MC6

v3.0 REV. 03/2017

CONTROL BOARD

CN1
01 ▷ Ground connection input.
02 ▷ Ground connection input.
03 ▷ 230V power supply Input ~ (PHASE)
04 ▷ 230V power supply Input ~ (NEUTRAL)
05 ▷ Rising/Closing motor output
06 ▷ Common motor output
07 ▷ Descent/Opening motor output
08 ▷ 230V presence light output ~ (PHASE)
09 ▷ 230V presence light output ~ (NEUTRAL)

CN2
Antenna Mass Input (COM)
Antenna control board pole input

GROUP OR GENERAL CENTRALIZATION ◁

▷ Centralization via radio through transmitter

The centralization of two or more control boards via radio allows simultaneous movement of ascending or descending of more awnings.
The centralization is performed by entering the same codes (keys) from a transmitter to all control boards at maximum distance of 20 meters from the transmitter point in, in order to get the general or partial motion of more automations. For a satisfactory radio centralization, you must choose carefully the location of installation.
The operating range is not only related with the technical characteristics of the device, it may vary depending on the radioelectric conditions of the location.

▷ Presence Light operation with remote control

It is also possible to program a remote control channel to turn on or off a 230Vac lamp at a distance, connected to connectors of the board (8-9) CN1.

⚠ **Whenever it is made a full opening/closing of the awning, the control board turns off the presence light.**

▷ TECHNICAL SPECIFICATIONS

Control board MC6, for awning automation, with possibility to connect a presence light with timer, with operation via transmitter and Wireless Sensor (sun/wind/rain).

▷ Power supply	AC 230V 50/60Hz 1000W max.
▷ Motor output	230V~ 500W max.
▷ Output courtesy light	230V~ 500W max.
▷ Working temperature	-20÷55°C
▷ Radio receiver	433,92 MHz
▷ Compatible transmitters	12-18 Bit - Rolling Code
▷ Number of transmitters for memorize	5 max.
▷ Number of sensors Wireless for memorize	1 max.

Automatic Limit-Switch when opening/closing

There is, in the control board, an limit-switch automatic system to use in the awning. Whenever it is identified an excessive current absorption (by one motor) during opening/closing, due to the possible presence of an obstacle or the complete movement of opening/closing, the control board stops immediately the maneuver and relieves.

▷ Programming buttons and indicator LEDs

SEL 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 returns to its normal status.

SET button: makes the choosen programming with the SEL button.
LED signaling
LED on: option saved.
LED off: option not saved.
Intermittent LED: option selected.

▷ Main menu

Ref. LED	LED desligado	LED aceso
CODE	Nenhum código	Código programado
CODE LAMP.	Nenhum código	Código sempre programado
T.MOT	Tempo motor 3 min.	Tempo motor programado

CODE (Programming the remote control to operate the awning and the wireless Wind Sensor)
CODE LAMP (Programming the remote control to operate a lamp)
T.MOT (Programming the Working Time/ motor)

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

The programming of the transmission codes of the remote control is performed as following: 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

programmation is finished. If the second code is not sent within 10 seconds from the first one, the unit exits the programming phase, leaving only a button on the remote control to work step by step (open/stop/close).

▷ Programming wireless sensor (sun/wind/rain)
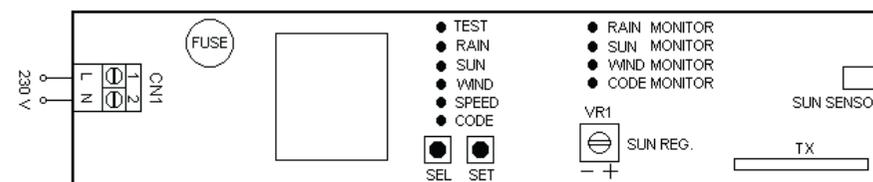
If you want to memorize a wireless sensor, follow these steps:

**1º** Turn ON the power supply of the sensor;

2º Open the memory of the control board MC6. For this step we have two options:
(option 1) - Open the control board as follows: use the SEL button to go to the LED CODE. (option 2) - With the awning openned and lighting turned off, continually press the remote's opening channel memorized for more than 10 seconds until the light of the awning flashes once;
After opening the control board's memory, you have 10 seconds to send the sensor's order to the control board.

3º (Sensor) Use the SEL button to go to the LED CODE (led starts to blink), immediately press the SET button of the sensor so that it emits a rapid flashing of the LED CODE until the light of the awning flashes once;

4º With the SEL button of the sensor, you must now select the functions you want to leave activated in the sensor the sun/wind/rain. Press SEL repeatedly until the LED of the desired function flashes. With the LED flashing, press the SET button for more than 1 second until it is fixed (LED turned on = active function).
To disable any function, repeat point 4 but press the SET button at least for 1 second and the LED goes out, leaving the function disabled.
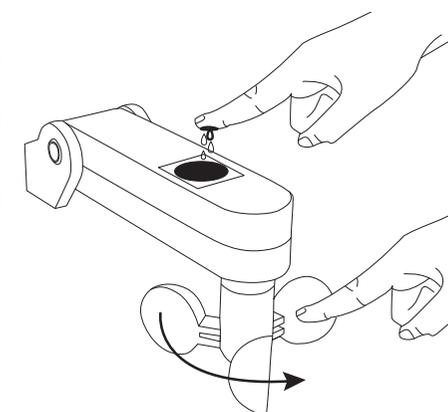
5º To test the sensor you should follow the next instructions:
Use the SEL button to go to the LED CODE (led starts to blink). Press the SET button for more than 1 second and the LED stays on.
TEST RAIN SENSOR Place a wet finger over the sensor until the awning begins to close (the awning will close during 5 seconds).
TEST WIND SENSOR Rotate the propeller. The awning will close for 5 seconds.
TEST SUN SENSOR Turn VR1clockwise (+) and the awning will open for 5 seconds.
Turn the VR1 counterclockwise (-) and the awning will close for 5 seconds.
In case the awning performs the indicated operations successfully, the sensor is programmed and the test finished.

You must deactivate the LED TEST so that, in case of emergency, the awning closes entirely. If the LED TEST stays on, the awning will only close for 5 seconds.

When the awning closes by sensor's order, we can see what order is being sent, checking which LED of the sensor is ON, on the board's monitor.
For more information on how to adjust the wind   speed, sensitivity and sensor's illuminance, read the manual of Wiweather sensor.
To reset the sensor, simultaneously press the SEL and SET buttons of the sensor for 2 seconds. All LEDs light on and the sensor is back to the factory programming.

▷ Functions deactivation (sun/rain) via remote control

If you want to disable the Sun/Rain functions, please begin by opening the awning and before the awning finishes the opening by the limit switch, press the transmitter, the awning will stop immediately and turn off the Sun/Rain functions. However, whenever the awning does not fully open by being stopped with the remote control, the Sun/Rain functions are disabled and the Wind function remains active.
To reactivate the functions, let the awning fully open.

▷ Maximum number of memorable Wireless Sensors

The control board can only memorize 1 Wireless Sensor. Programming a new Wireless Sensor will delete the previously memorized code.

▷ Poor communication of the Sensor

In case of poor of communication between the Wireless Sensor and MC6 control board, the opening/closing will be automatically activated after 30 minutes. If poor communication continues, other remote controls will keep the control board in a state of security, not allowing the awning to open (when receives opening order, it opens a

little bit and returns to the point of closed). If the sensor is active with 3 functions (sun, rain and wind), where there sun, 10 minutes after sends the awning open. When the sun finished 10 minutes later sends the awning collapse. During the time that the awning is open, in case of rain or wind the awning collects.

▷ Programação

CODE LAMP (Programming the remote control for operating the light output)

The programming of the channels of the remote control is performed as follows:
Use the SEL button to go to the CODE LAMP LED (led starts to blink). Then
send the desired channel of remote control. LED CODE LAMP remains lit and programming is complete.

T. MOT. (Programming working time - 4 minutes max.)
The control board is supplied with **LED T.MOT. OFF,** meaning that the motor time is 3 minutes. With T.MOT LED. OFF and the remote control programmed, we can move the awning in the opening/closing direction, until you make the adjustment of the limit switches. Follow the instructions. The Working Time must always be set.

**The programming of the working time must be performed with a fully open awning.**

Programming the working time with limit switches only in opening and closing by effort is performed as follows:
Disadjust completely the closing limit switch for the awning to close the full course and stop by effort.

Programming motor's time is performed as follows:
With the awning openned and already with the opening limit switch adjusted, position the SEL button to LED T. MOT, press and keep pressing the SET button and the awning starts to close.
When the awning finishes the closing and the motor turns off, release the SET button,
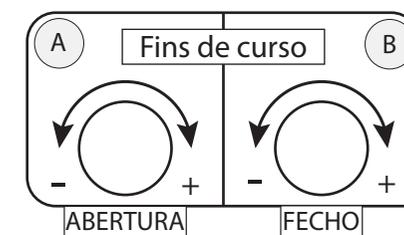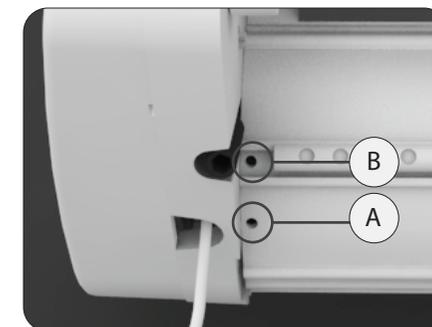
and the working time is now defined and the LED T.MOTstays on.
When it is intended that the awning stops on opening and closing by limit switch, with the open awning and the two limit switches fully regulated, with the SEL button, make the LED T.MOT flash and press without releasing SET button until the awning closes and the motor stops by limit switch. Wait more 2 seconds and release the SET button. LED T.MOT will illuminate and working time will be programmed.

▷ Extended Menu 1

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 1, 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 1 menu functions through the use of SEL and SET buttons, after 30 seconds, the control board returns to the main menu.

Extended MENU 1		
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 a new remote control or Wireless Sensor
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 memorired, 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).

▷ Cancelamento de códigos

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.
The cancellation of all codes memorized for the operation of the permanence of light, is carried out as follows, press the SEL button until the flashing of the LED CODE LAMP, and next, press the SET button in less than 1 second, LED CODE LAMP switches 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 (5 codes), repeating the programming operation, all indicator LEDs will flash quickly, signaling that are not possible other memorizations.

▷ Extended 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.

▷ PROGRAMMING

Extended MENU 2		
Ref. LED	LED OFF	LED ON
CODE	Motor 12RPM	Motor 17RPM
CODE LAMP.	Intermittent ON/OFF	
T.MOT	Intermittent ON/OFF	

The control board is supplied by the manufacturer with programming 12 RPM. This function can be changed in the extended menu 2. When it comes to a awning with safe, when it closes, if it doesn't use the motor's limit switch, the control board analyzes that the awning has closed and entered into effort and automatic turn off the motor.After that it reverses direction by thousand of a second so it does not effort the fabric too much. This inversion time is selected through the extended menu 2, in accordance with the motor installed in case of a motor 17 or 12 rotations to that the awning not reverse for too much time.

ATTENTION:

CE	This product is certified in accordance with European Community (EC) safety standards.
RoHS	This product complies with Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
	(Applicable in countries with recycling systems). This marking on the product or literature indicates that the product and electronic accessories (eg. Charger, USB cable, electronic material, controls, etc.) should not be disposed of as other household waste at the end of its useful life. To avoid possible harm to the environment or human health resulting from the uncontrolled disposal of waste, separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Home users should contact the dealer where they purchased this product or the National Environment Agency for details on where and how they can take these items for environmentally safe recycling. Business users should contact their vendor and check the terms and conditions of the purchase agreement. This product and its electronic accessories should not be mixed with other commercial waste.
	This marking indicates that the product and electronic accessories (eg. charger, USB cable, electronic material, controls, etc.) are susceptible to electric shock by direct or indirect contact with electricity. Be cautious when handling the product and observe all safety procedures in this manual.

• It is important for your safety that these instructions are followed.
• Keep these instructions in a safe place for future reference.
• The **ELECTROCELOS S.A.** is not responsible for the improper use of the product, or other use than that for which it was designed.
• The **ELECTROCELOS S.A.** is not responsible if safety standards were not taken into account when installing the equipment, or for any deformation that may occur.
• The **ELECTROCELOS S.A.** is not responsible for insecurity and malfunction of the product when used with components that were not sold by the them.
• This product was designed and manufactured strictly for the use indicated in this manual.
• This control board is not appropriate for inflammable or explosive environments.
• Any other use not expressly indicated may damage the product and/or can cause physical and property damages, and will void the warranty.
• Do not make any changes to the automation components and/or their accessories.
• Control board for indoor use with 230V connection.
• Keep remote controls away from children, to prevent the automated system from being activated involuntarily.
• The customer shall not, under any circumstances, attempt to repair or tune the automatism. Must call qualified technician only.
• The installer must have certified professional knowledge at the level of mechanical assemblies in doors and gates and control board programmation. He should also be able to perform electrical connections in compliance with all applicable regulations.
• The installer should inform the customer how to handle the product in an emergency and provide him the manual.

▷ CONNECTIONS SCHEME

CN2

SEL

SET

CODE

CODE L.

T.MOT.

FUSE FUSE

CN1

230V
F   N

△ COM ▽   LAMP

1 2 3 4 5 6 7 8 9

Ground wire

Brown wire

Blue wire

Blue wire

Brown wire

Ground wire

Brown wire

Blue wire

Black wire

Ground wire

Power Supply (3x1.5mm²)

Circuit breaker 16A. not supplied

LEDs
Transformer

Blue wire   Brown wire

+
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MOTOR

Motorline
PROFESSIONAL

06.A