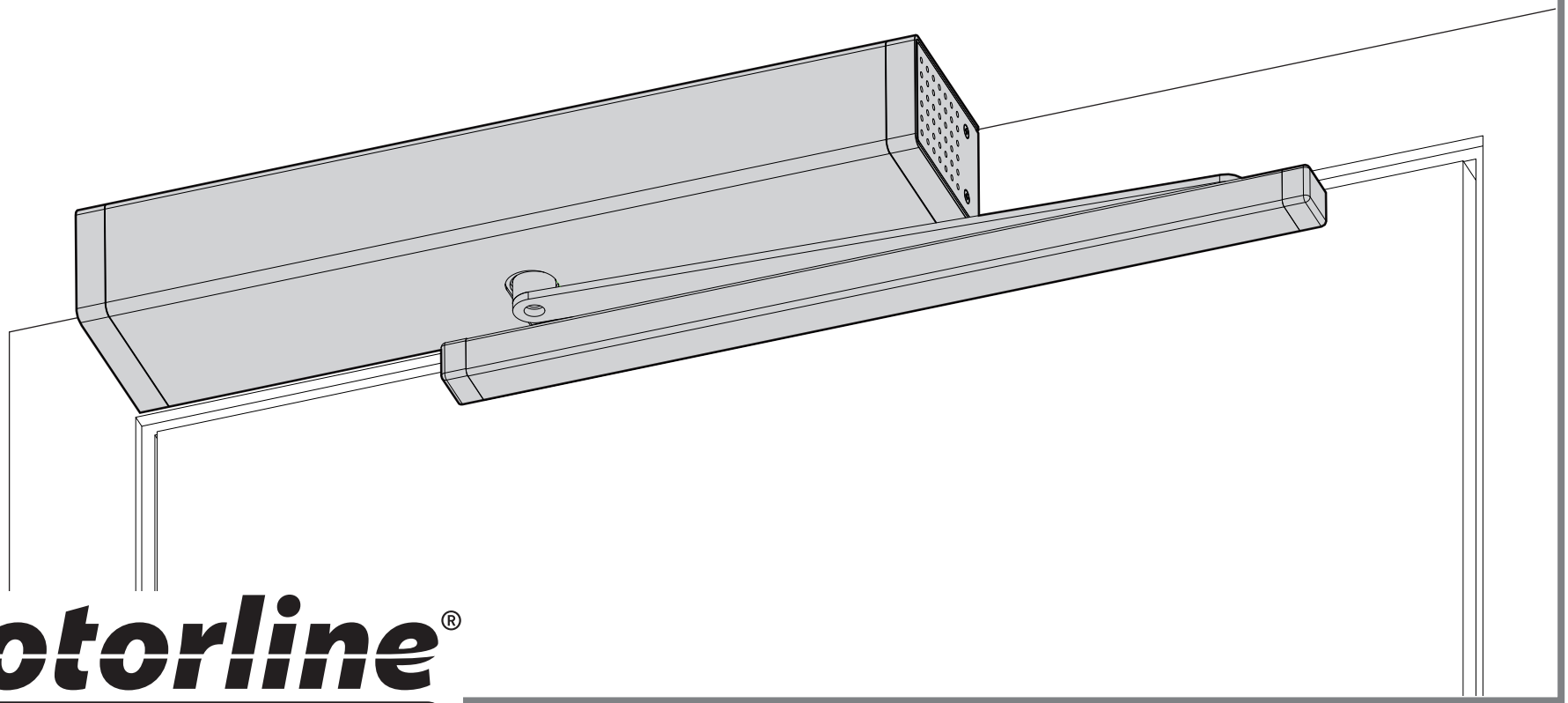
PORTUGAL

EN

M1805

USER/INSTALLER MANUAL



Motorline® PROFESSIONAL

V5.0
REV. 05/2019

00. CONTENT

INDEX

01. SAFETY INSTRUCTIONS

ATTENTION:

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

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

01. SAFETY INSTRUCTIONS

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 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

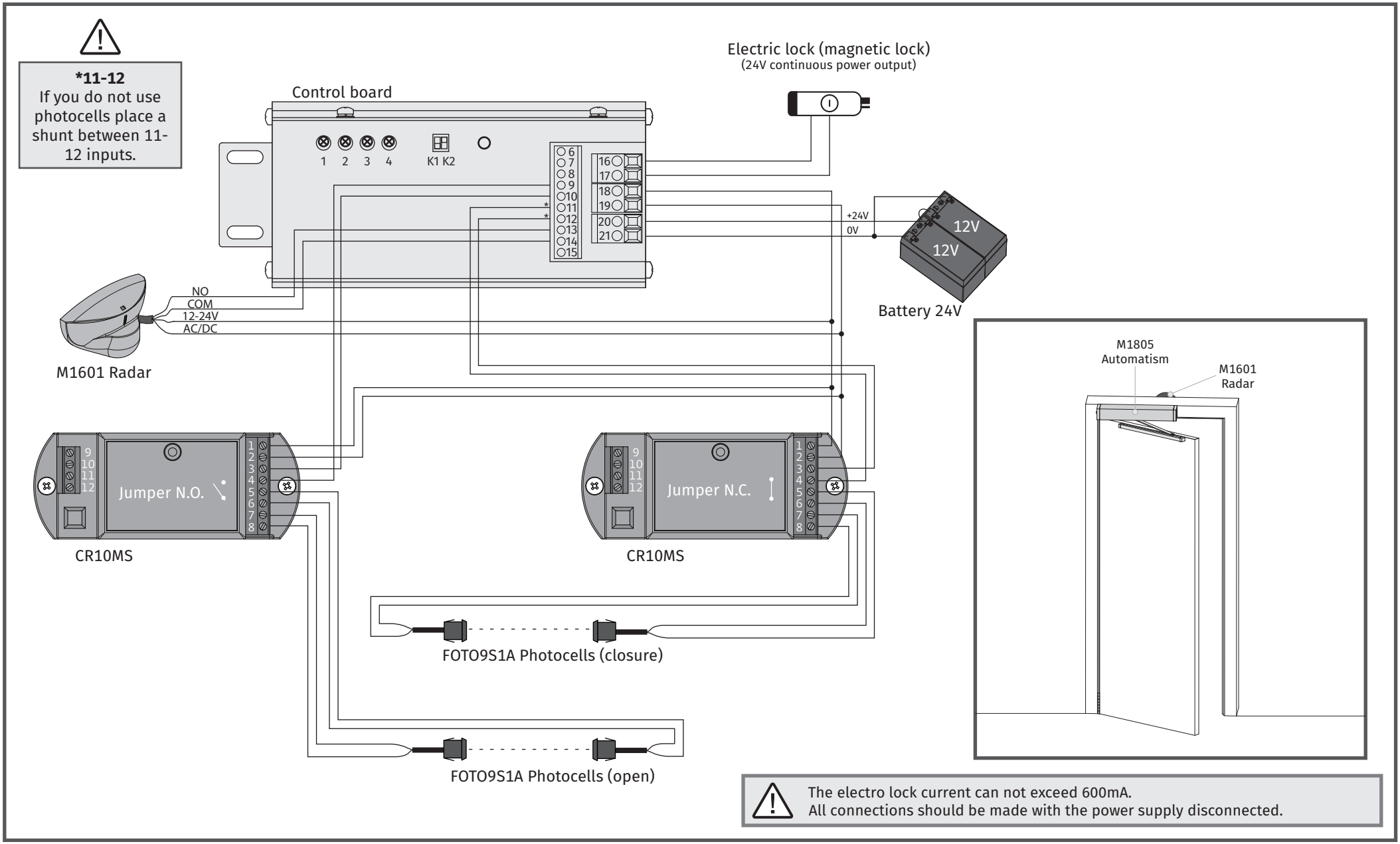

- Potentiometer information


- Connectors information


- Buttons information

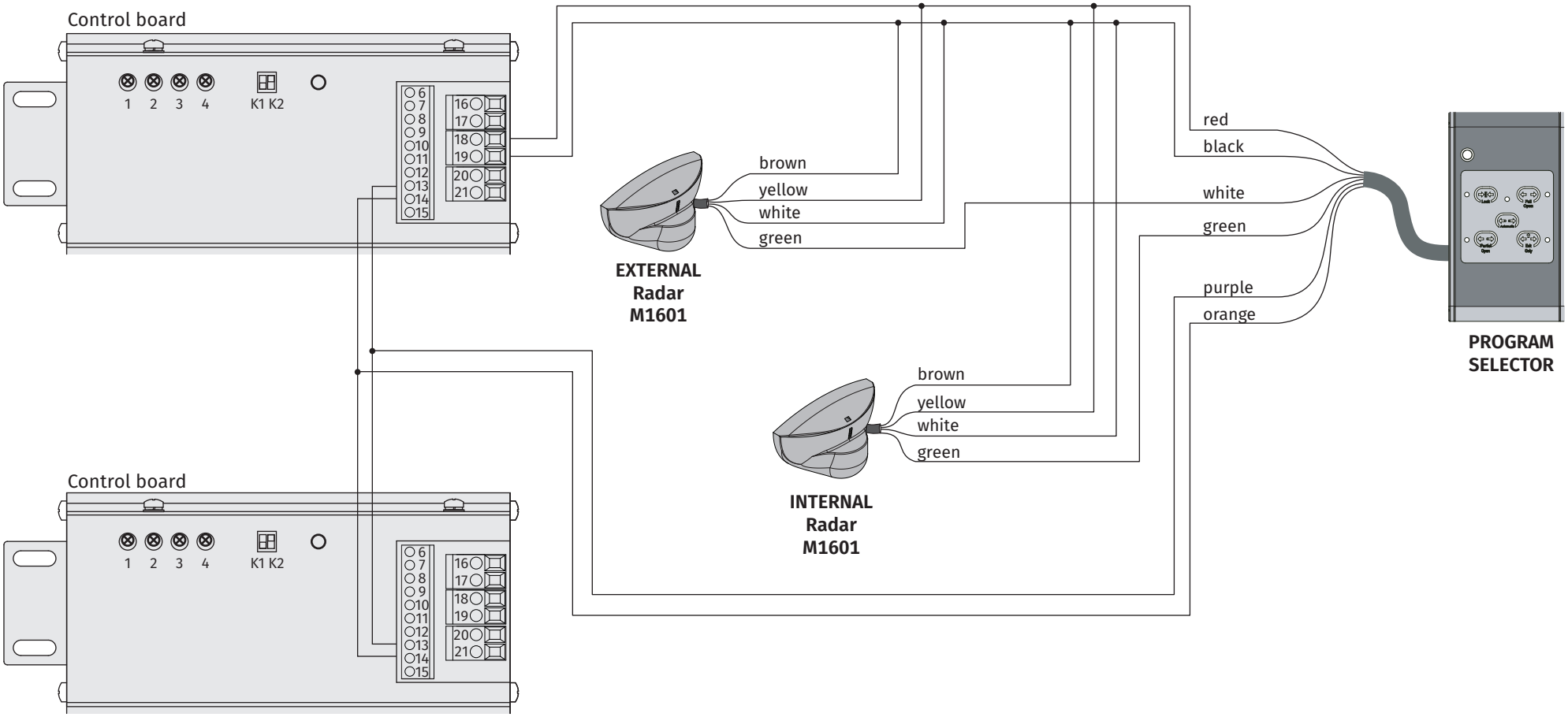
02. CONNECTION SCHEMES

COMPONENTS CONNECTION



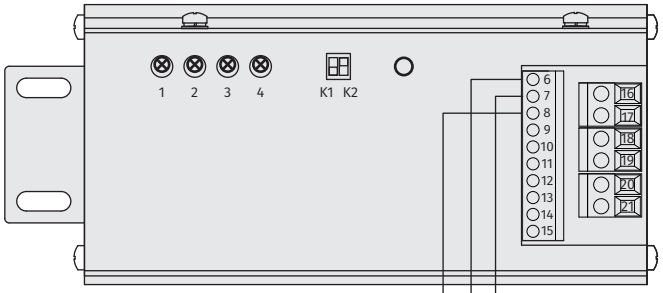
02. CONNECTION SCHEMES

RADARS AND PROGRAM SELECTOR CONNECTION

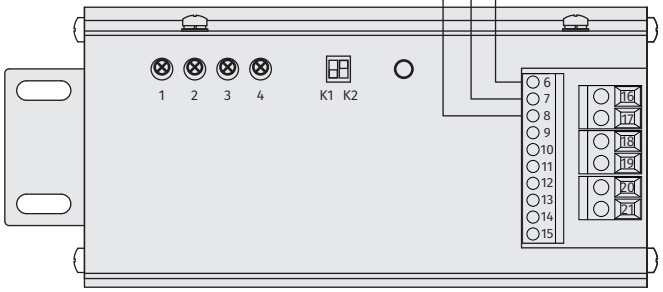


02. CONNECTION SCHEMES

CONNECTION OF 2 SINGULAR DOORS WITH INTERLOCK

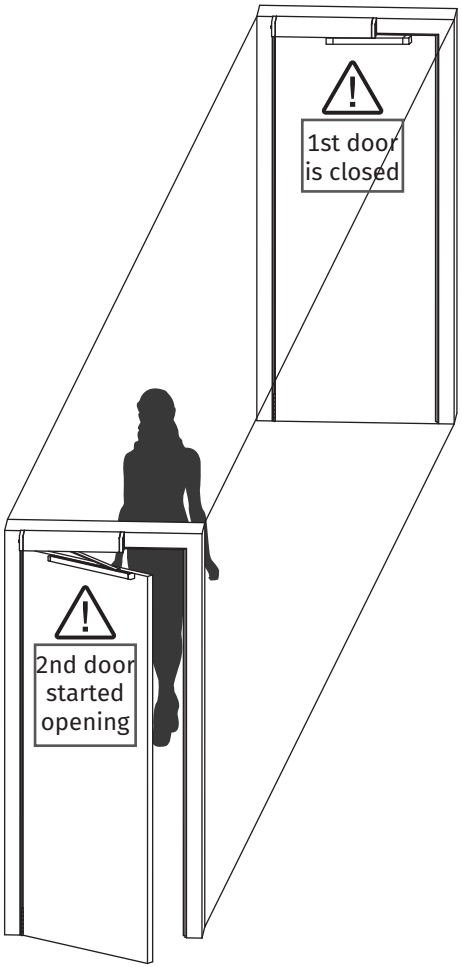


Control board of the 1st door



Control board of the 2nd door

Operation: When using 2 singular doors with interlocking, connected to each other, you should be aware these connections.
Only when one of the doors is closed, the other can open. When using this function, if one of the doors is disconnected from the electric current, the other will not open.

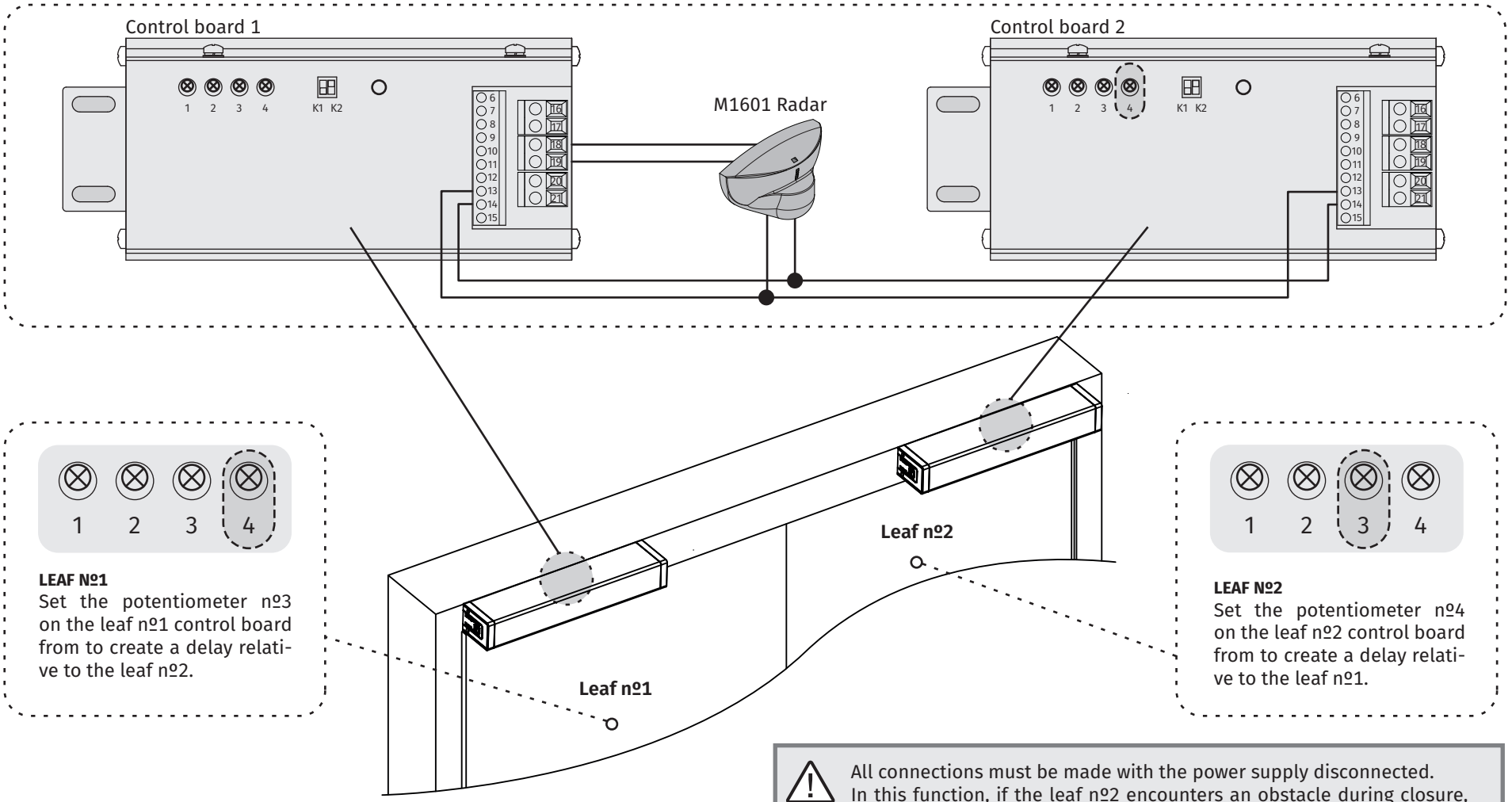


All connections should be made with the power off.

02. CONNECTION SCHEMES

DOOR WITH 2 LEAVES

Operation: When using a door with two leaves, you should note these connections.
This function will allow the two sheets work in a coordinated manner.



1 2 3 4

LEAF Nº1
Set the potentiometer nº3 on the leaf nº1 control board from to create a delay relative to the leaf nº2.

1 2 3 4

LEAF Nº2
Set the potentiometer nº4 on the leaf nº2 control board from to create a delay relative to the leaf nº1.

⚠ All connections must be made with the power supply disconnected.
In this function, if the leaf nº2 encounters an obstacle during closure, the micro will give opening order to the 2 leaves automatically, for a correct closure.

03. THE AUTOMATION

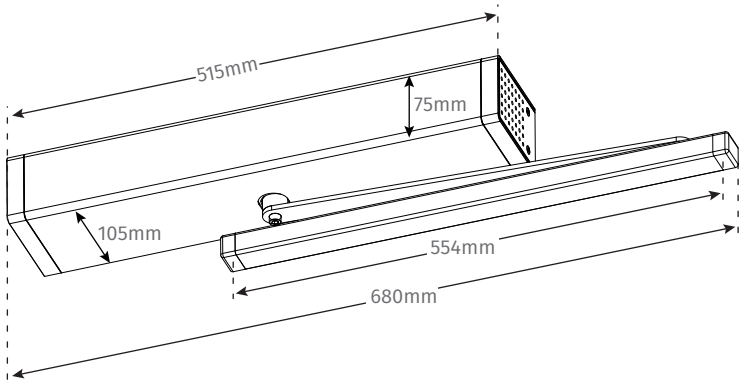
TECHNICAL CHARACTERISTICS

The M1805 is an automation with anodized aluminum chassis, developed to use in pedestrian doors up to 100kg.

• The control board is microprocessor controlled and does self programming. Users only need to select the speeds and the pause time.

• The automation has obstacle detection function and self-protection for overheating, overvoltage and overcurrent.

• Power Supply	230V AC 50Hz
• Potency	100W max
• Door Type	Right or left opening Internal or external opening
• Ângulo de abertura	0° - 110°
• Opening speed (90°)	2 sec. - 4 sec.
• Closing speed (90°)	2 sec. - 4 sec.
• Pause time in opening	1 sec. - 20 sec.
• Manual strength	<30N
• Consumption	<50W
• Operating temperature	-20°C - +50°C
• Door's maximum weight	100kg
• Accessories output	500mA
• Eletric lock output	600mA



04. PRE-INSTALLATION

KIT

KIT COMPONENTS

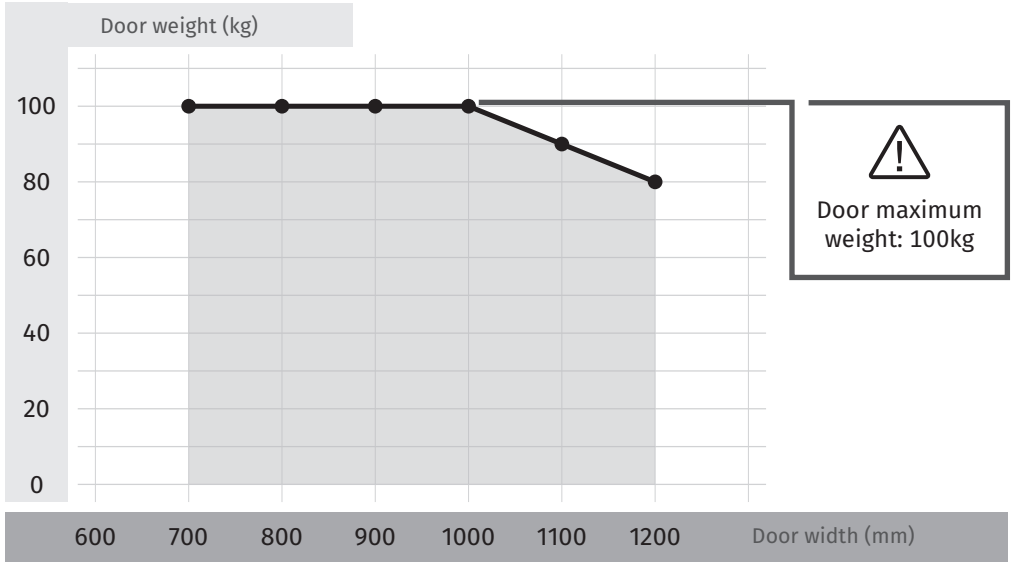
- Motor
- Motion shaft
- Guide with shaft
- Fixation plate

OPTIONAL COMPONENTS
(Not included in kit)

- Radars
- 2 1.2 A Bateries
- Push-button
- Photocells
- Remote-controls

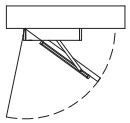
REQUIRED FOR INSTALLATION:

WIDTH/WEIGHT RATIO



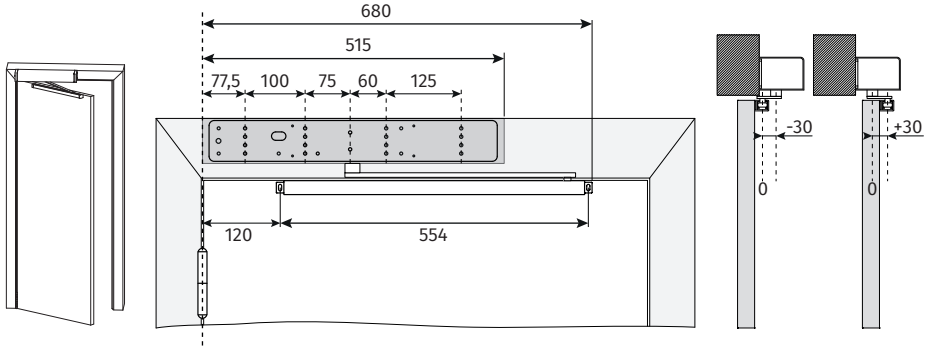
04. PRE-INSTALLATION

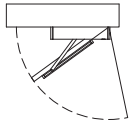
INSTALLATION MEASURES | OPENING DIRECTION



Opening orientation:
LEFT

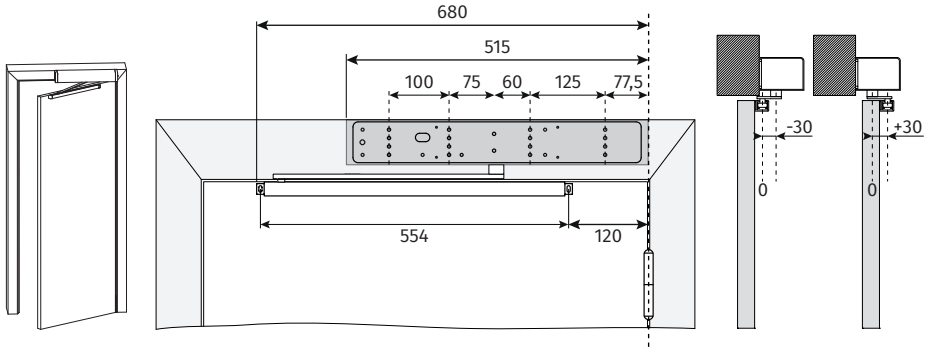
Opening direction:
INSIDE





Opening orientation:
RIGHT

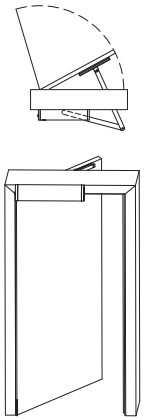
Opening direction:
INSIDE



For installation of the M1805 with **opening direction inwards**, the minimum size per sheet is **680mm**.

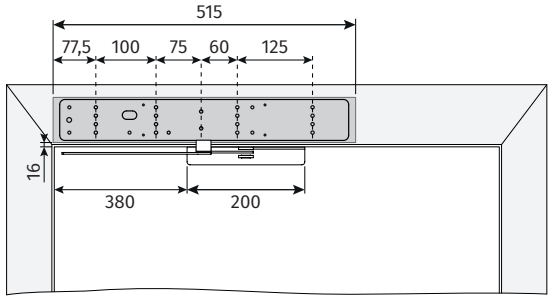
04. PRE-INSTALLATION

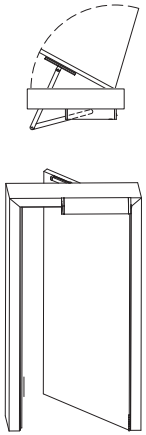
INSTALLATION MEASURES | OPENING DIRECTION



Opening orientation:
LEFT

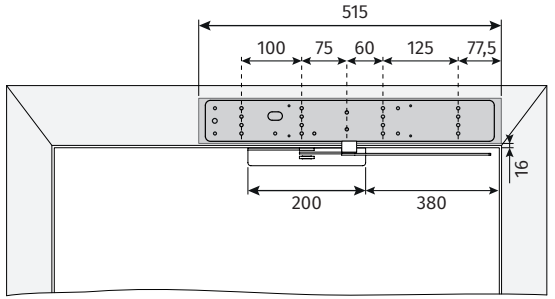
Opening direction:
OUTSIDE



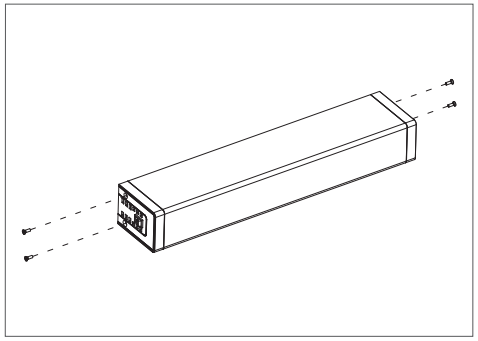


Opening orientation:
RIGHT

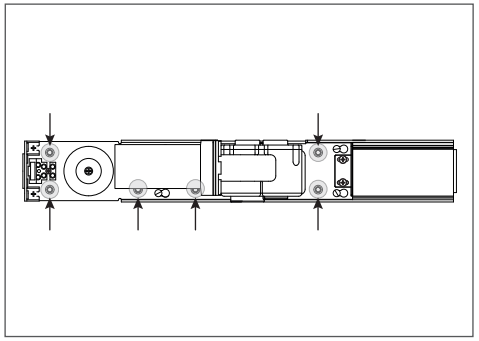
Opening direction:
OUTSIDE



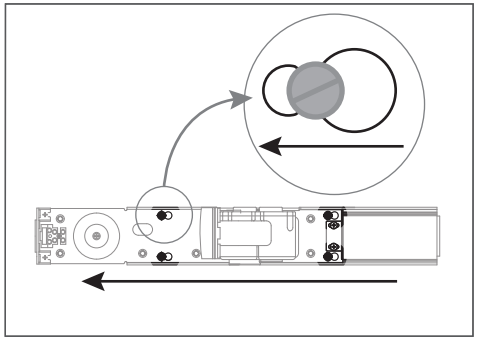
INSTALLATION PROCESS



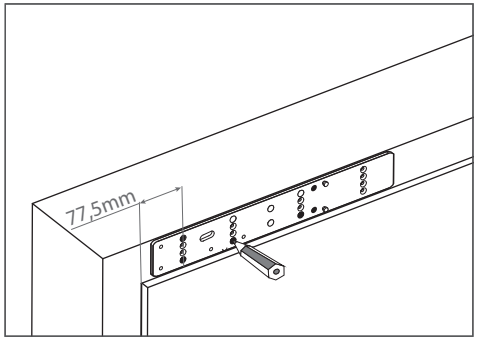
01 • Remove the 4 screws from the sides of the automation and remove the cover.



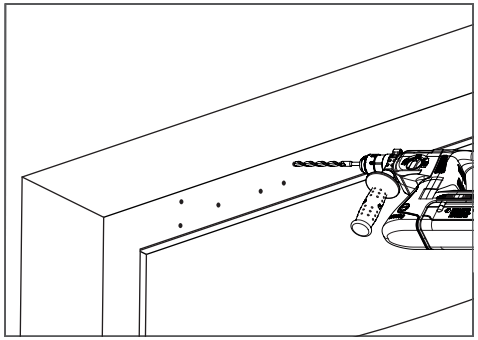
02 • Remove the 6 screws which hold the automation to the wall fixation plate.



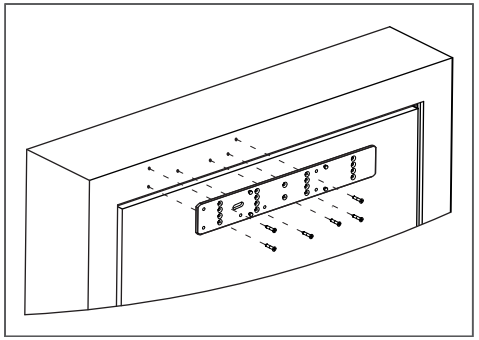
03 • Slide the automation to the left and separate it from the fixation plate.



04 • Put the plate against the wall and make the markings (pay attention the measures).

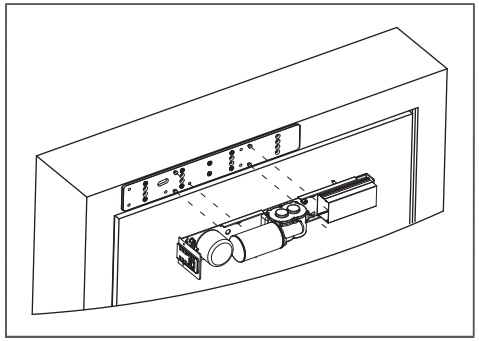


05 • Make the drillings.

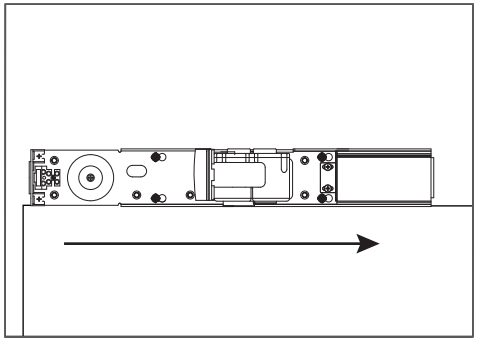


06 • Place the fixing plate directed with the holes and secure it with screws.

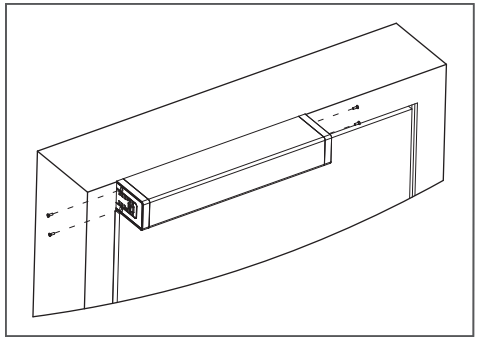
INSTALLATION PROCESS



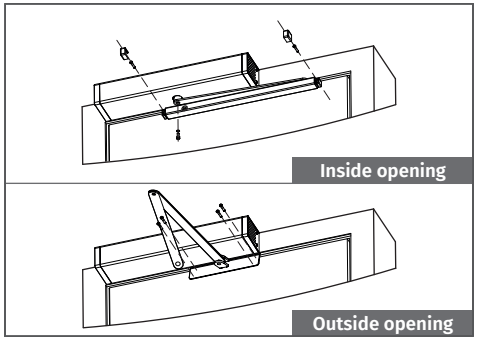
07 • Apply automation in the fixing plate and aim the screws.



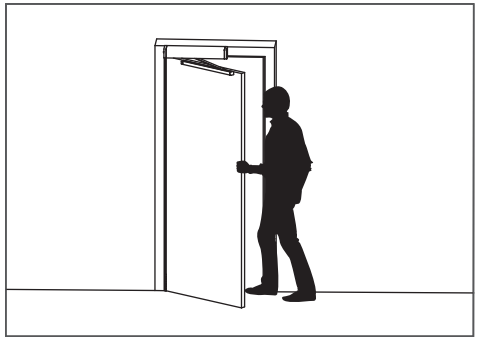
08 • Slide the automation to the right and secure it with the 6 screws.



09 • Apply the cover on the automation and tighten the screws.



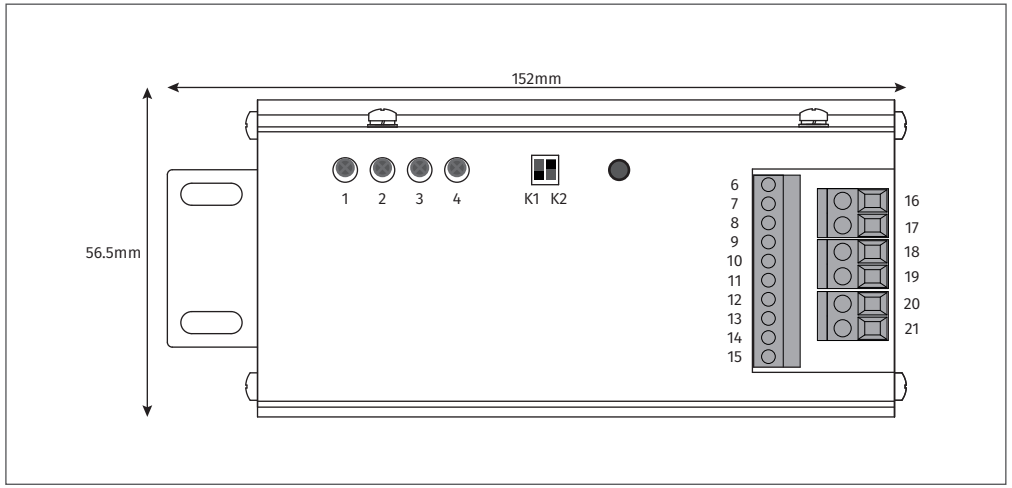
10 • Secure the arm on the automation and set the correct position of the guide to fix it in the door.



11 • Move the door manually to set the position of the opening stopper.

06. THE CONTROL BOARD

TECHNICAL CHARACTERISTICS



Potentiometers

1 • Opening speed
2 • Closing speed
3 • Delay time between motor nº1 and motor nº2 (when installed 2 motors)
4 • Pause time

	Dippers			
	ON		**OFF**	
K1	**Magnetic lock** The output is continuously activated when the door is closed.		**Normal lock** When the opening is triggered, the output receives an impulse for 3 seconds to open the latch.	
K2	Opening orientation: **RIGHT** Opening direction: **INSIDE**	Opening orientation: **LEFT** Opening direction: **OUTSIDE**	Opening orientation: **LEFT** Opening direction: **INSIDE**	Opening orientation: **RIGHT** Opening direction: **OUTSIDE**

06. THE CONTROL BOARD

TECHNICAL CHARACTERISTICS

Conetores

6 •Two singular doors connection - Entrance
7 • Two singular doors connection - Exit
Interlocking between 2 singular doors
8 • Common
9 • **Photocells (Aperture)** - Connection (**N.O**) of a safety sensor for the opening. If the terminal closes during the aperture, the door will stop opening and will start to close.
10 • Common
11 • **Photocells (Closure)** - Connection (**N.C**) of a safety sensor for the closure. If the terminal open sduring closing, the door will reverse the movement.
12 • Common
13 • **START (P.P.)** - Push button to open the door (**N.A**).
14 • COM
15 • Empty

16 • Eletric lock power supply output (+12V DC)
17 • Eletric lock power supply output (-12V DC, 600mA)

18 • **Accessories power supply:** +15V DC , 500mA.
19 • **Accessories power supply:** -15V DC

20 • Battery input 24V (+)
21 • 0V. If the terminal is connected with a 24V additional battery, when the 230V AC fails, the automation will continue to operate. **Note** • With the 230V AC power supply ON, the terminal output voltage can be higher or lower than 24V.

PROGRAMMING

01 • Make sure that all connections between components and control board are made according to the manual (see the schemes in p. 4, 5 and 6).
02 • Before connecting to the eletric current, check if there is some sort of obstacle that hinders the normal operation of the door and if the stopper is well placed.
03 • Put the K2 and the K1 in the desired position according to the dipper board from the page 11A.

⚠ • Before connecting the automation to the power supply, you must have the stopper installed so that the control board can recognize the course.

04 • Turn on the electric current. The door will have the following behavior:
Slowy closes → Slowly opens → Closes (to memorise the position) and stays in normal operation after finishing the cycle.

⚠ • When the door is in normal operation, the opening angle will reduce 2 degrees therefore, it does not need to touch the stopper during all cycles.

07. TROUBLESHOOTING

INSTRUCTIONS FOR FINAL CONSUMERS

INSTRUCTIONS FOR SPECIALIZED INSTALLERS

Anomaly	Procedure	Behavior	Procedure II	Find source of the problem
• Door/Motor doesn't work	• Make sure you have a 230V power supply connected to the control board and if it is working properly.	• Still not working	• Consult a qualified MOTORLINE technician.	1 • Open the control board and check if it has a 230V power supply; 2 • Check the control board input fuses (switch); 3 • If the motor does not work, remove it and send it to the MOTORLINE technical services for diagnosis.
• Door/Motor doesn't move but makes noise	• Turn off the 230V power supply and move the door manually to check if there are mechanical problems.	• Found problems?	• Consult an experienced door expert.	1 • Check all axes and motion systems associated with the door and automatism (shafts, hinges, etc.) to find out what the problem is.
		• The door moves easily?	• Consult a qualified MOTORLINE technician.	1 • If the door works, the problem is in the motor. Remove it and send it to the MOTORLINE technical services for diagnosis;
• Door/Motor opens but doesn't close	•Turn off the 230V power supply and move the door manually to the closed position. Turn off the building eletric board for 5 seconds and then turn on.	• The door opened but did not closed.	1 • Check if there is any obstacle in front of the photocells; 2 • Check if any of the door control devices (key selector and push button) are locked and are sending permanent signal to the control board; 3 • Consult a qualified MOTORLINE technician.	**A) SAFETY SYSTEMS** **(Security systems are opened):** 1 • Close with a shunt all control board safety systems (N.C. contacts). If the automatism starts to work normally, analyze which are the problematic devices. 2 • Remove one shunt at a time to find out which device has the malfunction. 3 • Swap the device with problems for a functional one and ensure that the automatism works correctly with all the other devices. If you find any more defective product, follow the same steps until discover all the problems.
• Door/Motor doesn't make complete route	• Turn off the power supply and move the door manually to check if there are mechanical problems.	• Found problems?	• Consult an experienced door expert.	1 • Check all axes and motion systems associated with the door and automatism (shafts, hinges, etc.) to find out what the problem is.
		• The door moves easily?	• Consult a qualified MOTORLINE technician.	1 • Make a new programming course in control board attributing the necessary times to open and close with appropriate force. 2 • If that does not work, remove the control board and send it to the MOTORLINE technical services for diagnosis. **NOTE:** The control board strength must be sufficient to open and close the door without stopping, but a person must be able to stop it with small effort. In case of safety systems failure, the door will never cause physical damage to the obstacles (vehicles, people, etc.).