

INSTALLATION INSTRUCTIONS DOOR MOTOR

WIDOOR



VERSION 3-02 EN

2, rue des Métiers
21110 – Genlis
Tel.: (33) 03 80 37 85 71
<http://www.mantion-smt.fr>



GUARANTEE - IMPORTANT SAFETY INSTRUCTIONS.

These instructions must be followed in the interest of personal safety; Keep these instructions.

This motorization is exclusively designed for opening and closing sliding internal doors. It must not be used for any purpose other than that specified in these instructions. The manufacturer or supplier shall not be liable for any damage resulting from improper use thereof. The user alone shall be solely liable and assume any risks arising from improper use of the product.

This door motor must be installed by persons fully aware of the hazards involved with electric currents, and having all qualifications to work on domestic installations in accordance with good practice.

Follow all these instructions because faulty installation can cause injuries.

The assembly steps must be followed, as must the operating instructions, and safety rules must always be heeded.

Before installing the door motor, check that both the driven part and the supplied motor are in good mechanical condition; and that the structure has the necessary load-bearing capacity for our product in its entirety.

The electrical installation must be done according to prevailing national standards. The power supply must be compatible with our product (*voltage and frequency as specified on the product*) Do not connect the device without first checking that the control circuit is disconnected from the power supply.

Check the installation frequently to detect any signs of wear and tear or damage. Do not use the device if it needs repairing or adjusting.

Always disconnect the power supply when cleaning or carrying out any maintenance or servicing tasks on the product.

Never modify or fit any additional parts to the device that may compromise safety without MANTION SMT's written permission.

The user alone is solely and entirely responsible for any breach of these safety rules, and any damage resulting therefrom.

The product must be stored indoors in a dry place at a temperature of between 0 °C and +50 °C. When fitting it, the installation engineer must heed accident prevention instructions and the standards in force in the country.

Do not immerse the gear motor in water or splash it.

Do not dispose of it in fire or bring it into contact with flame or any heat source.

Do not use household products or chemicals to clean it.

Do not dispose of the packaging in the environment; treat waste according to the standards in force in the country.

Keep products, devices and documentation out of reach of children.

Do not let children play with the fixed control devices. Keep remote controls out of reach of children.

This product may be used by children over the age of 8 and by persons with reduced physical, sensory or mental capabilities, or inexperienced persons, if they are properly supervised, or they have been given proper instructions on the safe use of the product, and possible risks have been removed.

Children must not play with the product. Cleaning and maintenance must not be carried out by children, without supervision.

The manufacturer or supplier shall not be liable for any damage resulting from any other use of the product. If replacing the product, only use MANTION SMT or MANTION SMT-approved products.

Terms of the guarantee

MANTION SMT products come with a 5 (five) year guarantee from the date of delivery.

The guarantee is limited, as decided by MANTION SMT, either to replacement or to repair of products that MANTION SMT recognizes as faulty, with the proviso that:

1. Subject to MANTION SMT's written permission to return the products, the said products are returned to MANTION SMT forthwith with the details of the fault and a copy of the installation engineer or dealer's bill stating the date of installation.
2. The products have been stored, installed, maintained and used in accordance with MANTION SMT's instructions and specifications.

The guarantee is strictly limited to the provisions of this clause, and any other guarantee or liability, including loss of profits or damage directly or indirectly resulting from the sale or use of the products, is excluded.

MANTION SMT shall in any event only be liable for the motorization. The guarantee does not apply in case of overvoltage or short-circuiting resulting for instance from connection errors, weather conditions such as lightning, etc. The guarantee does not cover normal wear.

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1. Technical characteristics

This product is used for opening and closing automatically sliding doors (one or two doors). It is designed for domestic or professional use.

General informations

Reference	K0000256 – Wire control K0000266 – Radio control
Designation	Sliding door motorization
Technology	Belt transmission
Connectivity	Radio (433,92 MHz) / Bluetooth (BLE4.1)
Size	L= 150 mm, T= 45 mm, H= 205 mm
Maximum weight per door	10 – 80 kg or 10 – 50 kg for double doors
Max speed	350 mm/s *
Max distance	6 m
Frequency of use	500 cycles per day (maximal recommended)
Guarantee	5 years

* Measure is given for indicative purpose, using a 50kg door.

Electrical

Power Supply	80 – 264 VAC
Frequency	47 – 63 Hz
Nominal Power	65 W
Current max	1,5 A at 115 VAC / 1 A at 230 VAC
Isolation class	Class II
Protection	Internal fuse 2,5 AT
Recommended power cable	3G0,75 mm ² for a maximum length of 20 m

Environment

Protection rating	IP 20
Operating temperature	+5 °C < T < +40 °C

Options

Command	Wired: push button or radar Radio: transmitter 433 MHz
Command and parameter setting	Smartphone application (Android or IOS)
Lock output	Allow to plug a locker (24 VDC, 500 mA max.)
Safety input	Allow to plug a safety input

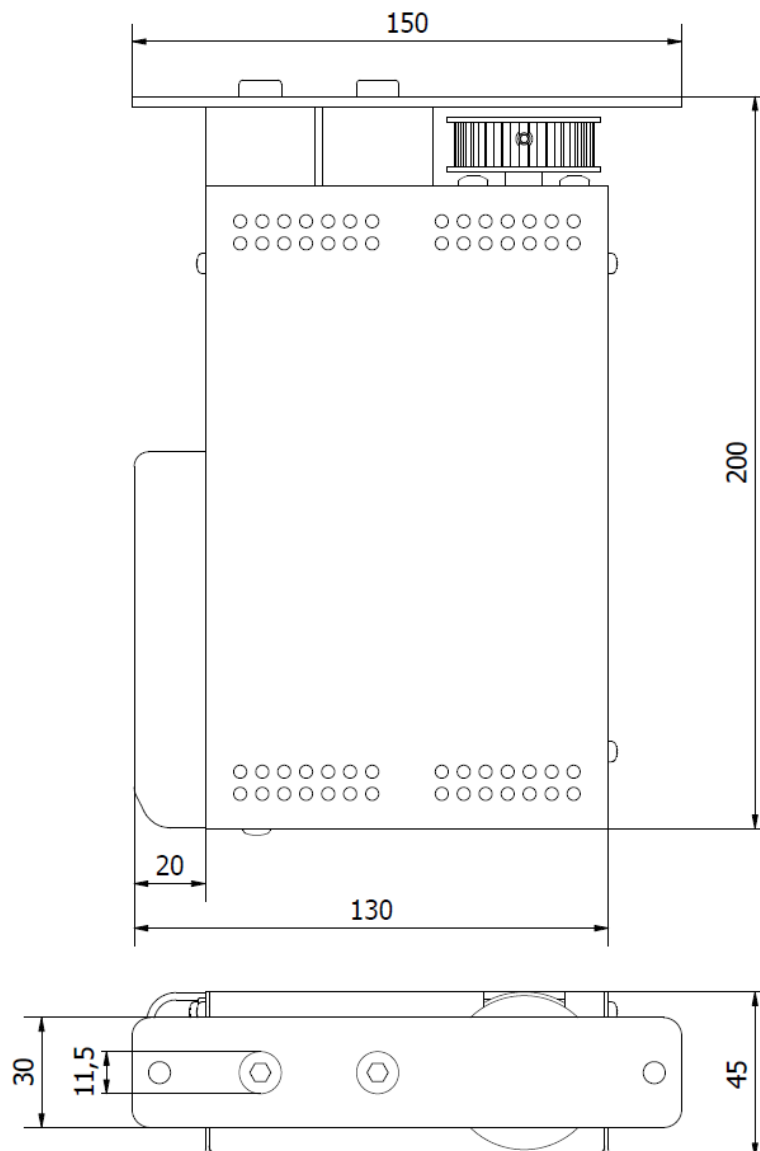
Setting Parameters

Max opening speed	50 mm/s – 350 mm/s *
Max closing speed	50 mm/s – 200 mm/s *
End opening speed End closing speed	Increase or decrease the speed at the end position
Deceleration at the opening	Adjust the deceleration according to the weight of the door
Timer before closing the door	0 s – 60 s

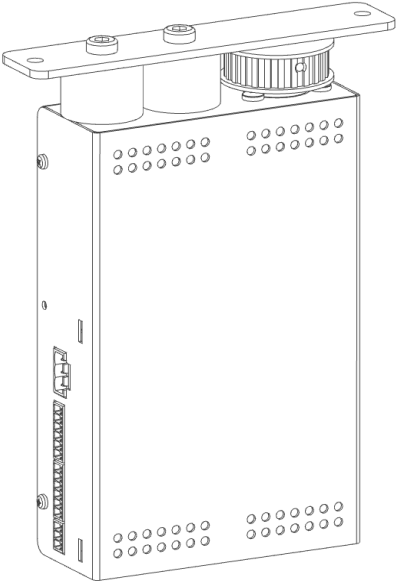
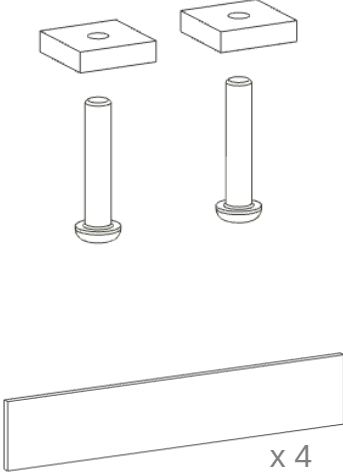
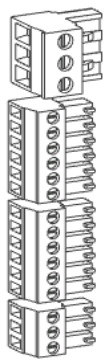
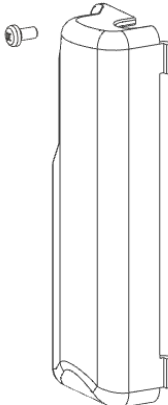
* Measure is given for indicative purpose, using a 50kg door.

Normative / directive compliance

Equipment safety	EN60335-1, EN60335-2
People security	Obstacle detection impact force < requirement of the standard EN16005
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4
ROHS Directive	2002/95/C

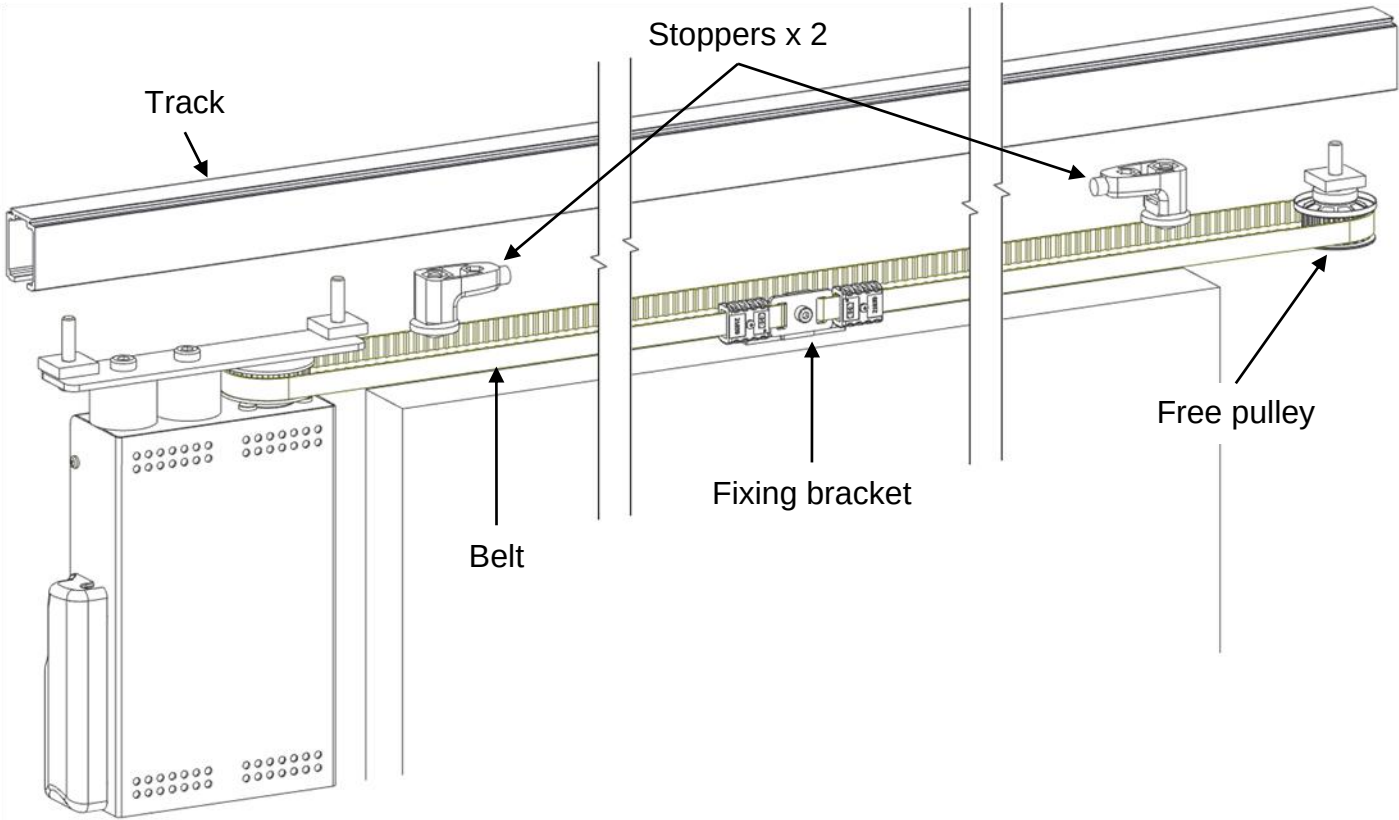


2. Kit contents

			
Motorization	Screws and adhesive band	Electrical terminal	Protection cover

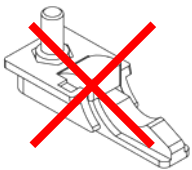
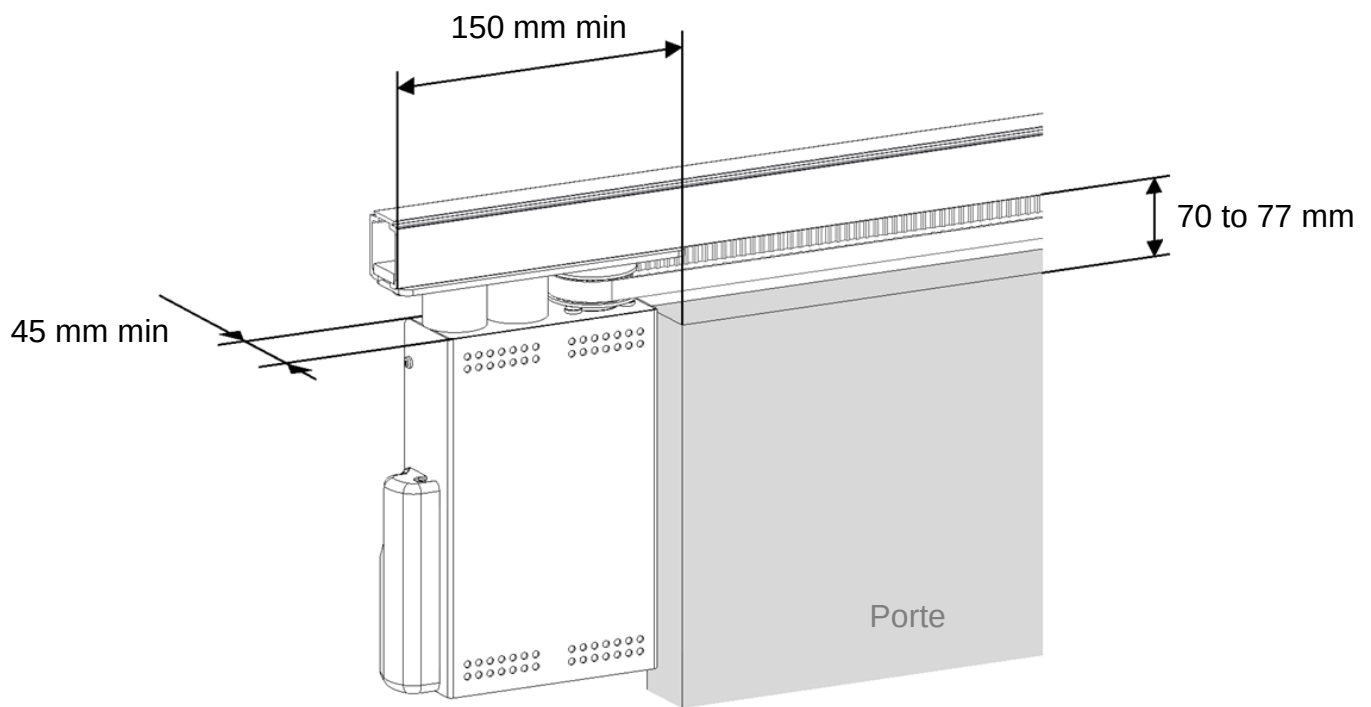
3. Installation diagram

Recommended components (not included):

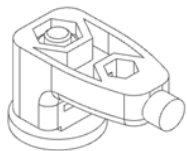


4. Pre-installation checking

Operating reserve: 150 mm in width and 45 mm for thickness.



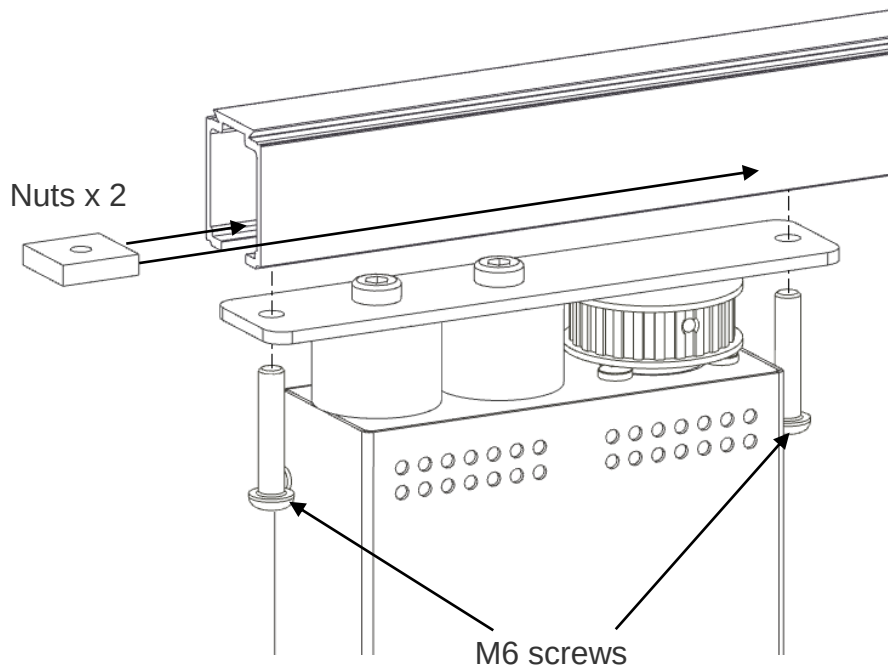
Do not use locking stoppers.



5. Motor installation

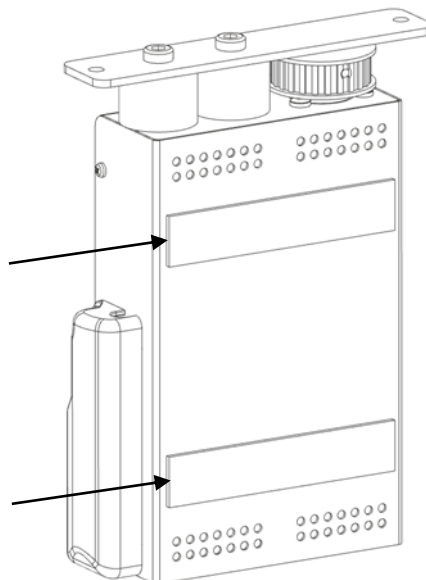
5.1. Gear motor establishment

In the track, slide the nuts fixing the system.

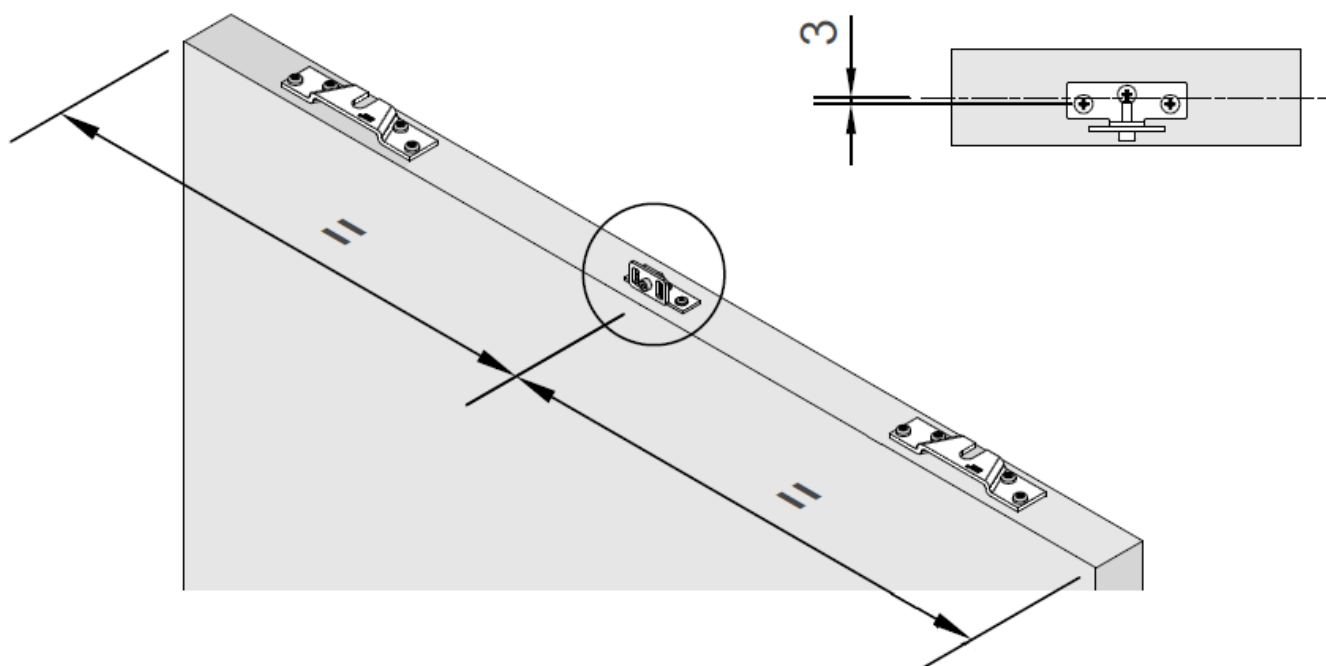


Tighten the two M6 screws.

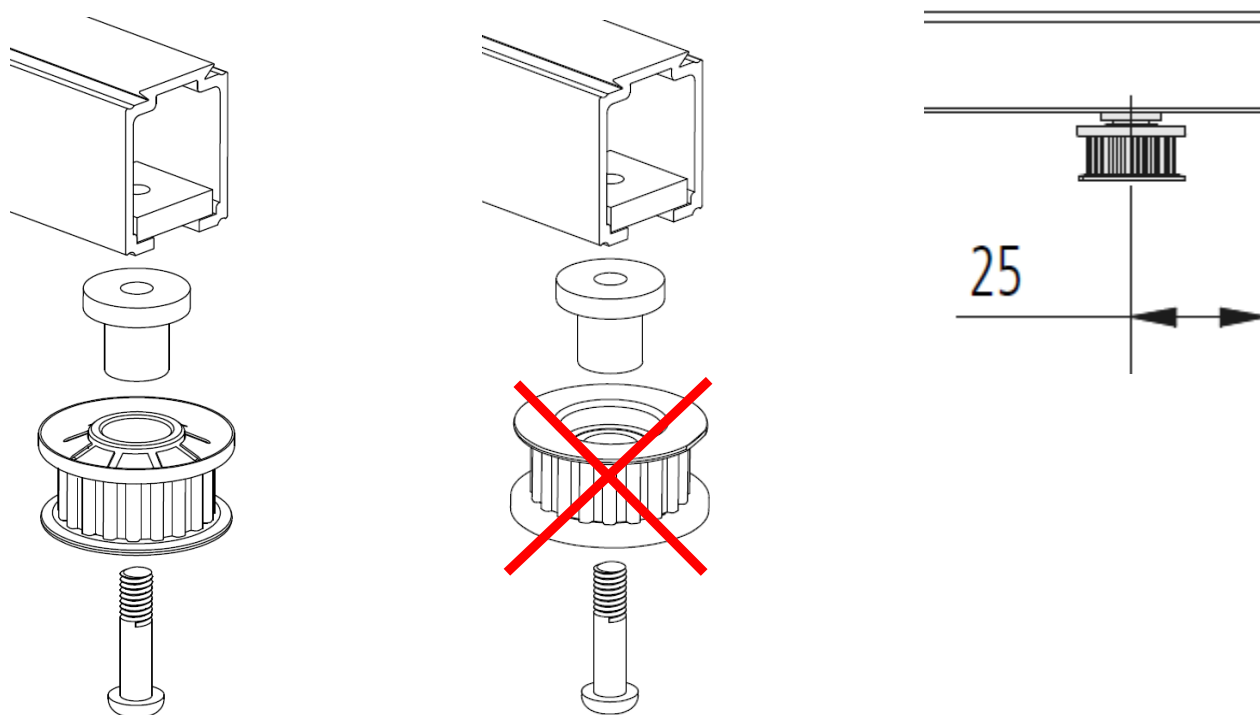
Note: if the motorization is between walls, put adhesive bands.



5.2. Belt fixing on the door (not included)



5.3. Free pulley installation (not included)

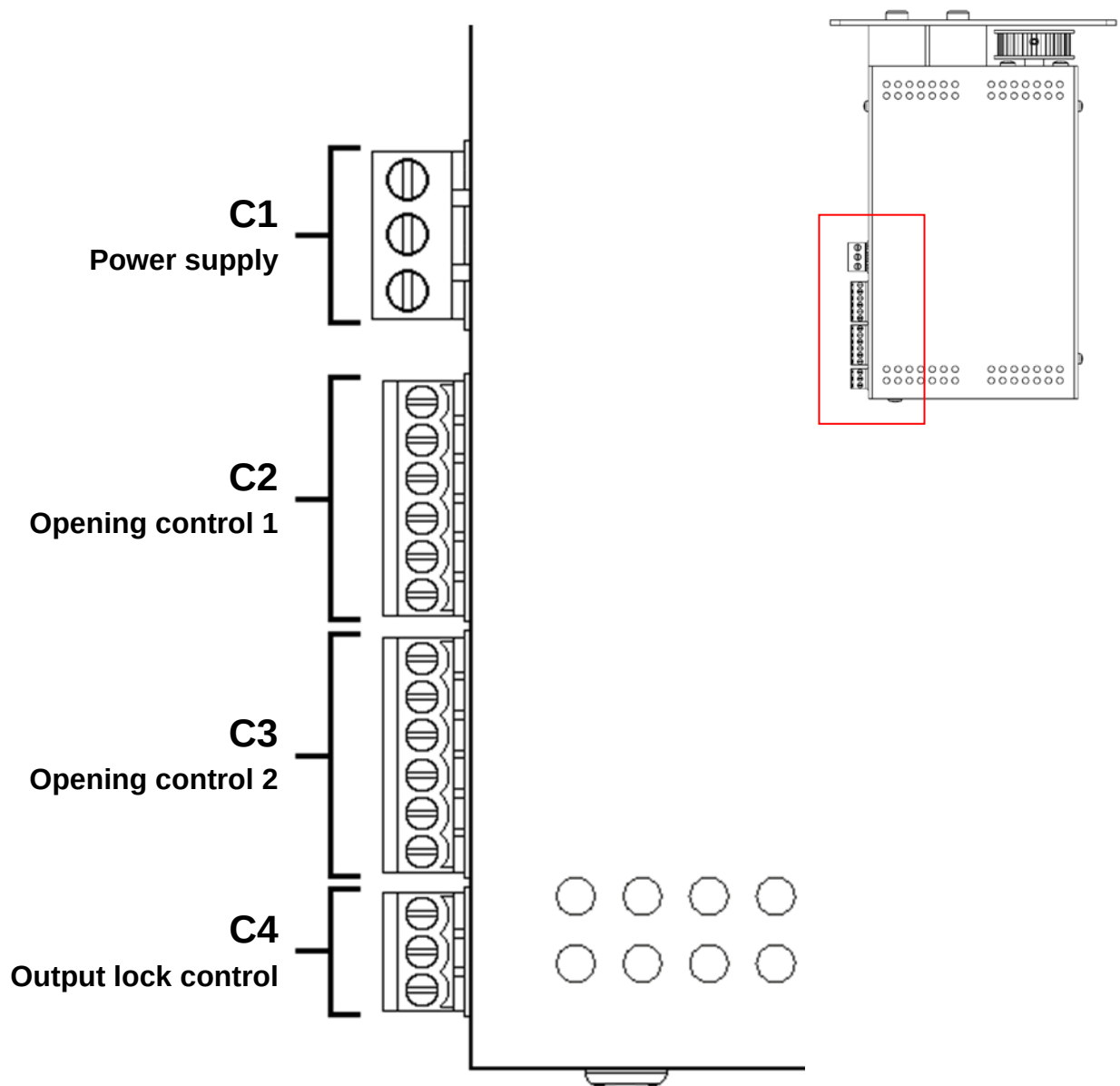


6. Electrical connection



Pay attention to your safety:

- The electrical installation must be carried out in accordance with the national standard in force, as well as any obligations foreseen by the law and/or by all obligations in force, laid down for this purpose.
- Electrical connection must take place **without voltage**, do not connect the sector before having disconnected all assembly operations.



This product is delivered with 2 shunts between terminals 4 and 5 of C2 and C3. These shunts are necessary for the system; remove them **ONLY** if you replace them with security cells.

6.1. External accessories connection

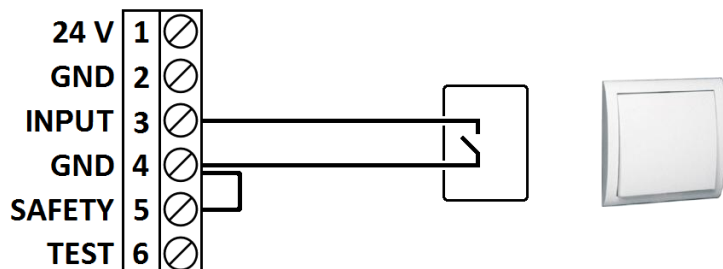
Function	Functionality description	Peripherals characteristics	Abbreviation	N°	Terminal / Connection description
C1 Power supply	It allows to supply the product	80 – 264 VAC 47 – 63 Hz 65 W	L		Live
			N		Neutral
					Protecting Earth
C2 Opening control 1	It allows to use an external command (pushbutton, non-contact pushbutton, radar, security cell, etc.)	Power consumption 1 A max (5 W in 24 V)	24 V	1	External command power
			GND	2	
			INPUT 1	3	Door opening (link with GND)
			GND	4	Common wire used for TEST, SAFETY and INPUT
			SAFETY 1	5	The door stays open if it's not connected to GND
			TEST 1	6	Connect the input Test radar (necessary to be conform with the EN16005 standard)
C3 Opening control 2	It allows to use an external command (pushbutton, non-contact pushbutton, radar, security cell, etc.)	Power consumption 1 A max (5 W in 24 V)	24 V	1	External command power
			GND	2	
			INPUT 2	3	Door opening (link with GND)
			GND	4	Common wire used for TEST, SAFETY and INPUT
			SAFETY 2	5	The door stays open if it's not connected to GND
			TEST 2	6	Connect the input Test radar (necessary to be conform with the EN16005 standard)
C4 Lock	It allows to use a locking system with a power applied or removed (suction or electromagnet)	Power consumption 500 mA max (12 W in 24 V)	N.O.	1	Connect it if the system is locked without power supply
			N.C.	2	Connect it if the system is locked with power supply
			24 V	3	Connect one of the two wires of the lock

6.2. Peripherals connections

6.2.1. Opening control (C2 and C3)

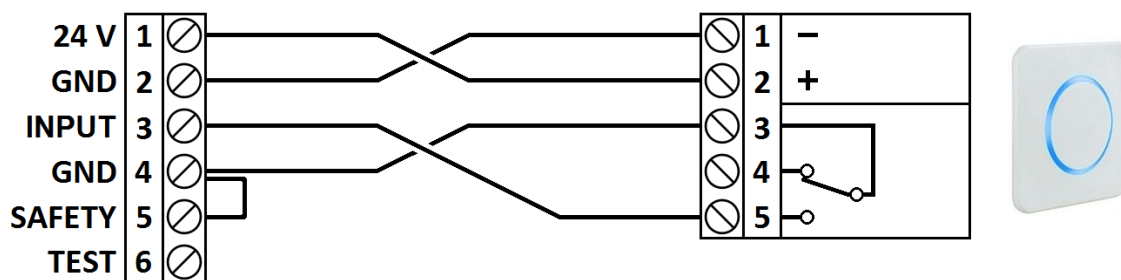
By default, "Opening control 1" is set for a radar and "Opening control 2" is set for a pushbutton. These settings can be set via the mobile application.

Pushbutton switch (C0001290):



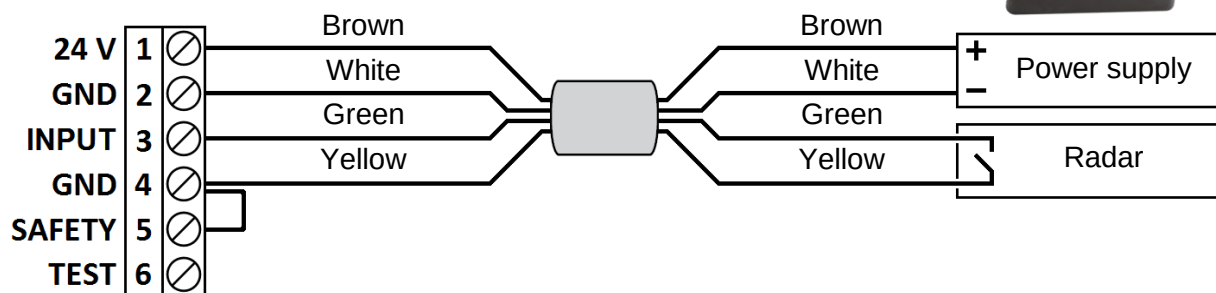
Add a shunt between the terminals 4 and 5.

Non-contact pushbutton (C0001300):



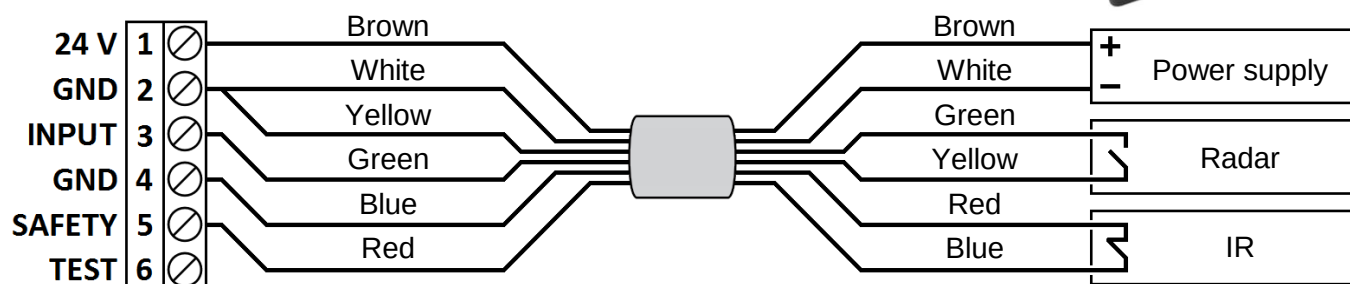
Add a shunt between the terminals 4 and 5.

Radar (C0001310):



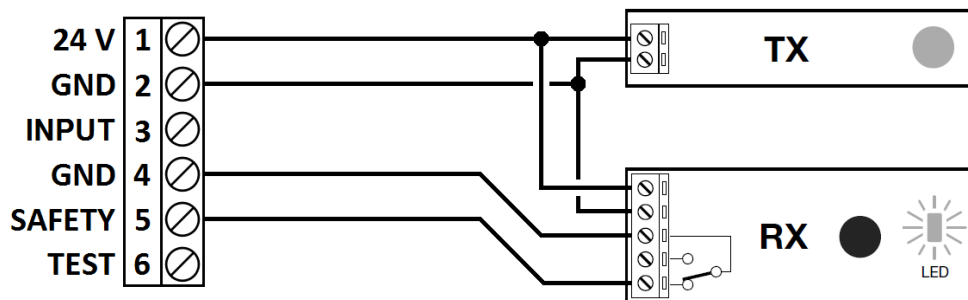
Add a shunt between the terminals 4 and 5.

Radar with security cell and test cell (C0001320):



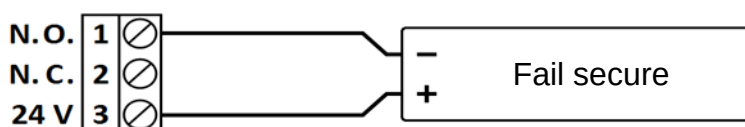
6.2.2. Security system (C2 and C3)

Security cell (C0003760):

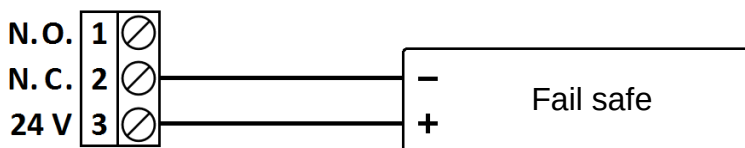


6.2.3. Locking system (C4)

Fail secure (locking system without power supply):

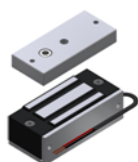


Fail safe (Locking system with power supply):



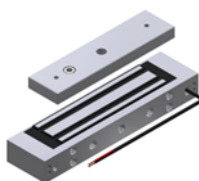
Fail safe suction:

C0013750



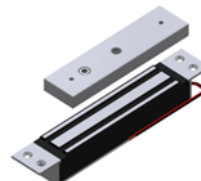
60 kg

C0013760



180 kg

C0013765

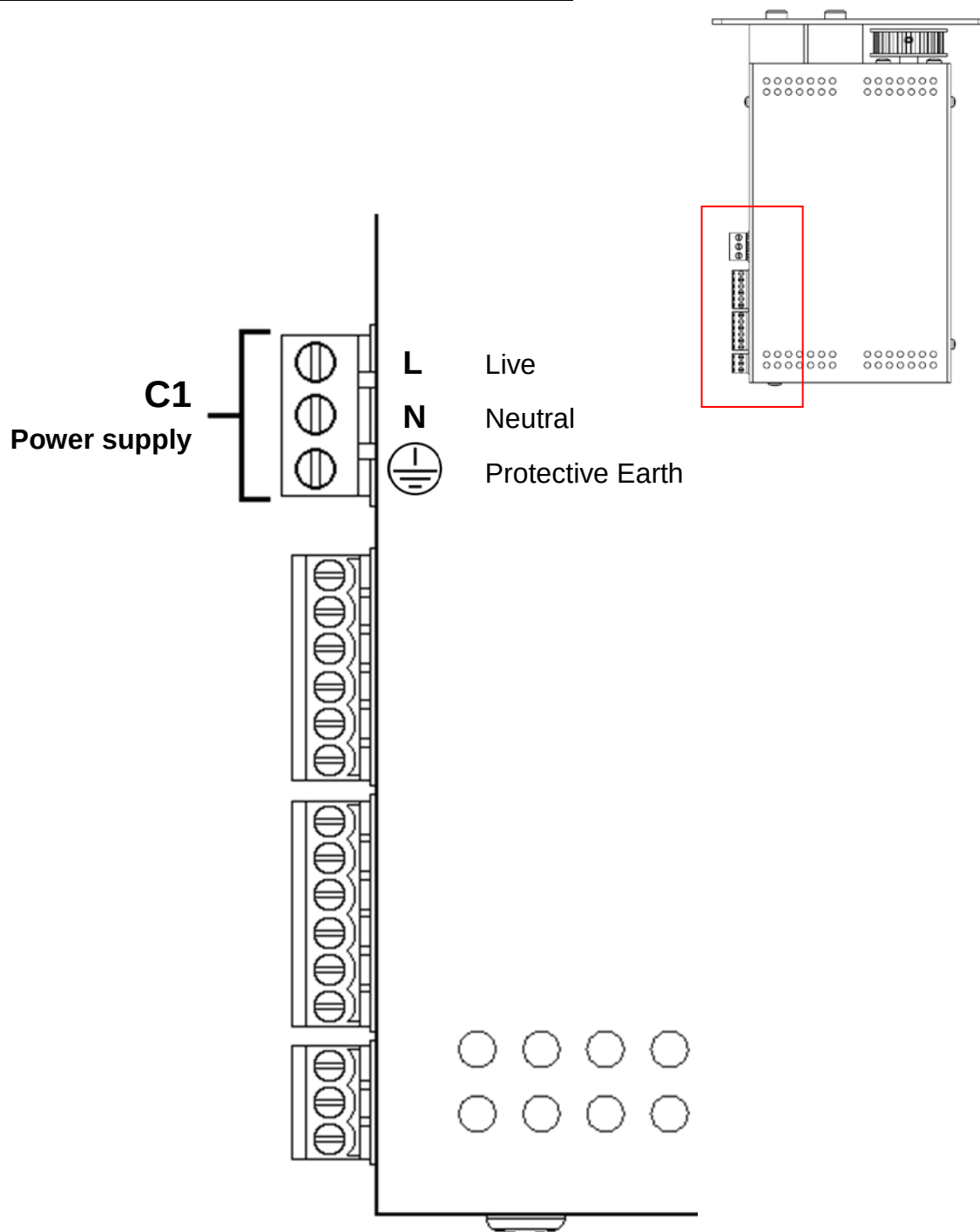


180 kg

6.3. Power supply connection (C1)

The installation must be equipped (L, N, PE) with a two-pole external circuit-breaker and a disconnector (or selector switch) on the primary side in order to isolate the product if necessary.

Supply voltage	80 – 264 VAC
Frequency	47 – 63 Hz
Power rating	65 W
Recommended power cable	3G0,75 mm ² for a maximum length of 20 m



7. Protection cover installation

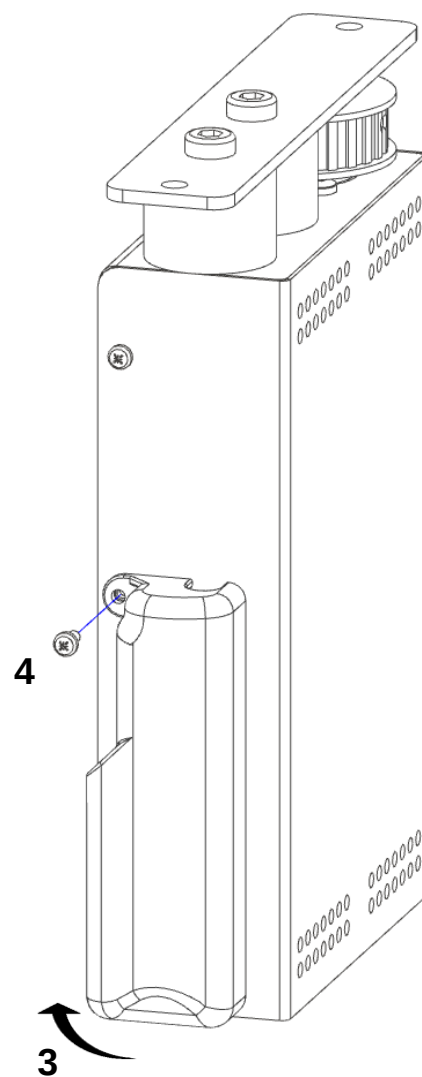
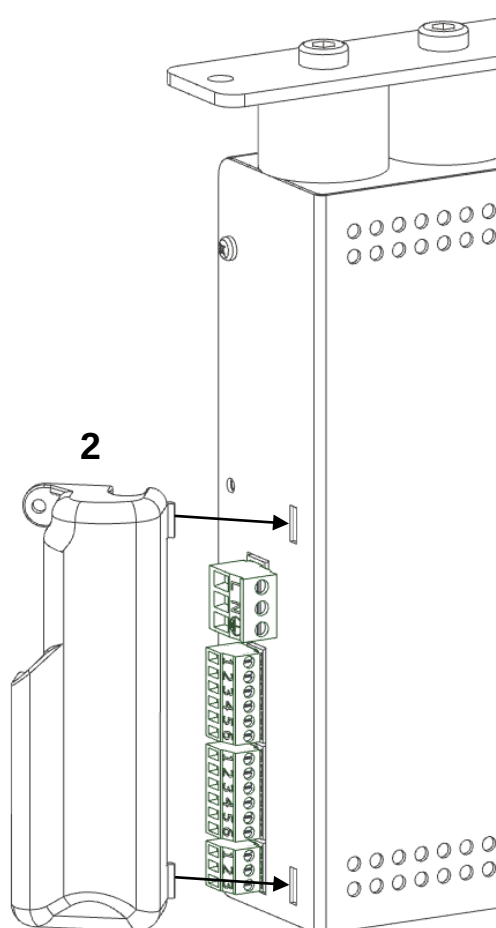
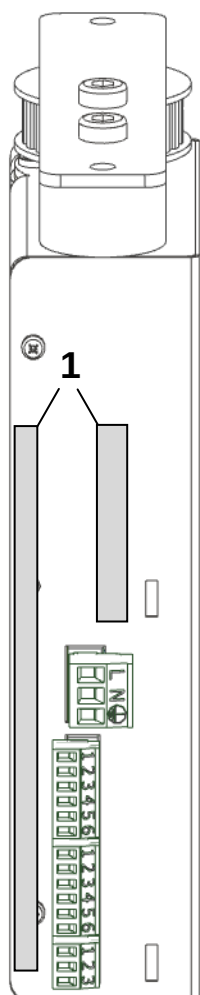
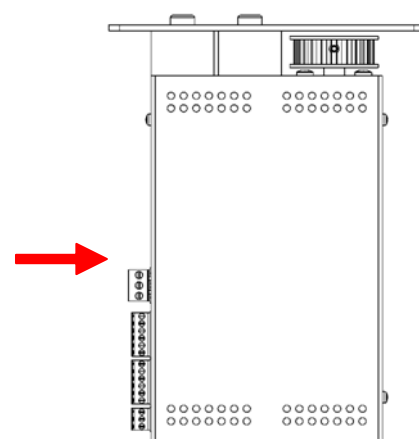
After electrical connections, put the protection cover.

Step 1. Arrange wires.

Step 2. Put the protection cover in openings.

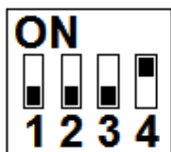
Step 3. Press the protection cover against the product.
Be careful with the wires.

Step 4. Put the screws.



8. Operating modes

8.1. Switches settings



Switch	OFF	ON
1	Radio and Bluetooth peering	Stoppers learning
2	Switch the direction of motor rotation	
3	Automatic mode: Automatic closing of the door	Manual mode: Opening and closing of the door on request
4	Bluetooth disable	Bluetooth enable

Note: by default, switches 1, 2 and 3 are in OFF position and switch 4 is in ON position.

8.2. Closing modes

Automatic mode (switch 3 on OFF):

Press on the control button	The door is opening Automatic closing after few seconds (adjustable with mobile application)
Press the button when the door is open	The door stays open
Press the button during the closing	The door is opening

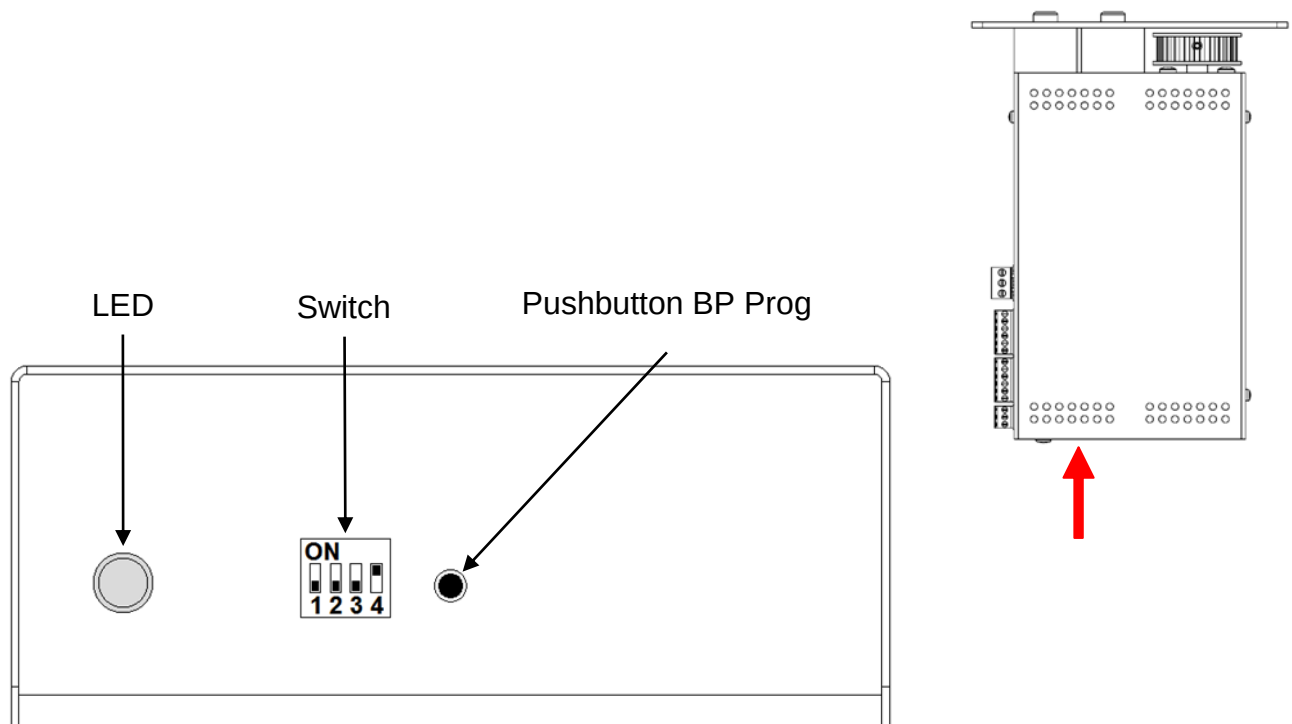
Manual mode (switch 3 on ON):

Press on the control button	The door is opening and stays open
Press the button when the door is open	The door is closing
Press the button during the closing	The door is opening

Note: radar use is not compatible with this closing mode.

9. Bringing into service

Before bringing into service this product, check you can move the doors manually effortless. A bad installation with a bad doors alignment or high frictions can damage the motors. Check that the product and accessories are correctly connected.



This product is equipped with a stoppers learning push button (BP Prog) which determines the movement of each door.

The motor won't work as the stoppers learning has not been carried out.

Modus operandi:

- Powering the system.
- If you want to use a radio product, refer to the wireless setup instructions, part "6. Peering".
- Turn ON the switch 1.
- Start the stoppers learning by pressing of BP Prog.
The system closes in slow speed. Then opens and closes in slow speed.
Finally, it performs an opening and closing cycle.
When the door is closed, the system is operational.

Note: if, after carrying out the learning cycles, the door is open instead of close, turn ON the switch 2 and do another learning.

10. Parameters settings



It's possible, with the "Widoor" application, to adjust settings. This app can be downloaded on stores.

10.1. Peering a smartphone

- Turn OFF the switch 1 and turn ON the switch 4.
- Press briefly one time on the BP Prog.
- The LED lights up in magenta.*
- When the LED is lighted: start the peering on your smartphone.
- The LED flashes quickly and then goes out: the smartphone is peered.*

Note: It is possible to peer several products on a same smartphone, or until 3 smartphones on the same product. For that, repeat the operations below.

If a 4th smartphone is paired, the product desynchronized the oldest used smartphones. To pair this smartphone, remove the product in the Bluetooth setting of the smartphone.

10.2. Disabling all smartphones

- Turn OFF the switch 1.
- Press briefly one time on the BP Prog.
- The LED lights up in magenta.*
- When the LED is lighted: Press and hold down the BP Prog during 10 seconds
- The LED flashes quickly and then goes out: all smartphone are disabled.*

Note: All smartphones and all radio switches will be deleted. All settings will be reseted to default values.

10.3. Adjustable parameters via mobile application

Opening speed	Range: 50 mm/s - 350 mm/s *
Closing speed	Range: 50 mm/s - 200 mm/s *
End of open speed End of close speed	It allows to adjust a soft arrival on the stoppers
Opening deceleration	It allows to adjust the opening deceleration
Delay before closing	Time: 0 to 60 s

* Measure is given for indicative purpose, using a 50kg door.

Additional features are available in the mobile application.

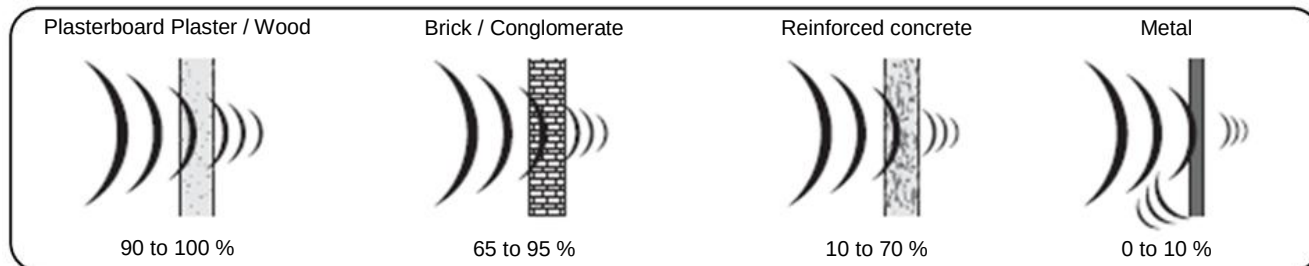
11. Wireless setup instructions (Radio product only)

11.1. Radio specifications

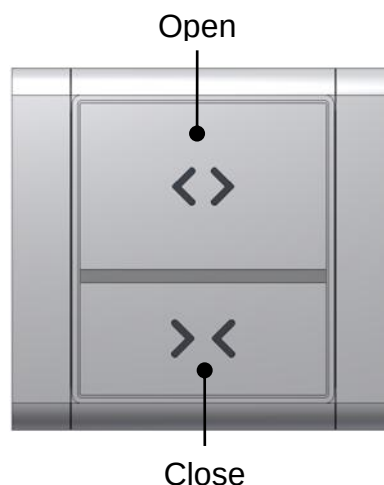
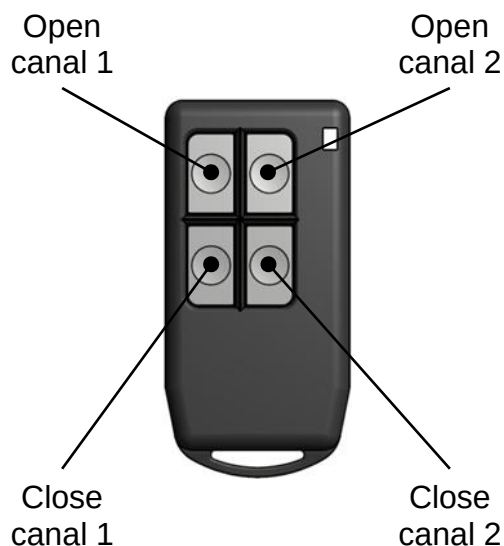
Frequency: 433,92 MHz

Transmitter range: approximately 70 m line-of-sight*

* Propagation of radio waves varies according to the medium they traverse. The range of the radio waves will also vary according to the type of construction:



In case of bad reception, use the radio repeater. Ref. C0004760.



11.2. Peering a switch or a remote control (transmitter)

- Turn OFF the switch 1.
- Press briefly one time on the BP Prog.
- The LED lights up in magenta.*
- When the LED turns on: press the “open” and “close” buttons simultaneously on the switch.
- The LED flashes quickly and then goes out: the switch is peered.*

Note: it is possible to peer several products on a same switch, or several transmitters on the same product. For that, repeat the operations below.

11.3. Disabling a switch or a remote control (transmitter)

- a. Turn OFF the switch 1.
- b. Press briefly one time on the BP Prog.
- c. *The LED lights up in magenta.*
- d. When the LED is lighted: press briefly one more time on the BP Prog.
- e. *The LED flashes slowly.*
- f. When the LED is flashing: Press the “open” and “close” buttons simultaneously on the switch.
- g. *The LED flashes quickly and then goes out:* the switch is disabled.

11.4. Disabling all transmitters (switches, remote control, etc.)

- a. Turn OFF the switch 1.
- b. Press briefly one time on the BP Prog.
- c. *The LED lights up in magenta.*
- d. When the LED is lighted: press and hold down the BP Prog during 10 seconds
- e. *The LED flashes quickly and then goes out:* all smartphone are disabled.

Note: all smartphones and all radio switches will be deleted. All settings will be reseted to default values.

11.5. Other informations

When the LED is lighted or flash, the system will automatically go back to its normal operating mode after 10 seconds of inactivity.

12. Further information

12.1. LED color code

Color	Status	Meaning
Dark blue	Flashing	The door is opening.
		The door is closing.
	Turned on	The door is open.
Cyan / Light blue	Flashing	Stoppers searching in progress.
Green	Turned on	The system needs a stopper learning.
	Flashing	Stoppers learning in progress.
Magenta	Turned on	Peering menu.
	Flashing	Disabling menu.
	Fast flashing	Validations of a radio or BLE command (Peering or disabling).
Orange	Flashing	Parameters are resetting.
Red	Turned on	Abnormal stop.
	Fast flashing	Peering problem.

12.2. Restart after power outage

In case of a power outage, the door can move manually easily. Once electrical power is restored, the door needs a stoppers searching. The door will open and close slowly after the first command only.

12.3. Obstacle detection

In case of an obstacle detection during the opening, the door stops instantly. The door will open and close slowly after the first command only.

In case of an obstacle detection during the closing, the door is opening once more. According to the operation mode:

Automatic mode: The door is trying to close 3 times maximum. If after 3 attempts, the door doesn't succeed to close, this one will be locked in open position and will wait an order to close.

Manual mode: The door is waiting an order to close.

13. Diagnostic aid

Symptoms	Probable/Likely cause	Solution
The motor doesn't work	Connection problem to the power supply	Check the connection to the power supply (chapter 6.3)
	Learning not done	Do a learning (chapter 9.)
The door closes when we request it to open	Put the motor in the other way	Turn on the switch 2 and do another learning
The door opens after a closure	There is an obstacle	Remove the obstacle
	Learning problem	Do another learning (chapter 9.)
The learning is done, and the door doesn't open with a wired button	Wrong command connection	Check the command connection (chapter 6.)
	Learning problem	Do another learning (chapter 9.)
The learning is done, and the door doesn't open with a radio command	Defective battery	Check the command battery and change it if necessary
	Learning problem	Do another learning (chapter 9.)
	Peering problem	Peer the transmitter once more (chapter 9.)
The door hardly opens	Wrong mounting of the door	Check the mounting of the door. The door must be able to move manually easily
	Motor speed is too slow	Adjust door speed with the mobile app
Problem with a smartphone	Peering problem	Do another peering or check the help section in the application
The door doesn't close	Nothing is connected to security inputs	Add a security cell or put the shunt (chapter 6.)

[illegible]