

MICROCAP 16

Control unit for awnings and rolling shutters
with the management of wireless sensors



Thank you for choosing this Allmatic product.
Please read this manual carefully before installing the product.

REMARKS

Please read this instruction manual very carefully before installing and programming your control unit.
After the installation keep this instruction in a safe place for any further consultation.

- The device must not be used by people (children included), whose physical, sensory and mental capacities are reduced, or without experience or knowledge, unless they could benefit through the intermediation of a person responsible for their safety, of a surveillance or of instructions related to the use of the device.
- Children must be kept under surveillance to make sure that they do not play with the device.
- If the power supply's cable is damaged, it must be replaced by the manufacturer or by his assistance service or in any case by a person with similar status in order to prevent any risk.
- This instruction manual is only for qualified technicians, who specialized in installations and automations.
- The contents of this instruction manual do not concern the final user.
- Every programming and/or every maintenance service should be done only by qualified technicians.
- The installer must provide the installation of a device (es. magnetothermal switch) that ensures the omnipolar sectioning of the equipment from the power supply.

1 INTRODUCTION

The control unit has been studied to be utilized with rolling shutters and awnings. This product drives 230V motors in alternating current up to 500 W (max) with electric limit switches. It is pre-wired.

This control unit contains a radio receiver for the remote control by transmitters (CLARUS and B.RO) and for the management of the KAIROS wireless climatic sensors (light, wind, rain and temperature), KAIROS DUO (light and wind) and AXEM (wind and inclination), all with broadcast radio frequency 433.92MHz.

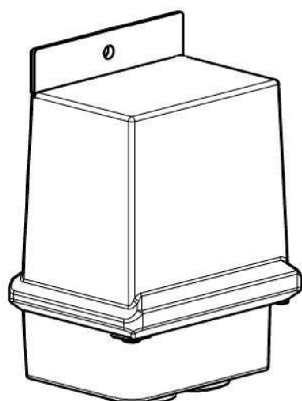
The control unit has been realized in small dimensions to allow the installation inside the boxes of the shutters or outside (respecting the orientation of the control unit).

MICROCAP 16 drives a motor with a maximum working time of 2,5 minutes. The relays are activated with a "OPEN" or "CLOSE" command from the transmitter and are deactivated by pressing any button of the transmitter during the functioning. For example, in the case in which the awning / rolling shutter is stopped for the intervention of a limit switch, the control unit remains on the state of opening (or closing) awning until the reaching of the 2,5 minutes. In this time interval, 2 "CLOSE" commands will be necessary to bring the awning on closing (because it will be necessary to pass through the STOP state).

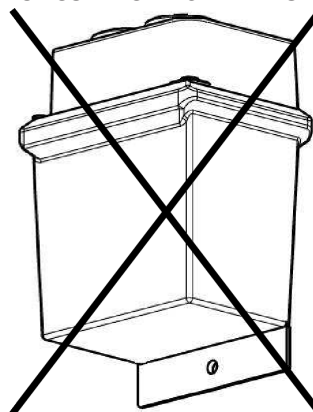
2 INSTALLATION

For an external installation, it is essential to respect the orientation of the control unit. The correct installation is with the power supply cables and the motor cables getting out from the bottom as reported on the box.

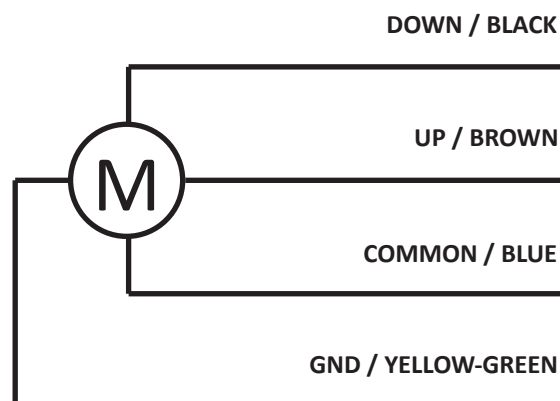
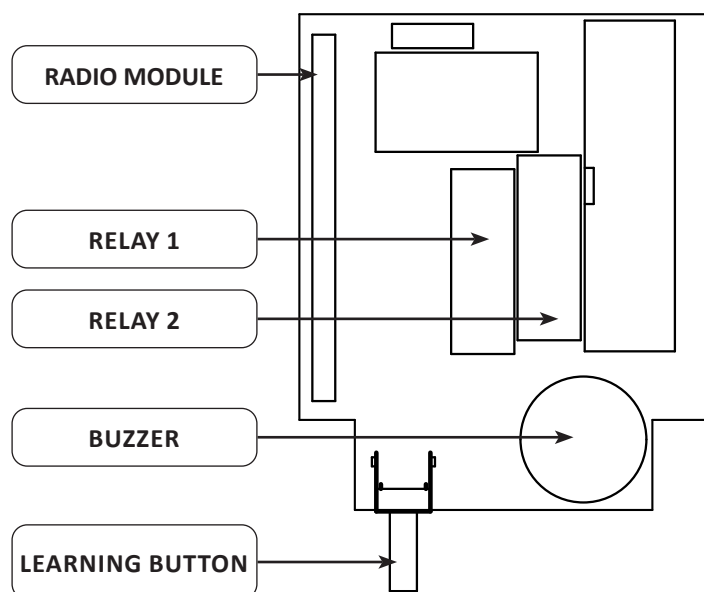
CORRECT INSTALLATION



UNCORRECT INSTALLATION



3 CONFIGURATION AND ELECTRICAL CONNECTIONS

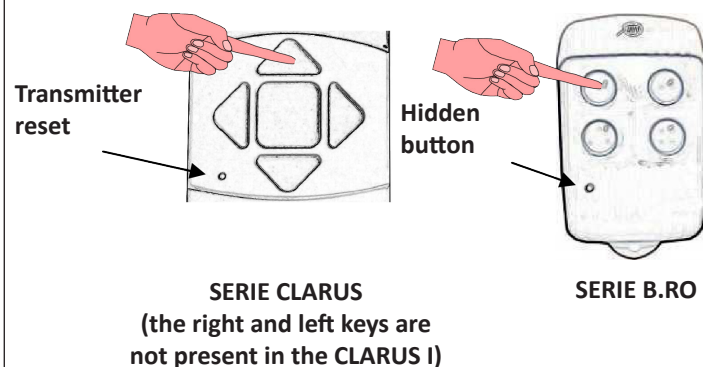


Warning: the functions up/down depend on the orientation of the motor. If at one up control corresponds a descent, it will be necessary to invert the brown cable (up) and the black cable (down).

4 LEARNING OF A TRANSMITTER

4.1 Learning of a transmitter through the button of the control unit

The control unit can be commanded by all the remotes B.RO 2/4WN, B.RO WALL and the CLARUS series.



1. Press and release the learning button on the control unit; it emits **3 beeps**.
2. Press a key of the transmitter that you want to memorize. The control unit automatically stores all the keys and emits a **long beep**.
3. Release the key of the transmitter, the control unit emits **4 beeps**.

If no signal is transmitted in 15 seconds, the control unit automatically exits from the learning mode (**4 beeps**).

4.2 Learning of a transmitter through a transmitter already memorized



Warning: do not use this procedure if you have multiple units in operation, since the store opening would affect all devices where the channel is stored. In this case, disconnect the power supply of the control units which shall not be involved.

1. Press and release the hidden button of a B.RO transmitter or transmit the item “M” of a CLARUS (*) already memorized; the control unit emits 3 beeps.
 2. Press a key of the transmitter that you want to memorize. The control unit automatically stores all the keys and it emits a long beep.
 3. Release the key of the transmitter, the control unit emits 4 beeps.
- If no signal is transmitted in 15 seconds, the control unit automatically exits from the learning mode (4 beeps).
- (*) For the menu functions of the CLARUS transmitter, please refer to the instruction of the product.

5 CLIMATIC SENSORS

5.1 Learning of a climatic sensor

1. Press and release the learning button on the control unit; it emits 3 beeps.
2. Press the button on the sensor, the control unit emits a long beep.
3. Release the key of the transmitter, the control unit emits 4 beeps.

If no signal is transmitted in 15 seconds, the control unit automatically exits from the learning mode (4 beeps).

Once the sensor is memorized, you can test the transmission by pressing the key on the sensor. The control unit emits an acoustic signal until the release of the key.

NOTE: the control unit allows to learn one single sensor. The memorization of a second sensor deletes automatically the first one memorized.

5.2 Checking the motor direction during an alarm

This procedure is necessary to verify the correct wiring of the motor, so that the automation will be closed in case of alarm.

1. With a transmitter, move the awning / rolling shutter at about halfway and stop it.
2. On the KAIROS sensor, adjust the trimmer to minimum wind (TEST) and rotate the blades of the sensor at a constant speed for few seconds. On the used AXEM sensor, shake the awning until the intervention of the sensor.
3. The control unit will reclose the awning / rolling shutter during the alarm.

If the awning / rolling shutter moves in opening, remove the power supply from the control unit and swap the motor cables (black and brown) and make again the test above. If the awning / rolling shutter moves in closing, wait until it is completely closed; press and release the button on the sensor.

Follow the manuals of the sensors for their setting.

5.3 Deleting of a climatic sensor

1. Press and release the learning button on the control unit; it emits 3 beeps.
2. Press the button on the sensor, the control unit emits two long beeps.
3. Release the key of the transmitter, the control unit emits 4 beeps.

If no signal is transmitted in 15 seconds, the control unit automatically exits from the learning mode (4 beeps).

5.4 Behaviour of the AXEM sensor

The alarms of the AXEM sensor are disabled for all the working time of the control unit and for more 10 seconds. To delete the waiting time and enable the sensor immediately, press the learning button on the Axem device.

5.5 LIGHT sensor

The control unit is realized to carry out the opening of the awning / rolling shutter during the transition **from Night to Day**, while it realizes the closure of the awning / rolling shutter during the transition **from Day to Night**.

Moreover, the re-opening for light has been integrated at the end of possible alarms (wind or disconnection).

It is possible to deactivate the light sensor functionality in any moment, and therefore do not make automatically go up and down the automation depending on the light variation. To deactivate the light sensor proceed as follows:

1. Press and hold a key of a transmitter already memorized (at least 8 seconds). The control unit emits 2 beeps to

indicate the deactivation of the sensor or emits 3 beeps to indicate the activation of the sensor.

2. Release the key of the transmitter.

5.6 Control unit behaviour during the alarms (wind, rain, snow, disconnection)

The presence of an alarm will immediately close the awning / rolling shutter and block the operation of the transmitters for:

- 2 minutes after the finishing of the rain alarm. The alarm condition is signaled with 3 beeps after a user command.
- 12 minutes after the finishing of the wind alarm. The alarm condition is signaled with 2 beeps after a user command.
- 30 minutes after the finishing of the snow alarm. The alarm condition is signaled with 5 beeps after a user command.

The detection of the snow (snow alarm) occurs in different ways depending on the type of sensor used:

- Sensor powered from the mains (KAIROS): presence of rain and temperature below 4°C (sensor with heater).
- Sensor powered by photovoltaic panel (KAIROS SA): only temperature lower than 2°C regardless of the presence of rain (sensor not equipped with heater).
- AXEM sensor: inclination of the awning higher than 2° compared to the memorized position.

In case the radio communication between the sensor and the control unit is missing for more than 4 minutes, the control unit closes completely the awning / rolling shutter and remains in disconnection alarm until the reconnection of the sensor.

During the state of alarm it is possible to carry out the radio learning, but it is not possible to carry out any movement until the control unit does not exit from the alarm. The alarm condition is signaled after a user command.

6 RESET

1. Press and hold the learning button. After 7 seconds, the control unit emits a continuous beep.
2. Release the learning button, the control unit emits 5 beeps.

All the transmitters have been erased and the settings have been reset at factory settings.

7 DISPOSAL OF THE PRODUCT

This product is an integral part of the automation, and therefore, they must be disposed of together. As for the installation operations, at the end of the life of this product, the dismantling operations must be performed by qualified personnel. This product is made from different types of materials: some can be recycled, others must be disposed of. Please inform yourselves on the recycling or disposal systems provided for by the laws in force in your area, for this category of product. CAUTION! – some parts of the product can contain polluting or dangerous substances which, if dispersed in the environment,



may cause serious harm to the environment and human health.

As indicated by the symbol at the side, it is forbidden to throw this product into domestic refuse. Therefore, follow the “separated collection” instructions for disposal, according to the methods provided for by local regulations in force, or redeliver the product to the retailer at the moment of purchase of a new, equivalent product. CAUTION! – the regulations in force at local level may envisage heavy sanctions in case of abusive disposal of this product.

WARRANTY

In compliance with legislation, the manufacturer’s warranty is valid from the date stamped on the product and is restricted to the repair or free replacement of the parts accepted by the manufacturer as being defective due to poor quality materials or manufacturing defects. The warranty does not cover damage or defects caused by external agents, faulty maintenance, overloading, natural wear and tear, choice of incorrect product, assembly errors, or any other cause not imputable to the manufacturer. Products that have been misused will not be guaranteed or repaired. Printed specifications are only indicative.

The manufacturer does not accept any responsibility for range reductions or malfunctions caused by environmental interference. The manufacturer’s responsibility for damage caused to persons resulting from accidents of any nature caused by our defective products, are only those responsibilities that come under Italian law.



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