

**VOLTAGE-FREE OUTPUT****MAX. CURRENT 13A****AC/DC POWER SUPPLY**

■ Features

- Casambi relay for controlling non-dimmable loads
- Voltage-free contact output
- Maximum output current: 13A
- Three power supply modes: AC / 24VDC / 12VDC
- Control of systems with volt-free inputs
- Dedicated push button input for controlling Casambi devices
- Integrated CBM module (it can be paired to Casambi Long Range networks)
- Compact size and very low standby power consumption
- Multiple Casambi fixture profiles available

■ Description

CBU-RLVF-1P is a Casambi relay for controlling non-dimmable loads and systems with volt-free inputs (garage doors, HVAC systems...). CBU-RLVF-1P device uses Bluetooth Low Energy communication to receive a command signal from the Casambi app and control the voltage-free contact of the internal relay according to the selected fixture profile.

CBU-RLVF-1P has a voltage-free contact output of up to 13A and allows three different power supply modes: AC, 24VDC and 12VDC.

There are several Casambi fixture profiles available for CBU-RLVF-1P, which include different control modes: Toggle, Independent Toggle, Press, Pulse...

CBU-RLVF-1P also integrates a dedicated push button input for controlling Casambi devices.

Configuration and control can be done from a mobile phone or tablet using the free CASAMBI APP (available for iOS and Android).

In order to access the most updated manuals and information, consult our website:
<https://www.olver.com/olver-cbu-rlvf-1p.html> or QR code.



■ Technical data

CBU-RLVF-1P			
Power supply mode		AC	DC (24V)
Nominal input voltage		110 ... 240 Vac	24 VDC
Input voltage range		99 ... 264 Vac	21,6 ... 26,4 VDC
Input frequency		47 ... 63 Hz	-
Input current ¹⁾		≤ 20 mA	≤ 30 mA
Power consumption ¹⁾		≤ 0,85W	≤ 0,85W
Standby power consumption ²⁾		< 0,25W	< 0,25W
Max. load	Incandescent or mains halogen lamps	13 A	
	LED lamps and drivers	6 A	
	High frequency fluorescent lamps	6 A	
	Electronic or wire wound transformers	6 A	
	Motors (cos φ > 0,4)	3 A	
	Max. inrush current	120 A (20ms)	
	Max. voltage	240 Vac / 24 VDC	
Control output		Voltage-free contact output (normally open relay)	
Push button input ³⁾		Normally open push button (N.O.)	
RF	Communication interface	Bluetooth Low Energy (BLE) 4.0 / 5.0	
	Communication protocol	Casambi	
	Operating frequencies	2402-2483 MHz	
	Max. transmission power	+7 dBm	
Firmware update		OTA (Over The Air)	
Protections		Line permanent over voltage (non-replaceable fuse), line surge over voltage, over temperature.	
Operating temperature range		-20°C ... +50°C	
Operating relative humidity range		0 ... 80% non-condensing	
Connector		Screw terminals (Max. torque: 4 Lb.In / 0,5 Nm)	
Wiring	Solid size	0,2 ... 3,3 mm ² / 30 ... 12 AWG	
	Stranded size		
	Wire strip length	6,5 mm	
IP		IP20	
Enclosure material		Plastic (UL94-V0)	
Dimensions and weight		44 x 57 x 25 mm / 50gr	
Single box		55 x 68 x 35 mm / 0,065 kg	
Packing		160 units per box / 34 x 31,5 x 23 cm / 10,8kg	
Standards		EN 60669-2-1:2022, EN 61000-3-2, EN 61000-3-3, EN 301489-1, EN 301489-17, EN 300328	
Directives		(LVD) 2014/35/UE, (EMC) 2014/30/UE, (RED) 2014/53/UE, (RoHS) 2011/65/UE, (REACH) 1907/2006.	

¹⁾ Values measured with the relay activated/closed.

²⁾ Values measured with the relay deactivated/open.

³⁾ The recommended maximum wiring distance between the push button and terminals is 100 meters (in installations with strong electromagnetic interferences, shielded cable may be required). Push button input is designed exclusively for connecting a normally open push button. Make sure not to connect live parts to PUSH terminals.

■ Casambi fixture profiles



Factory default fixture profile is **#39300 Toggle**.

Several Casambi fixture profiles are available, which include different control modes:

- Toggle
- Independent Toggle
- Press
- Pulse
- Presence
- Push Button
- Repeater...

To access the full Casambi fixture profiles information, please refer to the next link:

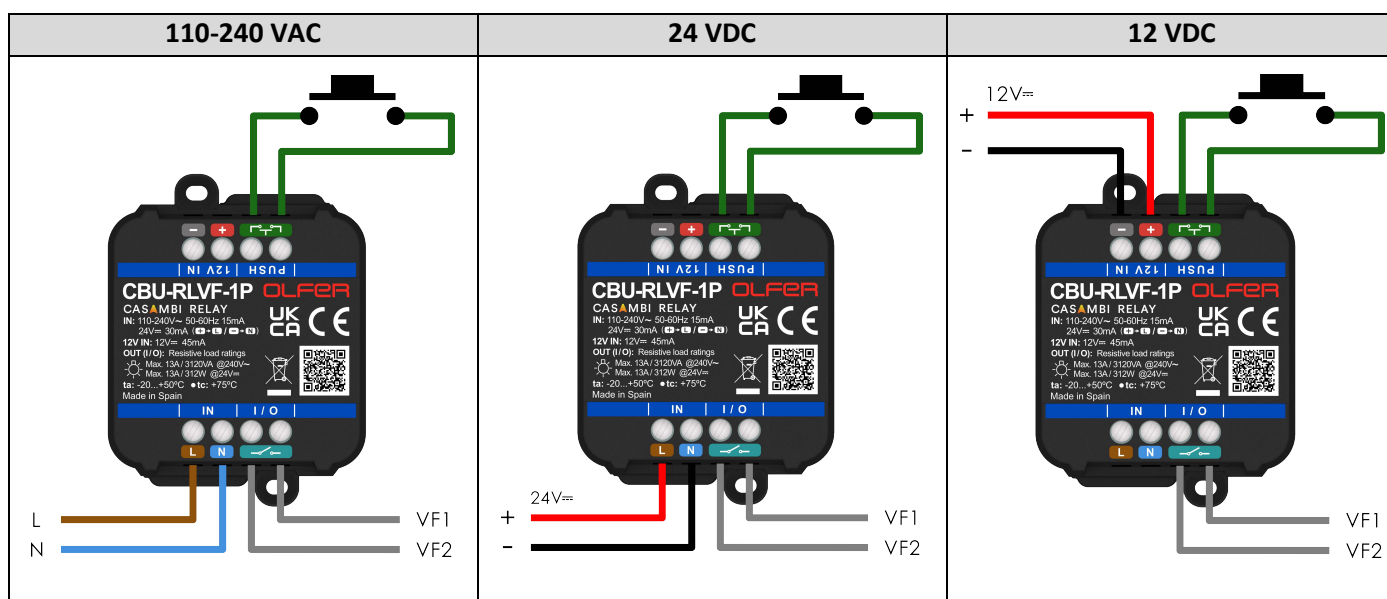
<https://www.olfer.com/olfer-cbu-rlvf-1p.html>


Type	Profile				Description	Manual App Control	
	Fixture ID	Model / Name	Icon	Fixture mode			
Relay	39300**	Toggle		PWM/Elements(OH, HWTmp)	Relay fixture. Toggle switch for relay output control. All lamps button or Press/slide on the same profile icon DOES change the relay status.	OUT: Toggle button for relay output	
	39301	iToggle		PWM/Elements(OH, HWTmp)	Relay Profile. Independent toggle switch for relay output control. All lamps button or Press/slide on the same profile icon does NOT change the relay status.	OUT: Toggle button for relay output	
	39303	Press		PWM/Elements(OH, HWTmp)	Relay Profile. Independent push button for relay output control. Releasing the push button deactivates the relay immediately. All lamps button or Press/slide on the same profile icon does NOT change the relay status.	OUT: Push button for relay output	
	39304	Pulse 0.3s		PWM/Elements(OH, HWTmp)	Relay Profile. Independent push button for relay output control. Pressing the push button will activate the relay for 0.3	OUT: Push button for	


Other fixture profiles available on request.

■ Wiring diagram

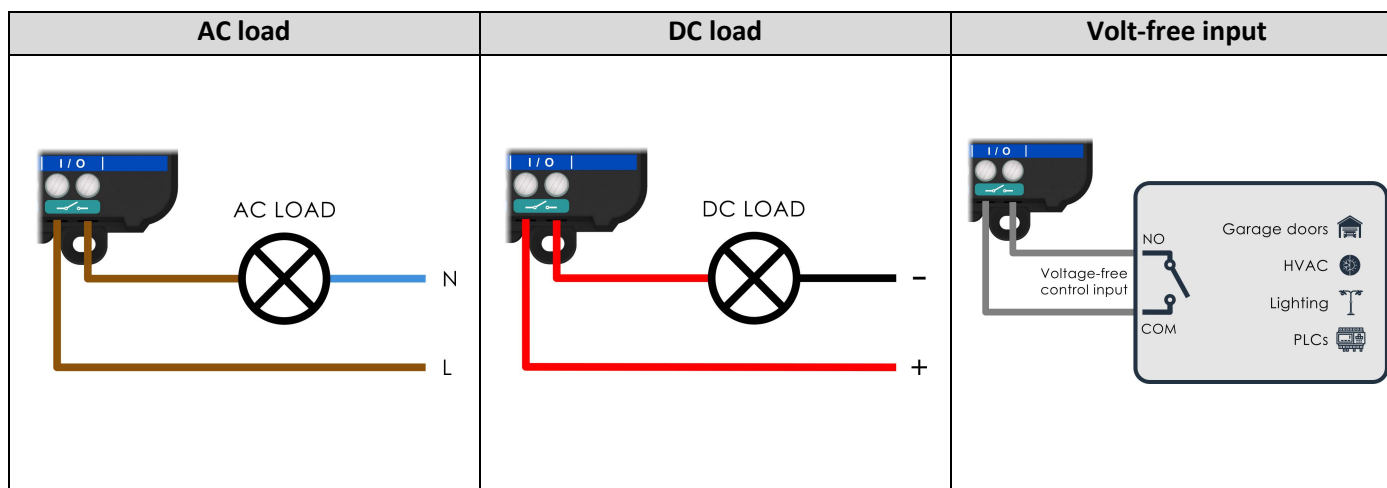
➤ Power supply (3 different modes):



- "I/O" terminals marked with the symbol "" refer to the terminals of the volt-free contact of the internal relay. Therefore, the connection of the VF1 and VF2 signals is independent of the power supply mode used.

- Connect a normally open push button to the PUSH terminals marked with the symbol "". Make sure not to connect live parts to the PUSH terminals.

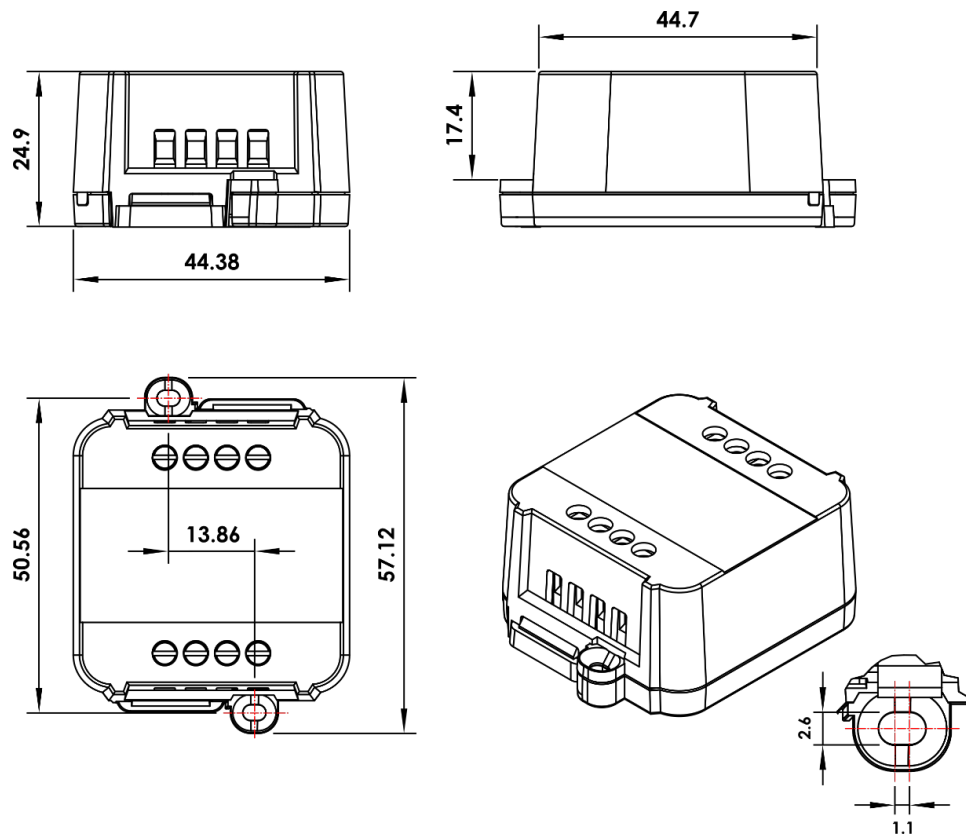
➤ Load type (application examples):



To access the [full wiring diagram information](https://www.olfer.com/olfer-cbu-rlvf-1p.html), please refer to the next link:

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■ Mechanical dimensions



■ Placement and antenna location

Like any other Casambi product with Bluetooth control, make sure not to place the product inside a metal case or placed near large metal structures. Metal will significantly block the radio signal, which is crucial for the proper functioning of the device.

When the product is mounted inside a metal case (e.g. integrated into a metal light fixture), a cut-out around the antenna may be needed for allowing the RF signal to exit the structure. The cut-out area should be as large as possible. Also the device should be placed as far away from any vertical structures as possible.

CBU-RLVF-1P's antenna is located on the right side of the device (below location marked in yellow):



The range between two devices in open air without obstacles is up to 150 meters in balanced networks. Higher ranges could be achieved using long range networks.

Effective range is also highly dependent on the surrounding and obstacles, such as walls and building materials.

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