

ZVLISTFT201 V. 11.2017

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# mod. FT201 SINCRO



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INSTALLATIONSANLEITUNGEN FÜR EXTERNE

LICHTSCHRANKE

Fig. 1 / Abb. 1

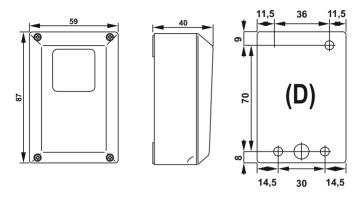


Fig. 2 / Abb. 2

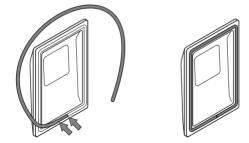


Fig. 3 / Abb. 3

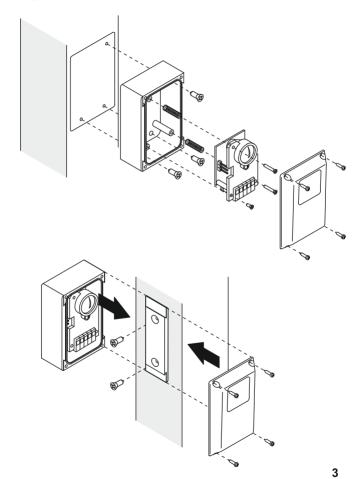


Fig. 4 / Abb. 4

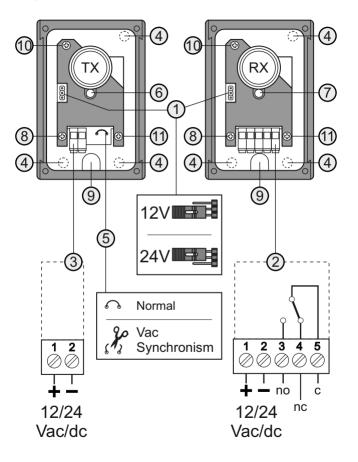


Fig. 5 / Abb. 5

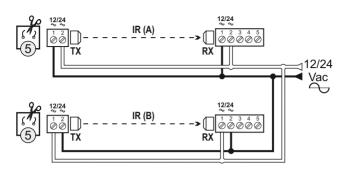
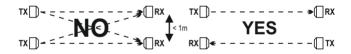
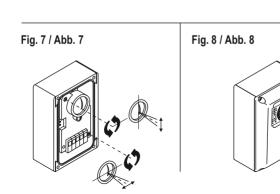


Fig. 6 / Abb. 6







## **CHARACTERISTICS**

The photoelectric cells FT201SINCRO are safety devices suitable for automatic access.

Each pair consists of a modulated infrared ray transmitter and a receiver with a dual relay output contact.

Both cells have an optical system (lens) to concentrate the ray, an electronic circuit as immunity to the sun light and synchronizing system for installing two pairs of photocells.

Thanks to its compact size, the external version can be used in any kind of systems.

The container is in a glass reinforced plastic material offering high mechanical resistance and weathering.

## **TECHNICAL SPECIFICATIONS**

40*
c/Vdc 12/24±10%
45
60
1
c 30
-20+55
44

<sup>\*</sup> The range is subject to the external environmental conditions. The range can therefore be reduced by 70% in the presence of fog, dust or rain.

## PARTS DESCRIPTION

### Fig. 4

- power supply selector
- 2. Receiver connection terminal block
- 3. Transmitter connection terminal block
- 4. Fixing holes
- 5. Synchronism jumper
- 6. Led on when transmitter is powered
- 7. Led on when the transmitter and receiver are out of aligment
- 8. Internal casing fixing screws
- Cable entrance
- 10. Vertical adjustment
- 11. Horizontal adjustment

## **INSTALLATION**

The equipment should be installed expertly by people with the necessary requirements as established by the laws in force in the country of installation.

The receiver and transmitter must be located one in front of the other and fixed so as to be as accurately aligned as possible. In the case of errors or in extreme cases, the inside bodies of the photocells can be slanted vertically or horizontally  $\pm 5^{\circ}$ .

#### ASSEMBLY (fig.3):

- **A.** Fasten the outside containers in order to obtain optimum alignment between the transmitter and receiver.
- **B.** Insert the two sides and carry out the electrical connection.
- **C.** Complete the cover with the rubber profile, and remember that for a better seal, the joining point should be on the bottom (fig.2).



#### **POWER SUPPLY**

The photocells are made to be powered with 24 Vdc ac. For voltages lower than 18V plug in the jumper provided (fig.4).

#### **SWITCH OUTPUT**

- 3. OPEN contact with free field between TX and RX.
- 4. CLOSED contact with free field between TX and RX.
- 5. COMMON contact.

## SYNCHRONISM

The beams from a pair of photocell in a system with two pairs of photocells that are close together could interfere on the other pair causing malfunction; in this case it is advised to activate the synchronism if an alternating power supply is available.

To activate the synchronism, cut the jumpers in both transmitters (detail 5 fig. 4) and invert the power supply on one of the photocell pairs, see figure 5. If it is not possible to activate the synchronism, then avoid positioning the two receivers on the same side and the transmitters on the other, and alternate the receivers and transmitters, fig. 6.

## **CENTRING AND TESTING**

Check that voltage is the same as that set or required for the model and switch power on.

At this point, if alignment of the pair is not completely wrong, the receiver should switch the output. If this does not happen proceed with centring.

To facilitate alignment, the inside bodies of both the transmitter and receiver are mounted on springs and, with two screws, they can be



swivelled horizontally or vertically (Figs. 7). Besides this, the receivers are fitted with a red LED that switches off when the photocell is centred.

We recommend centring even if you hear the receiver click.

Check functioning by passing in front of the infrared ray several times (the red LED on the receiver should turn on and the relay should switch). Repeat this also after the covers of the receiver and transmitter have been positioned.

The centring filter is used for an additional test and to be sure that even in the worst conditions, like fog or rain, everything works properly.

The test is quick and simple: place the film on one of the fronts (Fig. 8) and check that the photocell is working properly. If it does not it means we are either at the limit of its range or alignment is not accurate.

Attention: remember to remove the plastic film when you have finished testing.

## **FINAL ADVICE**

The non-observance of the said instructions could prejudice the correct function of the equipment.

Cardin decline any responsibility for possible malfunction and/or damage due to their non-observance.

Cardin srl reserve the right to make modifications at any time they deem necessary in order to improve the aesthetical and/or functional aspect of the product.