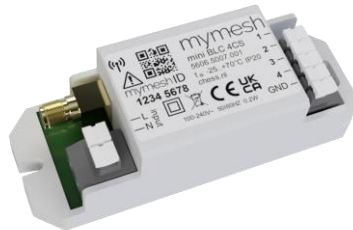


# Installation instruction

## Mini BLC 4CS



The Mymesh mini BLC 4CS is a product in the Chess program for building light control. The mini BLC 4CS is a wireless sensor for monitoring of up to four voltage free contacts.

### Safety



- Installation and service should be performed by qualified personnel only.
- The electrical installation must be in conformance with the national legislation and relevant standards.
- The mains connection of the mini BLC 4CS must be provided with a fuse or circuit breaker.
- Disconnect power at the source before installation, inspection or removal.
- Do not use the mini BLC 4CS if it is damaged.



- The mini BLC 4CS is suitable for use at indoor locations (IP20 protection class). Mount the mini BLC 4CS in an IP66 housing for use at outdoor locations.
- The mini BLC 4cs is double insulated (protection class II).
- The optional strain relief mini BLC can be used to fixate and protect wiring to the mini BLC 4CS.



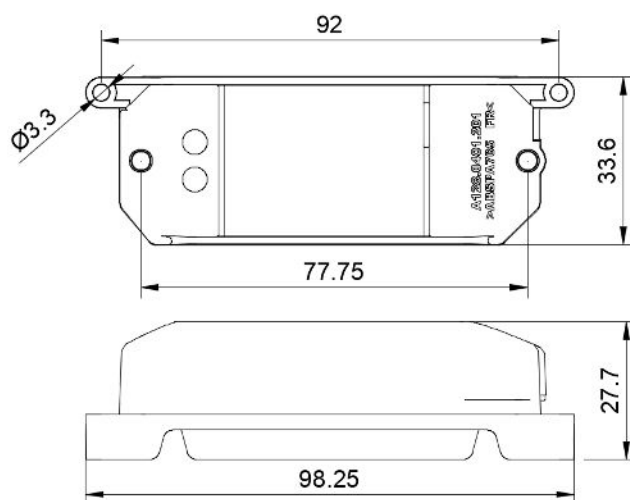
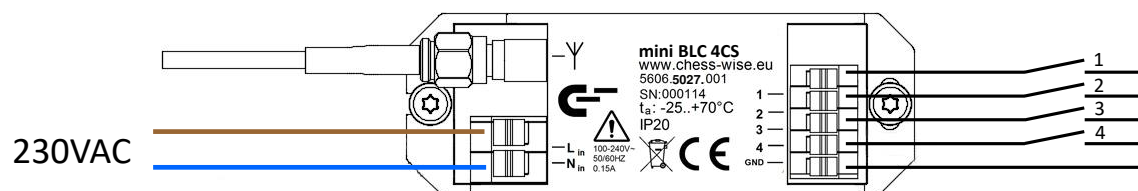
## Application

Refer to the mini BLC 4CS product sheet (see chess.nl) for the product specifications and environmental conditions.

## Installation

- Install the mini BLC 4CS in the direct neighborhood of other Mymesh products.
- Mount the mini BLC 4CS with 2x M3 screw/bolt (76 mm distance) or double sided tape.
- Use maximal 1.5 mm<sup>2</sup> (AWG16) wiring, strip length 9-10mm for all connections. Push the wires completely into the terminal block. Use wire end sleeves when using flexible wires.
- Connect the 230VAC supply voltage to the mini BLC 4CS.
- Connect one up to four contact inputs and the common GND to external voltage free contacts (see wiring diagram below). Use shielded cable 0.25 mm<sup>2</sup> (AWG24) or better, e.g. a CAT6 FTP cable.
- Ground the shield only at **one** end of the cable.
- Maximum cable length is 1000m.

### Mini BLC 4CS + voltage free contacts:



### Strain relief dimensions

**Material:** ABS-PA 765, RAL 9003 White.

## Antenna mounting

- Connect the supplied antenna to the antenna connector.
- The antenna is used for wireless communication with other Mymesh products. Operation of the antenna should not be disrupted.
  - Do **not** mount the antenna inside a metal housing, flat on a metal surface or directly next to a large metal object.
  - Some glass and plastic materials such as safety glass, tinted glass and double glass influence the operation of an antenna.
  - Use a plastic, polycarbonate or fiberglass housing **without** carbon
  - Mount the antenna **outside** the housing/cabinet if necessary. Ensure that the thickened part at the end of the antenna is positioned **outside** a housing plus 1.5cm of the antenna cable. Use a grommet for protection of the antenna cable.
- Depending on the installation of the antenna in the housing/cabinet the range is damped to a greater or lesser extent. The range of the antenna is divided into four categories:
  - ★★★★★ – 75 to 100% antenna range for situations where luminaires are installed far apart in an open space (approx. 30-50 meters) **OR** for situations where luminaires are installed in close proximity (approx. 20-30 meters) in complex buildings with a lot of damping through walls, partitions and ceilings
  - ★★★★★ – 50 to 75% antenna range is acceptable for situations where luminaires are installed in close proximity (approximately 10-20 meters) in buildings with limited attenuation due to partitions.
  - ★☆☆☆☆ – 25 to 50% antenna range is acceptable for situations where luminaires are installed in an open space in close proximity (approximately 10-20 meters).
  - ☆☆☆☆☆ – no antenna range. Do not apply.
- The following installation examples of the antenna are for illustrative purposes. Contact Chess in case of doubt.



*Antenna Mini BLC*



*Grommet*



*Antenna with grommet*

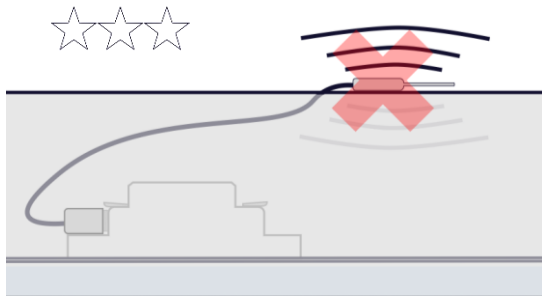


Figure 1: Do not mount the antenna flat on a metal surface.

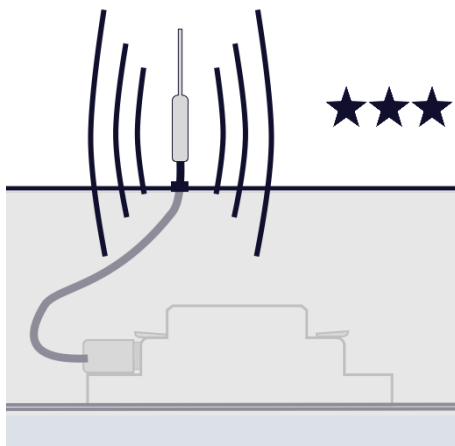


Figure 2: Route the thickened part of the antenna completely through the metal housing / cabinet plus 1.5cm of the antenna cable.

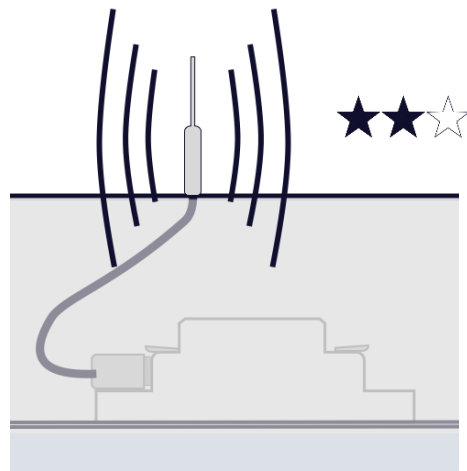


Figure 3: Route the thickened part of the antenna completely through the metal housing / cabinet



Figure 4: Do not place the antenna in a metal housing / junction box.

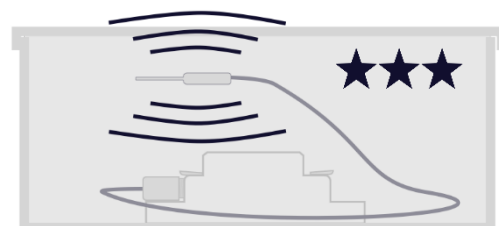


Figure 5: Freely place the antenna in a plastic junction box / housing (not against plastic)

## Configuration

Use the iPad Mymesh commission app for configuration of the mini BLC 4CS.

Warning: the mini BLC 4CS solely detects **contact changes** (for example from open to closed contact) and no contact status.

## Usage

The mini BLC 4CS will detect changes of the connected contacts and submit logging messages to a back office.

## Compliance



This product complies with the European directives and relevant standards for RED, REACH and RoHS. The mini BLC 4CS contains a 2.4 GHz radio. The applied frequency of the radio is within the band 2.401 – 2.482 GHz and the maximum transmit power is +4 dBm.

Hereby, Chess Wise B.V. declares that the radio equipment type mini BLC 4CS is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at [chess.nl](http://chess.nl)

## Repair

Do not open this product. In case of failure the mini BLC 4CS must be replaced.



## Recycling

Do not dispose this product as household waste, but bring it to an appropriate collection point for recycling.