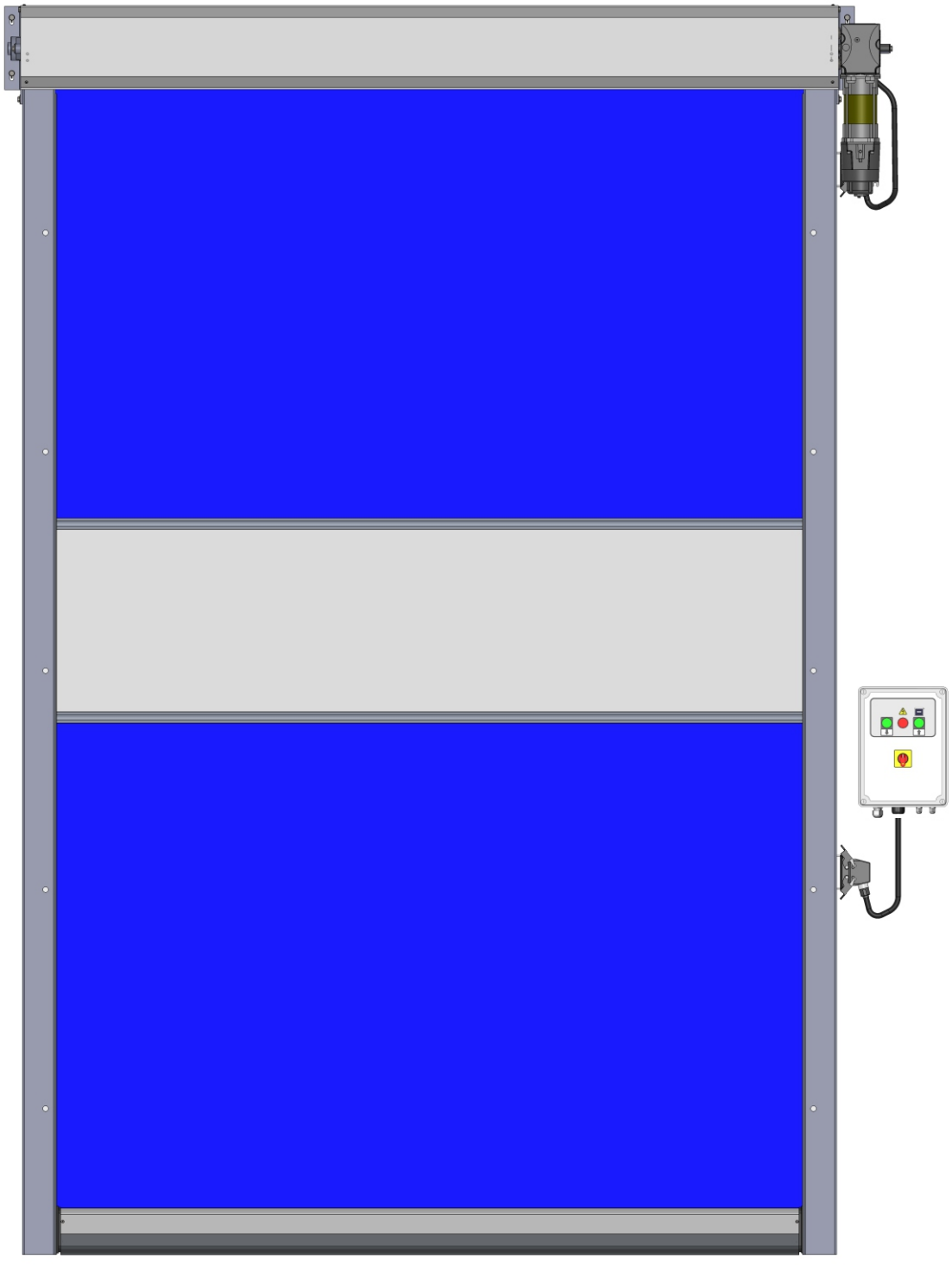
ASSEMBLY INSTRUCTIONS
HIGH SPEED DOOR
ROLL-UP MODEL

Flexidoor®
AUTOMATIC DOORS MANUFACTURER



EN

Translation of the original manual

LIV200.11-05

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1. GENERAL WARNINGS

To install, use and maintain all the hardware of the high speed door with security, there must be taken some precaution measures. To ensure the safety of persons and goods, please follow the procedures described in this manual. If in doubt contact your supplier.

This manual has been written for use by experienced fitters and as such is not suitable for d.i.y. purposes or for use by trainee fitters.

This manual describes the installation of the hardware set components, door sections (panels) and refers to installation manuals of the electrical operator. Be sure to supplement this manual if needed with instructions for any additional components not described in this manual.

Before starting, read this manual carefully!

All the components which have been supplied are designed for use with this specific overhead door. Replacement or adding additional components may have an adverse effect on the safety of, and the guarantee on, the door, if not approve by Flexidoor. Also the CE-approval which has been granted to this door will be cancelled when components are changed or installation is not done according to this manual! Installer is responsible for this.

Verify that the structure where the door will be installed meets the necessary requirements of strength and stability.

Certain components may be sharp or have jagged edges. As such you are advised to wear safety gloves.

Work carefully. Use the proper equipment. Ensure that you are standing in a steady position.

Ensure that there is sufficient light during installation. Remove obstacles and dirt. Make sure that there is no one else present other than the fitters. Other people (children!) may get in the way or endanger themselves during the installation.

Safety devices for automated doors (such as photocells, pressure-sensitive or electro-sensitive devices) as the regulation of closing forces shall be installed / verified taking into account the technical regulations, European Standards and guidelines in force available, where the requirements of some points of the European Standards EN 12604, EN 12445 and En12453 must be met by the installer.

Do not allow children or unqualified persons to operate this door, they may be in danger in handling the door.

Failure to install any of the components of protection by the installer, referred by the manufacturer or by the European Standards, declines any responsibility to the manufacturer of the door, if any accident occurs.

The installer must be provided with tools that are indispensable for proper and safe installation of the door (see figure 1).

The installer must supply to the user the instructions of functioning, use and maintenance provided by Flexidoor, which contains all the necessary information concerning the use and maintenance of the door, and the installer should also provide specific instructions regarding the use of the engine used in the door, in case of an motorized door.

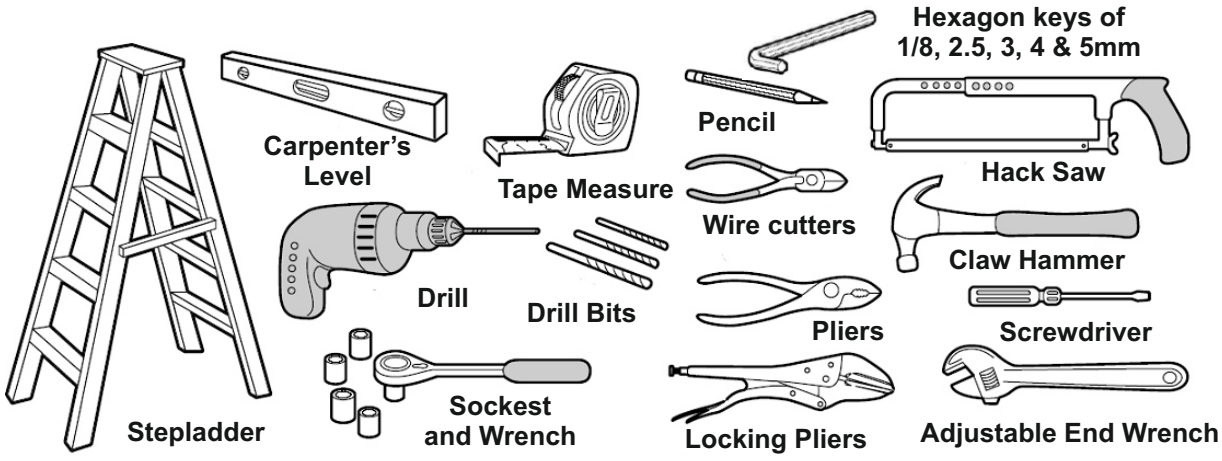


Figure 1: Necessary tools for the installation.

2. INSTALLATION OF THE VERTICAL GUIDES AND MACHINE

Verify the delivered material before start the installation.

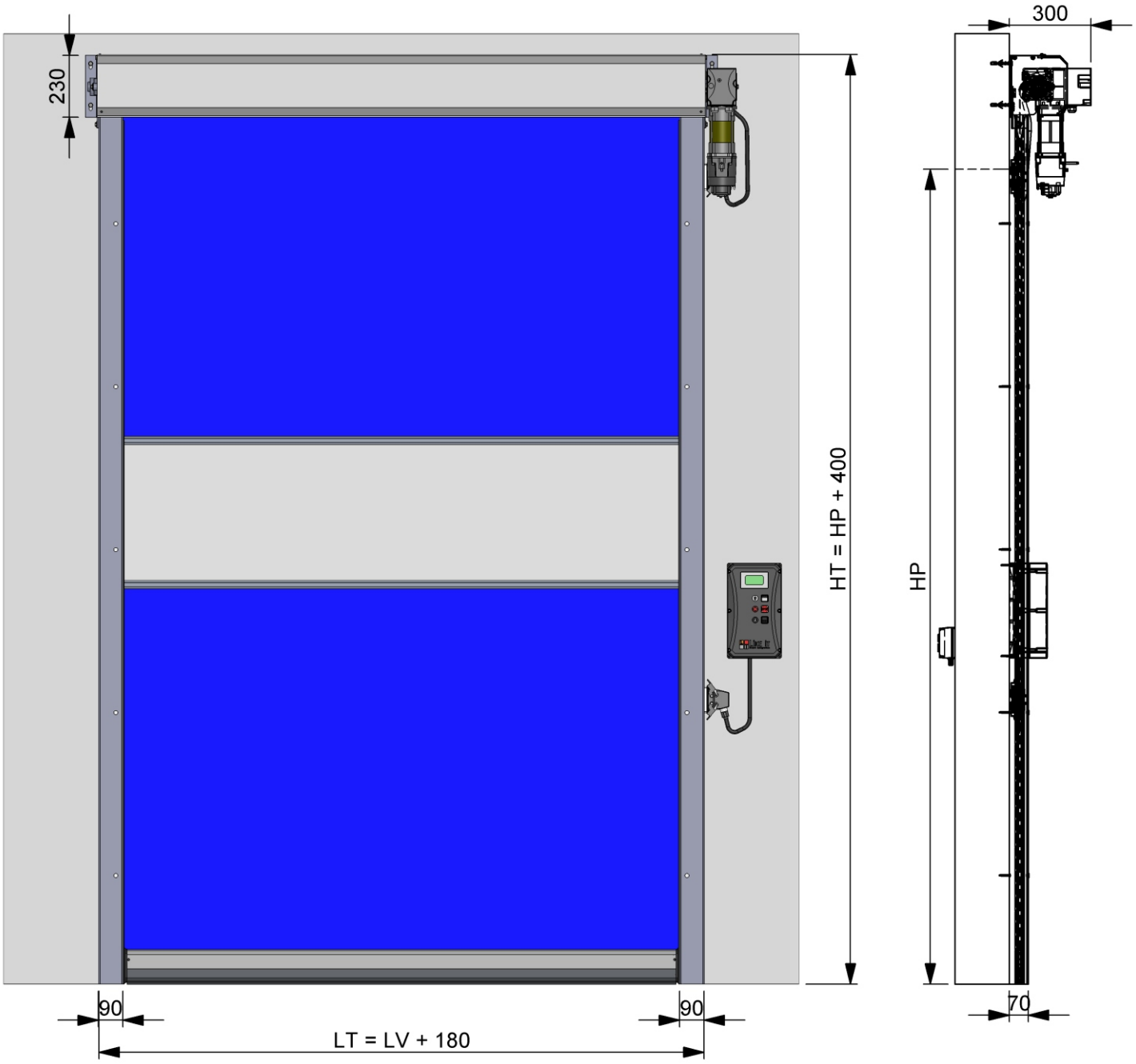
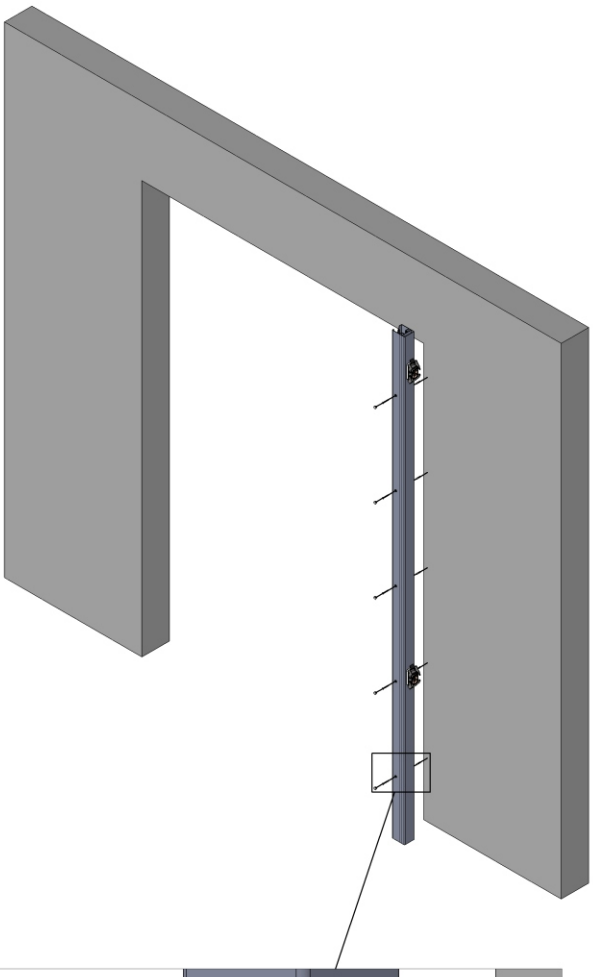


Figure 2: Door general view and engine connection with the vertical guide.

LV = Width of daylight
HV = Height of daylight
LP = Width of the door
HP = Total height of the door
LT = Total width of the door

Fasten the vertical guides (point **B** of figure 2) to the wall using a trifon screw M6x50 and an plastic bushing M6, in the holes on each vertical guide and then apply the cover, as showed in figures 4 and 5.



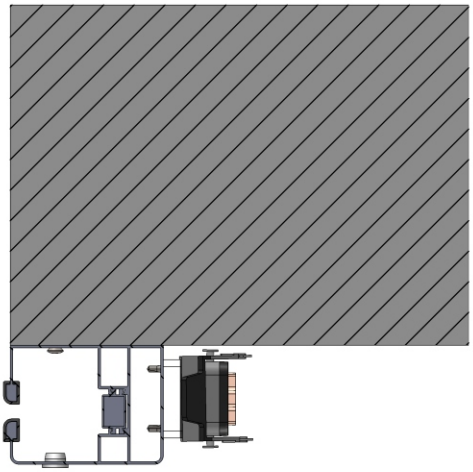


Figure 3: Place the vertical tracks in position against the wall in line with the door jambs.

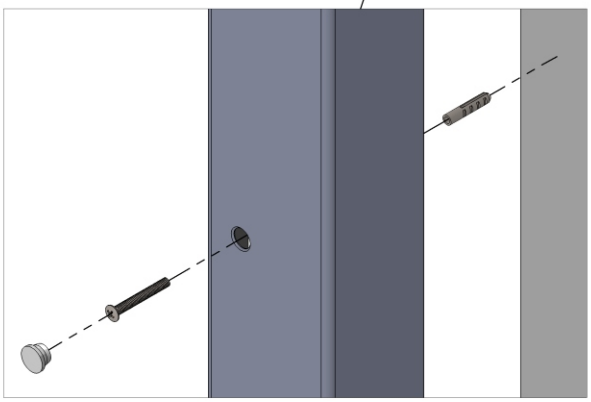
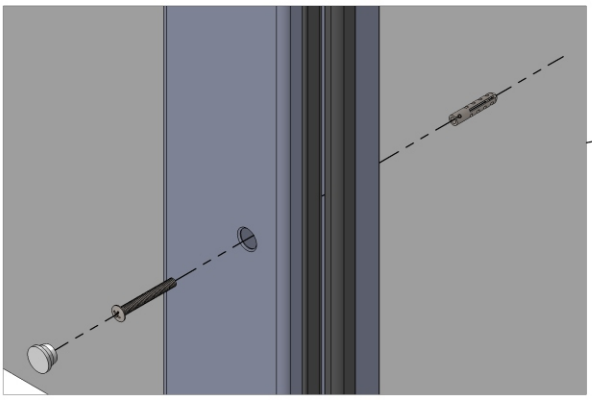


Figure 4: Fixation of the vertical guides to the wall.



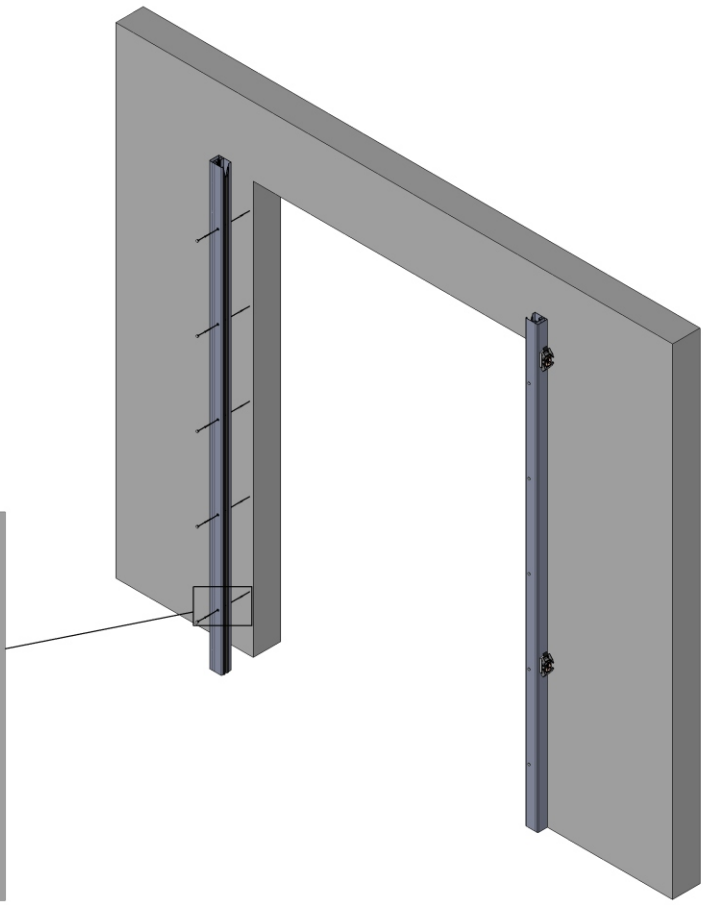
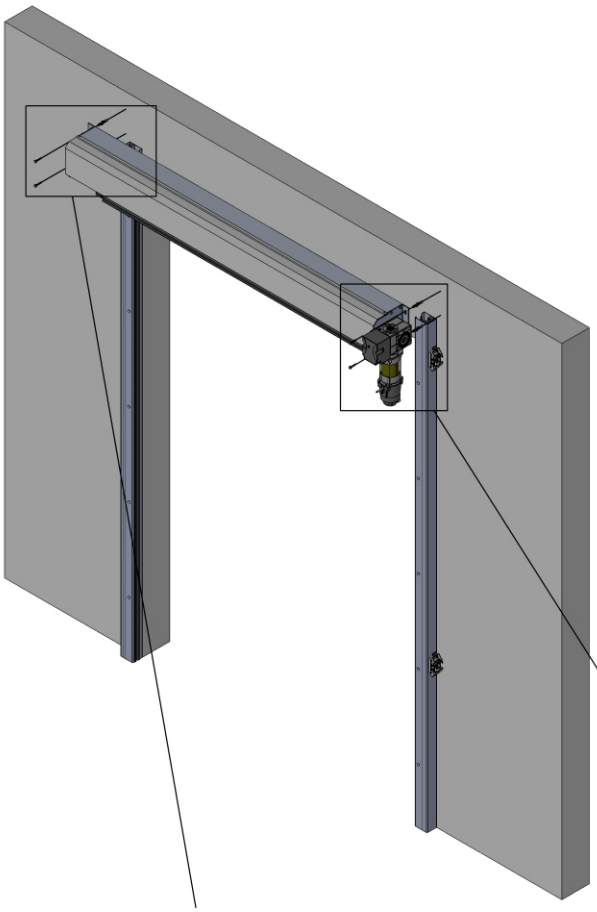


Figure 5: Fixation of the vertical guides to the wall.



Lift the door with the help of lifting mechanisms (stacker, differential), placing it in lintel or the daylight.

Finalize the fixation of the machine to the wall, tightening the screws of the bracket to the wall, as in figures 5 and 6.

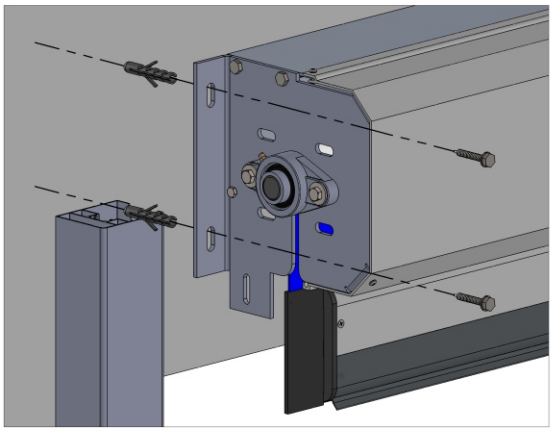


Figure 6: Fixation of the machine to the wall.

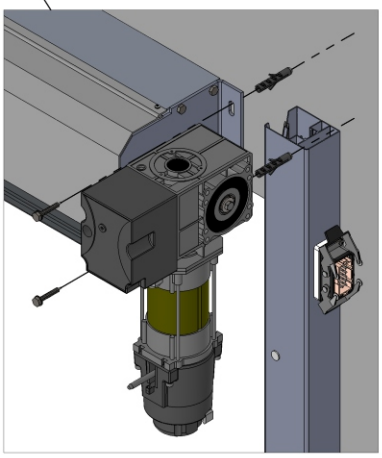


Figure 7: Fixation of the machine to the wall.

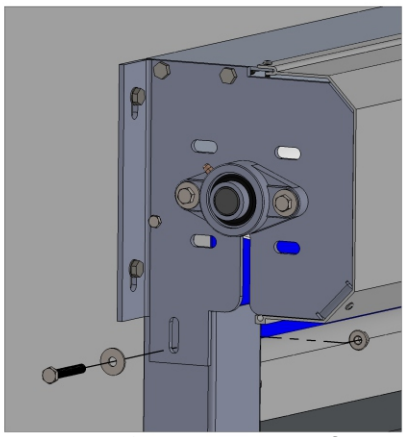


Figure 8: Fixation of the vertical guides to the machine.

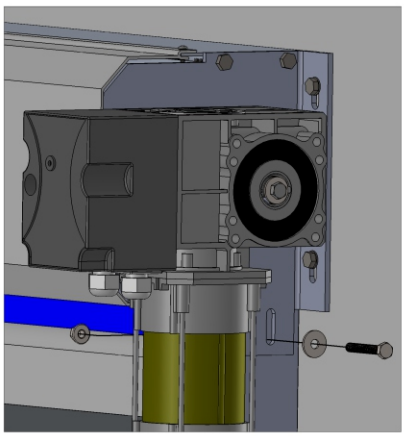


Figure 9: Fixation of the vertical guides to the machine.

3. INSTALLATION OF THE ELECTRIC CONTROL UNIT

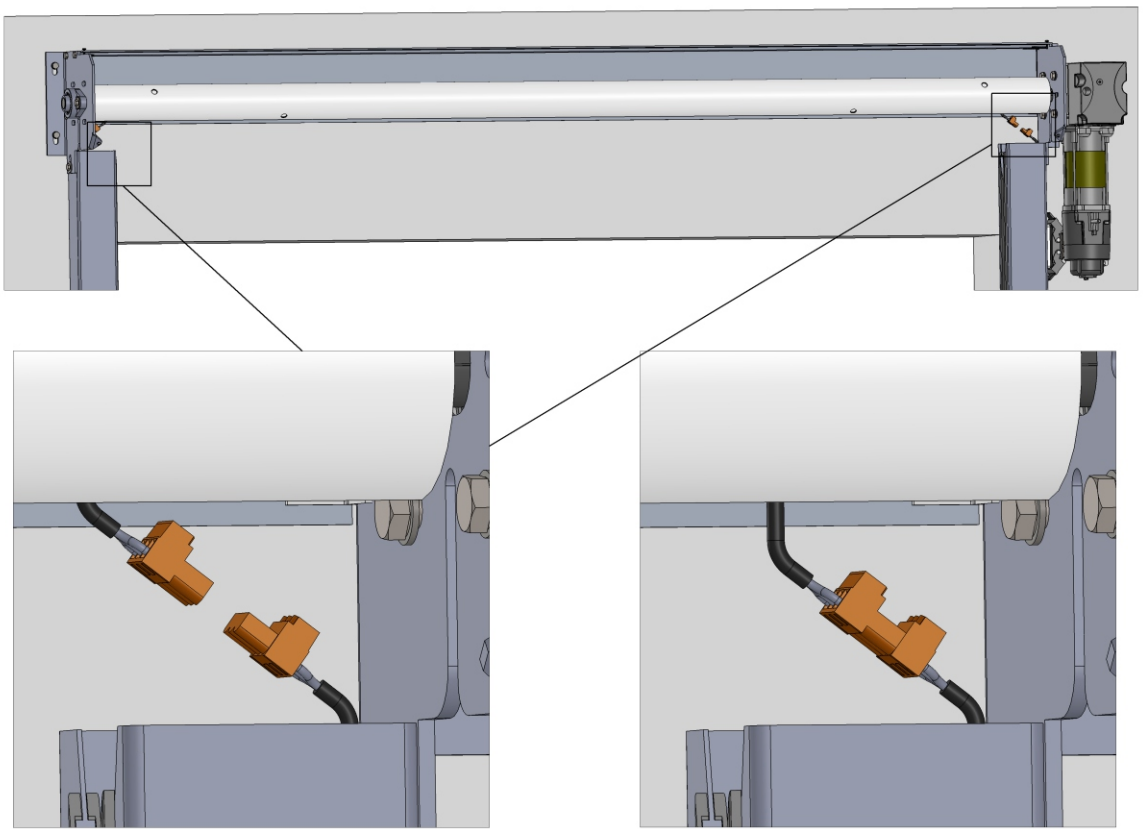


Figure 10: Connect the light curtain to the control unit.

Figure 11: Connect the light curtain to the control unit.

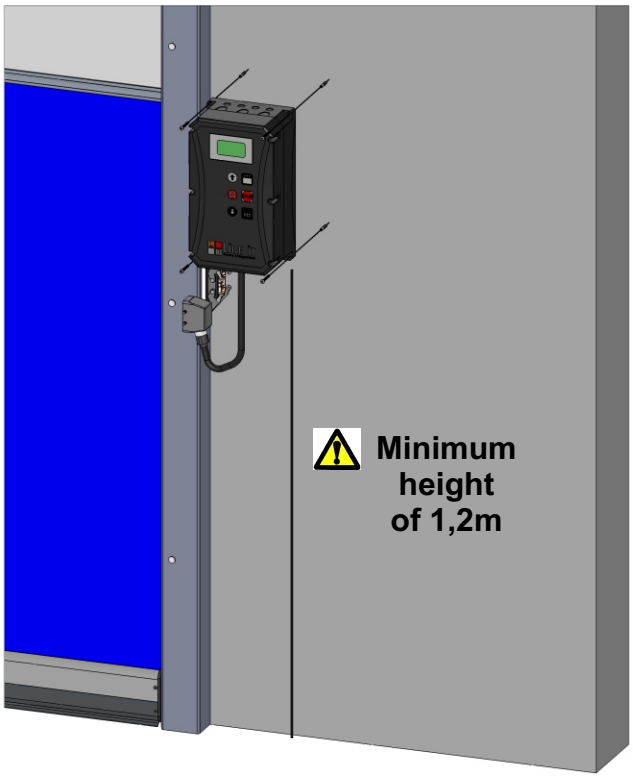


Figure 12: Minimum height to install the control box.

NOTE: Before installing the box make sure that to the length of the cable is enough to connect it to the vertical guide.

The box should be fixed to a minimum height of 1,2m, according to CE standards.

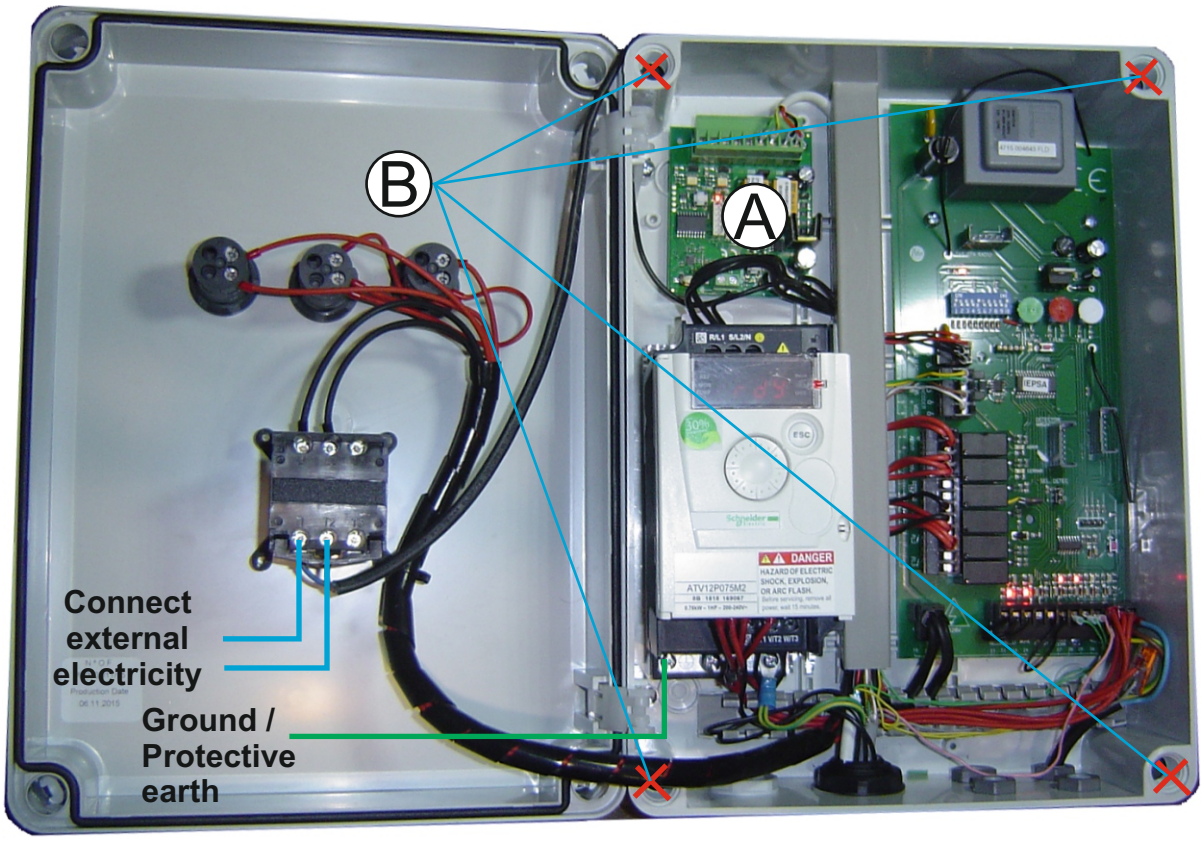


Figure 13: Control unit box fixation points.

Ⓐ SAFETY BAR RECEIVER

Ⓑ FIXATION POINTS OF THE CONTROL BOX

4. CONNECTION OF THE ENGINE AND CONTROL UNIT

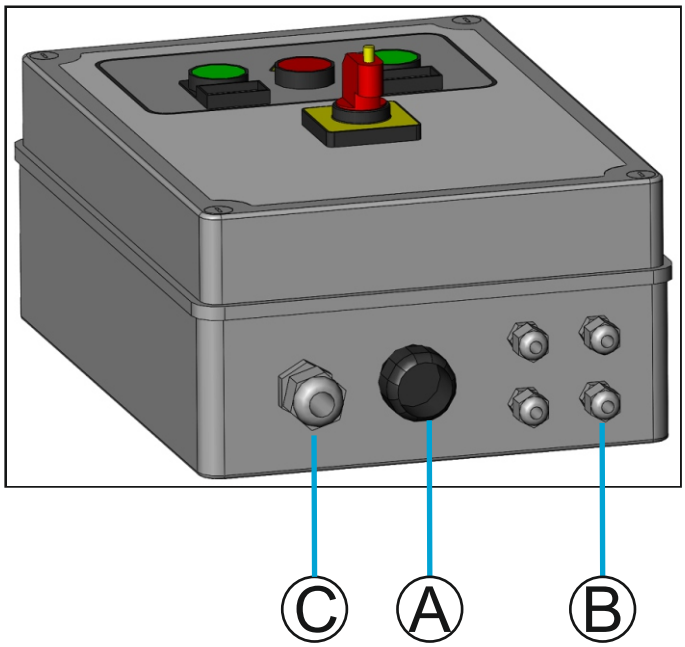


Figure 14: Connection cables and exterior control box.

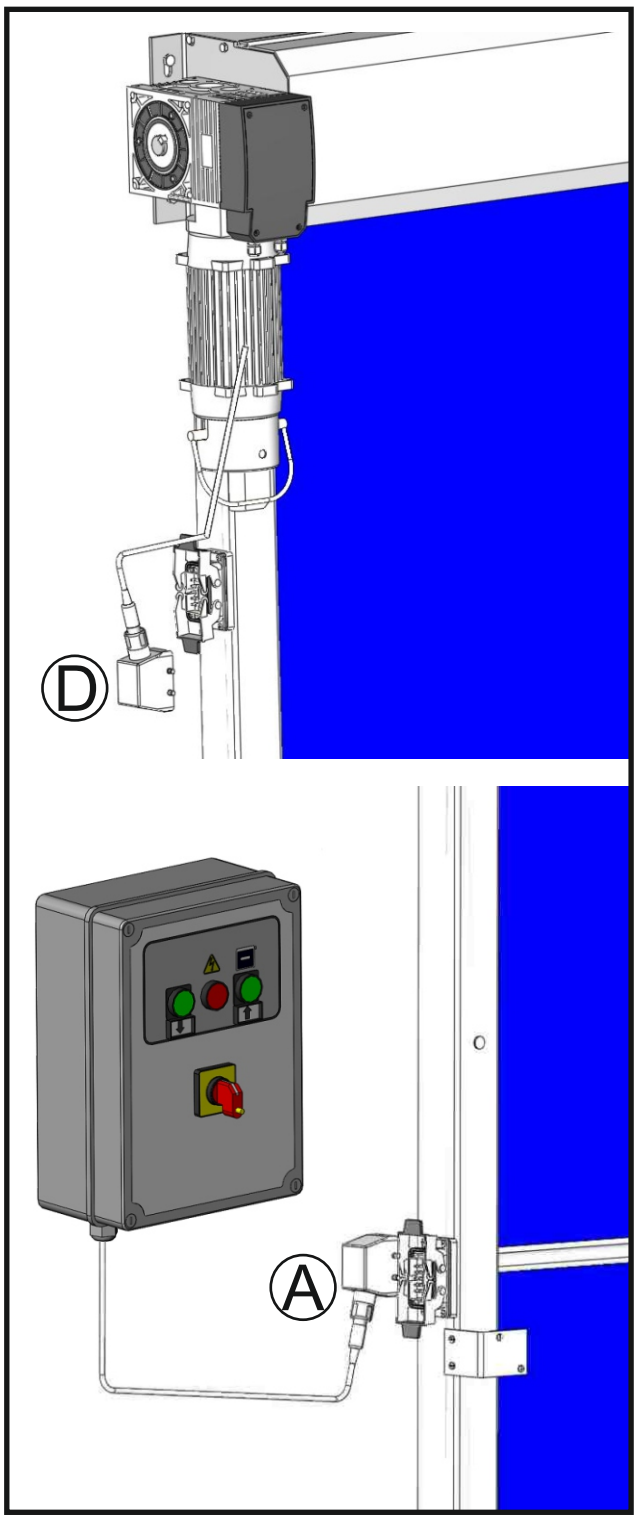


Figure 15: Electric connections.

Ⓐ PLUG CONNECTOR OF THE CONTROL BOX

Ⓑ CONNECTION OF THE EXTERNAL CONTROL BOX

Ⓒ POWER PLUG CONNECTOR OF CONTROL BOX

Ⓓ ENGINE PLUG CONNECTOR

Connect the plug of the control box (**A**) to the guide connector (figures 14 and 15).

Connect the electric power 230V/AC, passing the cable through point (**C**) (figure 14) and connect it to the breaker (see figure 14 point **C**).

5. MANUAL MOVEMENT UNLOCKER OF THE ENGINE AND CURTAIN

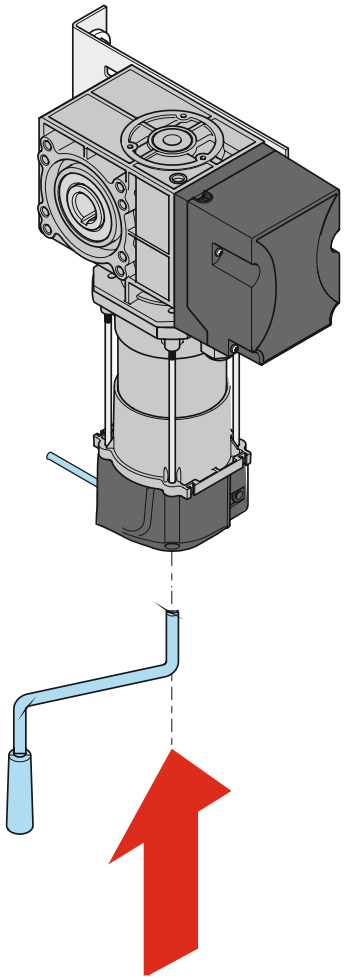


Figure 16: Manual unlocker.

It is used to open or close the door when there is a power failure or in an engine malfunction.

To close the curtain, use the unlocker handle of the engine (figure 16). If necessary use the winch for manual movement (figure 17).

To raise the curtain use the winch for manual movement (figure 17).

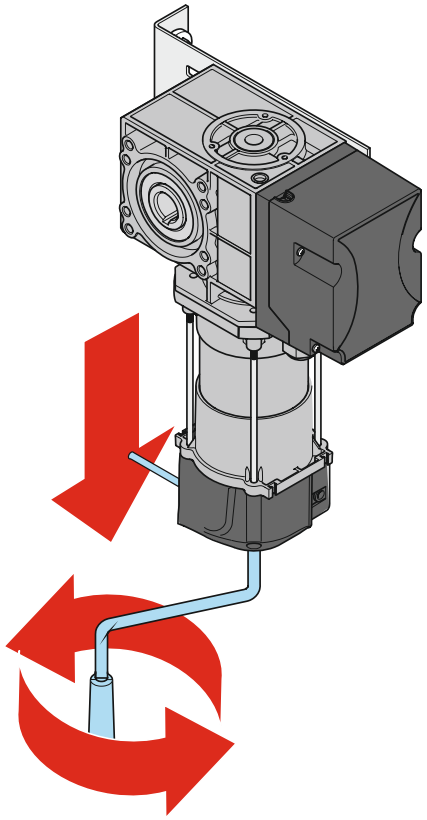


Figure 17: Manual unlocker.

Opening and closing gate with emergency crank

1. Take crank from holder.

2. Insert crank into crank housing to the stop with light pressure and slight rotation.

3. Release the brake by actuating the level and hold during cranking.

• The safety circuit of the operator is interrupted.

4. Rotate crank and open or close the gate.

5. Remove crank from crank housing and replace in holder.

• The drive is ready for motorised operation again.

6. LIGHT CURTAIN

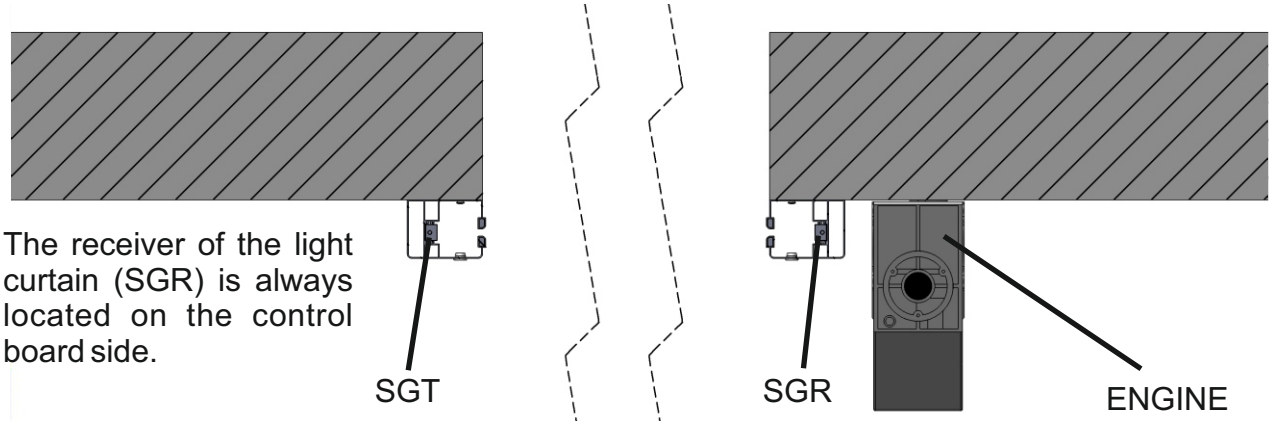
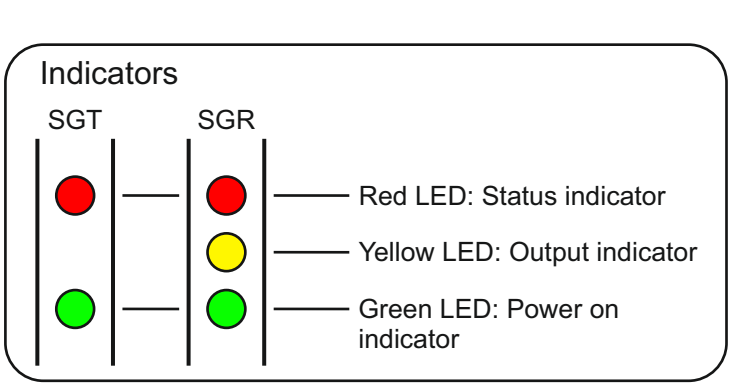
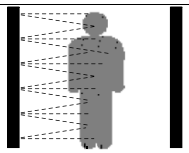
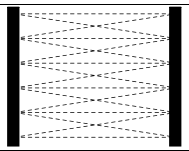


Figure 18: Light curtain scheme.



Output Logic

	Detection	Output status	Output indicator (yellow led)
Present		Open	Off
Absent		Closed	On

Troubleshooting	
Probable Reason	**Corrective Action**
1 Symptom: Red LED on SGT/R is constant on. All other LEDs are off.	
Error found during test process.	Check supply and cable to the SGT/R. Or replace the rails(s).
2 Symptom: Red and green LEDs on SGT is constant on.	
Error found during test process.	Replace the SGT rail.
3 Symptom: Red and green LEDs on SGR is constant on.	
Error found during test process.	Replace the SGR rail.
4 Symptom: Yellow LED on SGR is flashing	
Cross talk from another light curtain, or other powerful light sources.	Change position of the SGT and SGR rails.
5 Symptom: Yellow LED on SGR is constant off. Red LED is off.	
Rails are out of sensing range.	Check the sensing range and power to the SGT.
6 Symptom: After start up, red LED on SGR continues to flash quickly. Green LED is on.	
Rails are out of sensing range or SGT is not turned ON or an object is obstructing one or more beams.	Check the sensing range and for objects between the SGT and the SGR. Check SGT is powered or replace rails.
7 Symptom: After start up, green LED on SGT/R in on. Yellow LED on SGR is off.	
Test input is constant activated under and after star up.	Deactivate the test input on SGT/R.

7. USE INSTRUCTIONS

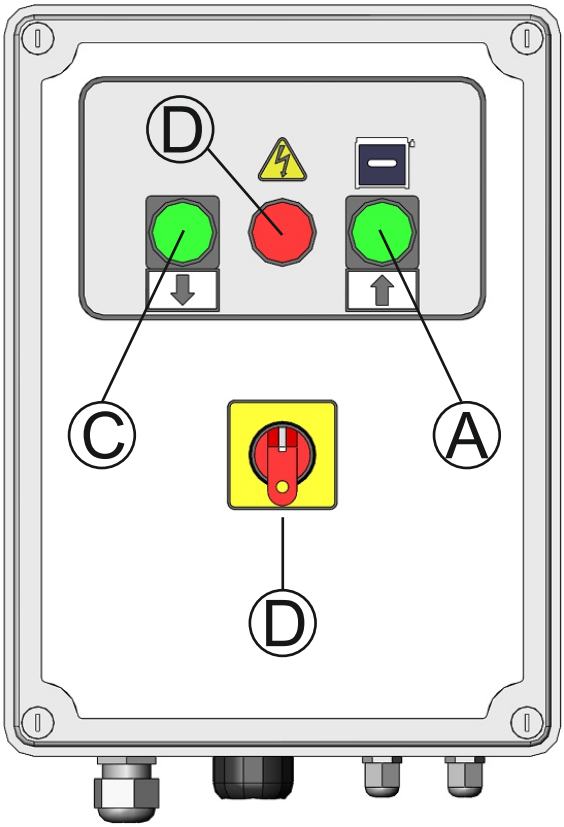


Figure 19: Control box.

Ⓐ OPEN DOOR
Ⓑ STOP
Ⓒ CLOSE DOOR
Ⓓ ON/OFF

The right green button (**A**) on the control panel, serves to open the door either in manual or automatic modes.

The red button (**B**) serves to stop the door movement.

The left green button (**C**) in the control panel serves to close the door.

The button (**D**) on the control panel has two positions: ON/OFF.

8. MAINTENANCE AND REPLACEMENT PARTS

The high speed door should be maintained and checked regularly to ensure safe operation and use. This is described in the EN norms. When you do the maintenance it is advisable to use the Flexidoor maintenance log book.
Always use original parts to keep the door in accordance with the CE Marking.

General advices:

1- Replacement of broken or worncomponents should always be done by qualified sectional door technician. If not handled properly, injuries or damages might occur!

2- When checking the door, always disconnect the electrical main power supply. Make sure that it is blocked against re-engaging without you knowing it.

Monthly:

- Cleen (blow with dry air) inside the vertical tracks, where the curtain pass (where the infrared curtain sensors are) in order to remove all the dust. The dust inside the tracks may cause malfunctions.

- In humid environments, it should be cleen more regularly.

Every 6 months (or after every 25000 cycles):

- Verify if the setting of the limit switches is correct by opening and closing the door.

- Grease the bearings that support the shaft.

- Check the status of the PVC curtain, and if necessary replace or repair the curtain.

- Clean the photocell and his mirror with a cotton cloth.

Every 12 months (or after every 50000 cycles):

- Verify the tightening in all fixings, either mechanical or electrical.

- Check the condition of the bearings supporting the shaft of the mechanism.

- In case of any anomaly in the functioning, contact the manufacturer.

9. ENGINE AND GEARBOX

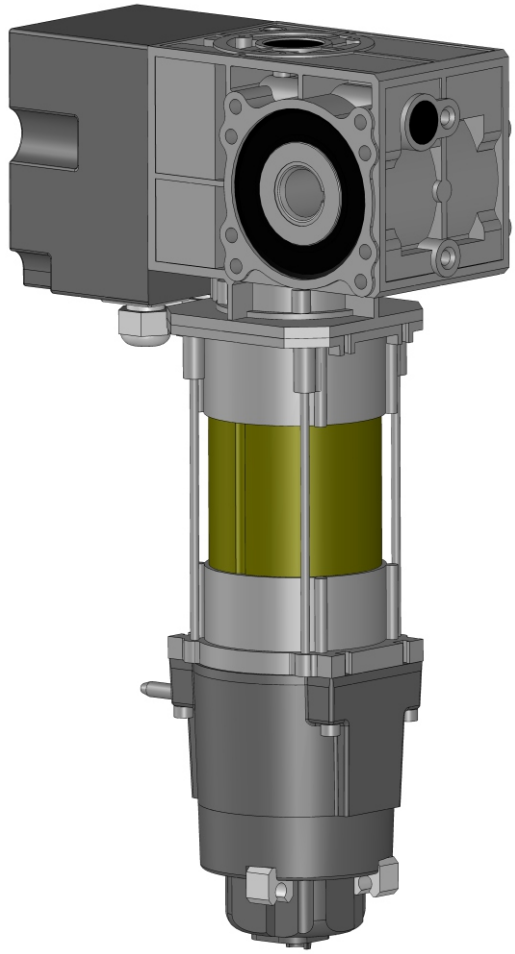


Figure 20: Engine.

Use and maintenance

⚠ **Attention**: Before making any maintenance/ repair, please contact our technical service.

In general terms, the following rules must be followed:

- Periodically check if the exterior of the engine is clean, especially in the cooling areas.

- Periodically check if there is any leakage, especially in the areas around the seals.

Critical applications

In locations with temperatures below -5 ° C or above 60 ° C.

Use in aggressive chemical environments.

Use in saline environments.

Use in other environment than not the atmospheric pressure.

Troubleshooting

⚠ **Warning:** Making changes in the engine / gearbox without the prior permission of Flexidoor immediately invalidate the warranty and may make it impossible to verify the causes of the defect or malfunction.

10. TROUBLESSHOOTINGS: DOOR / ENGINE

Error	Possible causes	Solution
The door does not close.	Light curtain with the status indicator (Red LED) ON.	Check the light curtain troubleshooting guide.
The door does not open.	Emergency button active.	Check if the emergency button is active.
The door does not work.	Verify in the control box display if it has any error code.	----

11. DISMANTLING THE HIGH SPEED DOOR

ATENTION/WARNING: To dismantle an existing door, a number of precautions must be taken. For the safety of all concerned pay heed to the warnings and instructions given below! If in doubt, contact your supplier or Flexidoor.

Dismantling should only be carried out by experienced fitters. This manual is not suitable for d.i.y. purposes or for use by trainee fitters.
This manual only describes the installation/dismantling of hardware for high speed doors and as such must be supplemented with instructions for any additional components.

CAUTION! Exercise at all times great caution. Use properly fitting tools.

STEP 1. Before starting to disassemble the door open the door (curtain).

STEP 2. Disconnect the engine and the electrical control box.

STEP 3. Disassemble the vertical guides**.** Remove the screws of the holes on each of the vertical guides, and make sure that the vertical guides are secure, then remove the screw that is fixed to the support of the machine and remove each vertical guide.

STEP 4. Support the weight of the door machine with the help of a lifting mechanism (forklift or differential, among others).

STEP 5. Remove the screws that hold the machine door to the wall (the brackets of the machine).

STEP 6. Remove the machine from the wall securely with the help of the lifting mechanism.

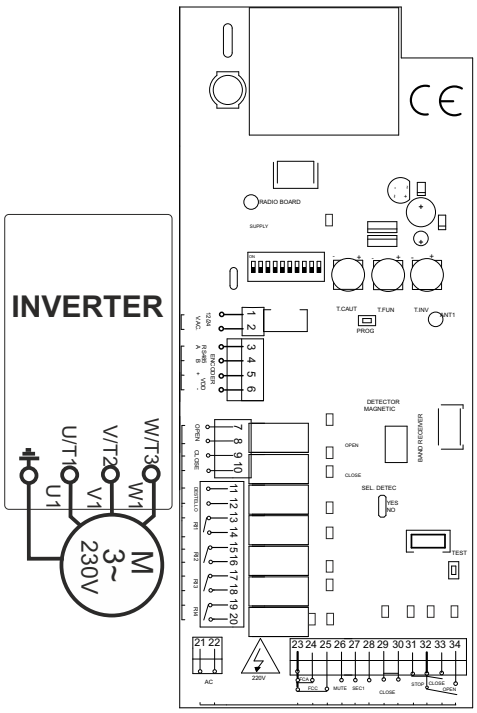
STEP 7. Remove the vertical guides and machine from the installation place.

STEP 8. Make sure that you remove all the parts so in an environment kindly way, and check with local authorities how and where you can leave this like garbage.

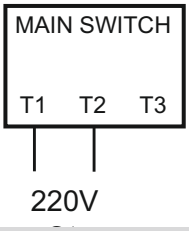
FOR ANY DETAILS ON THESE DISMANTLING INSTRUCTIONS, WE REFER TO THE INSTALLATION CHAPTERS OF THIS MANUAL WHERE DRAWINGS AND DETAILS ARE DISPLAYED.

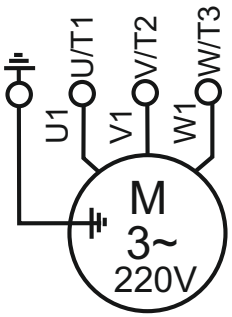
12. ELECTRIC SCHEME OF THE CONTROL BOARD

CONNECTIONS:

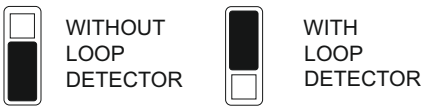


POWER SUPPLY & MOTOR INPUTS

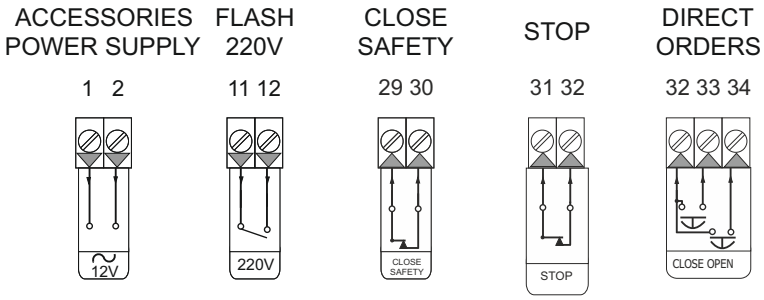




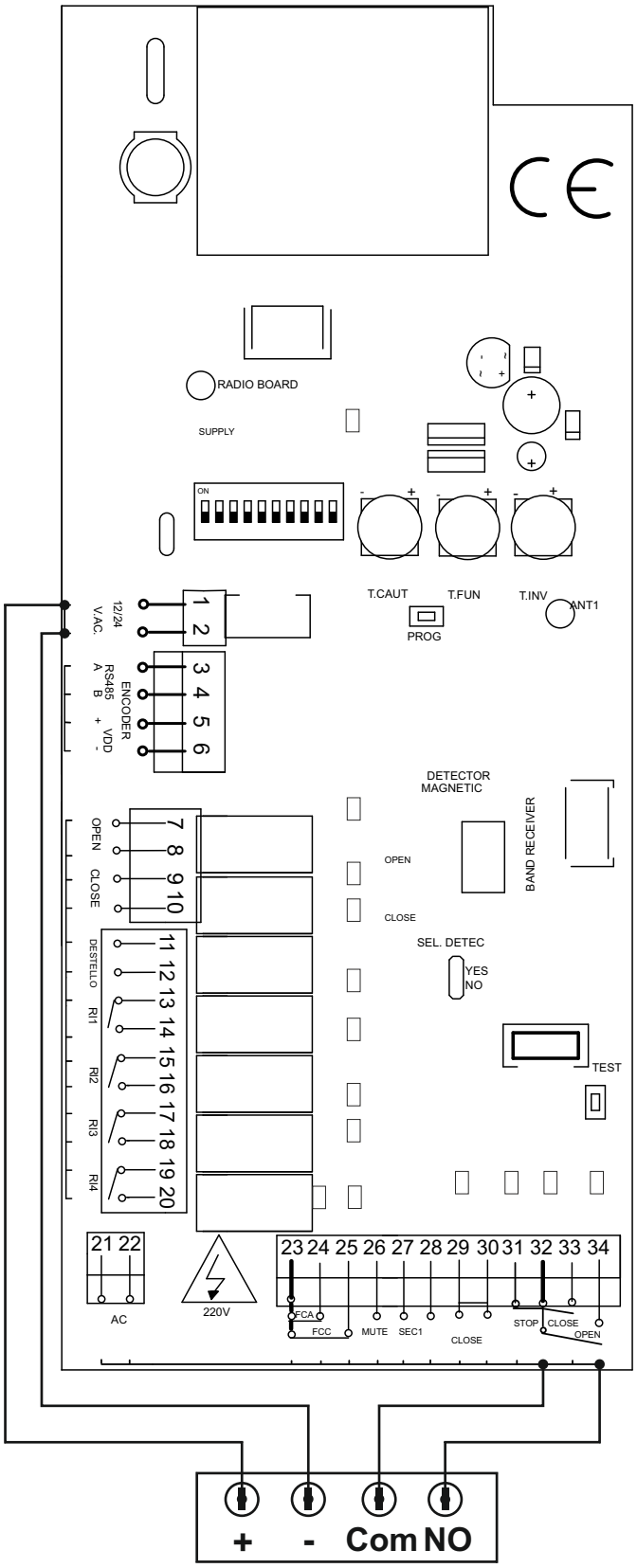
LOOP DETECTOR



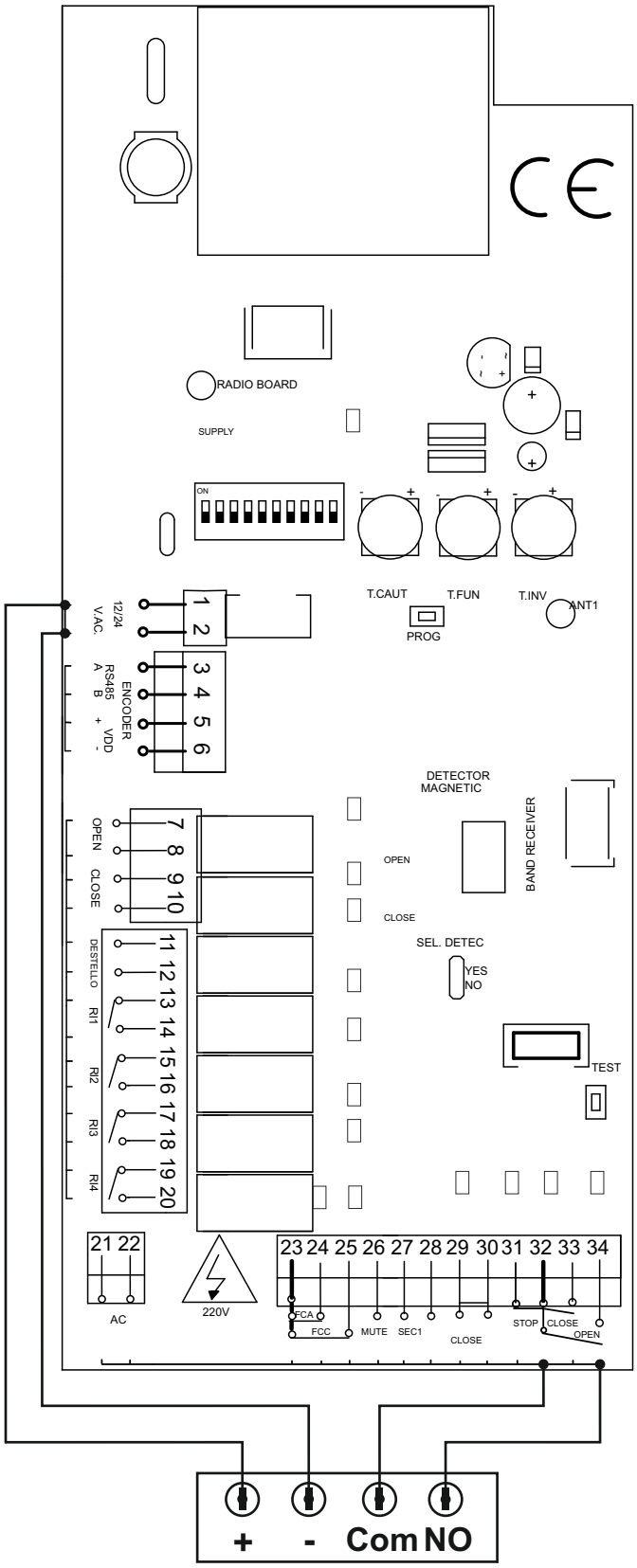
TERMINAL CONNECTIONS



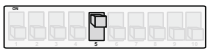
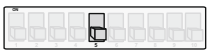
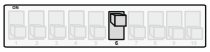
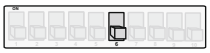
12.1. Wiring diagram of the motion detection.



12.2. Wiring diagram of an external receiver.



13. FUNCTION BUTTONS INSTRUCTION

1 AUTOMATIC CLOSING		Door closes automatically after waiting the a.c.time.
		Door does not close automatically.
2 DISABLE STOP ON OPENING		Opening the alternative button is disabled.
		If alternative button is pressed door stops.
3 RADIO OPEN/ ALTERNATIVE		Radio card / ABRIR button works as alternative button.
		Radio card / ABRIR button works as a opener.
4 DEAD MAN*		Maneuvres with ABRIR and CERRAR push buttons permanently activated.
		Opening and closing without dead man function.
5 DIGITAL ENCODER		Enabled.
		Disabled.
6 SOFT SPEED DURATION		- Long
		- Short
7 SAFETY EDGE/ PHOTOCELL		Input 25-26 configured as resistive 8k2.
		Input 25-26 configured as mechanical (N.C)
8 PHOTOCELL TEST		Enabled.
		Disabled.
9 PRE-FLASHING		Flashing output ENABLED before starting, open and close
		Flashing output DISABLED before starting, open and close
10 PROGRAMMATION TYPE		Digital time programming.
		Maneuvre time with potentiometers.

*If OPTION 3 & 4 ON, control unit makes a normal opening and dead man on closing.
If OPTION 4 ON & OPTION 3 OFF, control unit makes dead man on opening and closing.

14. TIME REGULATIONS

AUTOMATIC CLOSING TIME (GREEN)

Regulates the waiting time before the automatic close. Turn LEFT to decrease
and RIGHT to increase
Minimum - 6 to 8sec
Maximum - 110 secs

15. INVERTER MAIN PARAMETERS

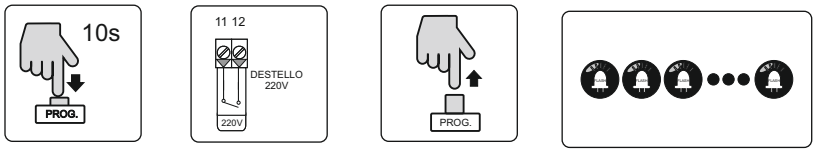
MENU (ConF)	FUNCTION	PARAMETERS
FULL → FUN → PSS → Sp2	**Opening speed:** Maximum opening speed.	0 - 400 Hz (by default 50 Hz)
FULL → FUN → PSS → Sp3	**Closing speed:** Maximum closing speed.	0 - 400 Hz (by default 60 Hz)

* Press inverter central push button for enter to next menu and ESC for back.

16. ADJUSTING THE LIMIT SWITCHES

IMPORTANT: Before starting programming the limit swiches of the door, this should be open, with the light curtains completely unobstructed, for the door to work properly with all the security elements active.

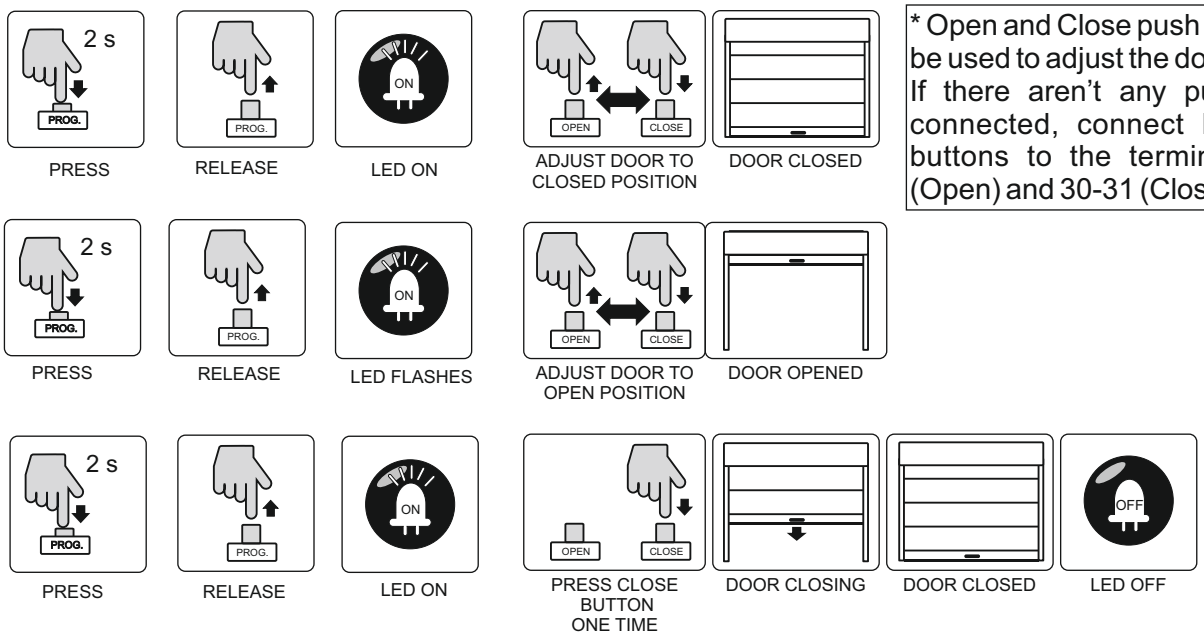
- Reset (always before programming process):



KEEP IT PRESSED | RELAY FLASH CLICK | RELEASE | # FLASHES

⚠ Option 5 ON and Option 10 ON

- Programming process:



PRESS | RELEASE | LED ON | ADJUST DOOR TO CLOSED POSITION | DOOR CLOSED

PRESS | RELEASE | LED FLASHES | ADJUST DOOR TO OPEN POSITION | DOOR OPENED

PRESS | RELEASE | LED ON | PRESS CLOSE BUTTON ONE TIME | DOOR CLOSING | DOOR CLOSED | LED OFF

* Open and Close push buttons will be used to adjust the door position. If there aren't any push button connected, connect N.O. push buttons to the terminals 30-32 (Open) and 30-31 (Close).

***Important:** Once encoder position is memorized, realize 3 complete manoeuvres to compensate door inertias.

⚠ **Attention:** During programming check that all guards are clear.

Customer Declaration

Standard EN 13241-1

Customer name:

Company stamp / Installer:

O.F. (See CE Marking plate): ___/___/___

Customer address:

Installation address:(if different from customer)

Other Information

The Customer received/verified that:	**Yes**	**No**
The door is complete and installed in proper conditions, without visible defects.	☐	☐
The door works as expected, and without risks for the users	☐	☐
The client received the Instructions and Documents:		
Use of security and emergency devices	☐	☐
Declaration of Performance	☐	☐
Copy of the test for limitation of forces (if necessary)	☐	☐
Operation Instructions, Use and Maintenance	☐	☐
Some elements of the door need maintenance/control at least two times by year (according to the standard EN 13241-1).	☐	☐
The Installer proposed to the client to sign a Maintenance Contract	☐	☐
The customer has accepted the Contract of Maintenance to the Door	☐	☐

Observations:

By signing this document, the customer declares that:

☐ Received maintenance instructions for the door, and that read these instructions

☐ Allow this document is available to all people authorized

☐ Ensures that will use the door in a correct way, and that will keep it in good condition, as described in the instructions.

Date:

Name and Installer signature: **Name and Customer signature:**

MAINTENANCE LOG BOOK

(Data to be completed by the technician before handing over to client)

Technical Data of Door and Installation

Company Name: _____

Address: _____ Contact: _____

Installation Date: ___ /___ /___ Plate Serial Number of Door (O.F.) :___ /___ /___

Customer: _____ Contact: _____

Work Location: _____

_____

Manufacturer: FLEXIDOOR - Portões Seccionados e Automatismos,S.A.
Ad dress : Rua da Majoeira | Nº400 | Apartado 542
2415 - 184 | Regueira de Pontes
Leiria | Portugal
Contact : Tel.: +351 244 850 470 Fax: +351 244 850 471

Door Model: ☐ Sectional Residential ☐ Sectional Industrial ☐ with Pass Door
☐ Automatic Door ☐ High Speed:Roll-up ☐ High Speed:Folding ☐ Sectional Sliding Door

List of Safety Devices Used

(Make the description of the security devices used)

Engine: _____ Model,type

Electric Board: _____ Model,type

Photocells: _____ Model,type

Command Device: _____ Model,type

Other: _____ Model,type

_____

Description of Intervention

(Signal X in the intervention made, and describe the work of the intervention, tuning parameters of the engine as well as possible errors in use)

☐ Assembly ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:___ /___ /___ Customer signature: _____

Installer name: _____ Installer signature: _____

Description of Intervention

(Signal X in the intervention made, and describe the work of the intervention, tuning parameters of the engine as well as possible errors in use)

☐ Inspection ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:___ /___ /___ Customer signature: _____

Installer name: _____ Installer signature: _____

Description of Intervention

(Signal X in the intervention made, and describe the work of the intervention, tuning parameters of the engine as well as possible errors in use)

☐ Inspection ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:____/____/____ Customer signature: ____________________

Installer name: ____________________ Installer signature: ____________________

Description of Intervention

(Signal X in the intervention made, and describe the work of the intervention, tuning parameters of the engine as well as possible errors in use)

☐ Inspection ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:____/____/____ Customer signature: ____________________

Installer name: ____________________ Installer signature: ____________________

Description of Intervention

(Signal X in the intervention made, and describe the work of the intervention, tuning parameters of the engine as well as possible errors in use)

☐ Inspection ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:____/____/____ Customer signature: ____________________

Installer name: ____________________ Installer signature: ____________________

Description of Intervention

(Signal X in the intervention made, and describe the work of the intervention, tuning parameters of the engine as well as possible errors in use)

☐ Inspection ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:____/____/____ Customer signature: ____________________

Installer name: ____________________ Installer signature: ____________________

Description of Intervention

(Signal X in the intervention made, and describe the work of the intervention, tuning parameters of the engine as well as possible errors in use)

☐ Inspection ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:____/____/____ Customer signature: ______________________________

Installer name: ______________________ Installer signature: ______________________

Description of Intervention

(Signal X in the intervention made, and describe the work of the intervention, tuning parameters of the engine as well as possible errors in use)

☐ Inspection ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:____/____/____ Customer signature: ______________________________

Installer name: ______________________ Installer signature: ______________________

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Date:____/____/____ Customer signature: ______________________________

Installer name: ______________________ Installer signature: ______________________

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☐ Inspection ☐ Test ☐ Maintenance ☐ Repair ☐ Modification

Date:____/____/____ Customer signature: ______________________________

Installer name: ______________________ Installer signature: ______________________

Flexidoor®

AUTOMATIC DOORS MANUFACTURER