VADSBO R3000WCM Bluetooth Relay Controller Instruction Manual

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⚠ Warning!

High voltage. Risk of electric shock. The installation should only be carried out by an authorized electrician.

Ensure that the power supply to the relay is switched off before connection.

The Bluetooth relay R3000WCM is controlled by one or multiple retractive switches and/or through the Casambi app which is free to download from Appstore and Google Play. The relay is used to control non-dimmable loads up to an interrupting rating of 13A (cos φ =1).

To control a relay in Casambi, the function “Control an element” is used.

Contents

Connection

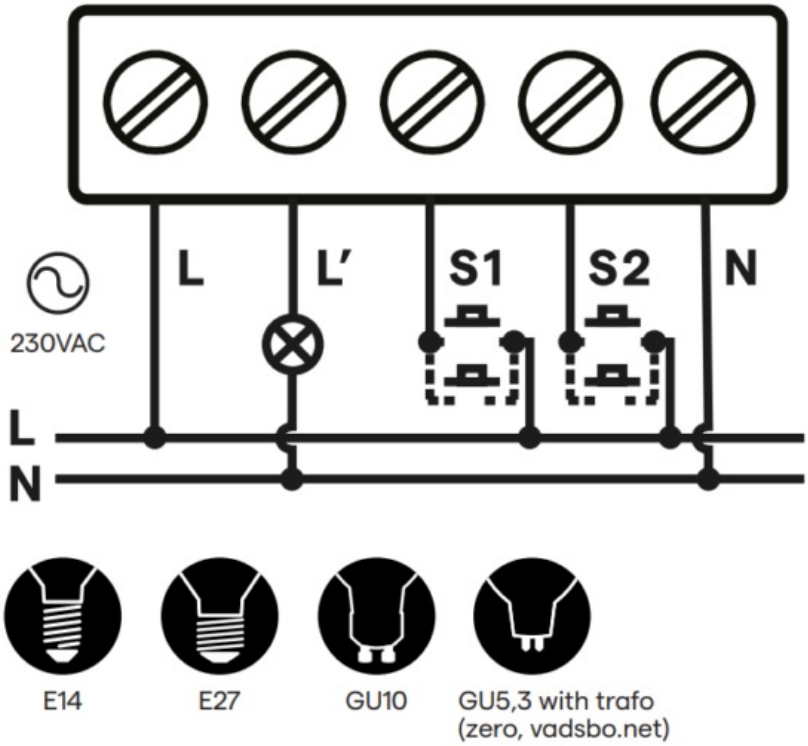
1. Make sure that the power is shut off before connection begins.
2. Connect the neutral wire to the terminal input marked N.
3. Connect phase wire to the terminal input marked L.
4. Connect the control wire S1 to the retractive switch.
5. Connect phase wire to the other side of the retractive switch.
6. Connect interrupting output L’ to the load. Connect neutral wire to the load.
7. Make sure that the spring installed on the retractive switch and all connections above are correct.
8. Put power back on.

To be able to use the retractive switch inputs S1 and S2, you need to configurate this in the app. The retractive switch inputs are set as “not used” in the factory settings.

Tip!

You can use the extra retractive switch input S2 to control a scene in the Casambi-network, for instance.

Wiring diagram



Technical data

- **Designation:** R3000WCM
- **Art.number:** V-42B0106-001Y
- **E-number:** 13 013 45
- **Power:** 0-3000VA
- **Input voltage:** 220-240V
- **Frequency:** 50Hz
- **Frequency band:** 2402MHz-2480MHz
- **Maximum radio-frequency power:** 4dBm
- **Standby power:** <0,5W
- **Maximum interrupt rating:** 13A (cos φ =1)
- **Control signals (ON/OFF):** Can be controlled with one or multiple retractive switches or via Casambi
- **Remembers the last set state:** Yes, even after power outage
- **Overheat-protection:** Yes
- **Mounting:** Wall mount box
- **Operating humidity:** 0…80% non-condensing
- **Operating temperature:** -20°C + 30°C
- **Dimensions LxWxH:** 47,5×47,5x20mm.
- **Weight:** 45g
- **Cable area:** 2,5mm2 (AWG 22)
- **Housing material:** Polycarbonate (PC)
- **Usage areas:** Control non-dimmable loads up to an interrupting rating of 13A (cos φ =1)
- **Insulation class:** IP20
- **Cladding class:** II
- **Authorizations:** CE, UKCA

Heat

R3000WCM is equipped with overheat-protection. When used continuously for a long time with high load in a warm environment, the relay will shut off. If the relay is installed in a warm environment or if multiple relays are installed tightly together, then the maximal output of the relay needs to be reduced.

Pay attention to that long cable lengths will increase the heat because of the cable's resistance.

Change profile

The relay's profile can be changed when it is not connected to a network. By pressing on the unit in the Casambi-app in the nearby devices, the option to change profile shows up. By changing profile, the function of the device is changed.

Profiles

R3000WCM ON/OFF: The relay is activated/deactivated by pressing the button.

R3000WCM ON WHILE PRESS: The relay is active while the button is held pressed.

Create an impulse function in Casambi with custom pulse length

1. Create a scene with the relay on – "Relay on".
2. Create a scene with the relay off – "Relay off".
3. Create an animation "Impulse".
4. First add the scenario "Relay on" to the animation "Impulse".
5. Add a delay, which will be the length of the pulse.
6. Then add the scenario "Relay off".
7. Activate the animation "Impulse" through the app or through a retractive switch.

Range

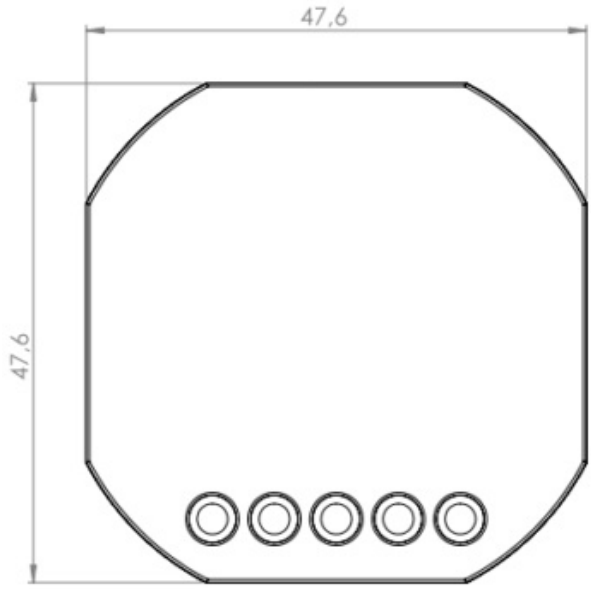
MESH means that the devices talk to each other via the Bluetooth network, and you only need to have coverage for one device. By using MESH technology, you only need to be within the range (30M max) of one device in order to control all devices. The MESH technology means that you can build large-scale installations with a large number of light fittings and control them easily, e.g. via your smart phone. We recommend 10m as all installations have different preconditions. Note that even a dimmer with no load can be used in the network as a presence enhancement through the network via MESH technology

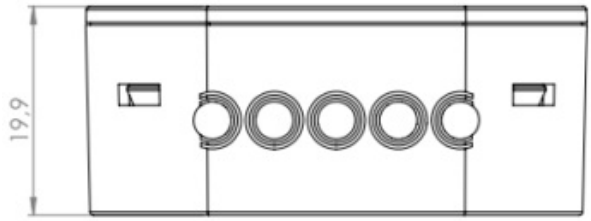
Load

The interrupting rating of 13A is valid on resistive loads. Different types of loads have different inrush currents when activated and voltage spikes when deactivated. To maximize the life span of R3000WCM it is recommended to follow the values given in the table below (given that the installation environment isn't too hot).

Load	PF	Rated output	VA	A
Halogen 230V	1	3000W	3000VA	13A
LED-loads	0,9	650W	800VA	3,25A
Fluorescent tube uncompensated	0,3	570W	1870VA	8,125A
Fluorescent tube compensated	0,85	1220W	1420VA	6,5A
Low voltage halogen electronic	0,8	1220W	1420VA	6,5A
Low voltage halogen conventional	0,95	975W	975VA	4A
Low-energy bulbs	0,6	400W	650VA	3,25A

Dimensions





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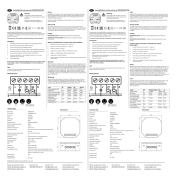
Documents / Resources

	VADSBO R3000WCM Bluetooth Relay Controller [pdf] Instruction Manual R3000WCM, Bluetooth Relay Controller, R3000WCM Bluetooth Relay Controller

References

- Vadsbo LightTech AB – Vi utvecklar, designar och säljer trådlösa ljusstyrningslösningar för stora & smarta projekt.
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