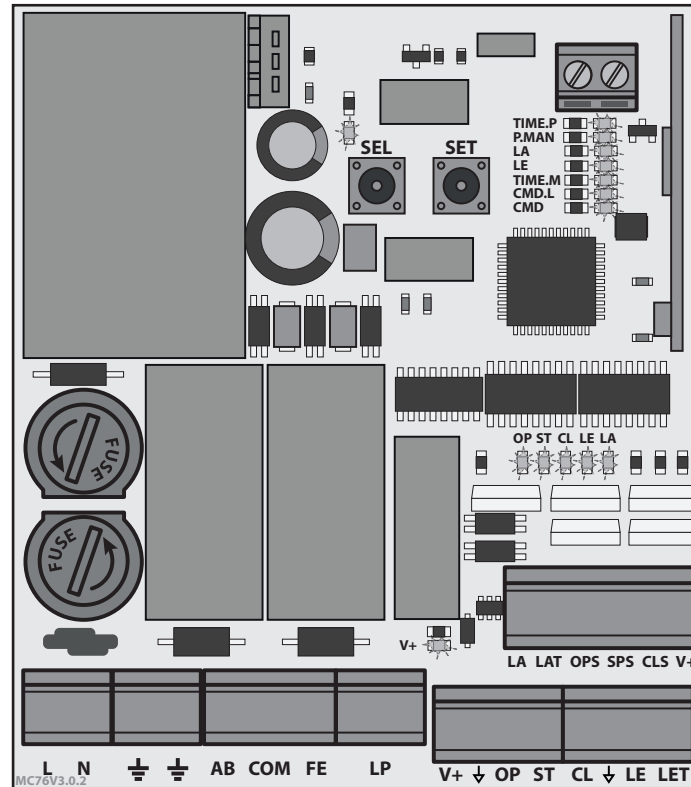




# MC76

## USER'S AND INSTALLER'S MANUAL



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# 01. SAFETY WARNINGS

	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 and with Delegated Directive (EU) 2015/863 from Commission.
	(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 batteries should not be discarded like other household waste at the end of their useful life. Batteries must be delivered to selective collection points for recycling.
	The different types of packaging (cardboard, plastic, etc.) must be subject to selective collection for recycling. Separate packaging and recycle it responsibly.
	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.

## 01. SAFETY WARNINGS

### GENERAL WARNINGS

- This manual contains very important safety and usage information. 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.

## 01. SAFETY WARNINGS

### WARNINGS FOR TECHNICIANS

- Children shouldn't play with the product or opening devices to avoid the motorized door or gate from being triggered involuntarily.
  - If the power cable is damaged, it must be replaced by the manufacturer, after-sales service or similarly qualified personnel to avoid danger.
  - The device must be disconnected from the electrical network when removing the battery.
  - Ensure that blocking is avoided between the actuated part and its fixed parts due to the opening movement of the actuated part.
- 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 control board 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

## 01. SAFETY WARNINGS

the power supply cable. Please note that all the cables must enter the control board 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.
- 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 safety with control board (only at 24V motors).
- Parts/products weighing more than 20 kg must be handled with special care due to the risk of injury. It is recommended to use suitable auxiliary systems for moving or lifting heavy objects.
- Pay special attention to the danger of falling objects or uncontrolled movement of doors/gates during the installation or operation of this product.

### 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

## 01. SAFETY WARNINGS

conditions have been met.

- In the event of tripping of circuits breakers or 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.

### **MOTORLINE ELECTROCELOS SA.**

Travessa do Sobreiro, nº29  
4755-474 Rio Côvo (Santa Eugénia)  
Barcelos, Portugal

### SYMBOLS LEGEND:



• Important safety notices



• Useful information



• Programming information



• Potentiometer information



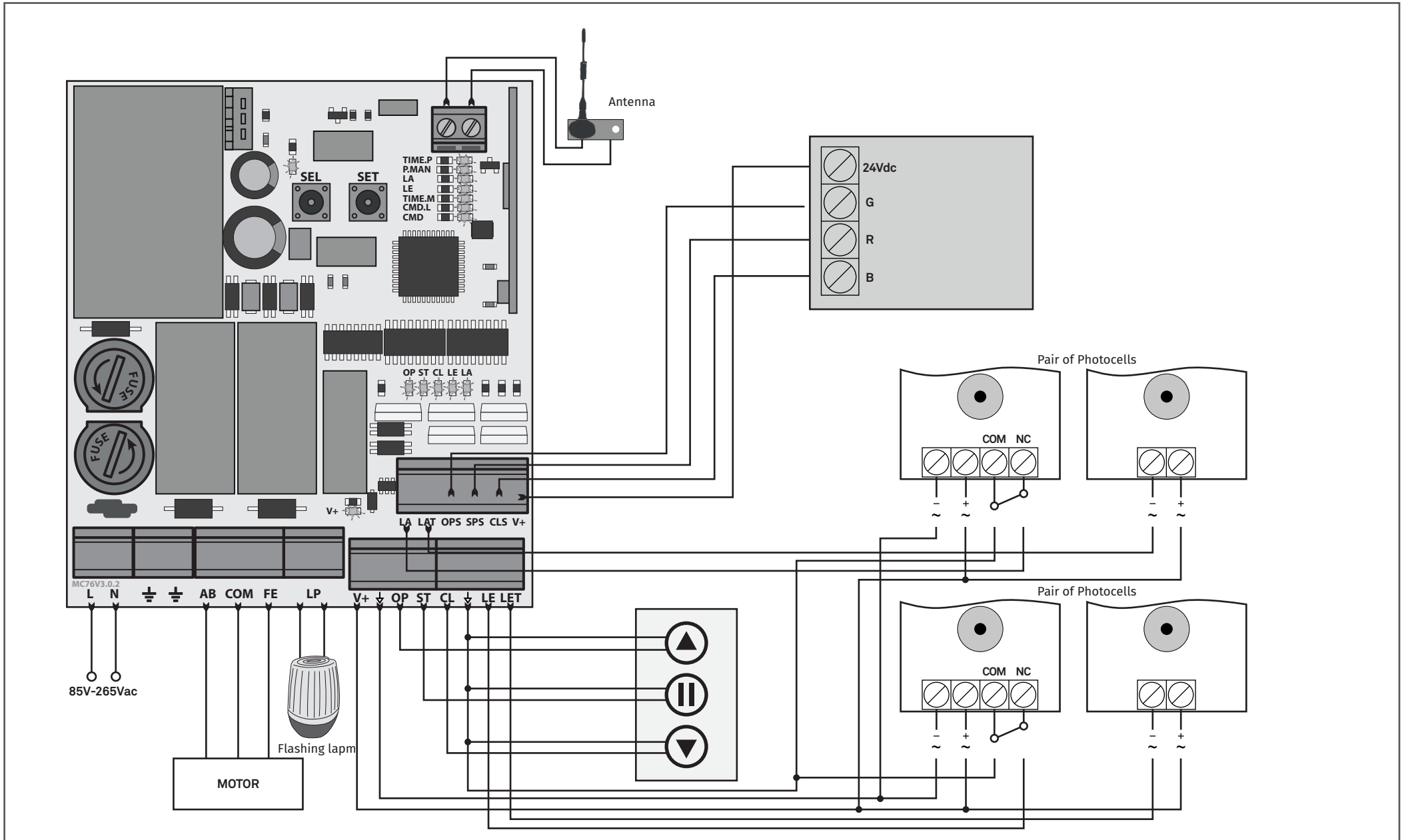
• Connectors information



• Buttons information

# 02. CONNECTIONS SCHEME

## CONNECTION OF COMPONENTS TO THE CONTROL BOARD



## 03. CONTROL BOARD

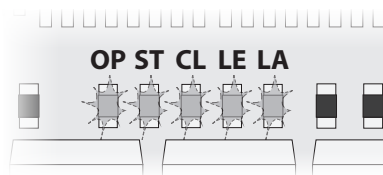
### TECHNICAL CHARACTERISTICS



The MC76 is a control board developed especially for rolling motors (TUB and ROLLING range), which allows programming of working time and pause time for automatic closing.

It has the ability to detect limit-switch devices and when the motor is blocked, and as such, the working time ends as soon as the curtain or rolling grille reaches a limit-switch and when it detects that the motor is blocked (in effort).

	230V	110V
• Power supply	85V-265Vac	85V-265Vac
• Motor Output Power	(8A x 230) 1840W máx.	(8A x 120) 960W
• Remote controls code	Rolling Code	
• Maximum memory capacity	120 Codes	
• Working temperature	-20°C ~ 55°C	
• Built-in radio receiver	433,92 Mhz	
• Output for auxiliary accessories	24Vdc/100mA	
• Output for external lamp	500W	
• Motor input fuse	Ø5x20mm 8A/250Vac delayed	
• Low voltage fuse for accessory output	Ø5x20mm 2A/250Vac delayed	

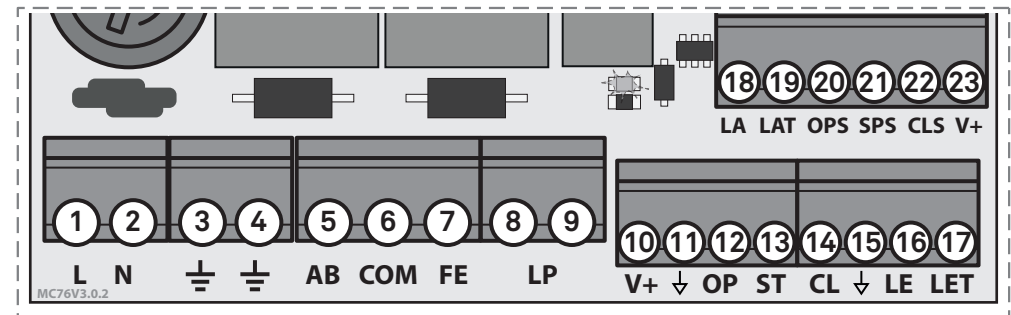
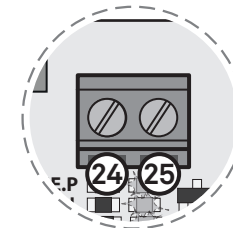
### INFORMATION LEDS



LED	DESCRIPTION		
OP	Opening Order	Receiving signal	No sign of activity
ST	-	Receiving signal	No sign of activity
CL	Closing Order	Receiving signal	No sign of activity
LE	Photocell circuit button indication	Photocells detected	Photocells not detected
LA			

## 03. CONTROL BOARD

### CONNECTION CONNECTORS



1 • Power supply 230V/110V - Phase (L)	Connecting the control board power
2 • Power supply 230V/110V - Neutral (N)	
3 • Ground connection	
4 • Ground connection	
5 • Motor Output - Opening (AB)	Connection of the Opening and Closing phases of the motor. If the direction of the motor is opposite to what is desired, simply swap the two wires to reverse the direction.
6 • Motor Output - Neutral (COM)	
7 • Motor Output - Closing (FE)	
8 • Output for External Lamp - Neutral (N)	Connection for external lamp with maximum output duration of 4 min.
9 • Output for External Lamp - Phase (F)	
10 • Auxiliary Output 24Vdc 100mA (V+)	Power output for devices
11 • Common - Negative (↓)	
12 • NO Input for Push button - Opening (OP)	Circuit for connecting push buttons: <b>Two-button push-button station:</b> Opening and closing control on each button. <b>One-button push-button station:</b> Operation in Step-by-Step mode (open-to-close-to-...) always with the same button.
13 • NO Input for Push button - Stop (ST)	
14 • NO Input for Push Button - Closing (CL)	

## 03. A CENTRAL

### CONECTORES DE LIGAÇÃO

15 • Common - Negative (↕)	
16 • NC Input for Photocells (LE)	This circuit allows connection of all types of safety photocells. The auto-test function tests the presence of a device connected to the LA input.
17 • Photocell Common with auto-test function (LET)	
18 • NC Input for Safety edge (LA)	This circuit allows connection of all types of safety photocells.
19 • Safety Edge Common with auto-test function (LAT)	The auto-test function tests the presence of a device connected to the LA input.
20 • Door open or opening signage	Connection to common when the door is open or opening
21 • Closed door signage	Connection to common when the door is closed
22 • Door closing signage	Connection to common when the door is closing
23 • Auxiliary output 24VDC/100 mA - Positive (V+)	Signal 24VDC/100mA max
24 • Common - Negative (↕)	
25 • Antenna	Antenna

## 04. MAIN MENU

### EXIT THE MENU



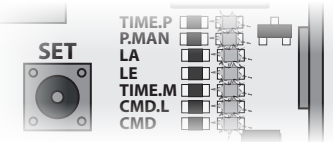
**Functionality** - This function allows you to exit the programming menu.  
**01** • Press the SEL and SET buttons simultaneously.

## 04. MAIN MENU

### LEDs



LEDs Main menu: The control board has a set of LEDs that allow you to identify the status of the different functions.



LED	DESCRIPTION	ON	OFF
TIME P	Pause Time	Programmed	Not Programmed
P. MAN	Human precense	Active	Inactive
LA	Activate the photocell or safety edge	Active	Inactive
LE	Activate the photocell	Active	Inactive
TIME. M	Working Time	Active	Inactive
CMD. L.	Remote control lamp	Programmed Remote control(s)	No programmed remote controls
CMD	Remote control	Programmed Remote control(s)	No programmed remote controls

### 1-BUTTON REMOTE CONTROL



**Functionality** - This function allows you to memorize a 1-button remote control via the control board.

**Memorize a 1-button remote control (step-by-step operation):**

- 01** • Press the SEL button as many times as necessary until the CMD LED starts flashing.
  - 02** • Press the remote control button to open for 1 second. The CMD LED starts flashing rapidly (twice the initial speed).
  - 03** • Click the same button again until the CMD.L LED starts flashing.
  - 04** • The remote control is memorized.
- Wait 10 seconds, the control board exits programming and all LEDs stop flashing..



With each click: open/stop/close/stop/open/close...



Programmed Remote control(s)



No programmed remote controls

## 04. MAIN MENU

### 2-BUTTONS REMOTE CONTROL



**Functionality** - This function allows you to memorize a 2-buttons remote control via the control board.

**Memorizing a 2-buttons remote control (normal operation):**

- 01** • Press the SEL button as many times as necessary until the CMD LED starts flashing.
  - 02** • Press the remote control button to open for 1 second. The CMD LED starts flashing quickly.
  - 03** • Press a different button (Close) until the **CMD LED** starts flashing even faster.
  - 04** • Click on a button like the previous one until the CMD.L LED starts flashing.
  - 05** • The remote control is memorized.
- Wait 10 seconds, the control board exits programming and all LEDs stop flashing.



The remote control is programmed to use two buttons. The first programmed button opens and the second programmed button closes.

Programmed Remote control(s) No programmed remote controls

### 3-BUTTONS REMOTE CONTROL



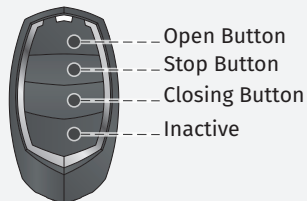
**Functionality** - This function allows you to memorize a 3-buttons remote control via the control board.

**Memorizing a 3-buttons remote control (normal operation):**

- 01** • Press the SEL button as many times as necessary until the CMD LED starts flashing.
  - 02** • Press the first remote control button (opening) until the CMD LED starts flashing faster.
  - 03** • Click on the third remote control button (close) until the CMD LED starts flashing even faster.
  - 04** • Click on the second remote control button (stop) until the CMD LED starts flashing even faster.
  - 05** • The remote control is memorized.
- Wait 10 seconds, the control board exits programming and all LEDs stop flashing.



The remote control will be programmed as follows:



Programmed Remote control(s) No programmed remote controls

## 04. MAIN MENU

### REMOTE CONTROL FOR EXTERNAL LAMP CONTROL



**Functionality** - This function allows you to memorize a remote control to control the external lamp through the control board.

**Memorize a remote control for controlling the external lamp:**

- 01** • Press the SEL button as many times as necessary until the CMD.L LED starts flashing.
  - 02** • Press the button on the remote control that you want to associate with controlling the lamp output for 1 second.
- If the button is already occupied by another operation on the control board, the button recording will not occur and the control board will wait for the user to choose a button that is not being used
- 03** • The remote control is memorized.
- Wait 10 seconds, the control board exits programming and all LEDs stop flashing.

Programmed Remote control(s) No programmed remote controls

### DELETE ALL REMOTE CONTROLS



**Functionality** - This function allows you to delete all remote controls added to the control board.

- 01** • Press the SEL button as many times as necessary until the CMD LED flashes.
- 02** • Press the SET button for 5 seconds, the CMD LED flashes. All remote controls for both motor control and lamp control will be eliminated.

Programmed Remote control(s) No programmed remote controls

### DELETE ALL LAMP REMOTE CONTROLS



**Functionality** - This function allows you to delete all remote controls added to the control board.

- 01** • Press the SEL button as many times as necessary until the CMD LED flashes.
- 02** • Press the SET button for 5 seconds, the CMD.L LED flashes. All lamp remote control will be eliminated.

Programmed Remote control(s) No programmed remote controls

## 04. MAIN MENU

### MOTOR WORKING TIME



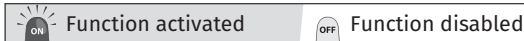
**Functionality** - This function allows you to set the working time for opening and closing the motor.

**01** • Manually close the rolling grille.

**02** • Press the SEL button as many times as necessary until the TIME.M LED starts flashing.

**03** • Press the SET button. The opening time starts to count down (TIME.M LED flashes at twice the initial speed). When you reach the end of the opening, press SET again to end the programming.

The control board exits programming after 10 seconds, and all LEDs stop flashing.



### ACTIVATION OF THE LE SAFETY DEVICE (NC DEVICE)

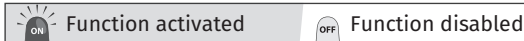


**Functionality** - This function allows the activation of the NC safety device.

**01** • Press the SEL button as many times as necessary until the LE LED starts flashing.

**02** • Press the SET button to activate/deactivate the option.

The control board exits programming after 10 seconds, and all LEDs stop flashing.



### ACTIVATING THE LA SAFETY DEVICE (NC/8K2 DEVICE)

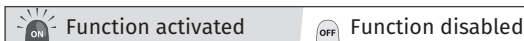


**Functionality** - This function allows the activation of the NC/8K2 safety device.

**01** • Press the SEL button as many times as necessary until the LA LED starts flashing.

**02** • Press the SET button to activate/deactivate the option.

The control board exits programming after 10 seconds, and all LEDs stop flashing.



## 04. MAIN MENU

### HUMAN PRESENCE FUNCTION

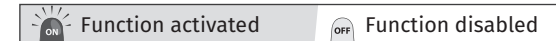


**Functionality** - This function allows you to activate the Human presence function. When activated, the automation only closes as long as you keep the closing button pressed.

**01** • Press the SEL button as many times as necessary until the P.MAN LED starts flashing.

**02** • Press the SET button to activate/deactivate the option.

The control board exits programming after 10 seconds, and all LEDs stop flashing.



### PAUSE TIME PROGRAMMING



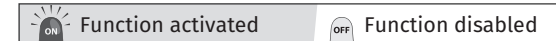
**Functionality** - This function allows you to define the time that the automation waits after opening until it starts closing automatically, up to a maximum of 4 minutes.

**01** • Press the SEL button as many times as necessary until the TIME.P LED starts flashing.

**02** • Press and hold the SET button to start counting the time (the TIME.P LED will flash at twice the initial speed) for the time you want to program in the pause time.

**03** • Release the SET button to end the pause time count.

The control board exits programming after 10 seconds, and all LEDs stop flashing.



### TOTAL RESET



**Functionality** - This function allows you to reset all factory defaults.

**01** • Press the SEL and SET buttons at the same time for 5 seconds. The LEDs all turn on and off, signaling that the operation has been carried out.

## 05. EXTENDED MENU

### EXTENDED MENU 0 - Manual Programming

To access the Extended Menu 0 press the SET button for 5 seconds. The P.MAN and TIME.P LEDs start flashing alternately indicating that you are in Extended Menu 0. Press SEL to navigate through the extended menus. Press SET to access the desired menu.

EXTENDED MENU 0 - MAIN MENU				
NAME	SELECTION	MENU SELECTED		FACTORY VALUE
• TIME.P		They flash alternately with a period of 0.5sec		NA
• P.MAN			Flash simultaneously	NA
• LA	Access to M5- EXTENDED MENU 5			NA
• LE	Access to M4-MENU EXTENSO 4			NA
• TIME.M	Access to M3-MENU EXTENSO 3			NA
• CMD.L	Access to M2-MENU EXTENSO 2			NA
• CMD	Access to M1-MENU EXTENSO 1			NA

Click on the SEL and SET buttons simultaneously to return to the previous menu/exit.

### EXTENDED MENU 1

To access the Extended Menu 1 options, follow these instructions:

Access the Extended Menu 0. Click the SEL button until the CMD LED starts flashing.

**01** • Press the SET button to enter the M1-Extended menu 1. The P.MAN and TIME.P LEDs flash simultaneously.

**02** • Press the SEL button to cycle between the various operating modes.

**03** • Press the SET button to save the selected option.

EXTENDED MENU 1				
NAME	FUNCTION	DESCRIPTION		FACTORY VALUE
• TIME.P		Flash simultaneously		0
• P.MAN				0
• LA	Single button control	Active (1)	Inactive (0)	0
• LE	Courtesy Light Mode 3	Courtesy light Mode 3 Lights up when opened, closed, during pause time and 3 minutes when closed (3)		0

## 05. EXTENDED MENU

### MENU EXTENSO 1

• TIME.M	Courtesy Light Mode 2	Courtesy Light Mode 2 Lights up when opened, closed and during pause time (2)	0
• CMD.L	Courtesy Light Mode 1	Courtesy light Mode 1 Lights up when opened and closed (1)	0
• CMD	Courtesy Light Mode 0	Courtesy light Mode 0 Control by remote control (0)	0

Click on the SEL and SET buttons simultaneously to return to the previous menu/exit.

### EXTENDED MENU 1 - COURTESY LIGHT



#### SELECT COURTESY LIGHT MODE

Control mode through remote control is the selected mode by default. CMD LED permanently ON.

**01** • Press the SEL button as many times as necessary until the LED corresponding to the mode you want to select is flashing.

**02** • Press the SET button to select the option. The marked LED stays on.



Function activated



Function disabled

### EXTENDED MENU 1 - SINGLE BUTTON CONTROL MODE



#### ACTIVATE/DEACTIVATE SINGLE BUTTON CONTROL MODE

With this mode active, a single button can be connected to any of the 12-OP, 13-ST, 14-CL inputs.



The button now controls the control board as follows: open/stop/close/stop/open/close....

**01** • Press the SEL button as many times as necessary until the LA LED is flashing.

**02** • Press the SET button to activate/deactivate the option.



Function activated



Function disabled

## 05. EXTENDED MENU

### EXTENDED MENU 2

To access the Extended Menu 2 options, follow these instructions:

Access the Extended Menu 0. Click the SEL button until the CMD.L LED starts flashing.

**01** • Press the SET button to enter the M2-Extended menu 2. The P.MAN and TIME.P LEDs flash simultaneously.

**02** • Press the SEL button to cycle through the different operating modes.

**03** • Press SET to save the selected option.

MENU EXTENSO 2				
NAME	FUNCTION	DESCRIPTION		FACTORY VALUE
• TIME.P		Flash simultaneously		0
• P.MAN				0
• LA	LA Security Test	Active (1)	Inactive (0)	0
• LE	LE Security Test	Active (1)	Inactive (0)	0
• TIME.M	Motor direction	Inverted (1)	Default (0)	0
• CMD.L	Motor type	17rpm (1)	12rpm (0)	0
• CMD	Remote programming	Active (1)	Inactive (0)	1

Click on the SEL and SET buttons simultaneously to return to the previous menu/exit.

### EXTENDED MENU 2 - REMOTE PROGRAMMING MODE



#### ACTIVATE/DEACTIVATE PROGRAMMING MODE REMOTELY



The remote programming mode is active by default. **CMD LED** permanently ON.

**01** • Press the SEL button as many times as necessary until the CMD LED is flashing.

**02** • Press the SET button to activate/deactivate the option.



Function activated



Function disabled

## 05. EXTENDED MENU

### EXTENDED MENU 2 - SELECTING MOTOR RPM



#### SELECTING THE MOTOR RPM



The 12RPM motor speed is selected by default. **CMD.L LED** permanently OFF.

**Functionality** - This option means that when the control board detects a motor blocking, it reverses the direction of the motor for X milliseconds, to relieve pressure on the motor shaft. Choosing between rotations allows you to adjust the motor inversion time.

**01** • Press the SEL button as many times as necessary until the CMD.L LED starts flashing.

**02** • Press the SET button to switch between 12RPM and 17RPM.



12RPM



17RPM

### EXTENDED MENU 2 - SELECT MOTOR DIRECTION



#### SELECTING THE MOTOR DIRECTION



By default, output 5-AB supplies current to the motor when the control board is opening and output 7-FE supplies current to the motor when the control board is closing.

**TIME.M LED** permanently OFF.

**01** • Press the SEL button as many times as necessary until the TIME.M LED starts flashing.

**02** • Press the SET button to switch between **AB-OPEN/FE-CLOSE** e **AB-CLOSE/FE-OPEN**.



FE OPENING



FE CLOSING

## 05. EXTENDED MENU

### EXTENDED MENU 2 - LE SECURITY TEST



#### ENABLE/DISABLE SECURITY TEST ON LE SECURITY DEVICE



By default, LE device security testing is disabled.  
LE LED permanently OFF

When this test is active, the safety device's power common becomes the 17-LET connector. When the test is performed, this connector disconnects the safety device common, no longer supplying power. This allows the control board to test the presence and functioning of the LE safety device.

The test is performed immediately before the control board performs an opening or closing operation. If the test on the safety device fails, the control board will not initiate any opening or closing operation.

**01** • Press the SEL button as many times as necessary until the LE LED is flashing.

**02** • Press the SET button to activate/deactivate the option.



Function activated



Function disabled

### EXTENDED MENU 2 - LA SAFETY TEST



#### ENABLE/DISABLE SECURITY TEST ON LA SECURITY DEVICE



By default, LE device security testing is disabled.  
LA LED permanently OFF.

When this test is active, the safety device's power common becomes the 19-LAT connector. When the test is performed, this connector disconnects the safety device common, no longer supplying power. This allows the control board to test the presence and functioning of the LA security device.

The test is performed immediately before the control board performs an opening or closing operation. If the test on the safety device fails, the control board will not initiate any opening or closing operation.

**01** • Press the SEL button as many times as necessary until the LA LED is flashing.

**02** • Press the SET button to activate/deactivate the option.



Function activated



Function disabled

## 05. EXTENDED MENU

### EXTENDED MENU 3









To access the Extended Menu 3 options, follow these instructions:

Access the Extended Menu 0. Click the SEL button until the LED TIME.M starts flashing.

**01** • Press the SET button to enter the M3-Extended menu 3. The P.MAN and TIME.P LEDs flash simultaneously.

**02** • Press the SEL button to cycle between the various operating modes.

**03** • Press the SET button to save the selected option.

EXTENDED MENU 3				
NAME	FUNCTION	DESCRIPTION		FACTORY VALUE
• TIME.P	   	Flash simultaneously		0
• P.MAN	   			0
• LA	LA Mode	Acts on opening (1)	Acts on closing (0)	0
• LE	LE Mode	Acts on opening (1)	Acts on closing (0)	0
• TIME.M	Input 8k2/ NO/NC	8K2 (1)	NO/NC (0)	0
• CMD.L	Motor relief	Active (1)	Inactive (0)	0
• CMD	Limit switch detection	Active (1)	Inactive (0)	0

Click on the SEL and SET buttons simultaneously to return to the previous menu/exit.

## 05. EXTENDED MENU

### EXTENDED MENU 3 - LIMIT SWITCH DETECTION



#### ENABLE/DISABLE LIMIT SWITCH DETECTION



By default, limit switch detection is activated.  
CMD LED permanently ON.

When limit switch detection is active, the control board turns off the motor when it detects the activation of a limit switch, even if the defined motor time has not yet ended.

- 01 • Press the SEL button as many times as necessary until the CMD LED is flashing.
- 02 • Press the SET button to activate/deactivate detection.



Function activated



Function disabled

### EXTENDED MENU 3 - MOTOR RELIEF



#### ENABLE/DISABLE MOTOR RELIEF



By default, motor relief is activated.  
CMD.L LED is permanently ON.

When motor relief is active, the control board, when it detects an motor blocking, reverses the motor in order to relieve the pressure exerted on the motor shaft.

- 01 • Press the SEL button as many times as necessary until the CMD.L LED is flashing.
- 02 • Press the SET button to activate/deactivate the relief.



Function activated



Function disabled

## 05. EXTENDED MENU

### EXTENDED MENU 3 - LA SAFETY DEVICE



#### SELECT LA SAFETY DEVICE INPUT TYPE



By default, the LA safety device input type is NC.  
TIME.M led permanently OFF.

- 01 • Press the SEL button as many times as necessary until the TIME.M LED is flashing.
- 02 • Press the SET button to activate/deactivate detection.



TYPE 8K2



TYPE NC

### EXTENDED MENU 3 - LE SAFETY DEVICE



#### SELECT TYPE OF SAFETY DEVICE INTERVENTION LA



By default, the intervention phase of the LE safety device is during closing.  
LE LED permanently OFF.

- 01 • Press the SEL button as many times as necessary until the LE LED is flashing.
- 02 • Press the SET button to select Opening/Closing.



IN OPENING



IN CLOSING

### EXTENDED MENU 3 - LA SAFETY DEVICE



#### SELECT TYPE OF SAFETY DEVICE INTERVENTION LA



By default, the intervention phase of the LA safety device is during closing.  
LA LED permanently off.

- 01 • Press the SEL button as many times as necessary until the LA LED is flashing.
- 02 • Press the SET button to select Opening/Closing.



IN OPENING



IN CLOSING

## 05. EXTENDED MENU

### EXTENDED MENU 4

Functionality - This menu allows you to set sensitivity levels for blocked motor detection. The control board is factory supplied with level 0, and this value can be adjusted, varying on a scale of 1 to 5 (1 least sensitive and 5 most sensitive).

To access the Extended Menu 4 options, follow these instructions:

Access the Extended Menu 0. Click the SEL button until the **LED LE** starts flashing.

01 • Press the SET button to enter the M4-Extended menu 4. The P.MAN and TIME.P LEDs flash simultaneously.

EXTENDED MENU 4		
NAME	FUNCTION	DESCRIPTION
• TIME.P		Flash simultaneously
• P.MAN		

Level	LEDs				
0					
1	CMD				
2	CMD	CMD.L			
3	CMD	CMD.L	TIME.M		
4	CMD	CMD.L	TIME.M	LE	
5	CMD	CMD.L	TIME.M	LE	LA



#### SELECTING THE SENSITIVITY LEVEL FOR BLOCKED MOTOR DETECTION



By default the sensitivity is at level N3. CMD/CMC.L./TIME.M LED permanently ON.

LEDs that are all off mean that the motor is blocked and deactivated.  
Fewer LEDs ON mean less sensitivity.  
More LEDs ON equal more sensitivity.

01 • Press the SEL button to change the sensitivity to the desired level.

02 • Press the SET button to confirm the selected level.

IN OPENING IN CLOSING

## 05. EXTENDED MENU

### EXTENDED MENU 5

To access the Extended Menu 5 options, follow these instructions:

Access the Extended Menu 0. Click the SEL button until the **LED LA** starts flashing.

01 • Press the SET button to enter the M5-Extended menu 5. The P.MAN and TIME.P LEDs flash simultaneously.

02 • Press the SEL button to cycle between the various operating modes.

03 • Press the SET button to save the selected option.

EXTENDED MENU 5			
NAME	FUNCTION	DESCRIPTION	
• TIME.P		Flash simultaneously	
• P.MAN			
• LA	Human presence	Only at Closing (1)	At Opening and Closing(0)
• LE	Sensitivity Multiplier	Reduced (1)	Default (0)
• TIME.M	ST input type	NC (1)	NO (0)
• CMD.L	CL input type	NC (1)	NO (0)
• CMD	OP input type	NC (1)	NO (0)

Click on the SEL and SET buttons simultaneously to return to the previous menu/exit.



#### OP INPUT TYPE



By default, the OP input is of type NO. CMD LED permanently OFF.

01 • Press the SEL button as many times as necessary until the CMD LED is flashing.

02 • Press the SET button to change between NC and NO.

NC INPUT INPUT NO

## 05. EXTENDED MENU

### EXTENDED MENU 5



#### CL INPUT TYPE



By default, the OP input is of type NO. CMD.L LED permanently OFF.

- 01 • Press the SEL button as many times as necessary until the CMD L. LED is flashing.
- 02 • Press the SET button to change between NC and NO.

NC INPUT

NO INPUT



#### ST INPUT TYPE



By default, the OP input is of type NO. TIME. M. LED permanently erased.

- 01 • Press the SEL button as many times as necessary until the TIME. M. LED is blinking.
- 02 • Press the SET button to change between NC and NO.

NC INPUT

NO INPUT



#### ACTIVATE THE SENSITIVITY MULTIPLIER



By default, the control board applies standard sensitivity levels. If the minimum sensitivity level causes an undesirable number of detections, you can activate this option to reduce all sensitivity levels by half.

- 01 • Press the SEL button as many times as necessary until the LE LED is flashing.
- 02 • Press the SET button to change between Activating and Deactivating the sensitivity multiplier.

Function activated

Function disabled

## 05. EXTENDED MENU

### EXTENDED MENU 5



#### HUMAN PRESENCE MODE



By default, the Human presence input is implemented both at opening and closing. LA LED permanently OFF.

- 01 • Press the SEL button as many times as necessary until the LA LED is flashing.
- 02 • Press the SET button to change between Human presence mode only in the closing or only in the opening.

Only at Closing

Only at opening

# 06. TROUBLESHOOTING

## INSTRUCTIONS FOR END CUSTOMERS

## INSTRUCTIONS FOR TECHNICIANS

Anomaly	Procedure	Behavior	Procedure II	Discover the source of the problem
• Motor does not work	• Check that the 110/230V power supply is connected to the automation and that it is working correctly.	• Still not working	• Consult a specialized MOTORLINE technician.	<ol style="list-style-type: none"> <li>1 • Open the control board and check if it has a 110/230V power supply;</li> <li>2 • Check the control board input fuses;</li> <li>3 • Disconnect the motor from the control board and test the fuses connected directly to 230V to find out if it is defective.</li> <li>4 • If the motor works, the problem will be with the control board. Remove it and send it to MOTORLINE technical services for diagnosis;</li> <li>5 • If the motor does not work, remove it from the installation location and send it to MOTORLINE technical services for diagnosis.</li> </ol>
• Motor does not move, but makes noise	• Unlock the motor and move the rolling grille manually to check it for mechanical problems.	• Found problems?	• Consult a specialized MOTORLINE technician.	1 • Check all axes and movement systems associated with the rolling grille and automation (pins, hinges, etc.) to find out what the problem is.
		• Does the rolling grille move easily?	• Consult a specialized MOTORLINE technician.	<ol style="list-style-type: none"> <li>1 • If the motor runs, the problem is with the control board. Remove it and send it to MOTORLINE technical services for diagnosis;</li> <li>2 • If the motor does not start, remove it and send it to MOTORLINE technical services for diagnosis.</li> </ol>
• Motor opens but does not close	• Unlock the motor and manually move the rolling grille to the closed position. Lock the rolling grille again. Turn off the power for 5 seconds, and turn it ON again. Give the opening order with the remote control.	• The rolling grille opened but did not close.	<ol style="list-style-type: none"> <li>1 • Check if there is any obstacle in front of the photocells;</li> <li>2 • Check if any of the control devices (key selector, push button, video intercom, etc.) on the rolling grille are stuck and sending a permanent signal to the control board;</li> <li>3 • Consult a specialized MOTORLINE technician.</li> </ol>	<p>All MOTORLINE control boards have LEDs that allow you to easily determine which devices have anomalies. All safety device (DS) LEDs remain ON in normal situations. All "START" circuit LEDs in normal situations remain OFF. If the device LEDs are not all turned ON, there is a failure in the safety systems (photocells, safety edges). If the "START" LEDs are ON, there is a command device emitting a permanent signal.</p> <p><b>A) SAFETY SYSTEMS:</b></p> <ol style="list-style-type: none"> <li>1 • Close the photocell circuit with the shunt or deactivate the PHOTO function.</li> <li>2 • Check that the system is functional.</li> <li>3 • Replace this device with a functional one, and check that the automation works correctly with all other devices. If you find any other defects, follow the same steps until you discover all the problems.</li> </ol> <p><b>B) START SYSTEMS:</b></p> <ol style="list-style-type: none"> <li>1 • Disconnect all wires connected to the connector (PULL and PED).</li> <li>2 • If the LED turn OFF, try reconnecting one device at a time until you find which device is broken.</li> </ol> <p><b>NOTICE:</b> If the procedures described in paragraphs A) and B) do not work, remove the control board and send it to MOTORLINE technical services for diagnosis;</p>
• Motor does not complete the entire course	• Unlock the motor and move the rolling grille manually to check the rolling grille for mechanical problems.	• Found problems?	• Consult a specialized MOTORLINE technician.	1 • Check all axes and movement systems associated with the rolling grille and automation (pins, hinges, etc.) to find out what the problem is.
		• Does the rolling grille move easily?	• Consult a specialized MOTORLINE technician.	<ol style="list-style-type: none"> <li>1 • Make sure the limit switches are correctly adjusted.</li> <li>2 • They are correctly tuned.</li> <li>3 • Make a new program starting with the rolling grille completely closed.</li> <li>3.1 • Disable Extended Menu 4 (Blocked Motor Detection).</li> <li>4 • If the motor does not start, remove it and send to MOTORLINE technical services for diagnosis.</li> <li>5 • If the motor works and moves the rolling grille well in its full course with maximum force, the problem is in the control board.</li> </ol>