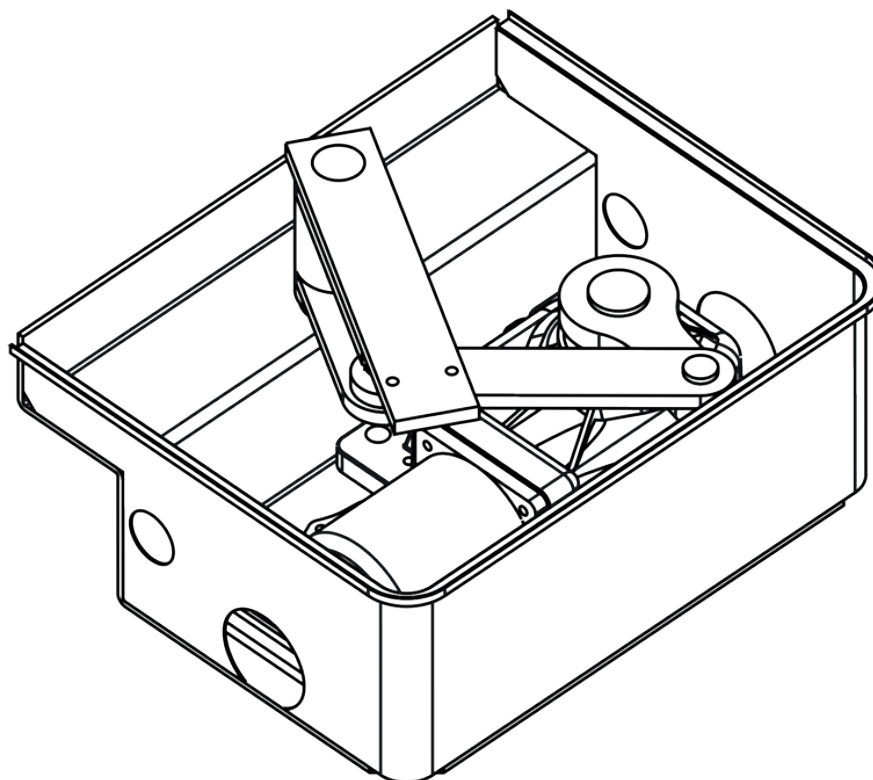




SUBWING 700

USER'S AND INSTALLER'S MANUAL








00. CONTENT

INDEX

01. SAFETY INSTRUCTIONS	1B
02. OPERATOR	
CONNECTION SCHEME	4A
INSTALLATION MAP	4A
TECHNICAL SPECIFICATIONS	4B
DIMENSIONS	4B
03. INSTALLATION	
GATE WING OPENING ANGLE	5A
BOX INSTALLATION	5B
ASSEMBLING THE OPERATOR AND LEVERS	6A
FASTENING THE OPERATOR LEVER TO THE GATE	6B
EMERGENCY RELEASE PROCEDURE	7A
LIMIT SWITCHES ASSEMBLY (OPTIONAL)	7A
04. TROUBLESHOOTING	
FINAL CONSUMERS AND SPECIALIZED INSTALLERS INSTRUCTIONS	7B

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.
 	(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 September 2009.
- Attach the permanent label for the manual release as close as possible

01. SAFETY INSTRUCTIONS

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 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 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.

SYMBOLS LEGEND:



• Important safety notices



• Useful information



• Programming information



• Potentiometer information



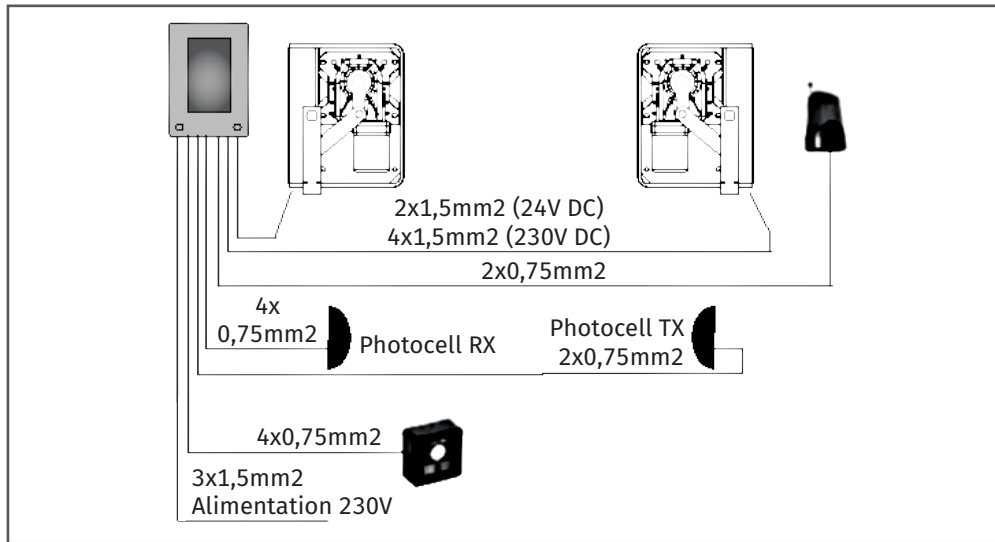
• Connectors information



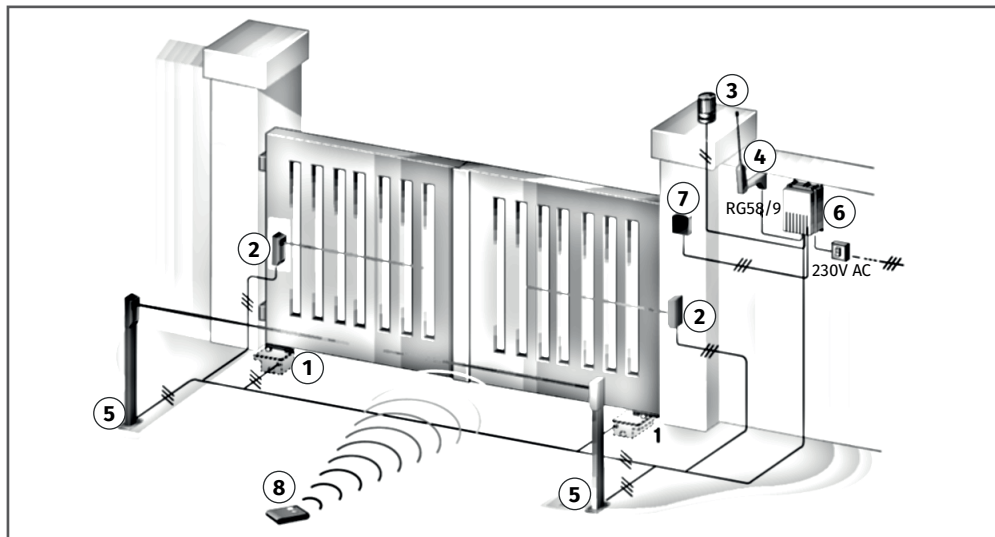
• Buttons information

02. OPERATOR

CONNECTION SCHEME



INSTALLATION MAP



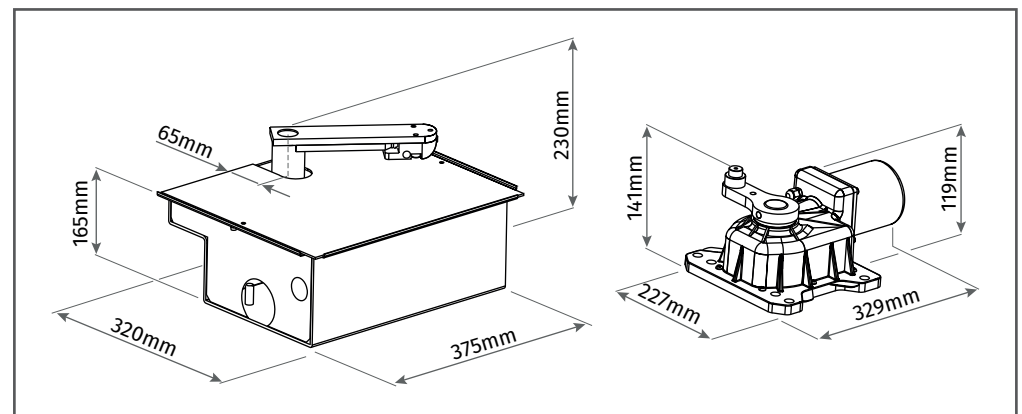
- 1 • Motor 3 • Flashing warning light 5 • Internal photocell 7 • Key-switch
2 • External photocell 4 • Antenna 6 • Electronic control unit 8 • Remote control

02. OPERATOR

TECHNICAL SPECIFICATIONS

	24V	230V
• Max. weight of gate	500Kg	
• Max. width of gate	2,50m	
• Motors power supply	24V DC	230V AC
• Motor power	50W	280W
• Motor RPM	1800	1400
• Condenser	-	12,5µF
• Mechanical unlock for emergency	With key	
• Working temperature	-25° C / +55° C	
• Weight	10Kg	
• Protection	IP67	
• Opening time 90°	16 sec	
• Force of thrust	250Nm	
• Motor current input	3A	1,5A

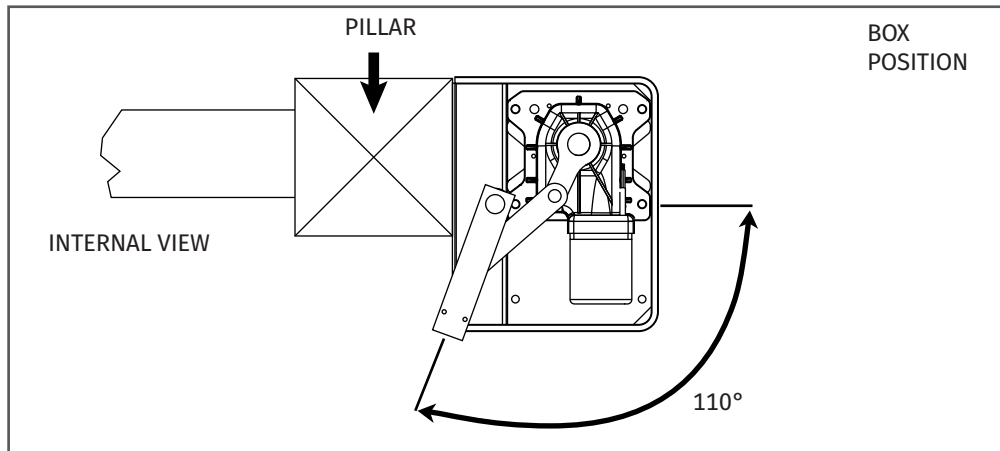
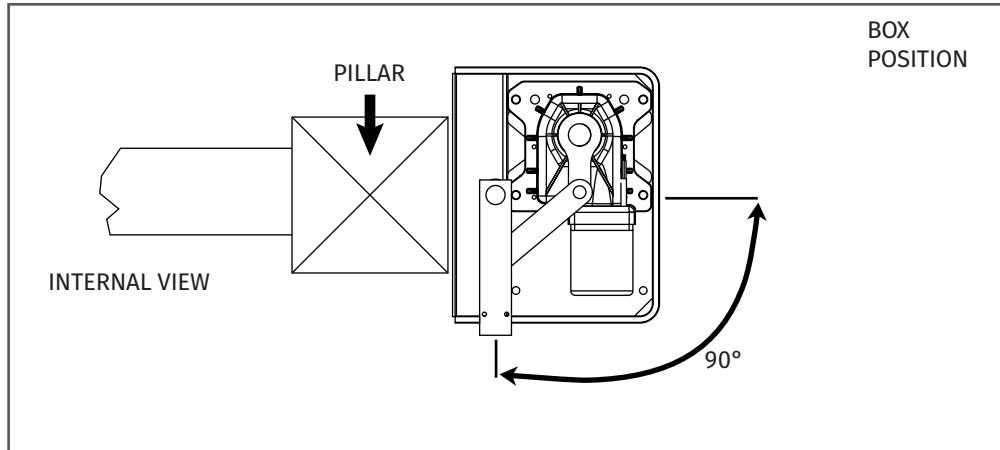
DIMENSIONS



03. INSTALLATION

GATE WING OPENING ANGLE

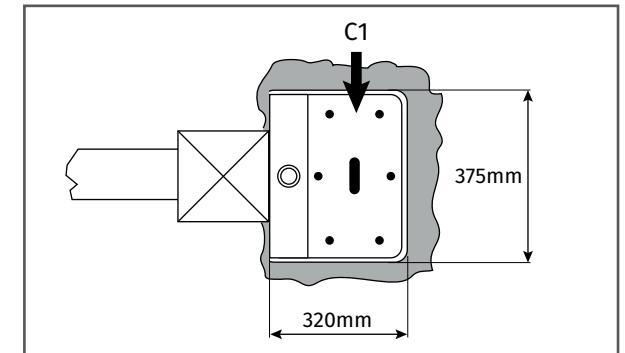
Establish the required opening angle.



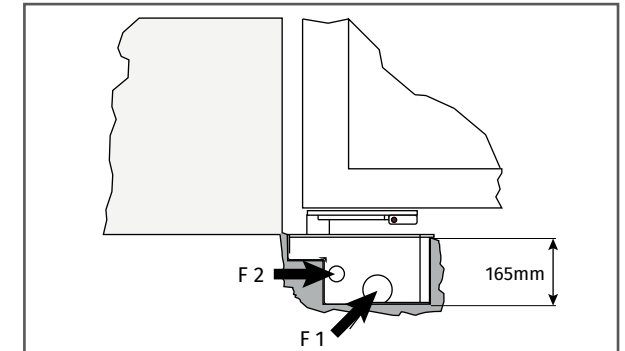
03. INSTALLATION

BOX INSTALLATION

1 • Dig a hole big enough to hold the box containing the operator (C1).



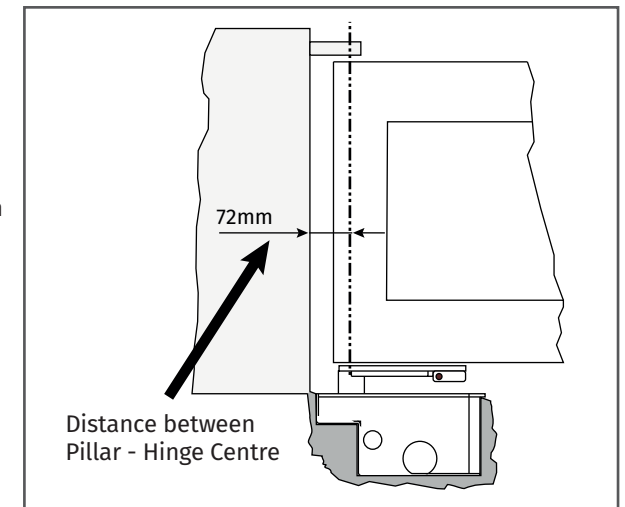
2 • Insert the tube for water drainage in the prepared hole (F1).



3 • Insert the sheath for laying the power cables (F2).

Note: while positioning the box, keep in mind the minimum distance there must be between the pillar and the centre of rotation of the gate hinge.

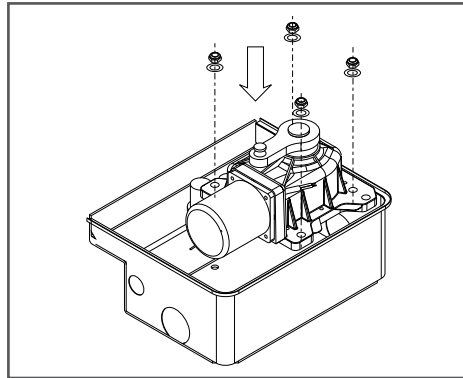
4 • Cement so that the box cannot be moved, wait for it to dry and then assemble the operator and levers.



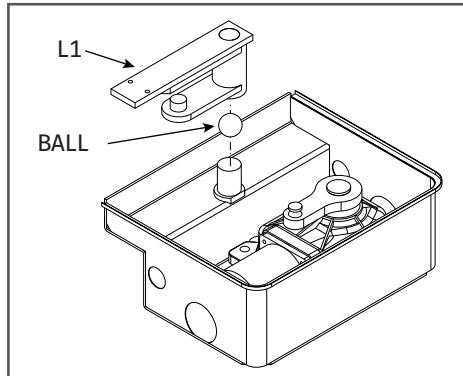
03. INSTALLATION

ASSEMBLING THE OPERATOR AND LEVERS

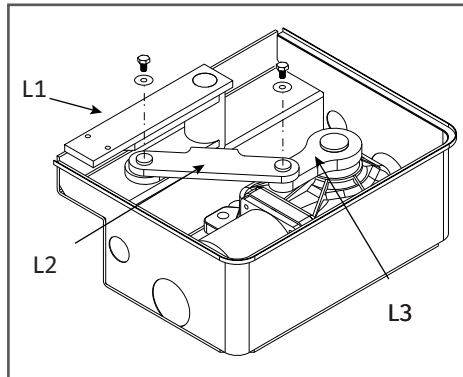
1 • Insert the motor into the foundation case and fix it with nuts and washers supplied.



2 • Insert the ball in the pin located on the box and fit the gate anchorage lever (L1).



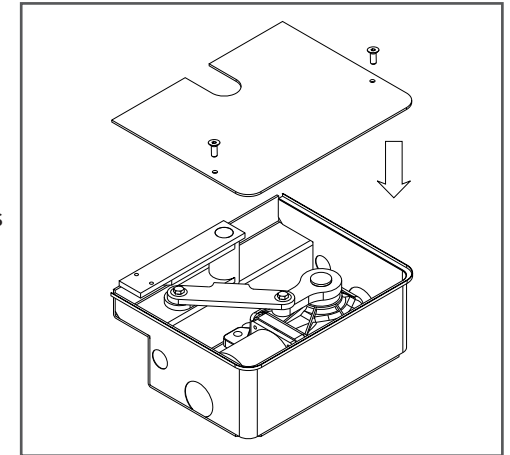
3 • Put the connection lever (L2) between the levers (L3) and (L1) and block it with screws and washers supplied.



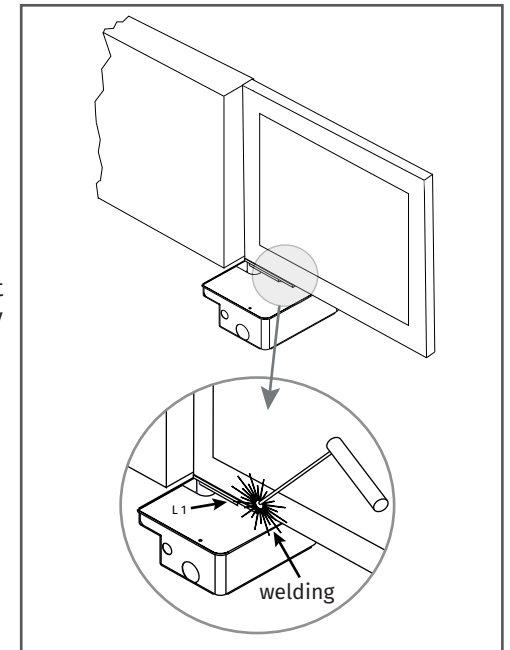
03. INSTALLATION

FASTENING THE OPERATOR LEVER TO THE GATE

Insert the cover and fasten it with the screws provided Position.



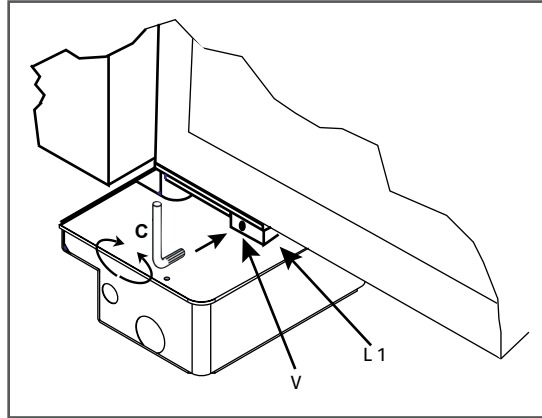
Position the gate wing and the lever (L1) so that they are perfectly aligned and fasten them by welding or similar.



03. INSTALLATION

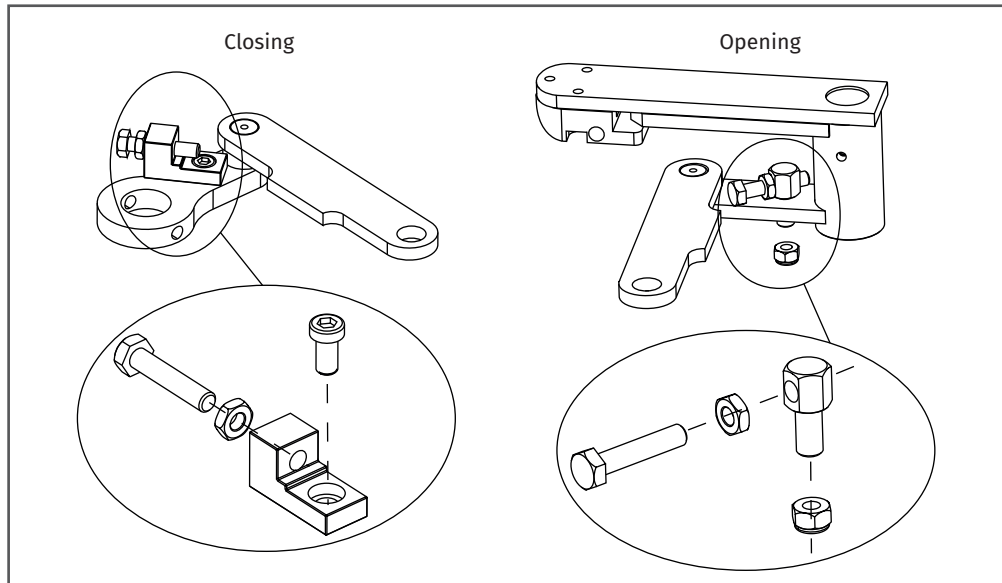
EMERGENCY RELEASE PROCEDURE

Insert the key C provided into the appropriate hole on the lever L1 and turn the key.



LIMIT SWITCHES ASSEMBLY (OPTIONAL)

Insert, regulate and block the mechanical limit switches in the desired position.



04. TROUBLESHOOTING

FINAL CONSUMERS AND SPECIALIZED INSTALLERS INSTRUCTIONS

Problem	Probable cause	Solution
	<ul style="list-style-type: none"> • 230V mains voltage absent 	<ul style="list-style-type: none"> • Check master switch
	<ul style="list-style-type: none"> • Emergency STOP present 	<ul style="list-style-type: none"> • Check for any STOP selectors or commands. If not used, check jumper on STOP contact input on the control board
<ul style="list-style-type: none"> • On giving a command with the remote control or with the key-switch, the gate doesn't open or the motor doesn't start 	<ul style="list-style-type: none"> • Fuse blown 	<ul style="list-style-type: none"> • Replace with one of same value.
	<ul style="list-style-type: none"> • Power cable of motor or motors not connected or faulty 	<ul style="list-style-type: none"> • Connect the cable to appropriate terminal or replace.
	<ul style="list-style-type: none"> • The photocell is not functioning or the beam is interrupted 	<ul style="list-style-type: none"> • Check the connection, remove any obstacle across the beam
<ul style="list-style-type: none"> • On giving a command with the remote control, the gate doesn't open but works with the key command 	<ul style="list-style-type: none"> • The remote control has not been memorised or the battery is flat 	<ul style="list-style-type: none"> • Carry out the remote control learning procedure on the radio receiver or replace the battery with a new one
<ul style="list-style-type: none"> • The gate starts, but stops immediately 	<ul style="list-style-type: none"> • The force of the motor or motors is insufficient 	<ul style="list-style-type: none"> • Modify the value with the FORCE trimmer on the control unit
<ul style="list-style-type: none"> • One wing opens and the other closes 	<ul style="list-style-type: none"> • The connection is not correct 	<ul style="list-style-type: none"> • Invert the connection of the cable of the motor which rotates in the wrong sense