



GENIUS 2 CE

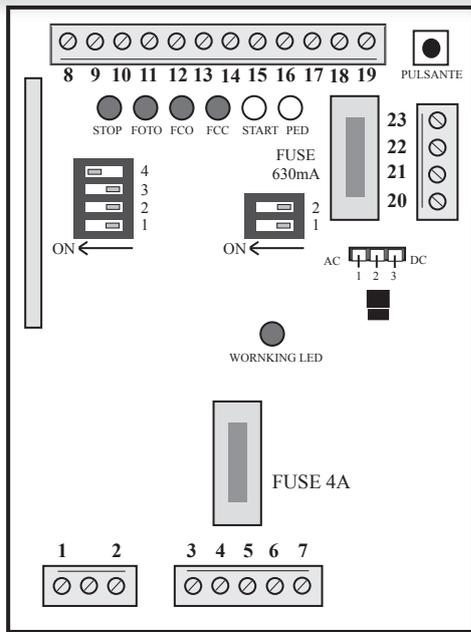
SINGLE PHASE UNIVERSAL CONTROL BOARD 230 Vac

Features:

- 3 LAGGING SPEED
- LIMIT SWITCH MANAGEMENT
- RADIO CODES INTEGRATED DECODING
- SELF LEARNING FUNCTION

- USER MANUAL -

CONTROL BOARD DESCRIPTION

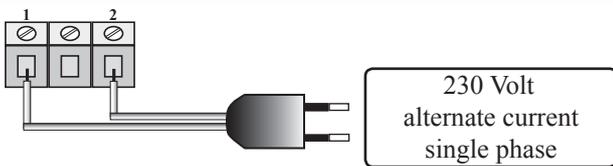


- CLAMPS FROM 1 TO 2: CONTROL BOARD POWER SUPPLY 230Vac
- CLAMPS FROM 3 TO 7: MOTOR POWER SUPPLY 230 Vac AND FLASHING LIGHT 230 Vac
- CLAMPS FROM 8 TO 19: ACCESSORIES POWER SUPPLY, SERVICES AND SAFETIES INPUTS.
- CLAMPS FROM 20 A 23: "CLEAN" CONTACT FOR PILOT LIGHT AND DATA BUS .
- JUMPER: 24Vac OR 24Vdc POWER SUPPLY SELECTION FOR CONTACT N.18 AND N.19
- 4 WAY DIP: SETTING OF CONTROL BOARD WORKING LOGIC
- 2 WAY DIP: LAGGING SPEED SELECTION
- PUSHBUTTON: RADIO CODES MANAGEMENT AND FORCE SETTING.

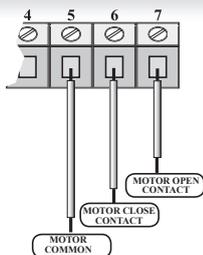
! ATTENTION: To avoid malfunction or damages to the control-board we suggest to follow carefully the connections diagram below.

CONNECTING THE CONTROL BOARD

CONNECTING THE POWER SUPPLY

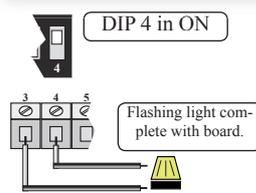


CONNECTING THE MOTOR

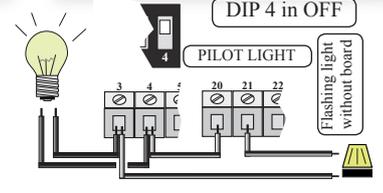


→ * Be careful not to invert OPEN and CLOSE contacts. In case of doubt about the proper connection before starting the selflearning sequence place the door in a middle position.

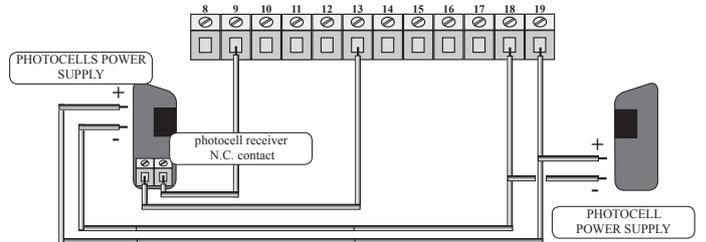
CONNECTING THE FLASHING LIGHT



CONNECTING THE FLASHING LIGHT AND THE COURTESY LIGHT



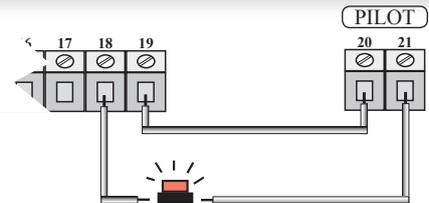
CONNECTING THE PHOTOCELLS



→ * The contact on the receiver photocell must be isolated from the power supply (clean) and of N.C. type (normally close). If using more than one pair of photocell, must be used a series connection.

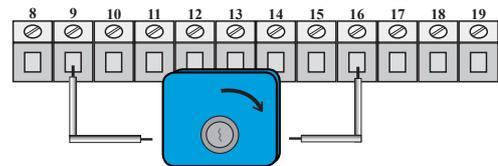
! ATTENTION!! IF PHOTOCELLS ARE NOT USED , INSERT A BRIDGE BETWEEN CONTACTS 9 AND 13.

CONNECTING A 24V PILOT LIGHT



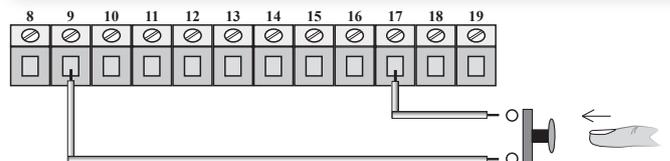
→ * Use a 24Volt low tension pilot light.

CONNECTION OF THE OPEN COMMAND



→ * The connection of the open command can be done with any push-button with a N.O. type contact (normally open). If there are more buttons, use a parallel connection.

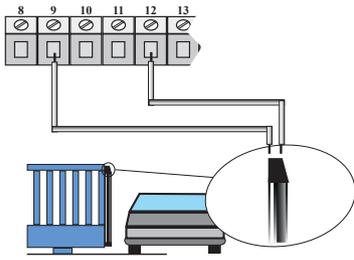
CONNECTION OF A PEDESTRIAN COMMAND



→ * The connection of the pedestrian opening command can be done with any pushbutton with a N.O. type contact (normally open). If there are more buttons, use a parallel connection.

CONNECTING STOP DEVICES (STOP)

! **ATTENTION!!** Respect always all safety specifications, use the STOP command to stop and inhibit the control board in case of danger.

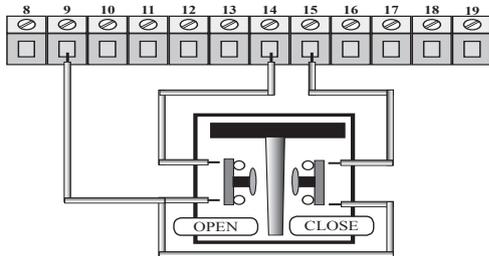


→ * The connection of the safety devices must be of the N.C. type contact (normally close). More safety devices must be series connected.

! **ATTENTION!!** IF THE STOP CONTACT IS NOT USED, INSERT A BRIDGE BETWEEN CONTACTS 9 AND 12.

CONNECTING THE LIMIT SWITCHES

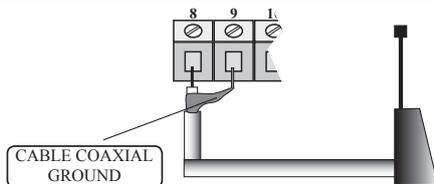
The picture shows the connection of both limit switches, but in this control board they can be used also individually. It is possible to use, only the "opening limit switch" or only the "closing limit switch".



→ * The limit switch contacts must be of N.C. type (normally close).

! **ATTENTION!!** IF THE OPENING LIMIT SWITCH IS NOT USED, INSERT A BRIDGE BETWEEN CONTACTS 9 AND 14.
! IF THE CLOSING LIMIT SWITCH IS NOT USED, INSERT A BRIDGE BETWEEN CONTACTS 9 AND 15.

CONNECTING THE ANTENNA

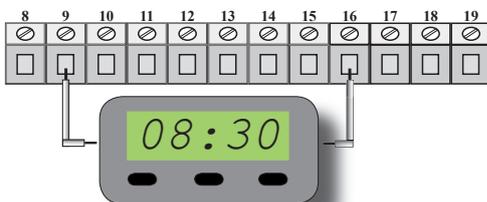


→ * If using a wire as antenna, connect it to clamp n. 8

CONNECTING A TIMER (WATCH)

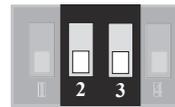
→ * Using contacts 9 and 16 it will be possible to connect a timer to program gate openings. The timer contacts must be of N.O. type (normally open) and as long as the contacts are closed the gate will stay open.

! If on contact 16 is already present the connection of the open command, use a parallel connection for the timer.



SETTING OF THE CONTROL BOARD

WORKING LOGIC (dip 2 and 3)



BUTTON 2

BUTTON 3

LOGIC SETTING

2-ON 3-OFF

During opening and pause time it does not accept any command, it closes automatically at the end of the pause time.

2-OFF 3-ON

At every command it follows the open-stops-close-stop-open logic. It does not close automatically.

2-OFF 3-OFF

At every command reverses the motion. It closes automatically at the end of the pause time.

2-ON 3-ON

At every command it follows the open-stops-close-stop-open logic. It closes automatically at end of the pause time.

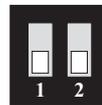
FLASHING LIGHT / COURTESY LIGHT (dip 4)



INT4 ON Voltage is present on contacts 3 and 4 only when the motor is turned on or when the automation is in pause time.

DIP4 OFF Voltage is present on contacts 3 and 4 from the beginning of the opening till 2 minutes after the closure. This can be useful for courtesy light power supply.

LAGGING SPEED (two way dip)



Using this dip is possible to change the lagging speed. If both dials are in ON position, the control board will not execute any lagging.

The following diagram shows the type of lagging speed accordingly to the position of the two dials.

SETTING	LAGGING SPEED
1-OFF 2-OFF	Slowest speed.
1-ON 2-OFF	Average speed.
1-OFF 2-ON	Highest speed, it is the most suitable speed for most motors.
1-ON 2-ON	Lagging OFF.

→ * If using the slowest speed the motor loses much torque, please use an highest speed. This can occur on some oleodynamic motor model.

POWERING THE CONTROL BOARD



At powering of the control board, if everything has been connected as described in the paragraph "CONTROL BOARD CONNECTION", the red segnalation led must blink, while STOP, FOTO, FCA and FCC leds must be on (if the door/gate is closed FCC is off). START and PED must be off.

- * If after being powered the control board execute a door/gate opening, it means that the board has been switched off while it was in open position. If working time needed to be set, switch off the control board, set DIP 1 on the 4 way dip to ON and power again the control board.

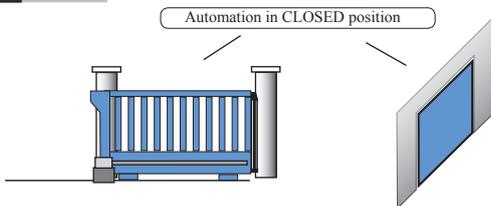
WORKING TIME LEARNING

! ATTENTION! The gate/door must be in closed position .

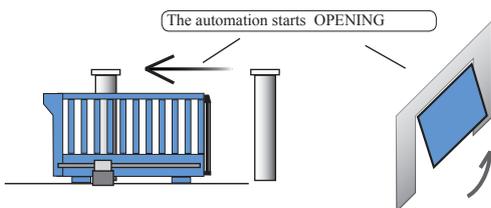
Below you can find the procedure for working time learning. In order to do such operation, it is necessary to use the START (OPENING) and PEDESTRIAN commands. Such commands can be given using a push-button connected to the corresponding contacts (see "CONNECTION OF THE OPEN COMMAND" AND "CONNECTION OF PEDESTRIAN COMMAND") or by a learnt transmitter (see "TRANSMITTER LEARNING").

○ WORKING TIME LEARNING USING THE OPEN COMMAND

↑  Set dip 1 of the four way dip to ON.

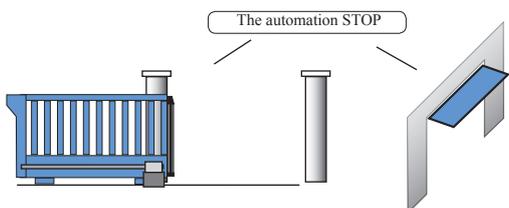


- **Step 1A.** Press the START command.



! ATTENTION! If the OPEN LIMITSWITCH is installed skip the step below and jump to step 3A.

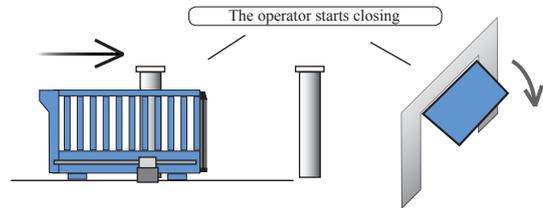
- **Step 2A.** Press the START COMMAND when the automation reaches the end of its run to stop the motor.



- **Step 3A.** Wait for the required pause time. If pause time is not needed skip to step 4A.

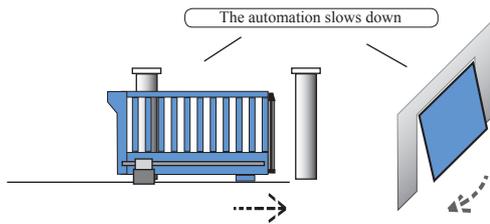


- **Step 4A.** Press the START COMMAND to begin closing the gate/door.

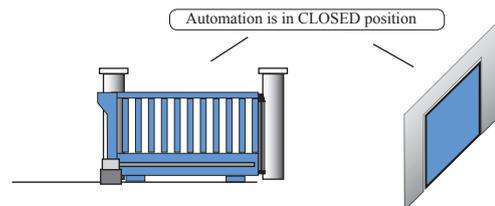


! ATTENTION! If lagging is enabled and the "closing limit switch" is present, press START in order to define the lagging start point.

- If start is not being pressed, the lagging will be executed 2 sec. after the action of the "closing limit switch".
- **STEP 5A.** Press the START COMMAND to define the lagging start point.



- **Step 6A.** Wait until the automation stops (motor is turned off).



Working time programming is over. To return to normal operations set dip 1 of the four way dip to OFF.



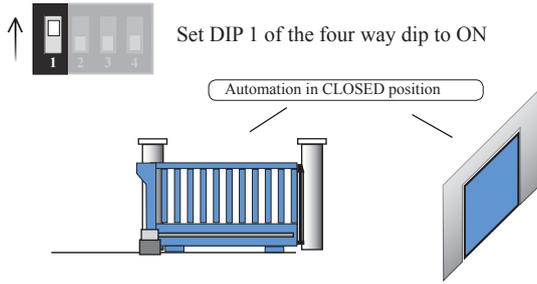
○ REMARKS ABOUT LAGGING POSITIONS

If learning of working time procedure has been done correctly, the automation will start slowing its motion about 2 seconds before the opened position; while during the closure it will slow in the point chosen on step 5A or after the action of the "closing limit switch".

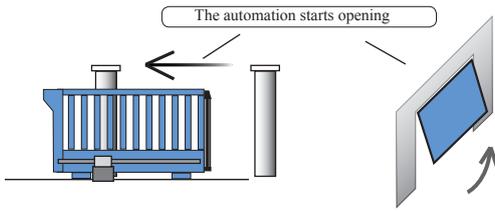
! ATTENTION! If the opening limit switch has not been used, the lagging positions will be respected only if the door/gate has a mechanical stop.

WORKING TIME LEARNING OF THE PEDESTRIAN COMMAND

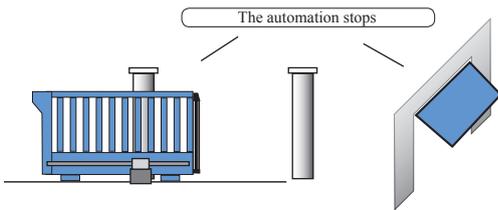
* The PEDESTRIAN command is used to open partially the gate/door in order to allow people or small vehicles to pass. During the movement executed through this command, the automation will slow down only during the closing phase.



● **Step 1B.** Press the PEDESTRIAN START COMMAND



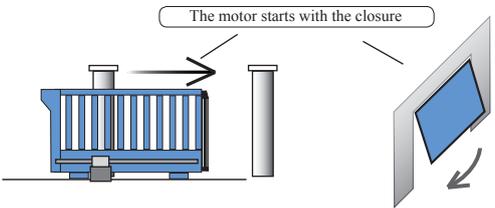
● **Step 2B.** Press PEDESTRIAN START COMMAND again to stop the automation in the desired position.



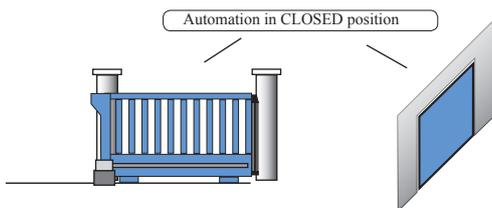
● **Step 3B.** Wait for the required pause time. If pause time is not needed skip to step 4B.



● **Step 4B.** Press PEDESTRIAN START COMMAND to begin closing the gate/door.



● **Step 5B.** Wait until the automation stops (motor is turned off).



Pedestrian time programming is over. To return to normal operations set dip 1 of the four way dip to OFF.



ACTIVATION OF FLASHING LIGHT DURING PAUSE TIME

! **ATTENTION!** This operation is possible only if PEDESTRIAN COMMAND is available on clamp 17 or via remote control.

During the working time learning for the OPEN COMMAND it is possible to enable a function that will set on the flashing light also during the pause time.

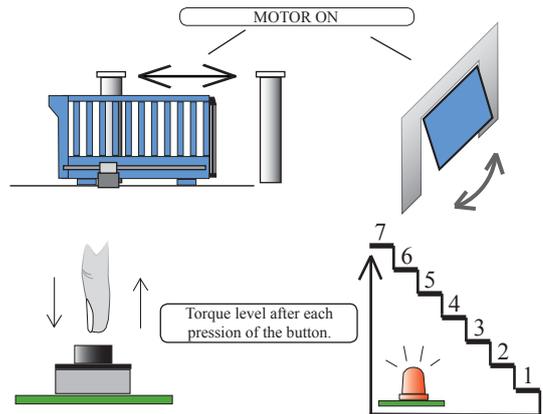


While the automation is OPENING during STEP 1A, press the PEDESTRIAN COMMAND pushbutton or the remote button to enable the flashing light.

To DEACTIVATE this function repeat the working time learning for OPENING COMMAND without using the PEDESTRIAN COMMAND between step 1A and 2A.

SETTING THE TORQUE

! **ATTENTION!** This operation is possible only when the motor is in function.



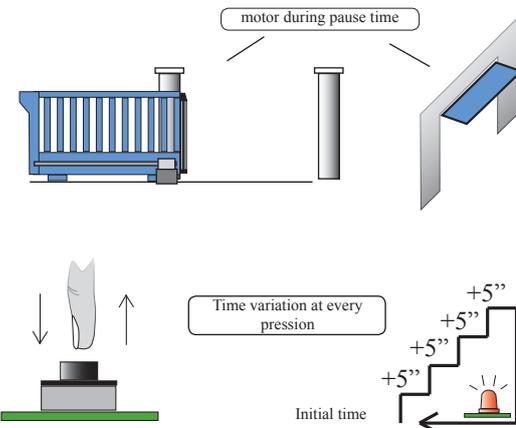
The controlboard has 7 torque levels. To decrease the torque press the button on the controlboard while the motor is in function. Each time the button is pressed the torque decreases a level; if the button is pressed again while the torque is set at the lowest level, the torque will be reseted to the highest level.

The step from minimum level to the maximum one is signaled by the warning led with a protracted lighting, when the button is pressed.

! **WARNING!** The control board keeps the torque at maximum level for 2 seconds every time the motor starts.

INCREASING THE PAUSE TIME

* It is possible to increase the pause time without repeating the working time learning.



While the motor is in pause time, at every pression of the button present on the control board, the pause time will be increased about 5 seconds. The 5th time the button is pressed, the pause time will be reestablished as at the beginning (the signaling led will do a protracted lighting).

With this operation it is possible to increase the pause time up to 20 seconds at the time. If 20 seconds are not enough, it is possible to go on increasing the pause time making another closing, opening cycle.

AUTOMATIC CLOSURE AFTER A POWER FAILURE



ATTENTION! This function is available only if dip 3 of the four ways dip is in OFF position.

- * If during a power failure the automation was not in closed position, it will do an opening-closing cycle to ensure that the door-gate does not remain open as soon as the power supply is back.



If the led blinks fastly, then slowly and then remains lighted for a few seconds, it means that the code has been learnt.



If the led remains lighted when you press the button of the remote control, it means that is not compatible.
If the led blinks slowly it means that the memory is full.

- To learn a other remote control, repeat the operation from the first step.

REMOTE CONTROL CODES

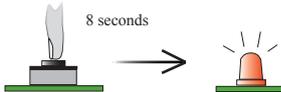
- The control board can manage several types of codes. The first remote control learnt determines what type of code the control board will manage. If a dip switch remote has been learned first, then it will not be possible to learn rolling codes and viceversa.

! Remind that in order to use the remote controls, the control board must have a receiver installed.
See paragraph 'Installing a receiver'.

ERASING REMOTE CONTROL CODES

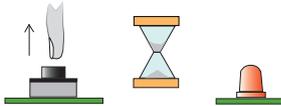
! Carry out this operation before learning the first remote control. The codes deletion is possible only when the automation is in CLOSED position. Make sure that dip 1 of the four ways dip is in OFF position.

①



Keep the button on the control board pressed until the led starts blinking quickly, then release the button.

②



Wait until the led starts blinking normally again.

LEARNING A REMOTE CONTROL

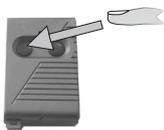
! Learning of a remote control code is enabled only when the automation is in CLOSED position. Make sure that dip 1 of the four ways dip is in OFF position.

①

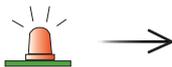


Press the button on the control board the led goes ON.

②



Press the button of the remote control to be associated to the **START** command. If a **START** command is not needed, wait until the led blinks again.

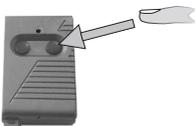


If the led blinks fastly, then slowly and then remains lighted for a few seconds, it means that the code has been learnt.



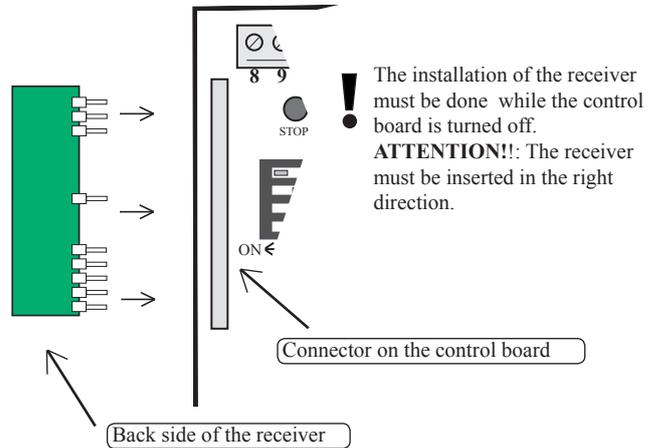
If the led remains lighted when you press the button of the remote control, it means that is not compatible.
If the led blinks slowly it means that the memory is full.

③



After learning the **START** command the led will remain lighted. Now press the button of the emitter to be associated to the **PEDESTRIAN** command. If the **PEDESTRIAN** command is not needed wait until the led return to blink normally

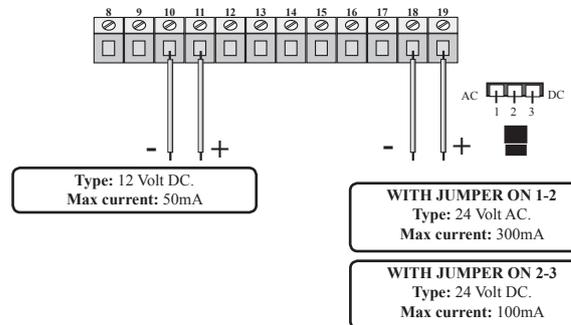
INSTALLING THE RECEIVER



! The installation of the receiver must be done while the control board is turned off. **ATTENTION!!:** The receiver must be inserted in the right direction.

! **IMPORTANT!!!** If the receiver is removed, **ALWAYS RESET THE REMOTE CONTROL MEMORY** (see 'ERASING REMOTE CONTROL CODES').

ACCESSORIES POWER SUPPLY





Important remarks about the control board settings

PROBLEM:

The control board does not work (the red led does not blink).

SOLUTION:

Check 4 A and 630mA fuses.

PROBLEM:

The 630 mA fuse is burnt.

SOLUTION:

Check the connections and verify that the total absorption of the accessories does not exceed 500mA.

PROBLEM:

The 4 A fuse is burnt.

SOLUTION:

Checks the motor, flashing light and courtesy light connections.

PROBLEM:

The motor stops after few seconds.

SOLUTION:

Increase the torque (see "SETTING THE TORQUE").

PROBLEM:

Using the lagging function, the motor does not reach the stop.

SOLUTION:

Increase the lagging speed (dips 1 and 2 of the two way dip).

PROBLEM:

The control board does not do openings.

SOLUTION:

Check the connecting red leds. They must be normally enlightened. If you use the limitswitches, the connecting led of the "close limitswitch" is turned off if the gate is closed.

Green leds, must be normally turned off.

PROBLEMA:

The control board acts irregularly.

SOLUTION:

Verify that service and safety connections haven't been erroneously connected to a pole of the power supply.

IMPORTANT!! if photocells are connected with only 3 wires, it is advisable to use the 12 Volt DC power supply from contacts 10 and 11.

WARNINGS :

BAME SRL, AS MANUFACTURER, CANNOT BE HELD RESPONSIBLE FOR DAMAGES DUE TO WRONG OR MISSING CONNECTIONS OR DUE TO AN UNPROPER SETTING .

THERE IS A RISK OF CRUSHING DURING THE CLOSURE OF THE SYSTEM; SO A FAULTY SETTING OF THE TORQUE MAY CAUSE DAMAGES TO PEOPLE,ANIMALS OR OBJECTS.

PHOTOCELLS ARE SECURITY DEVICES WHICH SHOULD BE INSTALLED AND KEPT ACCORDING TO THE HIGHEST STANDARDS . THE EDGE IS A SECURITY DEVICE WHICH SHOULD BE MAINTAINED ACCORDING TO THE HIGHEST STANDARDS.

ONCE SETTINGS AND ADJUSTEMENTS HAVE BEEN CARRIED OUT, REPLACE THE CONTROL BOX COVER AND CLOSE IT PROPERLY WITH IT'S SCREWS.

BAME SRL, AS MANUFACTURER, DECLINES ALL RESPONSIBILITIES FOR DAMAGES CAUSED BY A WRONG USE OF THE DOOR.

DO NOT REPLACE ANY ELECTRICAL, ELECTRONIC AND MECHANICAL DEVICE WITH NON ORIGINAL PARTS WITHOUT BAME CONSENT.

BAME SRL HAS THE RIGHT TO MODIFY OR CHANGE CONTROL BOARD, MANUALS AND MOTORS WITHOUT PRIOR ADVICE.

Warranty

BAME devices and accessories have a warranty of 24 months after production, it is printed on each item. BAME will replace or repair its devices, after being sent back to our company. In order to check the actual functioning of the returned pieces they will remain the property of the manufacturer. Warranty does not include damages due to any incorrect use, such as: unfulfillment of the instruction manuals detailed for each device: maintenance and repairing carried out without the previous BAME written consent. Moreover, warranty does not cover any damage due to wrong tension supply and other reason for which the manufacturer cannot be made responsible. Any device returned must be delivered to BAME with carriage paid and will be sent back with freight collect. Warranty validity stops in case of customer's unfulfillment of payment. Each device by BAME meets the safety regulations in force (UNI 8612 e CEI64-8). BAME declines all responsibility for the non observance of the safety rules by part of the installer.

In order to reduce the time spent for repairing, all faulty materials sent back to us must be accompanied by the installer's comment about the piece.



The manufacturer declares that the devices above mentioned satisfies all the technical regulations applicable to the product within the scope of council directives :
73/23/EEC, 89/336/EEC, 1999/5/EC
the following specifications or part of them have been applied :
EN55014, EN61000-3, EN61000-4
EN60335-1
EN60950, EN300220-3, EN301489-1, EN301489-3

The operators above mentioned when installed and maintained according to all the Manufacturer's instructions and installed in combination with a Swinging Gate, which also has been installed and maintained according to all the manufacturer's instructions, satisfies the provisions of the EU directive 98/37/EEC and all amendments.



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