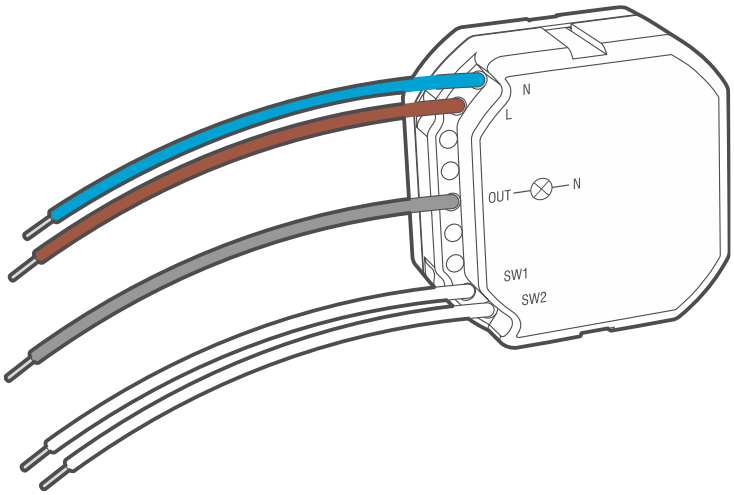
Smart Dimmer

ADC-200

Firmware version 1.04

EN



adc-200_BW_en 08/26

SATEL sp. z o.o. • ul. Budowlanych 66 • 80-298 Gdańsk • POLAND
tel. +48 58 320 94 00
www.satel.pl

IMPORTANT

The device should be installed by qualified personnel.

Changes, modifications or repairs not authorized by the manufacturer shall void your rights under the warranty.

Description of symbols on the device:


The device meets the requirements of the applicable EU directives.


The device must not be disposed of with other municipal waste. It should be disposed of in accordance with the existing rules for environment protection (the device was placed on the market after 13 August 2005).

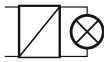

The device is designed for indoor installation.

Alternating current (AC).


Prior to installation, please read carefully the manual.


Solid state relay


Load type – bulb.


Load type – electronic step-down converter for extra-low voltage bulbs (e.g. halogen lamps, LEDs).


Load type – magnetic step-down transformer for extra-low voltage bulbs (e.g. halogen lamps, LEDs).

SATEL aims to continually improve the quality of its products, which may result in changes in their technical specifications and software. Current information about the changes being introduced is available on our website.
Please visit us at:
https://support.satel.pl

Hereby, SATEL sp. z o.o. declares that the radio equipment type ADC-200 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.satel.pl/ce

Signs in this manual


Caution – information on the safety of users, devices, etc.


Note – suggestion or additional information.

CONTENTS

1. Features 2
2. Description 2
3. Installation 3
3.1 Tips for installation 3
3.2 Mounting 4
4. Specifications 5

The ADC-200 dimmer (Smart Dimmer) is used to adjust the brightness of 230 VAC lighting. It can be used to turn on / turn off / dim down / dim up the lights. The manual applies to the dimmer installed in the BE WAVE system.

1. Features

- Control of various light sources:
  - 230 V incandescent bulbs,
  - 230 V halogen bulbs,
  - dimmable 230 V LED bulbs,
  - light sources powered by an electronic or magnetic transformer.
- Connected load automatically detected.
- Remote control or local control by means of control inputs.
- Stepless adjustment of light brightness.
- Memory of set brightness level.
- 2 control inputs:
  - capability to connect a push-button or a switch,
  - lighting controlled locally,
  - capability to control any device in the system.
- Operation in the 868 MHz frequency band.
- AES encrypted two-way radio communication.
- Transmission channel diversity – 4 channels for automatic selection of the one that will enable transmission without interference with other signals.
- Remote settings programming.
- Remote firmware update.
- Firmware protection against overload and overheating.
- Powered by 230 VAC.
- Installed in a flush- or surface-mounted junction box with a minimum diameter of 60 mm.

2. Description

Figure 1 shows the dimmer.

(1) button used to:

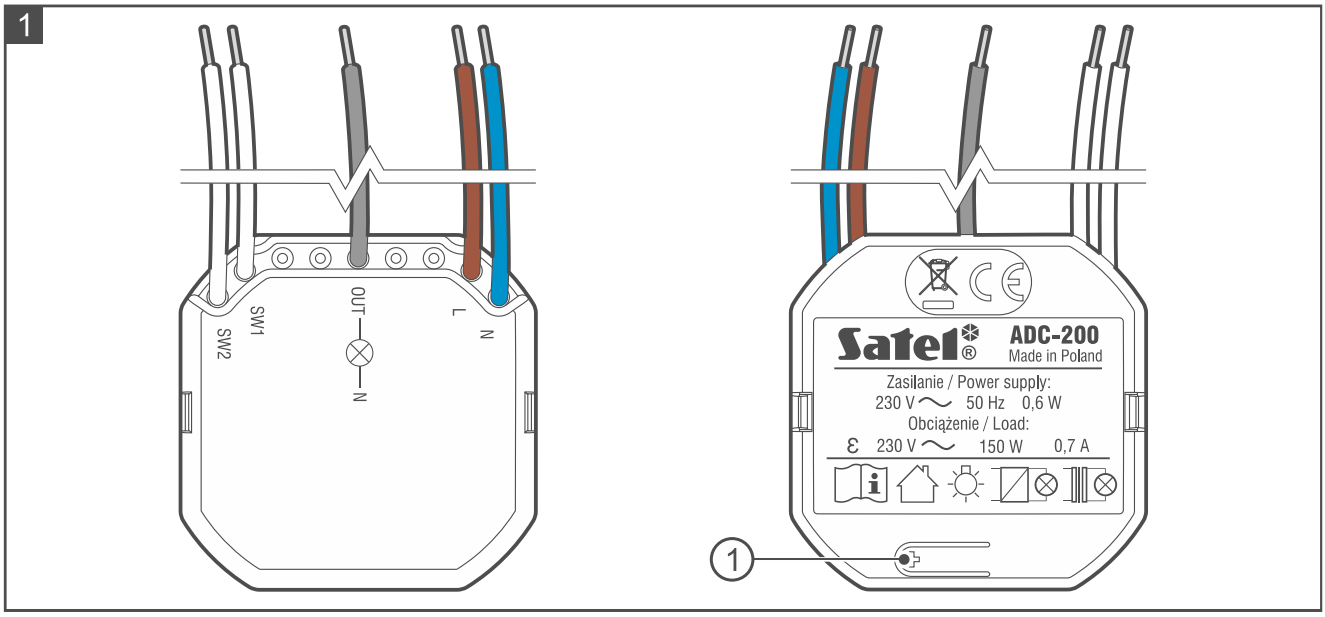
- register the dimmer in the system – press while adding the dimmer to the system,
- block / unblock the registration – press and hold for 10 seconds to block / unblock the capability to add the dimmer to the system.

Wires

N [blue] - for connecting 230 VAC supply neutral wire.
L [brown] - for connecting 230 VAC supply phase wire.
OUT [gray] - output to control the lighting.
SW1 [white] - control input 1.
SW2 [white] - control input 2.

The dimmer inputs are not galvanically isolated.

1



3. Installation

The device should be installed by qualified personnel.

Disconnect power before making any electrical connections.

Connect the dimmer to a single-phase network according to the applicable standards.

Do not remove the dimmer from the enclosure. Installing the dimmer without enclosure or with a damaged enclosure poses a risk of electric shock and may damage the device.

Do not use the dimmer to dim the lighting powered by DC because this may damage the dimmer and the connected lighting device.

Do not install the dimmer at locations above 2000 m above sea level.

3.1 Tips for installation

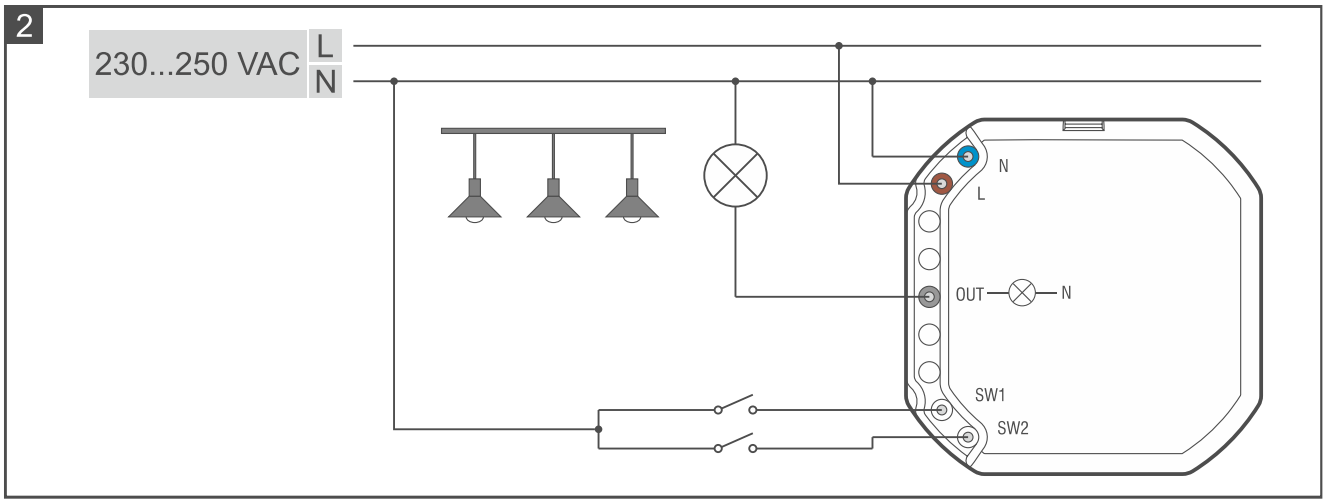
- The dimmer should be installed indoors, in spaces with normal air humidity.
- Do not install the dimmer outdoors.
- When selecting a place of installation, consider the radio communication range.
- Thick walls, metal partitions, etc. reduce the range of the radio signal.
- The electrical circuit to which the dimmer is to be connected must have suitable protection. Instruct the owner / user of the system on how to disconnect the dimmer from the mains supply (e.g. indicate the fuse or circuit breaker protecting the dimmer supply circuit).
- Install the dimmer in an electrical junction box (a deep junction box with a diameter of at least 60 mm).
- To connect the wires, use screw terminal blocks, splicing connectors, etc.

- You can connect to the dimmer light sources powered by 230 VAC (incandescent bulbs, halogen bulbs, LED bulbs) or light sources powered by electronic or magnetic transformer.
- Never connect to the dimmer different types of loads simultaneously.
- If you are connecting a LED light bulb, make sure it is dimmable.
- Do not connect more than one transformer to the dimmer output.
- If a magnetic transformer is connected to the dimmer output, make sure the load of the transformer is at least 50% of its rated capacity.
- Do not connect loads higher than 7 A / 150 W to the dimmer.
- You can connect a push-button or a switch designed for 230 V electrical installations to the dimmer inputs. The push-button is the preferred choice. It provides more functionality.

3.2 Mounting

1. Power off the circuit to which the dimmer is to be connected.
2. Open the electrical junction box in which the dimmer is to be installed.
3. Connect the dimmer to the 230 VAC supply circuit (Fig. 2):
   – brown wire [L] to phase wire.
   – blue wire [N] to neutral wire.
4. Connect the lighting to the dimmer output (Fig. 2).
5. Connect the push-buttons / switches to the dimmer inputs (Fig. 2).

2



6. Place the dimmer in the junction box. Make sure the wires are behind the dimmer enclosure.
7. Power on the circuit to which the dimmer is connected.
8. Add the dimmer to the system (see the manual for the BE WAVE system controller or the BE WAVE Hybrid system control panel).
9. Close the junction box.

If the lighting connected to the dimmer is off after the dimmer is started, the brightness level set in the Be Wave app / BE WAVE Soft program may be too low.

In the dimmer settings in the Be Wave app / BE WAVE Soft program set the minimum brightness level at which it will be visible that the lighting is on.

Always disconnect power before replacing the light source.

4. Specifications

Operating frequency band	868.0 MHz ÷ 868.6 MHz
Radio communication range (in open area)	up to 800 m
Supply voltage	230 VAC, 50 Hz
Standby power consumption	0.6 W
Maximum power consumption	1 W
Minimum load	1 W / 230 VAC
Maximum load	0.7 A / 150 W / 230 VAC
Complied with standards	EN 50130-4, EN 50130-5
Environmental class according to EN 50130-5	II
Operating temperature range	-10°C...+55°C
Maximum humidity	93±3%
Dimensions	47 x 47 x 22 mm
Weight	33 g