

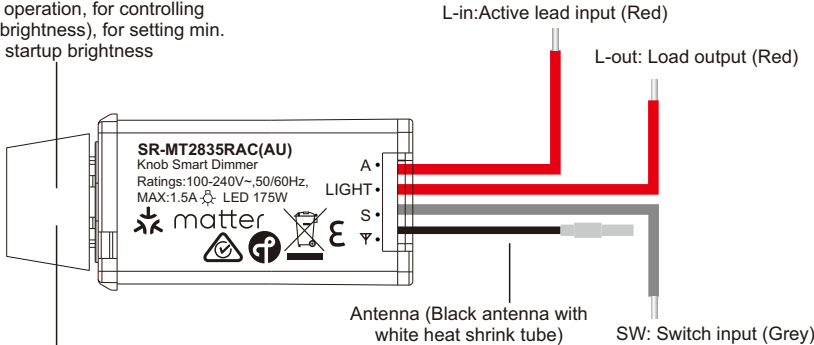
Matter + Zigbee Knob Smart Dimmer



Important: Read All Instructions Prior to Installation

Function introduction

Rotary knob, for Matter network pairing, factory reset operation, for controlling load (on/off, brightness), for setting min. brightness & startup brightness



Short press the knob to turn on/off load, rotate the knob clockwise to dim up the load to 100%, rotate the knob counterclockwise to dim down the load to 1%

Note: The order of the wires may not match the image. The two red wires are for L-in and L-out, you can connect either of them for L-in, and the other one for L-out.

Product Data

Input Voltage	Input Frequency	Output Voltage	Output Current	Radio Frequency	Size(LxWxH)	Ambient Temperature
100-240VAC	50/60Hz	100-240VAC	1.5A max	2.4GHz	45x21x21mm	-20°C ~ +50°C

Compatible Load Types			
Load Symbol	Load Type	Maximum Load	Remarks
	Dimmable LED lamps	175W @ 230V 88W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
	Dimmable LED drivers	175W @ 230V 88W @ 110V	Maximum permitted number of drivers is 175W divided by driver nameplate power rating.
	Incandescent lighting, HV Halogen lamps	350W @ 230V 175W @ 110V	
	Low voltage halogen lighting with electronic transformers	175W @ 230V 88W @ 110V	

Product Features

- Matter + Zigbee knob smart dimmer
- Neutral free, simple wiring
- Supports resistive loads, capacitive loads or inductive loads
- Enables to set minimum brightness and startup brightness
- 1 channel output, up to 350W
- Both leading edge version and trailing edge versions are available for choosing, preset by factory setting
- Enables to control ON/OFF and light intensity of connected light source
- App control + touchlink remote control + green power kinetic switch control
- App control through Matter (e.g. Apple Home, Amazon Alexa, Google Home)
- Can be voice controlled through Apple Siri, Google Assistant, Amazon Alexa
- With push switch input, can be controlled by universal AC push switches
- Standard size, can be compatible with existing Australia wall switch plate
- Radio Frequency: 2.4GHz
- Waterproof grade: IP20

Main Features:

- Advanced microprocessor control
- Implemented algorithm of smart light source detection
- Active power and energy metering functionality
- Soft start function
- Innovative minimum dimming level and startup brightness setting functions
- The Bypass is an extension unit

As a dimmer it operates under the following loads:

- Conventional incandescent and HV halogen light sources
- ELV halogen lamps and dimmable LED bulbs (with electronic transformers)
- MLV halogen lamps (with ferromagnetic transformers)
- Dimmable LED bulbs
- Supported dimmable light sources (power factor > 0.5) with minimal power of 3VA using the Bypass (depending on the type of load)

Trailing edge or leading edge dimming mode can be set by factory setting to control following types of loads:

- "Trailing edge" for resistive loads
- "Trailing edge" for capacitive loads
- "Leading edge" for inductive loads

Note: factory default setting is trailing edge.

Safety & Warnings

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

Operation

1. Do wiring according to connection diagram correctly.
2. This Matter thread device is a wireless receiver that communicates with a variety of Matter compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible Matter system.
3. Add to a Matter platform and control through the platform:

Note: An Apple HomePod mini is used as a Matter border router for adding and controlling the device. For other Matter border routers, please refer to their user manuals to learn how to add and control Matter devices.

Step 1: Prepare an iPhone (iOS 16.2 or later) or iPad (iPadOS 16.2 or later) with the latest version firmware, and prepare an Apple HomePod mini with the latest version firmware.

Step 2: Connect the iPhone or iPad to your home WLAN network. Run the Apple Home app and set up the HomePod mini as instructed by Apple (as shown in Figure 1 to Figure 7).

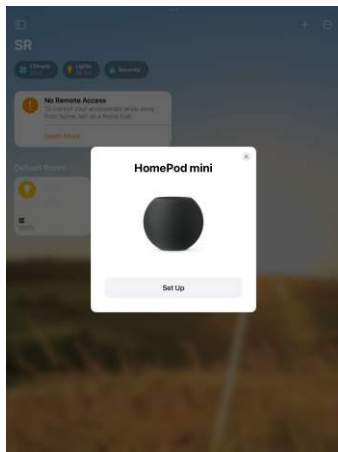


Figure 1

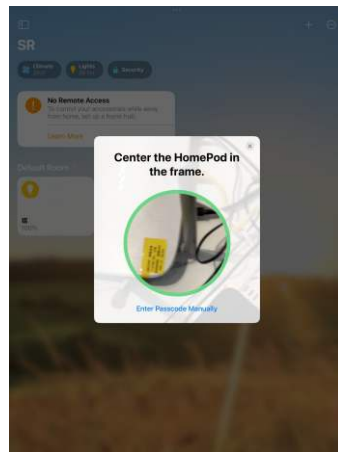


Figure 2

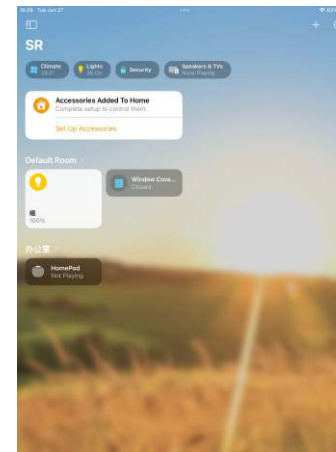


Figure 7

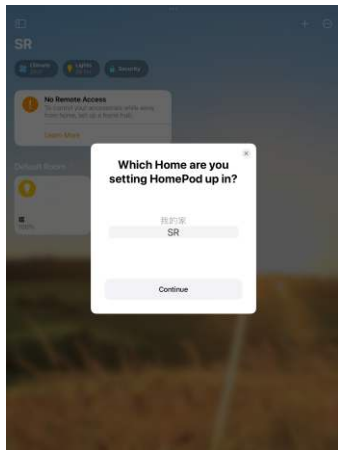


Figure 3

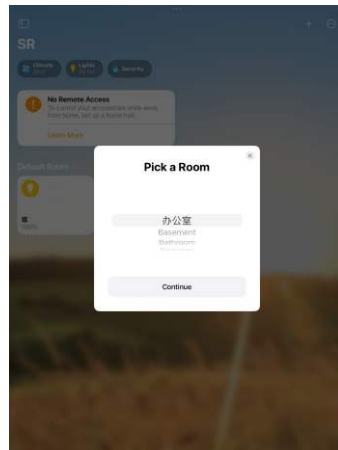


Figure 4

Step 3: Do wiring of the Matter thread dimmer according to the wiring diagram and power on it.

Step 4: Add the Matter thread dimmer to the Apple Home app by scanning the QR code sticker on the dimmer as shown in Figure 8 to Figure 16.

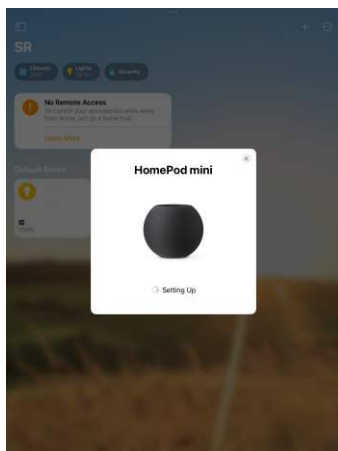


Figure 5

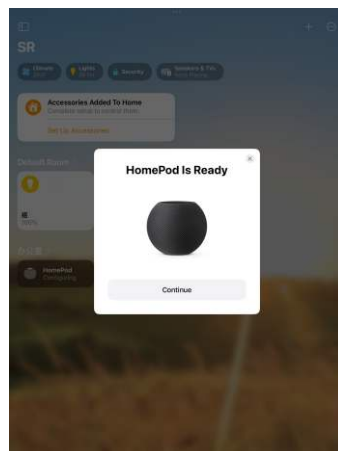


Figure 6

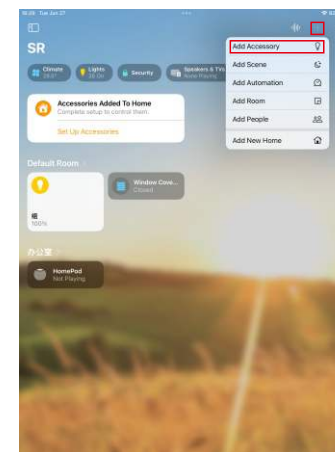


Figure 8

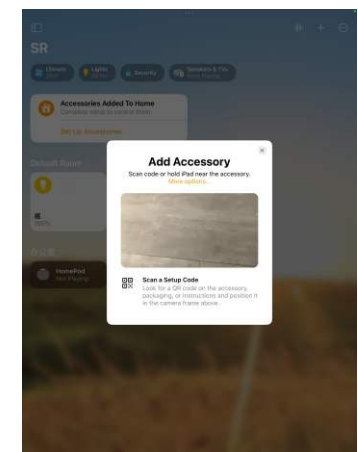


Figure 9

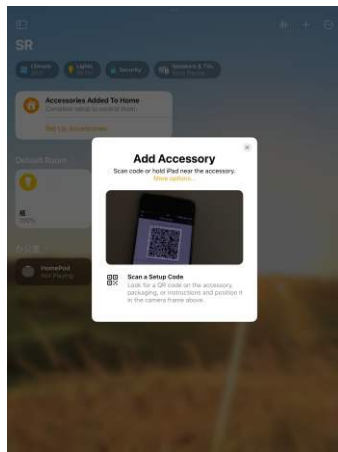


Figure 10

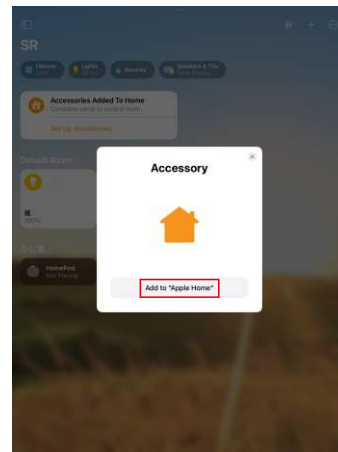


Figure 11

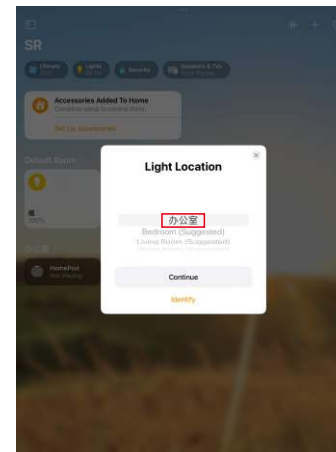


Figure 14

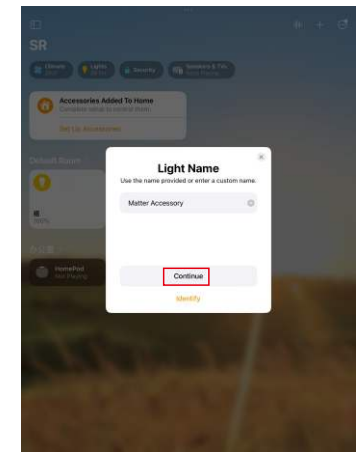


Figure 15

Note: Before scanning the QR code sticker on the dimmer as shown in Figure 10, short press the knob 5 times continuously then within 3 seconds press and hold it for over 5 seconds until LED indicator turns off to reset the dimmer so that it can be discovered by the Apple Home app. Otherwise if it has already been added to another gateway, current gateway can not discover and add it.

Note: When choose the room that you would like to add the dimmer to, please make sure to choose the same room that the HomePod mini is located as shown in Figure 14.

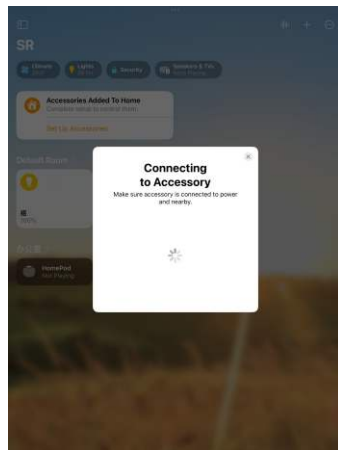


Figure 12

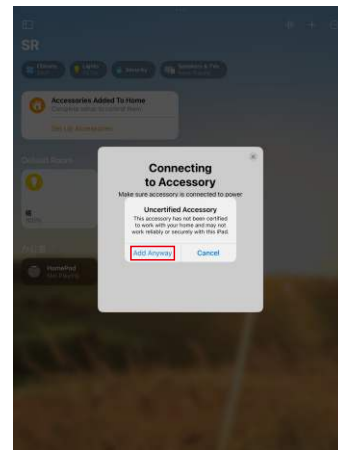


Figure 13

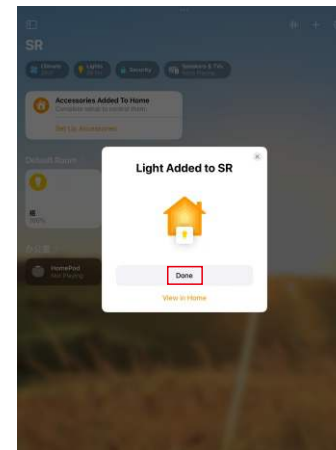


Figure 16

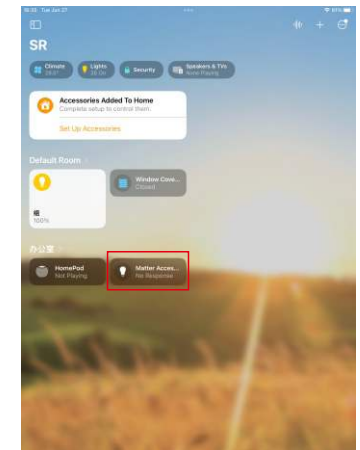


Figure 17

Step 5: once the dimmer is added to the gateway successfully, tap on the device to control on/off and brightness of the dimmer as shown in Figure 17 to Figure 19.

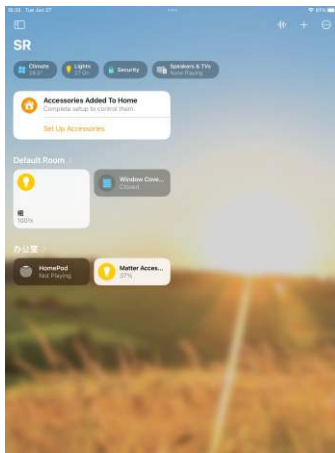


Figure 18

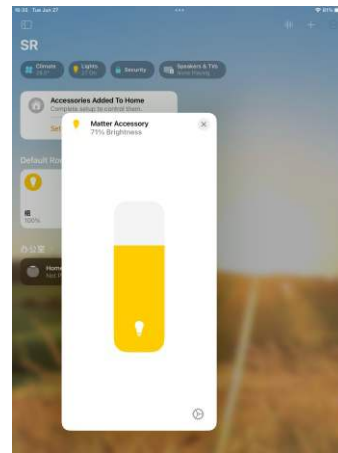
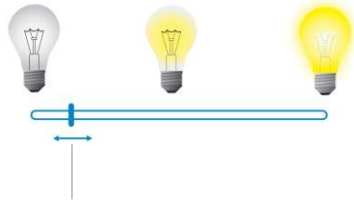


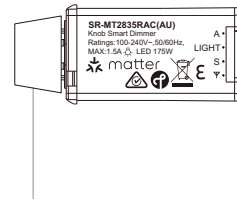
Figure 19

4. Minimum Brightness Setting

Set Minimum Brightness



Step 1: adjust the brightness of connected load to a desired level between 1%-50%.



Step 2: short press the knob 5 times continuously and rapidly, LED indicator will turn on green for 3 seconds, and within these 3 seconds short press the knob once to enter setting menu.

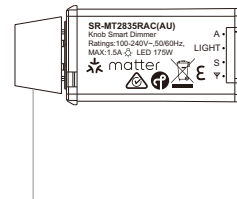
Step 3: LED indicator will blink green once, which means the dimmer has entered min. brightness setting process which will last for 15 seconds.

Step 4: Within the 15 seconds, press and hold the knob for over 5 seconds (if press and hold it less than 5 seconds, the dimmer will quit min. brightness setting process) until LED indicator blinks green rapidly for 2 seconds, the brightness adjusted in step 1 will be set as minimum brightness, then the load can not be dimmed below this level.

Delete Minimum Brightness



Step 1: adjust the brightness of connected load to 0%.



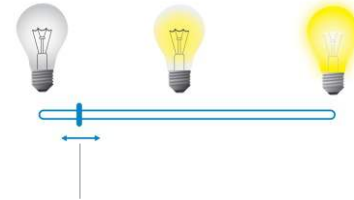
Step 2: short press the knob 5 times continuously and rapidly, LED indicator will turn on green for 3 seconds, and within these 3 seconds short press the knob once to enter setting menu.

Step 3: LED indicator will blink green once, which means the dimmer has entered min. brightness setting process which will last for 15 seconds.

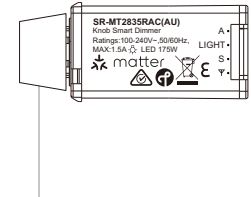
Step 4: Within the 15 seconds, press and hold the knob for over 5 seconds (if press and hold it less than 5 seconds, the dimmer will quit min. brightness setting process) until LED indicator blinks green rapidly for 2 seconds, previously set min. brightness will be deleted, then the load can be dimmed to 1%.

5. Startup Brightness Setting

Set Startup Brightness



Step 1: adjust the brightness of connected load to a desired level between 1%-50%.



Step 2: short press the knob 5 times continuously and rapidly, LED indicator will turn on green for 3 seconds, and within these 3 seconds short press the knob twice to enter setting menu.

Step 3: LED indicator will blink green twice, which means the dimmer has entered startup brightness setting process which will last for 15 seconds.

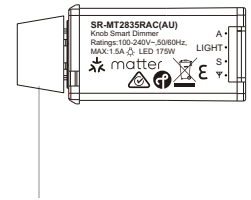
Step 4: Within the 15 seconds, press and hold the knob for over 5 seconds (if press and hold it less than 5 seconds, the dimmer will quit startup brightness setting process) until LED indicator blinks green rapidly for 2 seconds, the brightness adjusted in step 1 will be set as startup brightness.

Note: startup brightness setting function is to avoid the phenomenon that some dimmable LED drivers can not be turned on after turned off at a very low brightness level. Once setting a startup brightness, if the startup brightness is higher than the brightness before turned off, the driver will first go to the startup brightness after turned on then drop down to the level before turned off. If the startup brightness is lower than the brightness before turned off, the driver will directly go to the brightness before turned off.

Delete Startup Brightness



Step 1: adjust the brightness of connected load to 0%.



Step 2: short press the knob 5 times continuously and rapidly, LED indicator will turn on green for 3 seconds, and within these 3 seconds short press the knob twice to enter setting menu.

Step 3: LED indicator will blink green twice, which means the dimmer has entered startup brightness setting process which will last for 15 seconds.

Step 4: Within the 15 seconds, press and hold the knob for over 5 seconds (if press and hold it less than 5 seconds, the dimmer will quit startup brightness setting process) until LED indicator blinks green rapidly for 2 seconds, previously set startup brightness will be deleted.

6. Restore factory settings

To restore the factory settings, short press the Knob 5 times continuously and then within 3 seconds press and hold it for over 5 seconds until LED indicator turns off or switch the device on and off in the following sequence. If the device is successfully reset, the connected light will blink 3 times to indicate successful reset.

Stage	Duration	State
1	< 1s	ON
2	> 3s	OFF
3	5s - 15s	ON
4	> 3s	OFF
5	< 1s	ON
6	> 3s	OFF
7	< 1s	ON
8	> 3s	OFF
9	< 1s	ON
10	> 3s	OFF

7.Controlled by a push switch:

Once connected with a push switch, click the push switch to switch ON/OFF, press and hold down it to increase/decrease light intensity.

8. Touchlink to a Zigbee remote

- Step 1:** Short press the knob 4 times and then within 3 seconds press and hold it for over 5 seconds to start Touchlink pairing.
- Step 2:** Bring the remote within 10cm of the receiver.
- Step 3:** Set the remote into Touchlink pairing, please refer to its manual.
- Step 4:** There shall be indication on the remote for successful link and the connected light will flash.

Note: There are two control situations:

- 1. Only one remote, to control one or more receivers:** directly perform Touchlink pairing between the remote and the receiver.
- 2. Only one receiver, to be controlled by multiple remotes, or multiple remotes and multiple receivers with cross-control:** use one receiver as the Zigbee hub, add all remotes and other receivers to the hub, and then perform Touchlink pairing between the remotes and the receivers. The steps are as follows:
- Step 1:** Use one receiver as the Zigbee hub and short press the knob 4 times and then within 3 seconds press and hold it for over 5 seconds to start adding Zigbee devices.
- Step 2:** Reset power of another receiver once to enter Zigbee network pairing mode, it will be added by the hub, and the connected light will flash.
- Step 3:** Set a Zigbee remote to enter Zigbee network pairing mode, it will be added by the hub, and the indicator will flash to indicate.
- Step 4:** Add more receivers and remotes to the hub as you would like, refer to the corresponding remote manual.
- Step 5:** Touchlink the added receivers and the remotes.

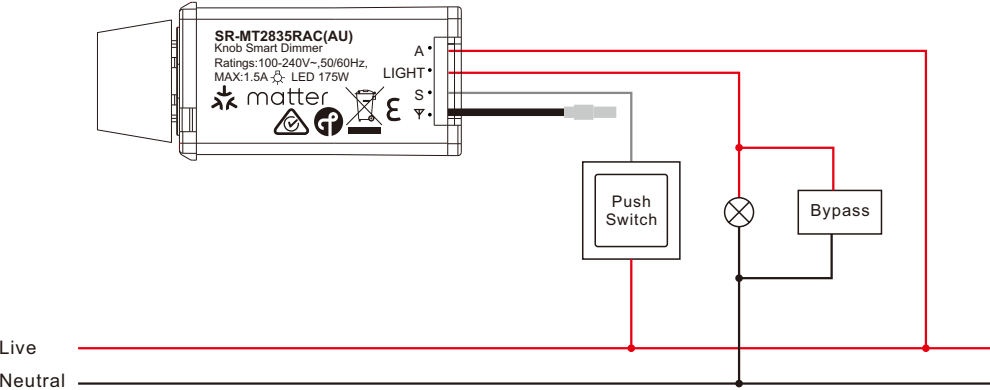
9. Learning to a Zigbee Green Power Switch

- Step 1:** Short press the knob 4 times and then within 3 seconds press and hold it for over 5 seconds to start Learning mode.
- Step 2:** Set the green power switch into Learning mode, please refer to its manual.
- Step 3:** There shall be indication on the switch for successful learning.

Note: There are two control situations:

- 1. Only one receiver, to be controlled by multiple GP switches:** directly perform pairing between the GP switch and the receiver.
- 2. Only one GP switch, to control multiple receivers, or multiple GP switches and multiple receivers with cross-control:** use one receiver as the Zigbee hub, add all other receivers to the hub, and then pair the GP switch with the receiver. The steps are as follows:
- Step 1:** Use one receiver as the Zigbee hub and short press the knob 4 times and then within 3 seconds press and hold it for over 5 seconds to start adding Zigbee devices.
- Step 2:** Reset power of another receiver once to enter Zigbee network pairing mode, it will be added by the hub and the connected light will flash.
- Step 3:** Add more receivers to the hub as you would like.
- Step 4:** Pair the added receivers with the GP switches.

Wiring Diagram



NOTE: Switch connected to the switch wire activates the basic functionality of the dimmer (short press to turn the light on/off, hold to dim up or dim down).

The Bypass is a device designed to work with the smart dimmer. It should be used in case of connecting LED bulbs or energy saving compact fluorescent lamps. The Bypass prevents flickering of the LED lights and glowing of the turned off compact fluorescent lamps. In the case of 2-wire connection, the Bypass allows to reduce minimum power of load required by the dimmer for correct operation. The Bypass provides powering of the dimmer in case of controlling the low loads of minimum power down to 3W (for cosφ>0.5).

Dimensions

