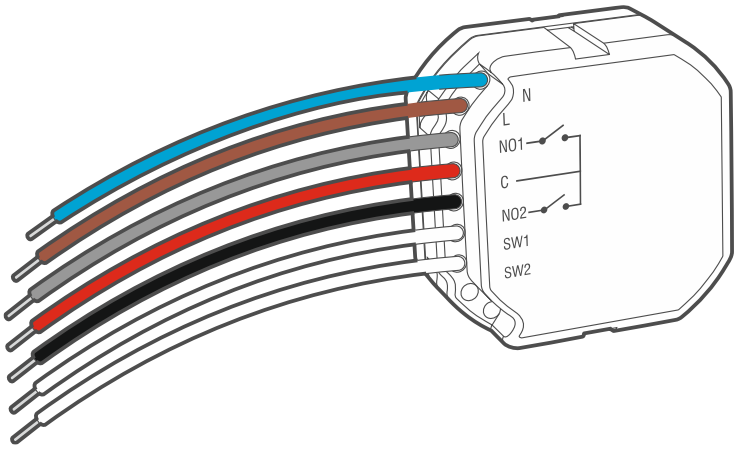
Smart 2-CH Relay

ASW-210

EN

Firmware version 1.02



CE

asw-210_BW_en 08/26

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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).

 Prior to installation, please read carefully the manual.

 The device is designed for indoor installation.

 Alternating current (AC).

 Direct current (DC).

 Switch.

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 ASW-210 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 4
3.1 Tips for installation 4
3.2 Mounting 4
4. Specifications 6

The ASW-210 controller (Smart 2-CH Relay) is used to turn ON / OFF up to two 230 VAC electrical appliances. The manual applies to the controller installed in the BE WAVE system.

1. Features

- Control of 230 VAC electrical appliances.
- 2 relay outputs:
  – remote control,
  – local control by means of control inputs,
  – galvanic isolation of the outputs.
- 2 control inputs:
  – capability to connect a push-button or a switch,
  – local control of the relay output,
  – 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.
- Powered by 230 VAC.
- Installed in a flush- or surface-mounted junction box with a minimum diameter of 60 mm.

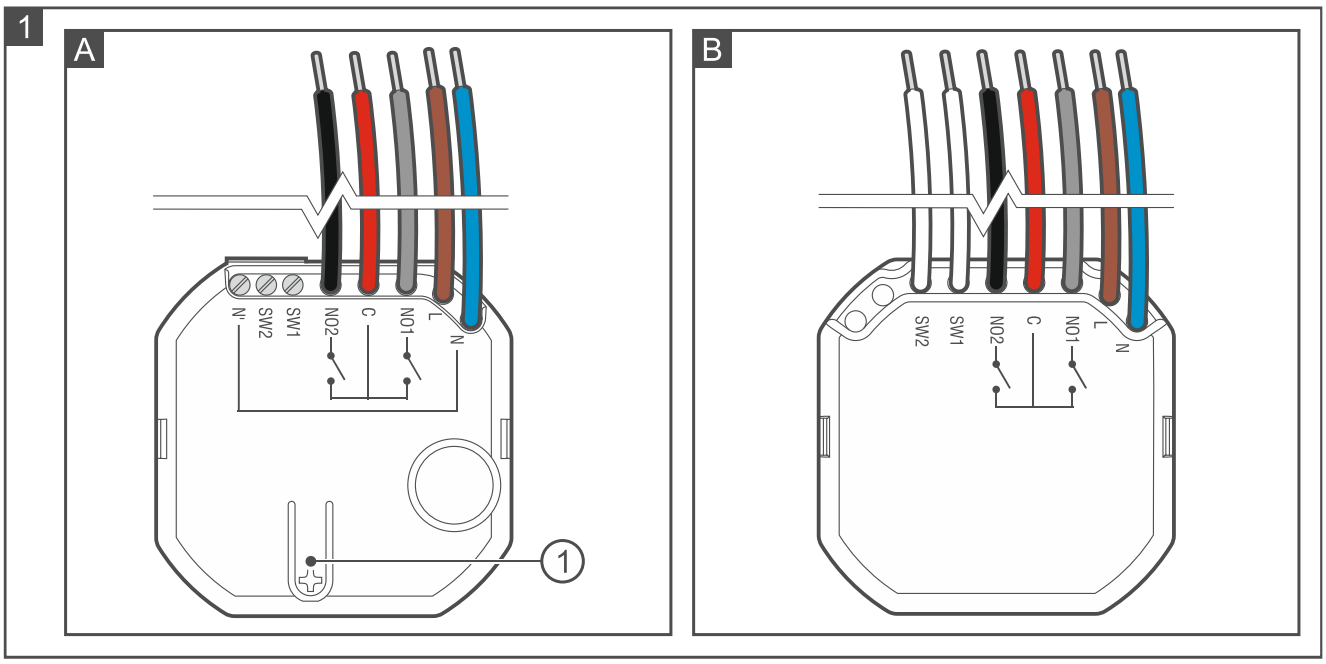
2. Description

The variant A of the device (with screw terminals) had been manufactured until 2024 when it was replaced by variant B (no terminals, wires only).

Figure 1 shows the controller in two variants:

① button used to:
  – register the controller in the system – press while adding the controller to the system,
  – block / unblock the registration – press and hold for 10 seconds to block / unblock the capability to add the controller to the system.

In variant B, the button is located at the back of the enclosure.



Wires

N [blue] - for connecting 230 VAC supply neutral wire.

L [brown] - for connecting 230 VAC supply phase wire.

NO1 [gray] - NO contact of the relay output 1 (normally it is disconnected from the common contact C – does not conduct electricity).

NO2 [black] - NO contact of the relay output 2 (normally it is disconnected from the common contact C – does not conduct electricity).

C [red] - common contact C of the relay outputs.

SW1 [white] - control input 1. [only variant B]

SW2 [white] - control input 2. [only variant B]

Terminals [only variant A]

SW1 - control input 1.

SW2 - control input 2.

N' - for connecting 230 VAC supply neutral wire.

Given the specific character of radio communication, it is not recommended that the controller be used in applications where quick switching of the output status is required.

Using the relay outputs for frequent (more than once every 10 seconds) switching of capacitive loads, e.g. LED lighting power supplies, LED lamps, etc. is not recommended.

Do not connect more than one LED lighting power supply to the relay output.

The controller inputs are not galvanically isolated.

3. Installation

The device should be installed by qualified personnel.

Disconnect power before making any electrical connections.

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

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

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

3.1 Tips for installation

- The controller should be installed indoors, in spaces with normal air humidity.
- Do not install the controller 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 controller is to be connected must have suitable protection. Instruct the owner / user of the system on how to disconnect the controller from the mains supply (e.g. indicate the fuse or circuit breaker protecting the controller supply circuit).
- Install the controller 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.
- To the relay output you can connect a 230 VAC appliance with current consumption up to 5 A.
- To the control input you can connect a push-button or a switch designed for 230 V electrical installations.
- To connect the push-button / switch, use flexible wires with a cross-section of 0.5-0.75 mm^2.

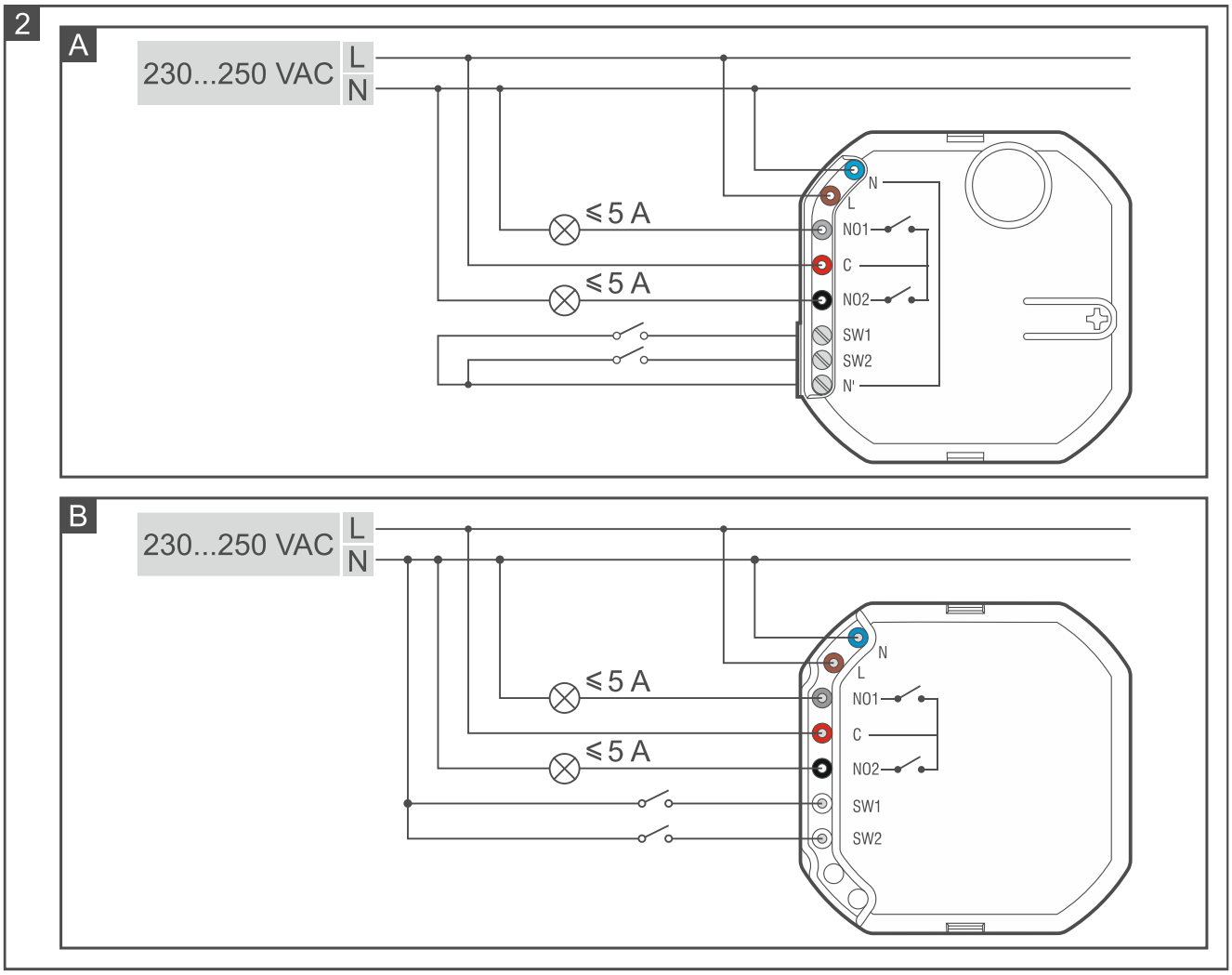
3.2 Mounting

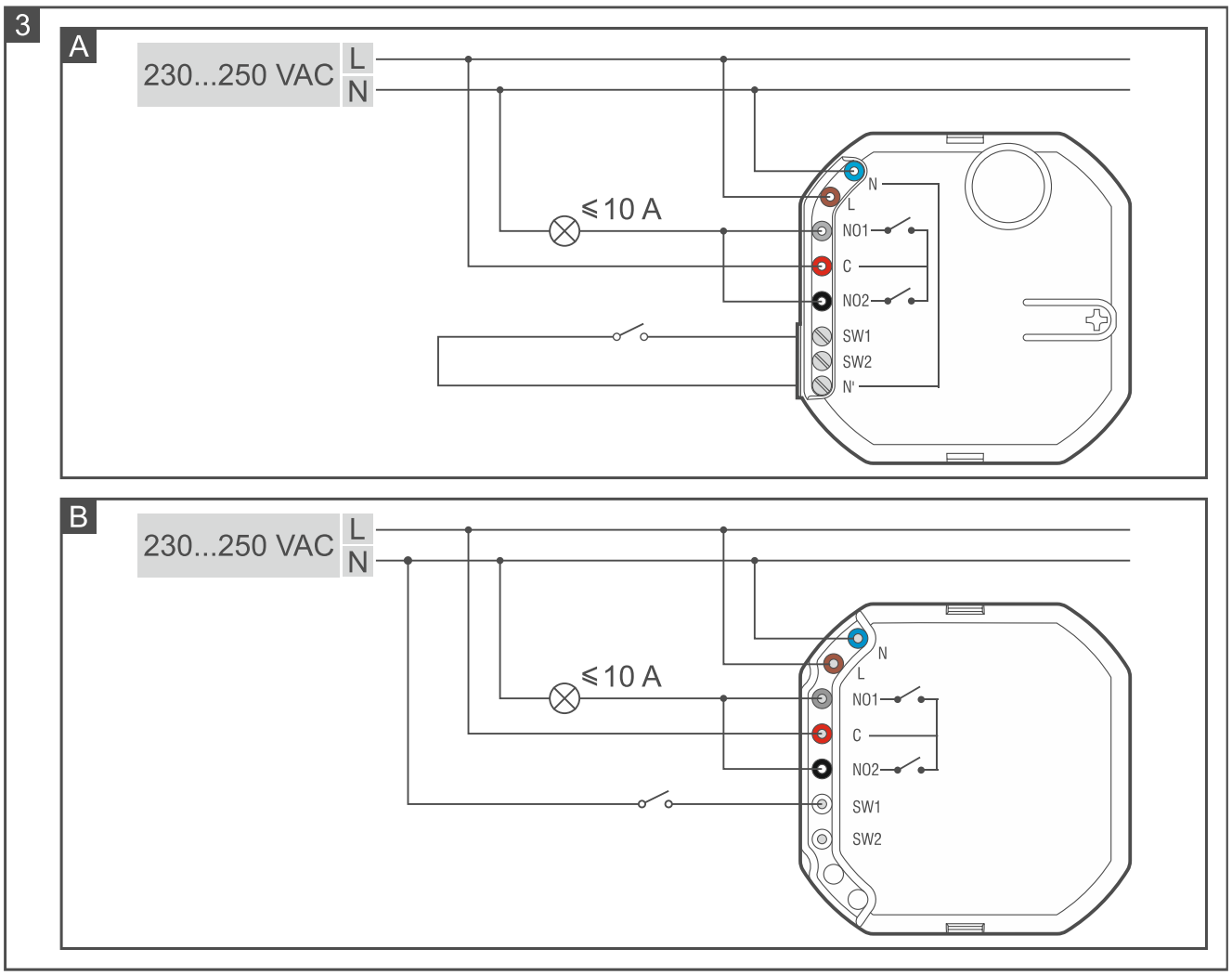
1. Power off the circuit to which the controller is to be connected.
2. Open the electrical junction box in which the controller is to be installed.
3. Connect the controller to the 230 VAC supply circuit (Fig. 2):
   – brown wire [L] to phase wire.
   – blue wire [N] to neutral wire.
4. Connect the wires of controller relay outputs to the wires of electrical circuits to be controlled by the controller (Fig. 2).
5. Connect the push-buttons / switches to the controller inputs (Fig. 2).
6. Place the controller in the junction box. Make sure the electrical wires are behind the controller enclosure.
7. Power on the circuit to which the controller is connected.

8. Add the controller to the system (see the manual for the BE WAVE system controller or the BE WAVE Hybrid system control panel).

You can add 1 or 2 controller channels to the system. If you add only 1 channel, when controlling this channel, you control two relay outputs simultaneously. This configuration allows you to connect 230 VAC appliances with current consumption up to 10 A to the controller outputs (Fig. 3). If the second output is unused, the NO2 wire must be secured.

9. Close the junction box.





4. Specifications

Operating frequency band ..... 868.0 MHz ÷ 868.6 MHz
Radio communication range (in open area) ..... up to 1300 m
Supply voltage ..... 230 VAC, 50 Hz
Standby power consumption ..... 0.47 W
Maximum power consumption ..... 1 W
Rated switching voltage ..... 250 VAC
Relay outputs rated load – AC1 ..... 5 A / 250 VAC
Minimum switching current ..... 10 mA
Rated switching current ..... 5 A
Maximum breaking capacity – AC1 ..... 1250 VA
Minimum breaking capacity ..... 50 mW
Contact resistance ..... ≤ 100 mΩ
Electrical life (number of cycles) – AC1 (360 cycles/hour) ..... > 10^5
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 47.4 x 22 mm

Weight..... 40 g