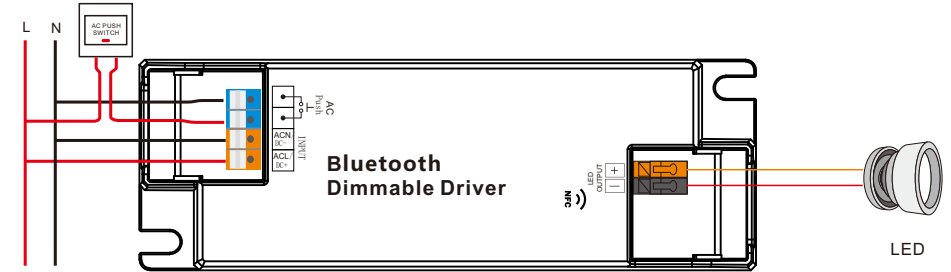**Step 5: After setting, please save the selected configuration via NFC and power on the device.**
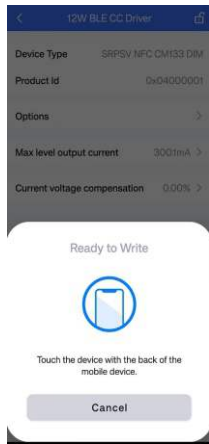
Tips

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

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

3. You can create a default profile with the "+" button.
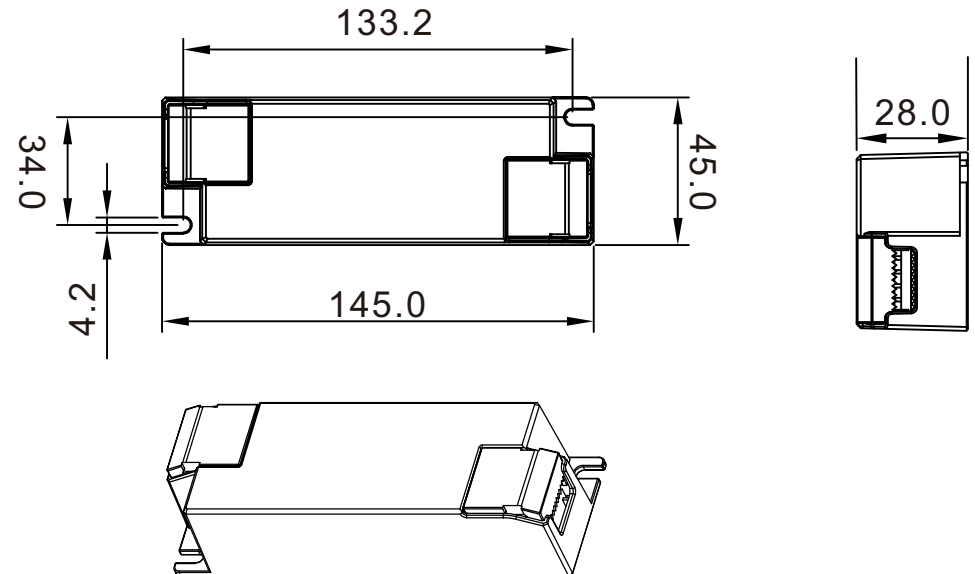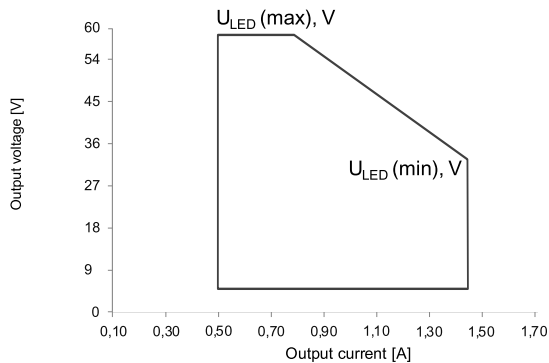
Wiring Diagram
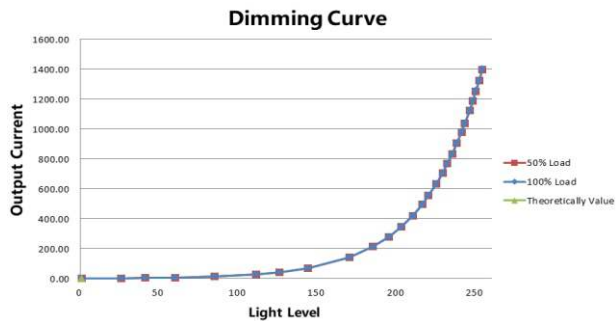
Application 1（Without PUSH）

Application 2（With PUSH）

Product Dimension

Operating window

Output voltage [V]
U_{LED} (max), V
U_{LED} (min), V

60, 54, 45, 36, 27, 18, 9, 0

Output current [A]
0,10 0,30 0,50 0,70 0,90 1,10 1,30 1,50 1,70

Dimming Curve

Dimming Curve

Output Current
1600.00 1400.00 1200.00 1000.00 800.00 600.00 400.00 200.00 0.00

Light Level
0 50 100 150 200 250

- 50% Load
- 100% Load
- Theoretically Value

Note: Test data under 1400mA gear

Driver Performance

Typical Power Factor

1.0000 0.8000 0.6000 0.4000 0.2000 0.0000

11.18 12.58 16.77 20.96 27.97 34.96 41.96 44.79

— PF Value

Note: Test data under 1400mA gear

Driver Performance

Typical Efficiency

90.00% 88.00% 86.00% 84.00% 82.00% 80.00% 78.00% 76.00% 74.00% 72.00% 70.00%

11.18 12.58 16.77 20.96 27.97 34.96 41.96 44.79

— Efficiency
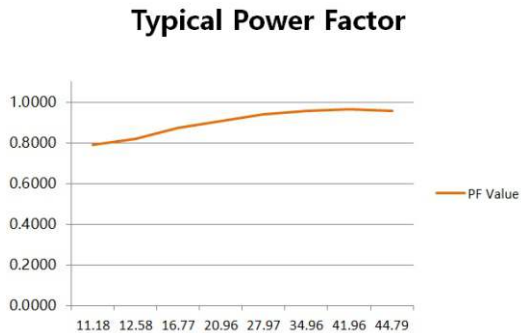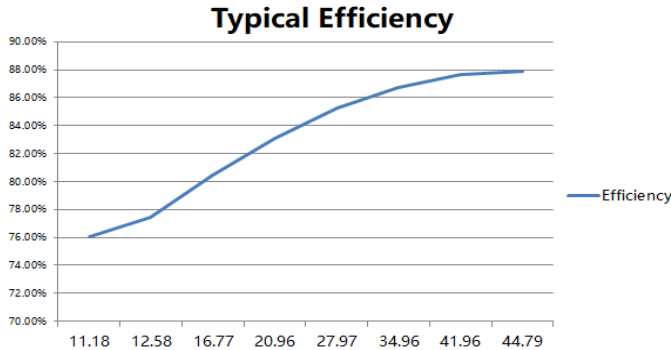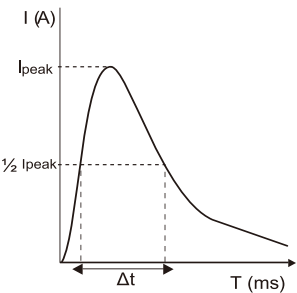
Note: Test data under 1400mA gear

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-SV9105N-45CC500-1400	8.56A	88μs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80
SRP-SV9105N-45CCT500-1400	8.56A	88μs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80

I (A)
Ipeak
½ Ipeak
Δt
T (ms)

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
2024-1-8	V1.0	Initial Version	Romeo

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