



CBU-RL-2P

Instructions manual

Read this manual before installation.
Keep this manual for future reference.

WARNING: Risk of electrical shock, personal injury or death.

This device may only be installed and put into operation by qualified personnel.

Check the information of the devices to be controlled to see if they are compatible.

This device is designed for use in lighting and industrial control.

Do not use this device in equipment where malfunction may cause severe personal injury or threaten human life.

Turn power off before installing the device.

Respect national and applicable installation regulations.

If damage or malfunction should occur during operation, immediately turn power off and send device to the factory for inspection. Do not open, modify or repair the device. The device does not contain serviceable parts.

Description

CBU-RL-2P is a Casambi relay for controlling non-dimmable loads. CBU-RL-2P device uses Bluetooth Low Energy communication to receive a command signal from the Casambi app and control the power supply to the connected load through the internal relay according to the selected fixture profile.

CBU-RL-2P has a switched live output of up to 10A and allows control of loads powered by AC or DC (24V) through its two different power supply modes.

There are several Casambi fixture profiles available for CBU-RL-2P, which include different control modes: Toggle, Independent Toggle, Press, Pulse...

CBU-RL-2P also integrates two independent push button inputs 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).

To access [all user guides and documents](https://www.olfer.com/olfer-cbu-rl-2p.html), consult below link or scan QR code:

<https://www.olfer.com/olfer-cbu-rl-2p.html>

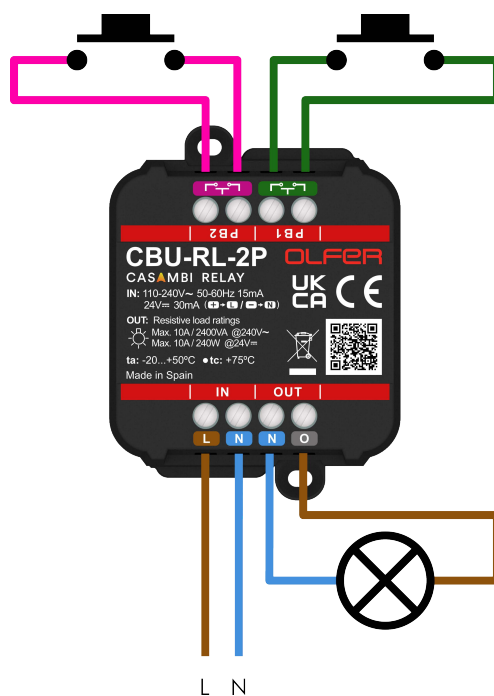


Technical data

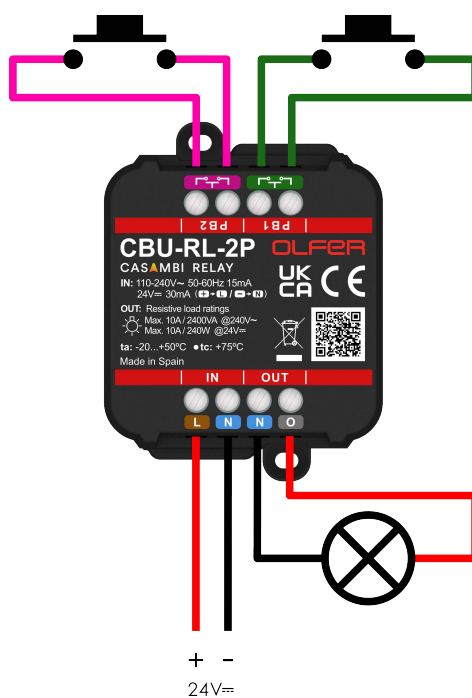
CBU-RL-2P		
Power supply mode		AC
		DC
Nominal input voltage		110 ... 240 Vac
Input voltage range		24 VDC
Input frequency		99 ... 264 Vac
Input current		47 ... 63 Hz
Power consumption		≤ 20 mA
Standby power consumption		≤ 0,85W
Max. load	Incandescent or mains halogen lamps	≤ 0,25W
	LED lamps and drivers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

Wiring diagram

- Control of AC-powered loads:



- Control of DC-powered loads (24V):



Installation instructions

Make sure that the mains voltage is switched off when making any connections. Use 0,2 - 3,3 mm² solid or stranded conductor electrical wires. Strip the wire 6,5mm from the end.

Insert the wires to the corresponding holes and tighten the connector screw. Max. torque is 4 Lb.In / 0,5 Nm. Make sure to connect the inputs and outputs correctly.

The technical data table provides the maximum controllable current value according to the load type and the maximum inrush current value allowed by the device. Make sure that the current consumption and inrush current of the load connected to the device do not exceed the specified values.

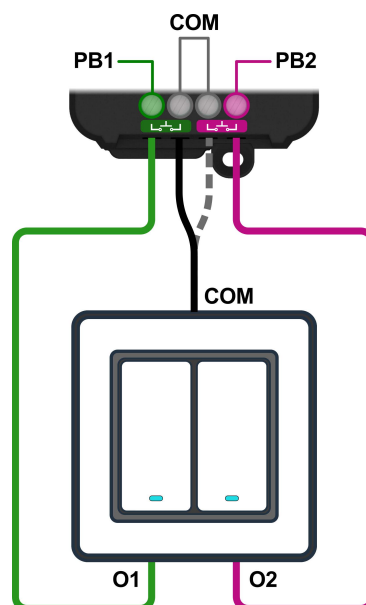
The internal relay will always switch the signal wired to the input terminal “**L**”, to the output terminal “**O**”. Therefore, in AC power supply mode, it will switch the mains phase, while in 24VDC power supply mode, it will switch the power positive. Make sure that the power supply mode used for the device (AC or DC) matches the one supported by the connected load.

If 24 VDC power supply mode is used, ensure that the input power positive is connected to the “**L**” terminal and the input power negative to the “**N**” terminal. Incorrect connection of the power input could damage the device.

Both “**N**” terminals are internally bridged in the device to facilitate the connection of the load. In AC power supply mode, they will be used to connect the neutral of the power supply/load, while in 24VDC power supply mode, they will be used to connect the negative of the power supply/load.

Push button inputs PB1 and PB2 are marked with the symbols “” and “”. The recommended maximum wiring distance between the push button and terminals is 100 meters (in installations with strong electromagnetic interference, shielded cable may be required). Push-button inputs are designed exclusively for connecting a normally open push button. Make sure not to connect live parts to PB1 and PB2 terminals.

The two adjacent terminals of the PB1 and PB2 inputs are internally bridged in the device. If a double push button module with a common connection point (COM) is used, it should be connected to either of these two terminals following below diagram:



CBU-RL-2P is a built-in device and it is intended to be integrated into a lighting fixture. Device protection against accidental contact of the active parts must be ensured by an additional enclosure (e.g. luminaire).

If you install CBU-RL-2P into a heat sensitive environment (i.e inside a luminaire or in a ceiling outlet box above a luminaire), make sure that the ambient temperature does not exceed the specified maximum value. The device shouldn't be covered by insulators such as rock wool.

CBU-RL-2P, as any other Casambi product, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block radio signals which are crucial to the operation of the product.

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.

Also mains wires should be placed as far as possible from the antenna area. CBU-RL-2P's antenna is located on the right side of the device (below location marked in yellow):



Effective range is also highly dependent on the surrounding and obstacles, such as walls and building materials. It is strongly recommended to perform thorough connectivity testing on-site.

When CBU-RL-2P is installed and powered, it can be configured and paired to a network using Casambi App. Unpaired devices will appear in nearby devices list of Casambi App. Select the most suitable fixture profile for the application before pairing CBU-RL-2P to a network. The updated fixture profiles list is available at the [product webpage](#).

If the device is already paired to a network for which you don't have credentials and you wish to pair it to a new network, please go to "Nearby devices" -> Tap on device's icon -> Tap "Unpair device". Once the unpairing sequence has started, switch off the mains power supply and switch it on again within 1-2 seconds. If you do the procedure too quickly, the unpairing may not work properly. Repeat the unpairing sequence, allowing an extra 1 or 2 seconds to pass between the instant in which the mains power supply is switched off and on again. A second method to unpair the device is to connect a normally open push button to any of the push button inputs of the CBU-RL-2P and during the unpairing procedure press the button.

ELECTRONICA OLFER, S.L.

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We reserve the right to make any changes without notice in the information reflected herein, not being liable for any harm that this may cause.



Type	Profile				Description	Manual App Control	
	Fixture ID	Model / Name	Icon	Fixture mode			
Relay	39288**	Toggle		PWM/Elements{OHI, HWTemp}	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 (O)	OUT
	39289	iToggle		PWM/Elements{OHI, HWTemp}	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 (O)	OUT
	39290	Press		PWM/Elements{OHI, HWTemp}	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 (O)	OUT
	39291	Pulse 0.3s		PWM/Elements{OHI, HWTemp}	Relay Profile. Independent push button for relay output control. Pressing the push button will activate the relay for 0.3 seconds. All lamps button or press/slide on the same profile icon does NOT change the relay status.	OUT: Push button for relay output (O)	OUT
	39292	Pulse 1s		PWM/Elements{OHI, HWTemp}	Relay Profile. Independent push button for relay output control. Pressing the push button will activate the relay for 1 second. All lamps button or press/slide on the same profile icon does NOT change the relay status.	OUT: Push button for relay output (O)	OUT
	39293	Pulse 10s		PWM/Elements{OHI, HWTemp}	Relay Profile. Independent push button for relay output control. Pressing the push button will activate the relay for 10 seconds. All lamps button or press/slide on the same profile icon does NOT change the relay status.	OUT: Push button for relay output (O)	OUT
Misc.	39294	Presence		Sensor{OHI,HWTemp}	Presence fixture. It doesn't appear under Lamps tab. A traditional motion sensor can be connected to behave as a Casambi presence sensor.	-	It appears under "Sensors" tab.
	39295	Push Button x2		PushButton{OHI,HWTemp}	Push button x2 fixture. It doesn't appear under Lamps tab. Two normally open (N.O.) push buttons can be connected.	-	It appears under "Switches" tab.
	39296	Repeater		PushButton{OHI,HWTemp}	Repeater fixture. It doesn't appear under Lamps tab. The device will only behave as a repeater, always using a maximum radio TX power of +8dBm in all networks.	-	It appears under "Switches" tab.

** Default profile

- Kabelkopplingsdosa "Väderbeständig"
- utan plint
- Mått H x B x T: 93 x 93 x 62 mm
- med metriska utbrytningsöppningar

ELEKTRISKA EGENSKAPER

Nominell isolationsspänning: $U_i = 1000 \text{ V}$

ANSLUTNINGSDATA

KABELINGÅNGAR

Kabelgenomföring:

Antal kabelgenomföring	Typ av kabelgenomföring	Storlek metrisk utbrytningsöppning	Kabelgenomföringsplats
7	metriska utbrytningsöppningar	M20	Vägg

MEKANISKA EGENSKAPER

Typ av lockfäste: Snabbförslutning för kapslingslock: Öppnas och stängs med ett kvarts varv, låsläget känns igen med en blick

Medlevererade tillbehör: Yttre fästen, Fästband, Tätningsplugg

IP-kapslingsklass: IP66, IP67, IP69
IP67: Kortvarig nedsänkning upp till 1 m/30 min
IP69: Vattentryck max. 100 bar, vattentemperatur max 80 °C, avstånd $\geq 0,15 \text{ m}$

Slaghållfasthet: IK09

Plomberingsbar utan tillbehör: Ja

MILJÖFÖRHÅLLANDEN

För att minska kondens och ackumulering, se teknisk information "Kondensvattenbildning och motåtgärder"

Användningsområde: Oskyddad installation

Max omgivningstemperatur 24 h: 55 °C

Omgivningstemperatur: -25 °C upp till +70 °C

Relativ luftfuktighet: $\leq 50 \text{ %}$ vid 40°C, $\leq 100 \text{ %}$ vid 25°C

MATERIALEGENSKAPER

material:	Polykarbonat
Glödtrådsprov enligt IEC 60695-2-11:	960 °C
UL 94:	V-0
Temperaturbeständighet:	-25 °C upp till +100 °C
Halogenfri:	Ja
Silikonfri:	Ja
Väderbeständig:	Ja (resistent mot UV-exponering från solstrålning, is och havsvatten, korrosion, temperaturbeständig, slagtålig)

DIMENSIONER

Höjd:	93 mm
Bredd:	93 mm
Djup:	62 mm
Nettovikt:	0.108 kg
Inbyggnadshöjd:	74 mm
Inbyggnadsbredd:	74 mm
Inbyggnadsdjup:	47 mm

GODKÄNNANDEN

Överensstämmelse med standarder: DIN EN 60670-1/-22, IEC 60670-1/-22

Certifikat:

Certifikattyp	Certifikatnummer
VDE	40041432
DNV GL	TAE00000EE

DISTRIBUTIONSDATA

Produktnummer:	62000042
EAN:	4012591121701
Förpackningsenhet:	5
Tulltaxenummer:	85369010

ETIM-klass:

DYNAMIC: EC002600 - Box/housing for surface mounting on the wall/ceiling

ETIM-8.0: EC002600 - Box/housing for surface mounting on the wall/ceiling

ETIM-7.0: EC002600 - Box/housing for surface mounting on the wall/ceiling

ETIM-6.0: EC002600 - Box/housing for surface mounting on the wall/ceiling

ETIM-5.0: EC002600 - Box/housing for surface mounting on the wall/ceiling

ETIM-4.0: EC002600 - Box/housing for surface mounting on the wall/ceiling

ANMÄRKNING

Den angivna skyddsgraden ändras inte vid användning av de medföljande tätningspluggarna.

product_label___input___

RITNINGAR

