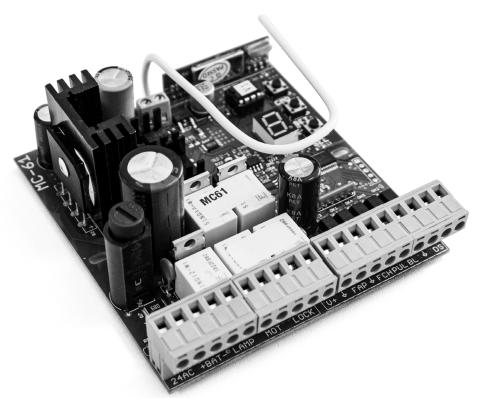




**INSTALLER AND USER'S MANUAL** 





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## 01. SAFETY INSTRUCTIONS

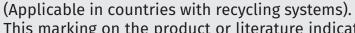
#### **ATTENTION:**



This product is certified in accordance with European Community (EC) safety standards.



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.





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



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.

accessories should not be mixed with other commercial





## 01. SAFETY INSTRUCTIONS

#### **GENERAL WARNINGS**

- •This manual contains very important safety and usage information. very important. Read all instructions carefully before beginning the installation/usage procedures and keep this manual in a safe place that it can be consulted whenever necessary.
- •This product is intended for use only as described in this manual. Any other enforcement or operation that is not mentioned is expressly prohibited, as it may damage the product and put people at risk causing serious injuries.
- This manual is intended firstly for specialized technicians, and does not invalidate the user's responsibility to read the "User Norms" section in order to ensure the correct functioning of the product.
- •The installation and repair of this product may be done by qualified and specialized technicians, to assure every procedure are carried out in accordance with applicable rules and norms. Nonprofessional and inexperienced users are expressly prohibited of taking any action, unless explicitly requested by specialized technicians to do so.
- Installations must be frequently inspected for unbalance and the wear signals of the cables, springs, hinges, wheels, supports and other mechanical assembly parts.
- Do not use the product if it is necessary repair or adjustment is required.
- When performing maintenance, cleaning and replacement of parts, the product must be disconnected from power supply. Also including any operation that requires opening the product cover.
- The use, cleaning and maintenance of this product may be carried out by any persons aged eight years old and over and persons whose physical, sensorial or mental capacities are lower, or by persons without any knowledge of the product, provided that these are supervision and instructions given by persons with experienced in terms of usage of the product in a safe manner and who understands the risks and dangers involved.
- Children shouldn't play with the product or opening devices to avoid

the motorized door or gate from being triggered involuntarily.

### **WARNINGS FOR TECHNICIANS**

- Before beginning the installation procedures, make sure that you have all the devices and materials necessary to complete the installation of the product.
- You should note your Protection Index (IP) and operating temperature to ensure that is suitable for the installation site.
- Provide the manual of the product to the user and let them know how to handle it in an emergency.
- If the automatism is installed on a gate with a pedestrian door, a door locking mechanism must be installed while the gate is in motion.
- Do not install the product "upside down" or supported by elements do not support its weight. If necessary, add brackets at strategic points to ensure the safety of the automatism.
- Do not install the product in explosive site.
- Safety devices must protect the possible crushing, cutting, transport and danger areas of the motorized door or gate.
- Verify that the elements to be automated (gates, door, windows, blinds, etc.) are in perfect function, aligned and level. Also verify if the necessary mechanical stops are in the appropriate places.
- The central must be installed on a safe place of any fluid (rain, moisture, etc.), dust and pests.
- You must route the various electrical cables through protective tubes, to protect them against mechanical exertions, essentially on the power supply cable. Please note that all the cables must enter the central from the bottom.
- If the automatism is to be installed at a height of more than 2,5m from the ground or other level of access, the minimum safety and health requirements for the use of work equipment workers at the work of Directive 2009/104/CE of European Parliament and of the Council of 16 September 2009.

## **01. SAFETY INSTRUCTIONS**

- Attach the permanent label for the manual release as close as possible to the release mechanism.
- Disconnect means, such as a switch or circuit breaker on the electrical panel, must be provided on the product's fixed power supply leads in accordance with the installation rules.
- If the product to be installed requires power supply of 230Vac or 110Vac, ensure that connection is to an electrical panel with ground connection.
- •The product is only powered by low voltage satefy with central (only at 24V motors)

### **WARNINGS FOR USERS**

- Keep this manual in a safe place to be consulted whenever necessary.
- If the product has contact with fluids without being prepared, it must immediately disconnect from the power supply to avoid short circuits, and consult a specialized technician.
- Ensure that technician has provided you the product manual and informed you how to handle the product in an emergency.
- If the system requires any repair or modification, unlock the automatism, turn off the power and do not use it until all safety conditions have been met.
- In the event of tripping of circuits breakers of fuse failure, locate the malfunction and solve it before resetting the circuit breaker or replacing the fuse. If the malfunction is not repairable by consult this manual, contact a technician.
- Keep the operation area of the motorized gate free while the gate in in motion, and do not create strength to the gate movement.
- Do not perform any operation on mechanical elements or hinges if the product is in motion.

### **RESPONSABILITY**

- · Supplier disclaims any liability if:
  - Product failure or deformation result from improper installation use or maintenance!
  - Safety norms are not followed in the installation, use and maintenance of the product.
  - Instructions in this manual are not followed.
  - Damaged is caused by unauthorized modifications
  - In these cases, the warranty is voided.

### **SYMBOLS LEGEND:**



 Important safety notices



Useful information



 Programming information



Potentiometer information



 Connectors information



Buttons information

# **02. CONNECTIONS SCHEME**

#### COMPONENTS CONNECTION TO THE CONTROL BOARD

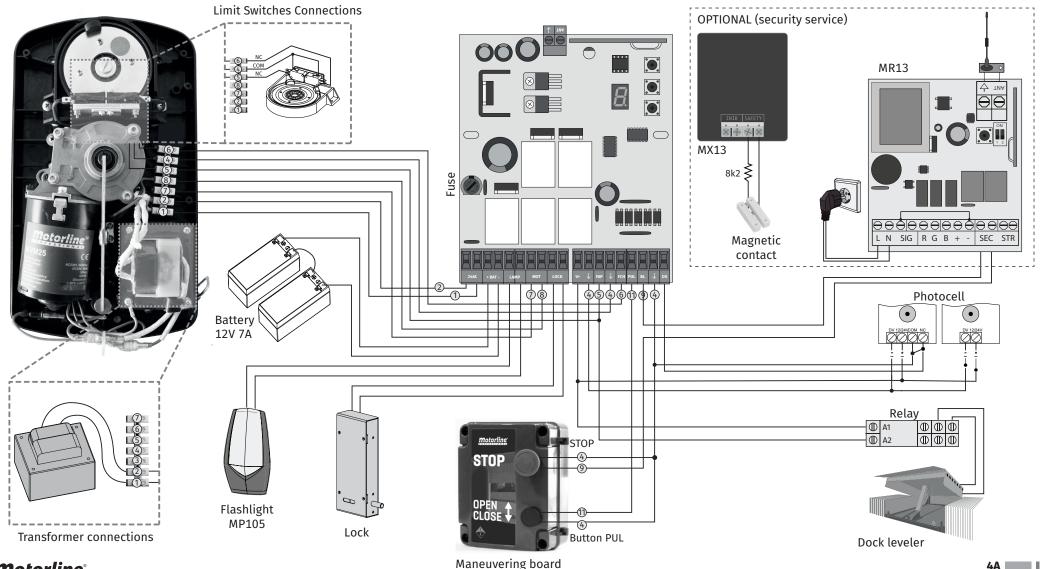


#### MENU C, page 7A

1 (photocells activated) Connect the NC contact of the photocells on the last connectors or make a shunt.

#### 2 (present man activated)

Use the last connectors to connect a N.A. push-button. Note • The Auto Close and Follow Me function is no longer effective.



# 03. CONTROL BOARD

#### **TECHNICAL SPECIFICATIONS**

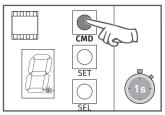
• Power supply	24Vdc AC/DC	
Battery output	24Vdc - 7AH máx.	
• Lamp output	24Vac - 3W máx.	
Motor output	24Vdc -100W máx.	
• Lock output	12Vdc - 10W máx.	
Auxiliary accessories output	24Vdc - 3W máx.	
Working temperature	-10°C a +55°C	
Incorporated Radio Receiver 433,92 Mhz		
Accepted codestype	Rolling Code	
• Central dimensions	99x10 <b>4,</b> 5 mm	
• Fuse	8A	

# **04. REMOTE CONTROLS**

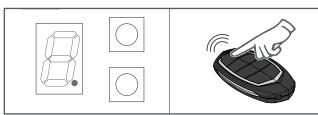
### PROGRAMMING/ERASE REMOTE CONTROLS

#### Programming

The control board MC61 has the capacity to memorize 23 remote controls (Rolling Code).



1 • Press the CMD button 1 second and the display point turns on.

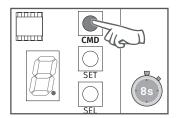


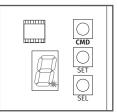
2 • Press a button of your choice from the remote control to program and the display point will flash twice. Remote control will be memorized after 10 seconds.

# **04. REMOTE CONTROLS**

### **PROGRAMMING/ERASE REMOTE CONTROLS**

#### Erase remote controls





Press **CMD** for 8 seconds (during this time the LED display point will stay ON). After this time, LED display point will flash twice and all codes have been deleted from memory.

# **05. FUNCTIONS**

#### **FUNCTION'S BOARD**

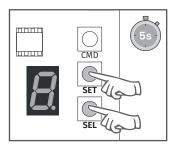
The control board MC61SE has a menu that allows access to all automatic configurations.

MENU	FUNCTION	MÁX. MIN. PROGRAMABLE	STATE	FACTORY VALUE	PAGE
F.	Automation sensibility programming	min. 9 1 1 max.		5	6A
<i>P</i> .	Opening and closing course programming		Opening indicator Closing indicator		6B
E.	Enable/disable photocells and present man		Disable Disable Disable Disable Disable	0	7A
R	Programming automatic closing	min. 109 109 max.	<u>[]</u> Disable	0	7B
E.	Enable/disable condominium function		Disable Enable	0	8A
E.	Enable/disable service door		Disable Enable	1	8B
H	Increase or decrease deceleration	min. 1s max.	[] Disable	2	9A
Ь	Enable/disable Follow Me		Disable Enable	0	9B

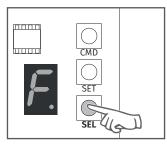


#### **AUTOMATION SENSIBILITY PROGRAMMING**

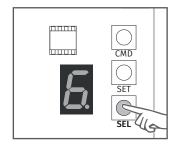
This menu allows to set the level of sensibility that you want in the motor operation. Maximum sensibility - 1 | Minimum sensibility - 9



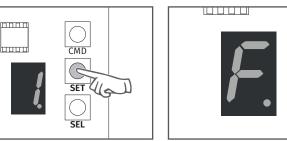
1 • Press the SEL and SET buttons simultaneously for 5 sec. to access the programming menu.



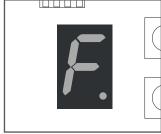
2 • The display will show F. Press **SET** button to access the submenu.



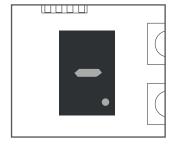
3 • The display will show a value between 1 and 9. indicating the currently configured level. Use SEL button to choose desired option.



4 • Press the SET button once to save this option.



5 • The display will show **F** and the configuration is successfully done.



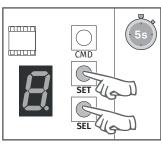
6 • To exit the programming mode wait 10 sec. until (-) appears.

# **05. FUNCTIONS**

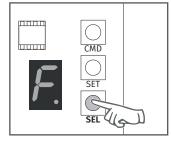
#### **OPENING AND CLOSING COURSE PROGRAMMING**

To make the opening and closing course programmation, the mechanical limit switches must always be in tune.

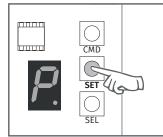
- 1º Unlock the motor:
- 29 Manually, put the gate in closing position and adjust the closing limit switch;
- 32 Manually, put the gate at the opening position you want and adjust the opening limit switch.



1 • Press the SEL and SET buttons simultaneously for 5 sec. to access the programming menu.



2 • The display will show F. Press the **SEL** button as many times as necessary until the display shows **P**.



3 • Press the SET button to start the course recognition.

- 4 If the door is open, it will close until it reaches the closing limit switch.
- 5 It will open slowly for 5 seconds to detect the force during deceleration.
- 6 It will close slowly to detect the force during deceleration.
- 7 It will open at normal speed until it reaches the opening limit switch.
- 8 It will close immediately, stopping only when it reaches the closing limit switch.
- 9 Programming completed.



During the course recognition, display shows P.



Closing indicator

When you start the opening display shows **U**. When you start the closing display shows **d**.









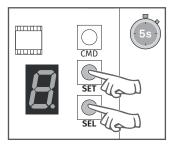
Opening indicator



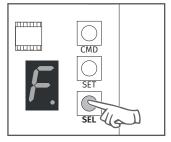
### **ENABLE/DISABLE SAFETY PHOTOCELLS AND PRESENT MAN**

When photocells enabled, if any obstacle interrupt them (if the door is closing), the door will reverse the direction.

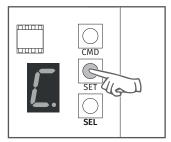
#### 0 - Disable | 1 - Enable | 2 - Present Man



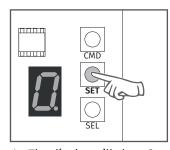
1 • Press the SEL and SET buttons simultaneously for 5 sec. to access the programming menu.



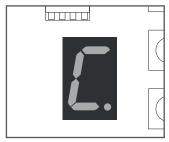
2 • The display will show F. Press the **SEL** button as many times as necessary until the display shows C.



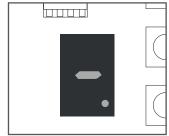
3 • Press the SET button to access the submenu.



4 • The display will show 0 (photocell and present man disabled), 1 (photocells activated) or 2 (present man activated). Use the SEL key to select the desired option and press **SET** to confirm. NOTE • Check the warning in the connections scheme (page 4A).



5 • The display shows C and the configuration is successful.



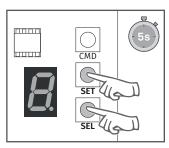
6 • To exit the programming mode wait 10 sec. until (-) appears.

# **05. FUNCTIONS**

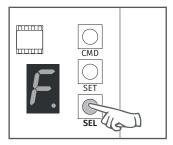
#### PROGRAMMING AUTOMATIC CLOSING

Option 0 disables the automatic closing, and the gate will close only if it receives an order from a configured device.

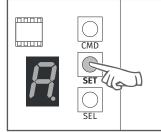
Any option between 1 and 9, multiplied by 10, sets the automatic closing time, the minimum is 10 seconds (number 1) and the maximum is 90 seconds (number 9).



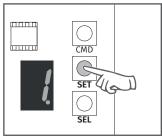
1 • Press the SEL and SET buttons simultaneously for 5 sec. to access the programming menu.



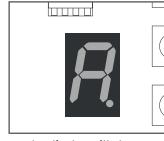
2 • The display will show F. Press the **SEL** button as many times as necessary until the display shows A.



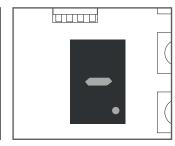
3 • Press the SET button to access the submenu.



4 • Use the SEL button to put on the desired option. Press the **SET** button once to save this option.



5 • The display will show A and the configuration was successful.



6 • To exit the programming mode wait 10 sec. until (-) appears.

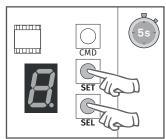
### **ENABLE/DISABLE CONDOMINIUM FUNCTION**

#### 0-Disabled

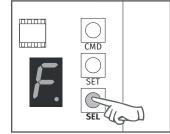
- If you send an order to the gate completely open, it will close.
- If pressing during the closure, the gate reverses direction (it will open). When disabled, you can control the opening or closing of the gate whenever you want, and their behavior is: open-stop-close-stop-open-stop (...) for each time you press a remote control key.

#### 1 - Enabled

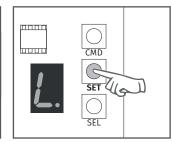
- This function makes the control board ignore all the orders sent by configured devices during the course of opening and during the pause time.
- Pressing the remote control during the opening, the order is declined and the gate continues to open.
- When activated the condominium function is activated the closing time in 10 seconds.



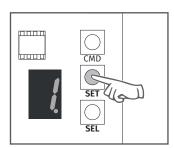
1 • Press the SEL and SET buttons simultaneously for 5 sec. to access the programming menu.



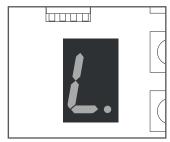
2 • The display will show F. Press the SEL button as many times as necessary until the display shows L.



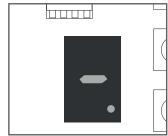
**3** • Press the **SET** button to access the submenu.



4 • The display will show the value 0 or 1, which identifies the option in which the control board is currently configured. Use the SEL button to put on the desired option. Press the SET button once to save this option.



**5** • The display will show **L** and the configuration was successful.



6 • To exit the programming mode wait 10 sec. until (-) appears.

# **05. FUNCTIONS**

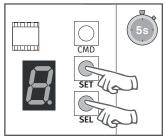
### **ENABLE/DISABLE SERVICE DOOR**

• When this function is activated, the control board will only work if the service door isclosed. If the door is open, the control board reject any opening or closing order.

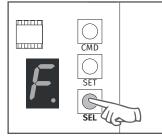
#### 0 - Disable | 1 - Enable



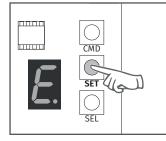
For this function, you must have installed a safety device N.C at the door.



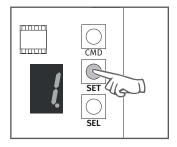
1 • Press the SEL and SET buttons simultaneously for 5 sec. to access the programming menu.



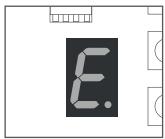
2 • The display will show F. Press the SEL button as many times as necessary until the display shows E.



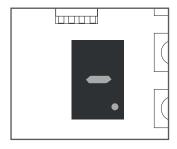
**3** • Press the **SET** button to access the submenu.



4 • The display will show the value 0 or 1, which identifies the option in which the control board is currently configured. Use the SEL button to put on the desired option. Press the SET button once to save this option.



**5** • The display will show **E** and the configuration was successful.



6 • To exit the programming mode wait 10 sec. until (-) appears.









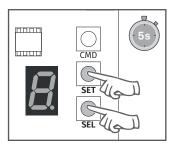
#### **INCREASE OR DECREASE DECELERATION**

The deceleration reduce the motor speed in the final part of the course (opening or closing).

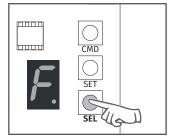
Without deceleration - select the value 0

Minimum deceleration - 1 second

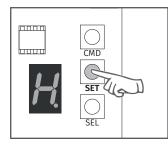
Maximum deceleration - 9 seconds



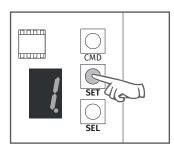
1 • Press the SEL and SET buttons simultaneously for 5 sec. to access the programming menu.



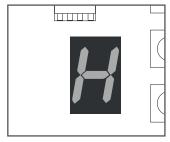
2 • The display will show F. Press the SEL button as many times as necessary until the display shows H.



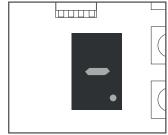
**3 •** Press the **SET** button to access the submenu.



4 • The display will show the value 0 or 4. Use the SEL button to put on the desired option. Press the SET button once to save this option.



**5** • The display will show **H** and the configuration was successful.



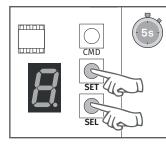
6 • To exit the programming mode wait 10 sec. until (-) appears.

# 05. FUNCTIONS

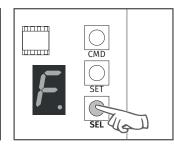
### **ENABLE/DISABLE FOLLOW ME**

With the "Follow Me" function activated, whenever the photocells detect the passage of a user/obstacle, the control board triggers the closing maneuver 3 seconds later.

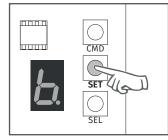
#### 0 - Disable | 1 - Enable



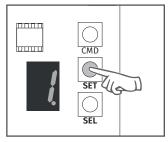
1 • Press the SEL and SET buttons simultaneously for 5 sec. to access the programming menu.



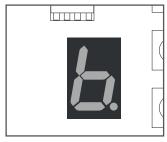
2 • The display will show F. Press the SEL button as many times as necessary until the display shows b.



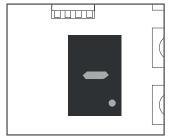
**3 •** Press the **SET** button to access the submenu.



4 • The display will show the value 0 or 1, which identifies the option in which the control board is currently configured. Use the SEL button to put on the desired option. Press **SET** to save the option.



**5** • The display will show **b** and the configuration was successful.



**6** • To exit the programming mode wait 10 sec. until (-) appears.

# **06. TROUBLESHOOTING**

### **INSTRUCTIONS FOR FINAL CONSUMERS/TECHNICIANS**

Anomaly	Procedure	Behavior	Procedure II	Discovering the origin of the problem
doesn't work 2 c a ti	Make sure you have 230V power supply connected to automation and if the fusible working properly.	• Still not working	• Consult a qualified technician.	<ul> <li>1 • Remove the motor top cover;</li> <li>2 • Measure the 24V output of the transformer to detect the fault location;</li> <li>A) Has 24V:</li> <li>1 • Verify the control board supplies of the motor to detect if the fault is in the motor or in the control board. Replace the damaged component or send it to the services for diagnosis and repair.</li> <li>B) Has not 24V:</li> <li>1 • Verify the 230V input of the transformer. If have 230V the problem is in the transformer. If haven't 230V, the problem should be in the fusible, electric cables or in the power supply. Verify all the systems.</li> </ul>
	Make sure the pedestrian service door is properly closed.	• Still not working	• Consult a qualified technician.	<ul> <li>1 • Take a start in remote control to open and verify the behavior of the LEDs;</li> <li>2 • Check the LED signs and the limit switches connections.</li> <li>If everything is corrected and there is no micro acted, the LEDs have to be on. Check all the photocells circuit connections to the motor;</li> <li>3 • In the E menu, make sure the service port is enabled (page 7B). If enabled and the circuit is not closed, the motor will not work.</li> </ul>
Motor doesn't move but makes	doesn't move but makes hand to check for mechanical problems	• The gate is stuck?	• Consult an experienced gate expert.	1 • Check all motion axis and associated motion systems related with the gate and automatisme (rails, pulleys, bolts, hinges, etc) to find out what is the problem. Also check that the springs are in good condition and can support the gate.
noise med		• The gate moves easily?	Consult a qualified technician	<ul> <li>1 • Turn off the motor from control board and test it on directly to a 24V battery to find out if it is damaged;</li> <li>2 • If the motor runs, the problem is in the control board. Remove it and send it to the technical services for diagnosis;</li> <li>3 • If the motor does not work, remove it and send to the technical services for diagnosis.</li> </ul>
Motor opens but doesn't close	1 • Check if there is any obstacle in front of the photocells; 2 • Make sure if the photocells are working. Put your hand in front and check that the relay makes the same noise. 3 • Check if any of the control devices (key selector, push button, video intercom, etc.) of the gate are jammed and sending permanent signal to control unit;		• Consult a qualified technician	<ul> <li>1 • Verify if the display is connected to confirm the existence of power supply;</li> <li>2 • Verify if the photocells are powered in control board output;</li> <li>3 • Access the menu on the display and disable the photocells and the service door;</li> <li>4 • Check limit switch connections. If the 2 LEDs are turned off, it means that the motor can not operate because have the limit switches actuated.</li> <li>5 • Try to close;</li> <li>A) Closed:</li> <li>1 • Problem is in one of these two systems. Activate the photocells and check that the gate closes. If close, problem will be in service door. Ative tin the menu and try to close the door to be sure.</li> <li>B) Doesn't closed:</li> <li>1 • Problem is in the motor or in the control board. Give an order to the gate close while measuring the control board power output to the motor. If you have 24V, the control board is working and the problem is in the motor.</li> <li>2 • If it has not current, the problem is in the control board.</li> </ul>
Gate doesn't make complete	• Unlock motor and move gate by hand to check for mechanical	• Encountered problems?	• Consult an experienced gate expert.	1 • Check all motion axis and associated motion systems related with the gate and automatisme (rails, pulleys, bolts, hinges, etc) to find out what is the problem. Also check that the springs are in good condition and can support the gate.
	problems on the gate.	• The gate moves easily?	Consult a qualified technician	<ul> <li>1 • Verify if the tests to the gate were well made;</li> <li>2 • Change the strength of F menu until the motor move the gate without changing the direction;</li> <li>3 • This adjustment should be made to in case the gate find an obstacle do an inversion;</li> <li>4 • If even at maximum power level (F9) is still the problem, test the motor directly connected to a 24V battery to see if it has the power to open / close the gate completely;</li> <li>5 • Change the strength in the F menu until the motor move the gate without changing the direction;</li> </ul>

