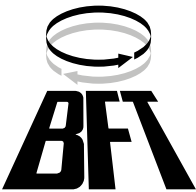


# MIZAR 6

D811029 30-10-00 Vers. 03

## CONTROL UNIT



Thank you for buying this product, our company is sure that you will be more than satisfied with the product's performance. The product is supplied with a "Warnings" leaflet and an "Instruction booklet". These should both be read carefully as they provide important information about safety, installation, operation and maintenance. This product complies with the recognised technical standards and safety regulations. We declare that this product is in conformity with the following European Directives: 89/336/EEC and 73/23/EEC (and subsequent amendments).

## 1) GENERAL OUTLINE

MIZAR 6 mod. control unit has been designed to control one single operator.

## 2) GENERAL SAFETY

**WARNING! An incorrect installation or improper use of the product can cause damage to persons, animals or things.**

- The "Warnings" leaflet and "Instruction booklet" supplied with this product should be read carefully as they provide important information about safety, installation, use and maintenance.
- Scrap packing materials (plastic, cardboard, polystyrene etc) according to the provisions set out by current standards. Keep nylon or polystyrene bags out of children's reach.
- Keep the instructions together with the technical brochure for future reference.
- This product was exclusively designed and manufactured for the use specified in the present documentation. Any other use not specified in this documentation could damage the product and be dangerous.
- The Company declines all responsibility for any consequences resulting from improper use of the product, or use which is different from that expected and specified in the present documentation.
- Do not install the product in explosive atmosphere.
- The Company declines all responsibility for any consequences resulting from failure to observe Good Technical Practice when constructing closing structures (door, gates etc.), as well as from any deformation which might occur during use.
- The installation must comply with the provisions set out by the following European Directives: 89/336/EEC, 73/23/EEC and subsequent amendments.
- Disconnect the electrical power supply before carrying out any work on the installation. Also disconnect any buffer batteries, if fitted.
- Fit an omnipolar or magnetothermal switch on the mains power supply, having a contact opening distance equal to or greater than 3mm.
- Check that a differential switch with a 0.03A threshold is fitted just before the power supply mains.
- Check that earthing is carried out correctly: connect all metal parts for closure (doors, gates etc.) and all system components provided with an earth terminal.
- The Company declines all responsibility with respect to the automation safety and correct operation when other manufacturers' components are used.
- Only use original parts for any maintenance or repair operation.
- Do not modify the automation components, unless explicitly authorised by the company.
- Instruct the product user about the control systems provided and the manual opening operation in case of emergency.
- Do not allow persons or children to remain in the automation operation area.
- Keep radio control or other control devices out of children's reach, in order to avoid unintentional automation activation.
- The user must avoid any attempt to carry out work or repair on the automation system, and always request the assistance of qualified personnel.
- Anything which is not expressly provided for in the present instructions, is not allowed.

## 3) TECHNICAL SPECIFICATIONS

Power supply: ..... 230V ±10% 50Hz. (\*)  
 Loadless absorption: ..... 100 mA  
 Accessory output power: ..... 24Vac 200 mA max  
 Max. motor power absorbed: ..... 500W  
 Limits switch: ..... electric switch  
 Working time: ..... adjustable from 1 to 90s  
 Control panel dimensions: ..... See fig.1  
 Case protection: ..... IP54

Working temperature: ..... -20 +55 °C  
 (\*) Special voltages on request.

## 4) TERMINAL BOARD CONNECTIONS (Fig.2)

Keep the low voltage connections definitely separated from the power supply connections.

### M1A

1-2 Power supply 230V +/- 10% 50/60 Hz (Neutral wire to terminal 1).  
 3-4-5 M motor connection (terminal 4 common wire, terminals 3-5 motor and capacitor operation).

1-4 Blinker connection 230V and Electric lock 230V mod. EBP.

### M1B

7-8 Open-close push button and key selector (N.O.).  
 7-9 Stop button (N.O.). If not used, leave jumped.  
 7-10 Photocell or pneumatic edge input (N.C.). If not used, leave bridged.  
 7-11 Opening limit switch (N.C.). If not used, leave jumped.  
 7-12 Closing limit switch (N.C.). If not used, leave jumped.  
 13-14 24 Vac power supply output for photocell and additional devices.  
 15-16 Second radio channel output of the double-channel receiver board (N.O.)  
 17-18 Antenna input for radio-receiver board (18 braid - 17 signal).

**CON1** Radio-receiver board connector, 1-2 channels.

Fig.7 shows a general wiring diagram.

## 5) LED (Fig.3)

The MIZAR 6 control unit is provided with a series of self-diagnosis leds which control all the functions.

The functions of the LEDs are the following:

(LD1 on - LD2 off) - Gate opening.

(LD1 off - LD2 off) - Gate stop.

(LD1 on - LD2 on) - Gate closing.

LD3 Start - goes on when a start command is given.

LD4 Closing limit switch - goes off when the closing limit switch is operated.

LD5 Opening limit switch - goes off when the opening limit switch is operated.

LD6 Photocell - goes off when the photocells are not aligned or in the presence of obstacles.

LD7 Stop - goes off when a stop command is given.

## 6) FUNCTIONING LOGIC

### 6.1) 4-step logic: (Dip-Fix IBL ON)

The following actions take place after a start command:

closed gate: ..... opens

opening: ..... stops and operates the TCA (Dip-Fix TCA ON)

open gate: ..... closes

closing: ..... stops (stops and does not operate the TCA)

after the stop: ..... opens

With Dip-Fix IBL ON, any start command given during opening has no effect.

### 6.2) 2-step logic: (on request)

The following actions take place after a start command:

closed gate: ..... opens

opening: ..... stops and operated the TCA (Dip-Fix TCA ON)

open gate: ..... closes

closing: ..... opens

after the stop: ..... opens

## 7) DIP-FIX SELECTION (Fig.3)

**TCA** Automatic closing time TCA.

ON: Automatic closing on.

OFF: Automatic closing off.

**IBL** Blocks impulses.

ON: START commands are not accepted during the opening phase.

OFF: START commands are accepted during the opening phase.

**FCH** Photocells.

ON: Photocells are only active in the closing phase. If an object is detected by the photocells during the closing phase, the gate reverses the current movement.

OFF: Photocells are active both in the closing and opening phase. If an object is detected by the photocells on closing or opening, the gate stops; once the object has been removed, the gate opens.

## 8) TRIMMER ADJUSTMENT (Fig.3)

**TCA (Dip-Fix TCA ON)**

It is used to set the automatic closing time, after which the gate closes

automatically (adjustable from 0 to 90 sec.).

## **TW**

It is used to set the motor working time, after which the motor stop (adjustable from 0 to 90 sec.). When using electrical limit switches, increase the motor stopping time by a few seconds with respect to the leaf closing time.

## **9) ACCESSORIES**

### **SPL** (fig.4).

Pre-heating optional board. Recommended for temperatures below -10°C.

### **ME** (fig.5).

Optional board used to connect a 12Vac electric lock.

### **SS** (fig.6).

Optional board signalling gate open. Operates only with electrical limit switches.

### **EBP** (fig.2).

The EBP electric lock with continuous service can be connected directly to terminals 1 and 4.

## **10) MAINTENANCE AND DEMOLITION**

**The maintenance of the system should only be carried out by qualified personnel regularly.** The materials making up the set and its packing must be disposed of according to the regulations in force. **Batteries must be properly disposed of.**

**The descriptions and illustrations contained in the present manual are not binding. The Company reserves the right to make any alterations deemed appropriate for the technical, manufacturing and commercial improvement of the product, while leaving the essential product features unchanged, at any time and without undertaking to update the present publication.**

Fig. 1

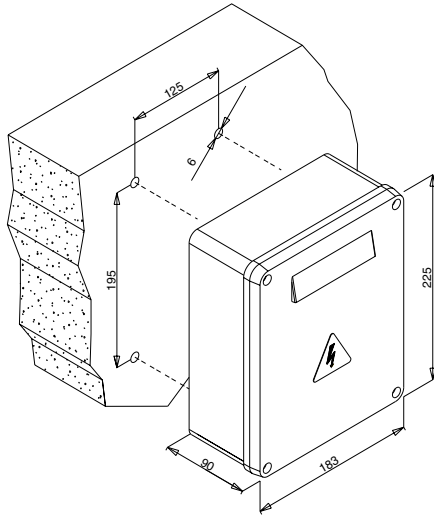


Fig. 3

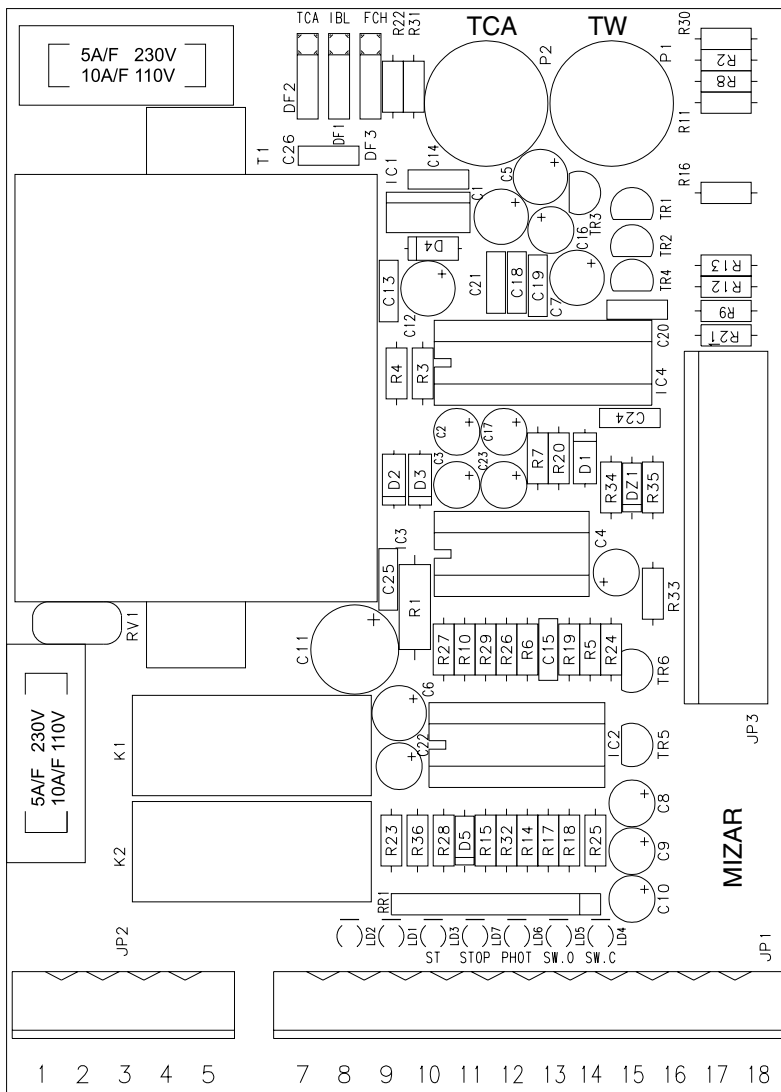


Fig. 2

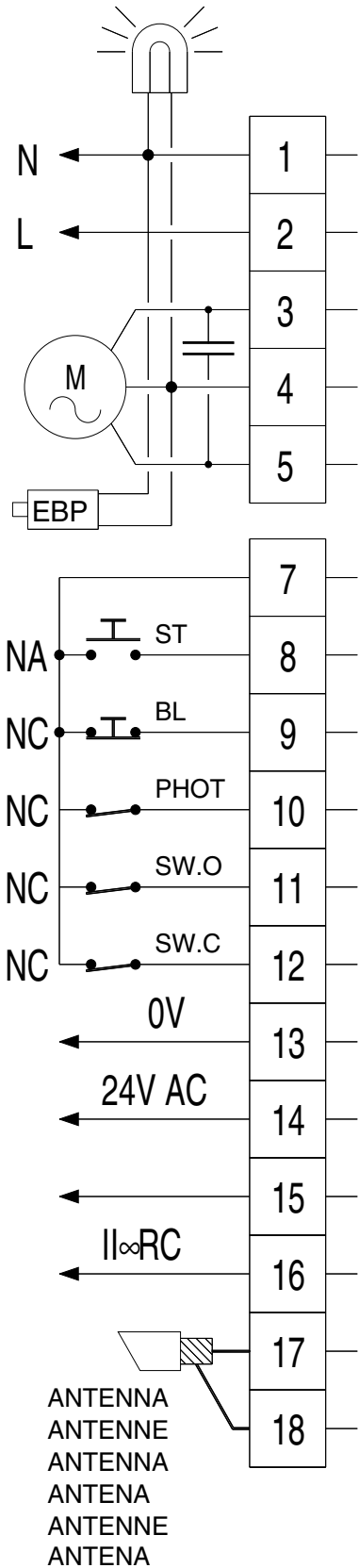


Fig. 4

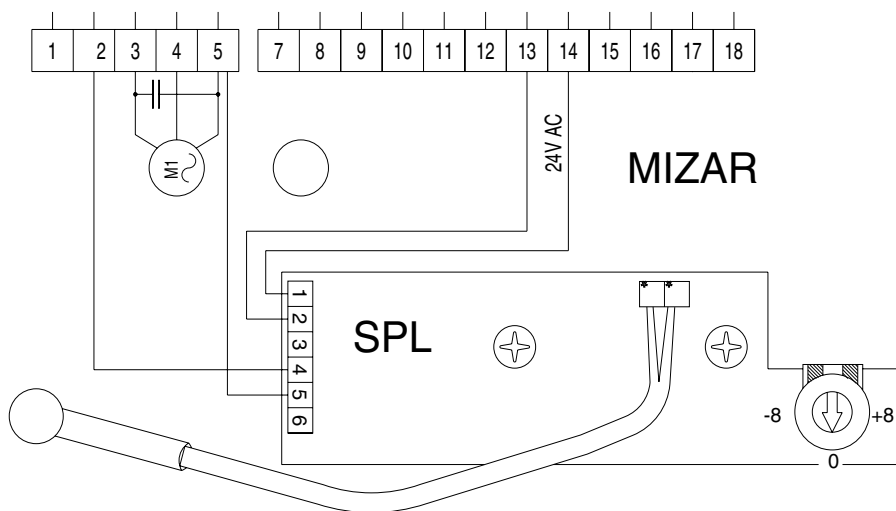


Fig. 5

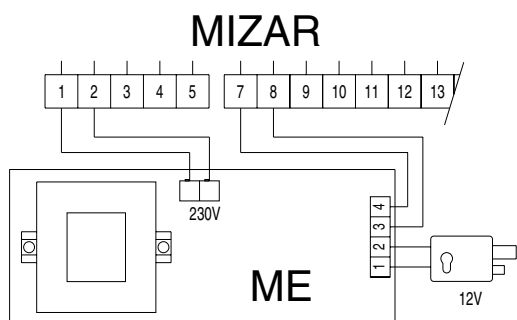


Fig. 6

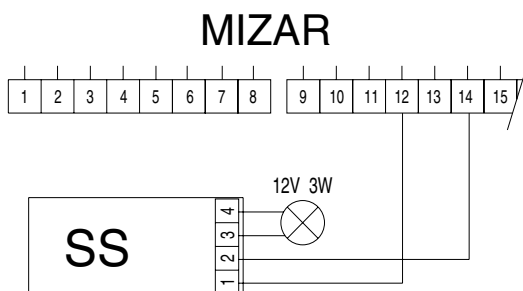
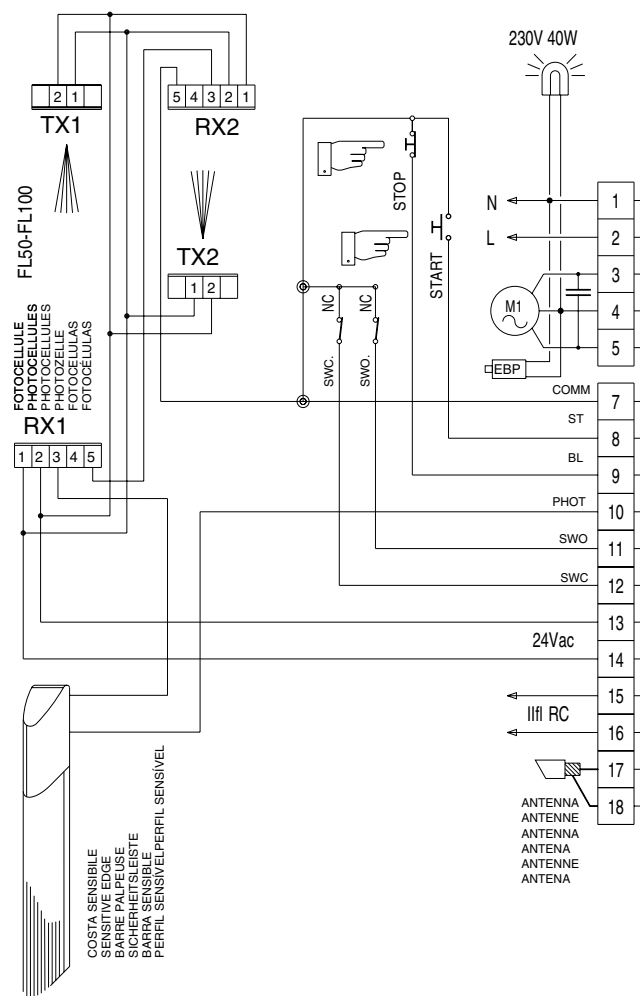


Fig. 7



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