CONTROL BOARD MC8
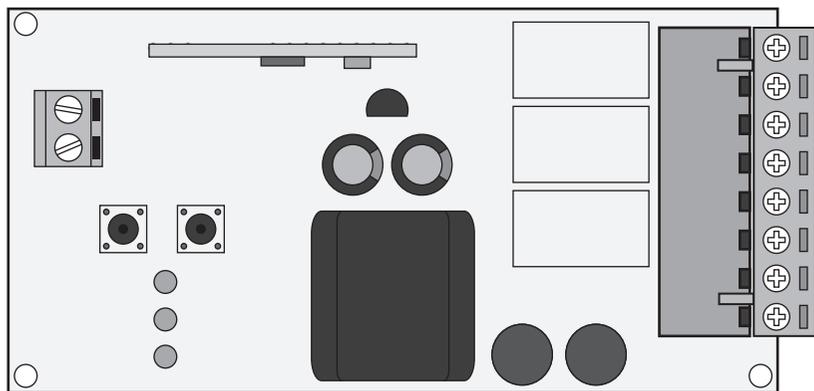
Control board MC8, for automation of awnings, with the possibility of connecting the timer light presence, with operation via remote control and Sensor Wireless (sun/wind/rain).

▷ Power supply	AC 230V 50/60Hz 1000W máx.
▷ Motor output	230V~ 500W máx.
▷ Output courtensy light	230V ~ 500W máx.
▷ Working temperature	-20÷55°C
▷ Radio receiver	433,92 MHz
▷ Compatible radio commanders	12-18 Bit - Rolling Code
▷ Number of radio commands for memorize	7 máx.
▷ Number of sensors Wireless for memorize	1 máx.

CONTROL BOARD MC8

CN1
- 01 ▷ Input connection Earth.
- 02 ▷ Input connection Earth.
- 03 ▷ Input line 230v~(NEUTRO)
- 04 ▷ Input line 230V~(FASE)
- 05 ▷ Output motor Rise / Closing
- 06 ▷ Output motor Common
- 07 ▷ Output motor Descent / Opening
- 08 ▷ Output present light 230V ~ (NEUTRAL)
- 09 ▷ Output present light 230V ~ (FASE)

CN2
Input massa antenna.
Input pole control board antenna.

CENTRALIZATION GROUP OR GENERAL ◁

▷ Centralization via radio through remote control

The centralization of two or more control boards via radio allows simultaneous movement of ascent or descent of more awnings.
The centralization carried out by entering the same codes (keys) of a remote control to all boards or a group that meets at a maximum distance of 20 meters from the point of command in order to get the general or partial motion more automations. For a radio centralization that is satisfactory, should carefully choose the location of installation.
The scope is not only connected with the technical characteristics of the device, but may vary in accordance with the radio conditions of the location.

▷ Operation Present Light with remote control

It is also possible to program a channel (1 button) of remote control to turn ON or OFF a lamp 230Vac at a distance, connected to connectors of the board (7-8) CN1.

⚠ **Whenever made full an opening / closing of the awning, the control board turns off the light of permanence.**

▷ Buttons of programming and indicator LEDs

SE key: selects the type of function to be memorized, the choice is indicated by the flashing of the LED. Pressing the button more times, it is possible to position yourself in the desired function. The flashing LED indicates that the selection is active, but the duration is 15 seconds. At the end of this period, the control board resumes its normal status.

SET button: makes the programming chosen with the SEL button.
LED signaling
LED ON: memorized option.
LED OFF: no memorized option.
Intermittent LED: option selected.

▷ Main menu

Ref. LED	LED OFF	LED ON
CODE	No code	Programmed code
CODE LAMP.	No code	Code of permanent light programmed
T.MOT	Time engine 3 min.	Time of motor programmed

CODE (Programming the remote control for operation of awning Wind Sensor and Wireless)
CODE LAMP (Programming the remote control to operate the lamp of awning)
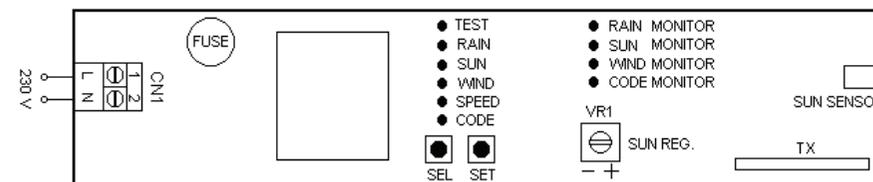**T.MOT** (Programming of time the work / motor)

▷ Programming the remote control 1 or 2 keys and Wireless Sensor

The programming codes for transmission of remote control is performed as follows:
press the SEL button and CODE LED will blink. At the same time, send the first code (closing) selected with the desired remote control. The LED CODE will flash rapidly. Send the second code (opening) to be memorized, the LED CODE will remain on and programming finish. If the second code is not sent within 10 seconds, the board exits the programming phase, selecting operation, leaving only a one button on the remote control.

▷ Programming sensor wireless (sun / wind / rain)

If you want to memorize a wireless sensor, follow these steps:

1º Turn ON the sensor;

2º Open the memory of the control board MC8. For this step we have two options. (**OPTION 1**) - Open the control board as follows: position with the SEL button flashing LED CODE. (**OPTION 2**) - With open awning and lighting off, continually press the channel's opening remote controls memorized for more than 10 seconds until that the light the awning flashes one time;

After opening the memory control board, has 10 seconds to send the order of sensor the control board.
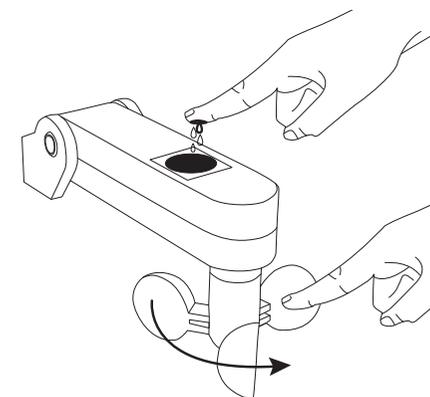
3º (Sensor) Position with the **SEL** button flashing LED CODE, immediately press the SET button sensor so that it emits a rapid flashing of the LED CODE until that the light the awning flashes one time;

4º With the **SEL** button sensor must now select the functions you want to leave assets in sensor the sun / wind / rain. Press **SEL** repeatedly until the desired function LED flashes. With the LED flashing, press the **SET** button for more than 1 second until it is fixed (LED lit – active function).
To disable any function, repeat point 4 but press the **SET** button at least 1 second and the LED goes out, leaving the function disabled.

5º To test the sensor should follow the next instructions.
With the **SEL** button position the LED TEST will begin to flash this. Press the **SET** button for more than 1 second and the LED stays ON.

TEST RAIN SENSOR Pass a wet finger over the sensor until the awning begins to close (the awning will close during 5 seconds).
TEST WIND SENSOR Turn the propeller. The awning will close for 5 seconds.
TEST SUN SENSOR Turn VR1 clockwise (+) and the awning will open for 5 seconds. Turn the VR1 anticlockwise (-) and the awning will close for 5 seconds.

If the awning perform the indicated operations successfully, the sensor is programmed and the test finished.

Return to deactivate the LED TEST that in case of emergency, close the awning in its entirety. If the LED TEST stay on, the awning only will close during 5 seconds.
When the awning close by order of sensor, we can see what the order is to be sent, checking that the LED of the sensor is on within the monitor.
For more information on how to adjust the wind speed, sensitivity and illuminance sensor, read the manual of sensor Wiweather.
To reset the sensor, simultaneously press the SEL and SET buttons of sensor for 2 seconds. LEDs light on and all the sensor back to the factory programming.

▷ Deactivation of functions (sun / rain) via remote control

If you want to disable the **Sun / Rain** functions, begin by opening order and without allowing the awning to finish the opening by the end of the course, press the remote control, the awning will stop immediately and turn off the **Sun / Rain** functions.
However, whenever the awning does not open fully, having been stopped opening with the remote control, the Sun / Rain functions are disabled and the Wind function remains active.
For the functions being re-activated, leave the awning open the whole its course.

▷ Maximum number of memorable Wireless Sensors

The control board allows memorize only 1 Sensor Wireless. Programming a new Wireless Sensor annuls definitely the previously memorized code.

▷ Poor communication Sensor

In case of poor of communication between the Wireless Sensor and control board MC8, after 30 minutes activates automatically ascent / closing the awning. If poor of communication continues, other remote controls makes that the control board to keep in a state of security not allowing the opening of the awning (when receive opening order opens a little bit and returns to the point of closed).

CODE LAMP (Programming the remote control for operating the light inside of the awning)
The programming the channels of the remote control is performed as follows: position with the **SEL** button flashing LED CODE LAMP. Then send the desired channel of remote control. LED CODE LAMP remains lit and programming is completed.

T. MOT. (Programming time motor - 4 minutes max.)
The control board is supplied with LED T.MOT. OFF means that the motor time is 3 minutes. With T.MOT LED. OFF and the remote control programmed we can move the awning in the sense of opening / closing until make tuning of limit switches. Follow the signs. After the limit switches fully tuned, set working time/motor.

The programming the time of the motor must be performed during the closing of the awning.

Programming time of motor with limit switch in the directions opening / closing is performed as follows:
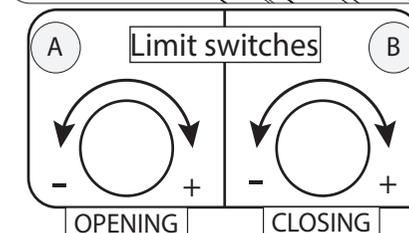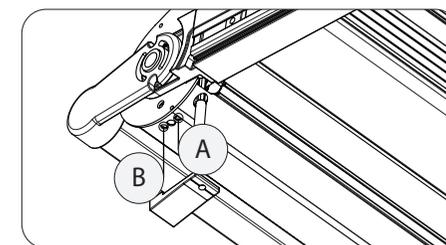With open awning and the two limit switches regulated opening / closing, the **SEL** button, position the T.MOT LED flash and press and hold the **SET** button until the awning close and the motor stops by limit switch.
Wait another 2 seconds and release the **SET** button and the LED will light T.MOT and motor time will be programmed.

In this example, the motor is installed on the left. If the motor is installed right, reverses the position (opening becomes B and closing A and - / + reverse).

▷ Menu 2

The control board is supplied by the manufacturer with the possibility of selecting only the main menu functions.
To enable the functions described in menu 2, proceed as follows: press the **SET** button continuously for 5 seconds and then there is the alternating flashing of the LEDs CODE LAMP and LED T. MOT, in this mode, you have 30 seconds to select the 2 menu functions through the use of **SEL** and **SET** buttons, after 30 seconds, the control board returns to the main menu.

MENU 2		
Ref. LED	LED OFF	LED ON
CODE	PGM distance = ON	PGM distance = OFF
CODE LAMP.	Intermittent ON/OFF	
T.MOT	Intermittent ON/OFF	

CODE PGM (programming without access to control board)
Programming a new remote control

The control board allows programming of another remote control, without intervening directly in the SEL of the control board, performing an operation at a distance.

The programming code of a remote control on distance, is carried out as follows: with the open awning and the lighting of the awning is off press continuously, for longer than 10 seconds, the opening of a channel remote control previously memorized. After 10 seconds the control board goes into programming mode (indicated by the flashing of the awning lighting the lamp). Press the closing channel of the new remote control until the awning illumination light flashes one time, and then press the release channel until the awning illumination light flashes 1 time (successfully programming).

Programming the remote control, button of illumination the awning

With the illumination on, press continuously the lighting channel of a remote control previously memorized, for longer than 10 seconds until the awning illumination light flashes 1 time. Press the channel of new remote control to memorize until the awning illumination light flashes 1 time (successfully programming).

Programming the wireless sensor without access to control board

With open awning and the lighting of the awning off, press continuously the opening channel remote control that a previously memorized, for longer than 10 seconds until the awning illumination light flashes 1 time. Position with the SEL button flash to LED CODE sensor, and then press the sensor SET button to this issue a quick flashing of the LED CODE until the awning illumination light flashes 1 time (successfully programming).

▷ Cancellation Codes

The cancellation of all codes memorized for the functioning of awning (remote controls and Wireless Sensor), proceed as follows: press the SEL button, LED CODE will flash, and then press the SET button for less than 1 second, LED CODE turns off and the procedure ends.

If necessary restore the control board to the initial factory settings, press the SEL and SET buttons at the same time and the LED display will be lit temporarily, confirming the success of the operation.

If you have been reached the memory limit (7 codes), repeating the programming operation, all indicator LEDs will flash quickly, signaling that are not possible other memorizations.

SAFETY INSTRUCTIONS

IMPORTANT FOR THE USER

- The device must never be used by children or persons with reduced physical-psychological abilities, unless supervised or trained on the functioning and the use modalities.
- Do not allow children to play with the device and keep the radio-controls away from their reach.
- ATTENTION: keep this instruction manual and respect the important safety prescriptions contained herein. The non compliance with the prescriptions may cause damages and serious accidents.
- Frequently examine the plant to detect any signs of damag-ing. Do not use the device if a repairintervention is necessary.

IMPORTANT FOR THE INSTALLER

The control unit has been designed to allow the installer to automise fastening in order to submit to regulatory prescriptions in force. The effective compliance with the obligations and achievement of the minimal safety requirements are, however, the responsibility of the installer. Installation must be carried out in compliance with EN 60335-2-97 " Safety of household and similar electrical appliances "part 2" Particular requirements for drives for rolling shutters, awnings, blinds and similar equipment".
- The control unit must be permanently connected to the power supply network and not have any type of sectioning de vice of the 230Vac electric line, it will therefore be under the care of the installer, to provide the plant with a sectioning device. It is necessary to install a single-phase switch with over-voltage category III. It must be positioned so as to be protected against accidental closures.
- For connections (power supply, motors output), use flexible cables under insulating sheath in harmonised polychloroprene (H05RN-F) with minimum section of the conductors equal to 0.75mm².
- For a correct functioning of the radio receiver, in case of us-ing one or more control units, the installation at a minimum distance of at least 3 meters one from the other is recommended. In case of using two or more control boards, it is advisable to avoid radio interference, only use one type of Wireless Wind Sensor.

ATTENTION
All operations which require the opening of the casing (cables connection, programming, etc.) must be carried out by expert personnel during installation. For any further operation which requires the casing to be re-opened (re-programming, repair or installation amendments) contact the after-sales assistance.

CONNECTIONS TO CONTROL BOARD

⚜ This scheme of conec-tions is for a motor installed on left. In case of motor be installed on right, the **black** wire and **brown** wire changed position.

Alimentation (3x1.5mm²)
Circuit breaker 16A. not supplied

MOTOR

Transformer LEDs

Brown wire   Blue wire

Blue wire   Brown wire

LED 1   LED 2