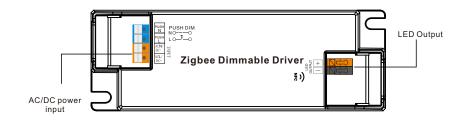
# 36W 1CH Zigbee NFC Enabled LED Driver(Constant Current)



Important: Read All Instructions Prior to Installation

#### **Function introduction**



## **Product Data**

	LED Channel	1						
	DC Voltage	6-54V, Max.60V						
Output	Current	350-1050mA via NFC setting; Min.current gear lower to 0.1mA,Default 800mA						
	Current Accuracy	±3%( ±1%@Certain full load) @ full load						
	Rated Power	Max. 36W						
	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 ≤ 14% (@ full load / 230VAC)*						
Input	Efficiency (Typ.)	> 86% @ 230VAC full load*						
	AC Current (Typ.)	0.25A Max.						
	Inrush Current (Typ.)	Max. 8.56A at 230VAC; 88µs duration						
	Leakage Current	< 5mA/230VAC						
	Standby Power Consumption	< 0.5W						
	Anti Surge	L-N:2KV						
	Dimming Interface	Zigbee						
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							
Environment	Max. Case Temp.	TC=85°C (Ta="45°C")							
	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, GB/T 19510.1-2023, GB/T 19510.213-2023							
	Withstand Voltage	I/P-O/P: 3.75KVAC							
	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							
	Dimension	145x45x28mm (L*W*H)							
	Warranty	5 Years							

<sup>\*:</sup> PF/THD/Eff shall be different per different testing setup and equipment.

- Dimmable LED driver, ZigBee device based on ZigBee 3.0 protocol
- Dimmable LED driver. Max. output power 36W
- 350-1050mA 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
- Amplitude/CCR dimming, smooth and deep dimming
- ZigBee end device that supports Touchlink commissioning
- Can directly pair to a compatible ZigBee remote via Touchlink
- Supports zigbee green power and can bind max. 20 zigbee green power switches
- Compatible with universal ZigBee gateway products
- Waterproof grade: IP20, 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--Zigbee Network**

- 1.Do wiring according to connection diagram correctly.
- 2. This ZigBee device is a wireless receiver that communicates with a variety of ZigBee compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible ZigBee system.

#### 3. Zigbee Network Pairing through Coordinator or Hub (Added to a Zigbee Network)

Step 1: Remove the device from previous zigbee network if it has already been added to, otherwise pairing will fail

**Step 2**: From your ZigBee Controller or hub interface, choose to add lighting device and enter Pairing mode as instructed by the controller.

**Step 3**: power on the device, it will be set into network pairing mode (connected light flashes twice slowly), the network pairing mode will last until the device is added to a zigbee network.

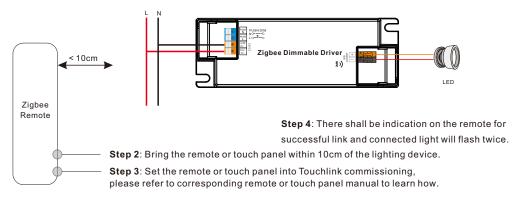


**Step 4**: Connected light will blink 5 times and then stay solid on, then the device will appear in your controller's menu and can be controlled through controller or hub interface.

#### 4. TouchLink to a Zigbee Remote

**Step 1: Method 1:** re-power on the device 4 times to start Touchlink commissioning immediately, 180S timeout, repeat the operation.

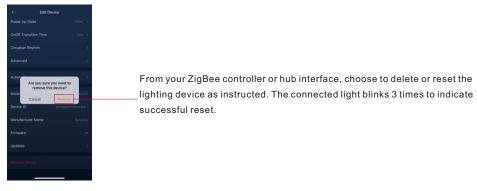
**Method 2**: If the device is already added to a network, it will be set into Touchlink commissioning immediately, 180S timeout. Once timeout, re-power on the device to set it into touchlink commissioning again.



Note: 1) Directly TouchLink (both not added to a ZigBee network), each device can link with 1 remote.

- 2) TouchLink after both added to a ZigBee network, each device can link with max. 30 remotes.
- 3) To control by both gateway and remote, add remote and device to network first then TouchLink.
- 4) After TouchLink, the device can be controlled by the linked remotes.

## 5. Removed from a Zigbee Network through Coordinator or Hub Interface



#### 6. Factory Reset Manually

Step 1: Enable Pairing via NFC App or re-power on the device for 5 times continuously.



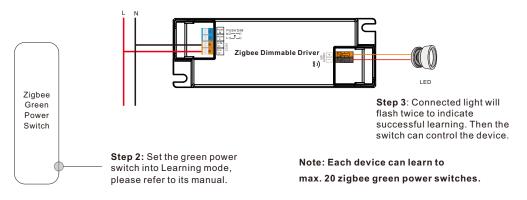
**Step 2**: Connected light will blink 3 times to indicate successful reset.

Note: 1) If the device is already at factory default setting, there is no indication when factory reset again .

2) All configuration parameters will be reset after the device is reset or removed from the network.

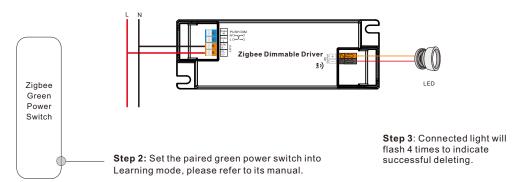
#### 7. Learning to a Zigbee Green Power Switch

**Step 1**: Re-power on the device 4 times to start Learning to GP switch mode (connected light flashes twice), 180 seconds timeout, repeat the operation.



### 8. Delete Learning to a Zigbee Green Power Switch

**Step 1**: Re-power on the device 3 times to start delete Learning to GP switch mode (connected light flashes slowly), 180 seconds timeout, repeat the operation.



### 9. ZigBee Clusters the device supports are as follows:

#### Input Clusters

- 0x0000: Basic 0x0003: Identify 0x0004: Groups 0x0005: Scenes 0x0006: On/off
- 0x0008: Level Control 0x0300: Color Control 0x0b05: Diagnostics

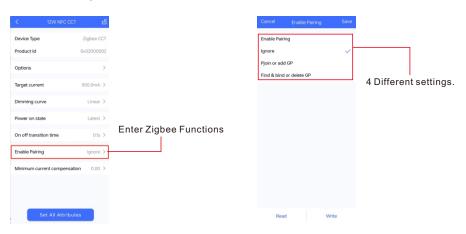
#### **Output Clusters**

• 0x0019: OTA

#### 10. OTA

The device supports firmware updating through OTA, and will acquire new firmware from zigbee controller or hub every 10 minutes automatically.

#### Function setting Via "SR NFC TOOL"



# 1) Enable Pairing

- A. Enable the Zigbee NFC drivers enter the pairing mode and add it into the Zigbee network.
- B. Factory reset. Enable the configured Zigbee NFC driver into configuring mode.
- C. Besides, you can re-power the device 5 times to enable this section as well.

# 2) Ignore

A. Remember, once you need to write other parameters into the NFC driver, you should select this section, so as not to change the driver's state.

# Pjoin or add GP

- A. This section as known as "Enable Touchlink & GP mode".
- B. Select this section and write it into the Zigbee NFC driver, the driver will enter Touchlink mode and GP Mode.

Note: You can both have Touchlink and GP functions as long as you matched with Touchlink function first.

C. Besides, you can re-power the device 4 times to enable this section as well.

# 4) Find & bind or delete GP

- A. This section as known as "Enable Find&Bind / Delete GP".
- $B. \ Select this \ section \ and \ write \ it into \ the \ Zigbee \ NFC \ driver, \ the \ driver \ will \ enter \ Find \& Bind \ mode, and \ it \ will \ delete \ previous \ GP \ bonding \ .$
- C. Besides, you can re-power the device 3 times to enable this section as well.

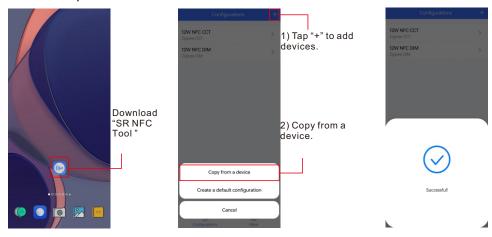
### With NFC Programming devices

### 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 .

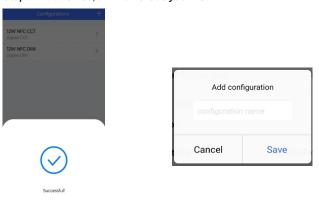
## Working with "SR NFC Tool" APP

Step 1: Download the APP (searching "SR NFC Tool" from App Store and Google Playstore) .
Then open the APP .



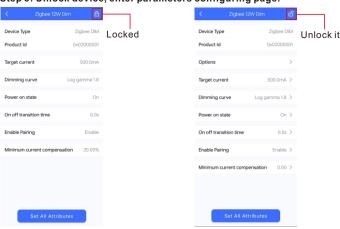
- Note: 1. Please Make sure that you have enabled NFC function with your mobile phone/ tablet
  - 2. Please Make sure that the "NFC position" is matched.
  - 3. Please do not power on the device before setting.
  - 4. If you can't download "SR NFC Tool". Please contact with us.

Step 2: Add device, and name it as you wish.





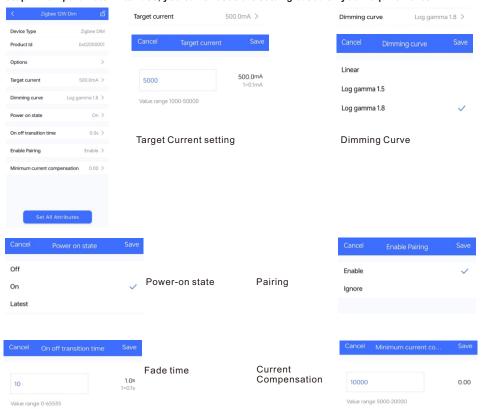
Step 3: Unlock device, enter parameters configuring page.



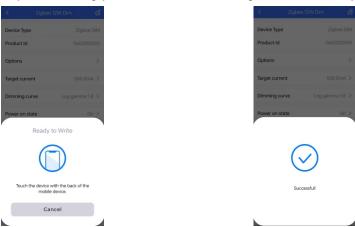
<	Optio	ons
0	Max level Min level	
0	Power on level System failure leve	d
0	Short address Groups	
0	Fade time Fade rate	
0	Dimming curve	
0	Scenes	
0	Target current	
0	Low side current e	rror compensation
	Unselect All	Select All

- 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.



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

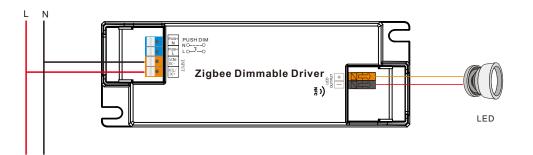


# Tips

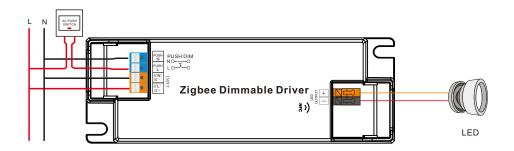
- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. You can create a default profile with the "+" button.

## Wiring Diagram

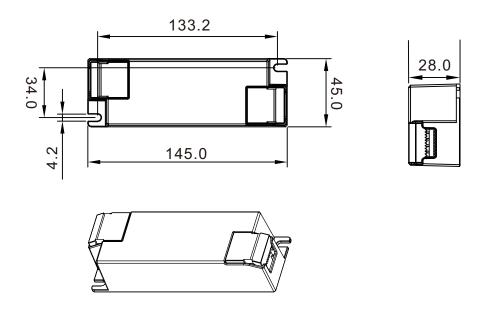
Application 1 (Without PUSH)



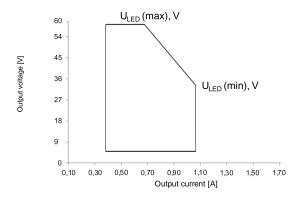
## Application 2 (With PUSH)



## **Product Dimension**

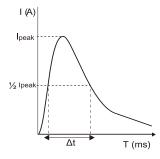


# **Operating window**



# **MCB Load Quantity**

Module Number	lpeak	Twidth					.qua	-				•					
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRP-ZG9105N-36CC350-1050	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80
SRP-ZG9105N-36CCT350-1050	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80



## 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

## Update log

Date	Version	Update content	Update by
2023-9-28	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

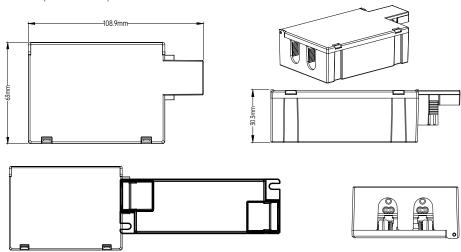
# Loop in & Loop Out design

1x DALI Loop in 1x AC Loop in 1x DALI Loop out 1x AC Loop out

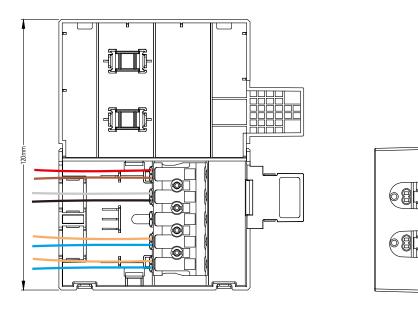
Combined(Top View)



Combined(Side View)



Note: Because the height of the 36W 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.

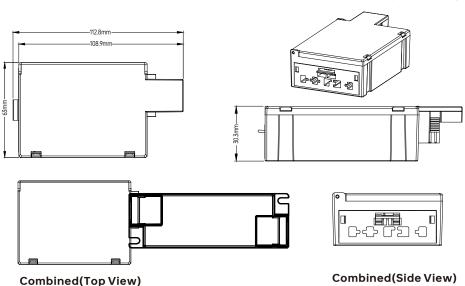


# **Quick Connector Box (Optional for Order)**

# SRP-Loopbox-02

Plug & Play design (Wago Terminal)

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



Note: Because the height of the 36W 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.

