

510063

EN Swip 200 - CONNECT Motor drive for sliding gates



4m / 200kg

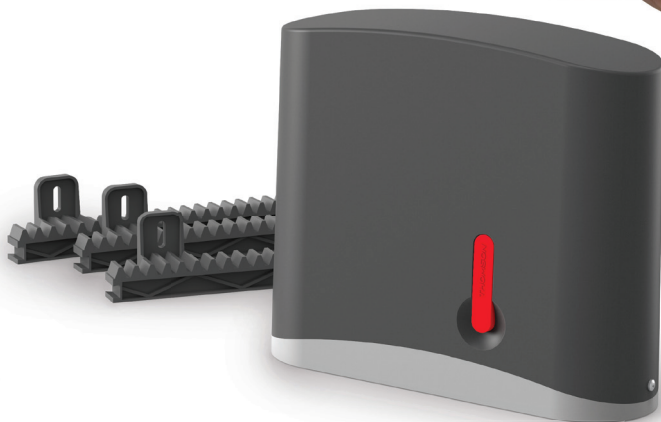


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A - SAFETY INSTRUCTIONS

In our efforts to continually improve our products, we reserve the right to make any changes to the technical, functional, or aesthetic specifications related to their development.

This motorised gate, and its manual, were designed to enable a gate to be motorised in compliance with current European standards.

WARNING

Important safety instructions. A motorised gate is a product that can cause injury to people and animals and damage to property. It is important for people's safety to follow these instructions and keep them.

1 - OPERATING PRECAUTIONS

- This apparatus may be used by children over the age of 8 and by persons with reduced physical, sensory or mental abilities or lack of experience or familiarity if they are correctly supervised or if the instructions relating to the safe use of the apparatus have been given to them and the possible hazards are understood. Children must not play with the device. Keep the remote controls out of the reach of children. Cleaning and maintenance must not be conducted by children without supervision.
- This apparatus should only be used for its intended purpose, that is, to motorise a sliding gate for vehicle access. Any other use will be considered dangerous.
- The opening or closing manoeuvre control must be used with perfect visibility of the gate. Should the gate be outside the user's field of vision, the installation must be protected by a photocell type safety device, and its operation must be checked every six months.
- All potential users must be instructed in the use of the motorised gate by reading this manual. It must be ensured that no persons who have not been instructed in the use of the device (children) may set the gate into motion.
- Before setting the gate into motion, ensure that there is no person in the area in which the gate moves.
- Avoid any natural obstacles (branch, stone, high grass, etc.) impeding the gate's movement.

- Do not manually activate the gate when the motor drive is not disengaged from the gate.
- Avidsen cannot be held liable for any use that does not comply with the instructions in this manual and causes damage.

2 - INSTALLATION PRECAUTIONS

- Read this entire manual before starting the installation.
- The electrical installation of the motorised gate must meet current standards (in particular NF C 15-100) and should be undertaken by a qualified person.
- The 230 V mains supply must be protected with a suitable circuit breaker which meets current standards.
- All electrical connections must be performed with the power switched off (safety switch in OFF position) and battery disconnected.
- Ensure that crushing and shearing between the mobile parts of the motorised gate and the surrounding fixed parts due to the gate's opening/closing movement are avoided or signalled on the installation.
- The motorised part must be installed on a gate according to the specifications provided in this manual.
- The motorised gate must not be installed in an explosive atmosphere (presence of gas, flammable smoke, etc.).
- The installer must check that the temperature range shown on the motor drive is suitable for the location.
- The wire that acts as an antenna must remain inside the electronic panel.
- It is strictly forbidden to modify any of the components provided in this kit, or to use an additional component not provided for in this manual.
- During installation, but above all during adjustment of the motorised gate, you must ensure that no person, including the installer, is in the area in which the gate moves at the start and throughout the duration of adjustment.
- The flashing light is an essential safety component.

A - SAFETY INSTRUCTIONS

- If installation does not correspond to one of the cases shown in this manual, you must contact us so that we can provide all the components necessary for correct installation with no risk of damage.
- After installation, ensure that the mechanism is correctly adjusted and that the protection systems as well as the manual override device work correctly.
- Do not let children play with the fixed control devices. Keep the remote controls out of the reach of children.
- Avidsen cannot be held liable in case of damage if installation is not conducted as indicated in these instructions.

3 - MAINTENANCE AND CLEANING

- You must read all the instructions given in this manual before carrying out maintenance on the motorised gate.
- Disconnect the power supply during cleaning or maintenance operations, in particular if the device is automatically controlled.
- Any technical, electronic or mechanical change to the motorised gate must be made with our technical department's approval. Otherwise, the guarantee will be immediately cancelled.
- In the event of breakdown, the damaged part should be replaced by an original part and nothing else.
- Check the installation frequently to reveal any fault on the gate or the motor drive (see the chapter on maintenance).
- Never use abrasive or corrosive substances to clean the product.
- Do not clean the product with a pressure washer.
- Use a lightly damp, soft cloth.
- Do not use aerosol sprays on the product because it could damage its interior.

4 - RECYCLING



Disposing of used batteries in household waste is strictly forbidden. Batteries/accumulators containing harmful substances are marked with symbols (shown opposite) which indicate that it is forbidden to discard them in the household waste. The heavy metals are referred to as follows: Cd= cadmium, Hg= mercury, Pb= lead.

You can dispose of these used batteries/accumulators at local waste treatment centres (centres for sorting recyclable materials), which are required to accept them. Keep batteries/button cells/accumulators out of reach of children and store them in a safe place not accessible to them. They could be swallowed by children or pets. May be fatal if swallowed! In the event that a battery is swallowed, consult a doctor or go to A&E immediately. Never short-circuit the batteries, and do not burn or recharge them. They may explode!

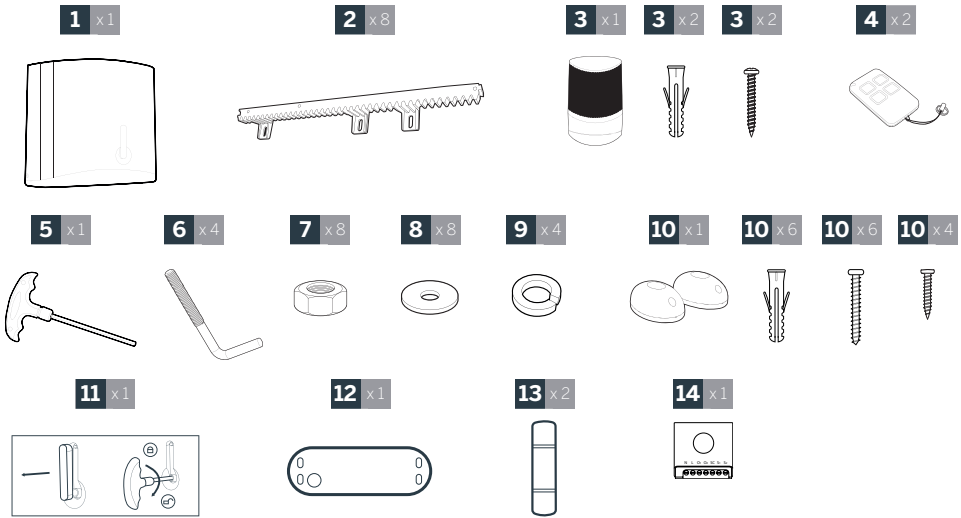


This logo denotes that devices which are no longer in use must not be disposed of as household waste. They are likely to contain hazardous substances that are dangerous to both health and the environment. Return the equipment to your local distributor or use the recycling collection service provided by your local council.



B - PRODUCT DESCRIPTION

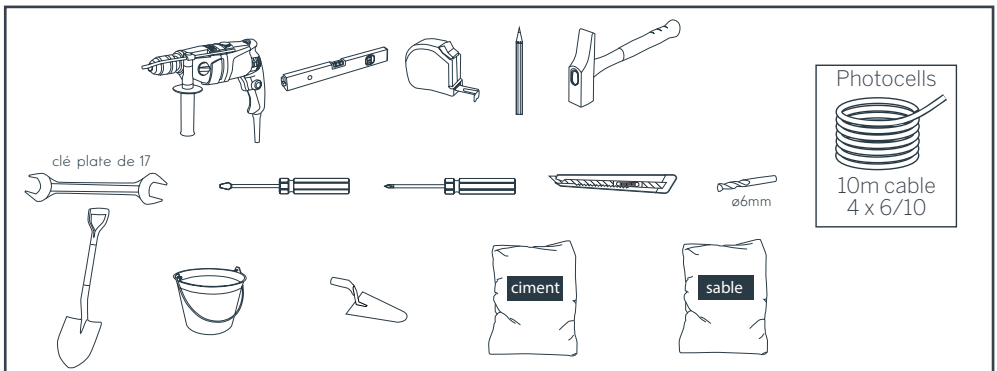
1 - KIT CONTENTS



1	24 V geared motor	8	Ø10 washer
2	50 cm rack	9	Ø10 spring washer
3	Flashing light and screws	10	Photocells and their screws
4	Remote controls	11	Disengagement label
5	Override key	12	Installation template
6	Floor fastening pin	13	Backup fuses
7	M10 bolt	14	Guardian Wi-Fi receiver module

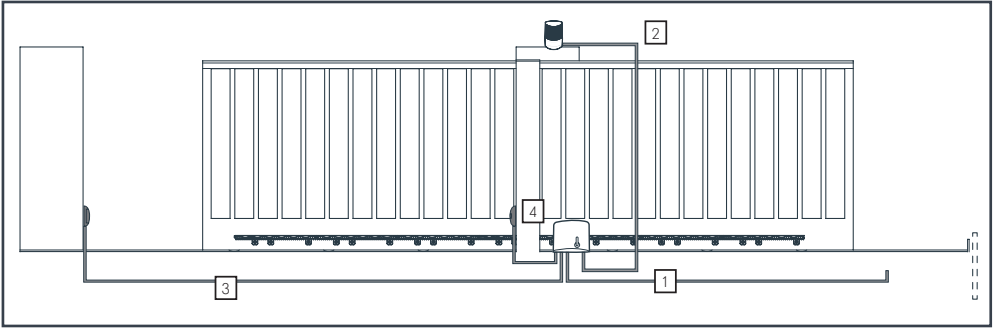
2 - EQUIPMENT REQUIRED (NOT INCLUDED)

The tools and screws required for the installation must be in good condition and compliant with applicable safety standards.



B - PRODUCT DESCRIPTION

The cables used must be appropriate for outdoor use (such as H07RN-F for example). The cable run between the two posts must comply with applicable standards (NF C 15-100). The table below contains our recommendations for the choice of cable type.



	Connection	Cable	Max length
1	230Vac power line	Cable 3 x 2.5mm ² (more than 30m long) Cable 3 x 1.5mm ² (less than 30m long)	Unlimited
2	Flashing light	Cable 2 x 0.5mm ²	15 m
3	Transmission photocell (TX)	4-strand telephone cable	10 m
4	Reception photocell (RX)	4-strand telephone cable	10 m

C - INSTALLATION

1. ANALYSING HAZARDS

1.1. Regulation

Installation of a motorised gate or a motor drive on an existing gate within the framework of "Residential" type use must be compliant with directive 89/106/EEC concerning building products.

The reference standard used to check this compliance is EN 13241-1 which refers to a framework of several standards including EN 12453 which specify the motorised gate safety methods and components to reduce or completely eliminate hazards to people.

The installer must train the end user on the correct operation of the motorised gate, and the trained user must train the other people likely to use the motorised gate, using this guide.

It is specified in standard EN 12453 that the minimum protection of the gate's primary edge depends on the type of use and the type of control used to set the gate in motion.

The gate motor drive is a press control system, i.e. simply pressing one of the control parts (remote control, key selector, etc.) sets the gate in motion.

This gate motor drive is equipped with a force limiter which complies with appendix A of EN 12453 standard, within the framework of use with a gate that is compliant with the specifications given in this chapter. The specifications of EN12453 standard therefore enable the 3 following use cases, as well as the minimum levels of protection:

- **Press activation with visible gate**
 - Force limiter only.
- **Press activation with non-visible gate**
 - Force limiter and 2 pairs of photocells to protect the gate's opening and closing.
- **Automatic control (automatic closure with time delay)**
 - Force limiter and 1 pair of photocells to protect the gate's automatic closing

The flashing light is an essential safety component.

Photocell type safety devices and their correct operation must be checked every six months.

1.2. Specifications of the gate to motorise

This motor drive can automate sliding gates measuring up to **4 m** long and weighing up to **200kg**.

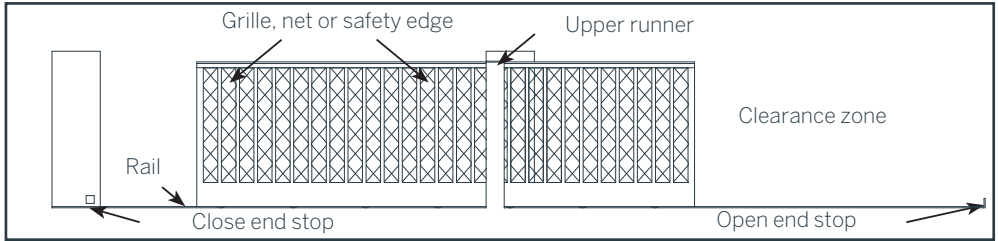
1.3. Safety checks on the gate

The motorised gate is strictly for residential use. The gate must not be installed in an explosive or corrosive atmosphere (presence of gas, flammable smoke, vapour or dust).

- The gate must not have locking systems (latch, lock, bolt, etc.).
- The guide rail must be perfectly straight, horizontal and fastened correctly to the ground.
- The gate rail and wheels must be of compatible shape and dimensions to ensure that the gate's movement is smooth and to remove any risk of the gate becoming derailed.
- The gate must be stopped open and closed by stops fastened solidly to the ground so that its movement is limited and above all to remove any risk of the gate becoming derailed.
- The zone in which the motor unit will be fastened must not be at risk of flooding. If it is, raise the motor unit.
- Without the motor drive, the gate must be in good mechanical condition, correctly balanced and open and close without resistance. It is recommended to lubricate the guide rollers and the supporting wheels.
- Check that the fastening points of the different components are in locations that are sheltered from shock and that the surfaces are solid enough.
- Check that the gate does not have any part protruding from its structure.
- If the gate is openwork type, you must place a protective grille or net so that no component can pass through the gate's bars when it is moving, or place a safety edge on each shear zone.
- The gate installed without the motor drive must be compliant with the requirements given in the EN 13241-1 standard.

C - INSTALLATION

- If installation does not correspond to one of the cases shown in guide, contact us so that we can provide all the components necessary for correct installation with no risk of damage.
- The motor drive cannot be used with a driven part that has a door.



1.4. Safety rules

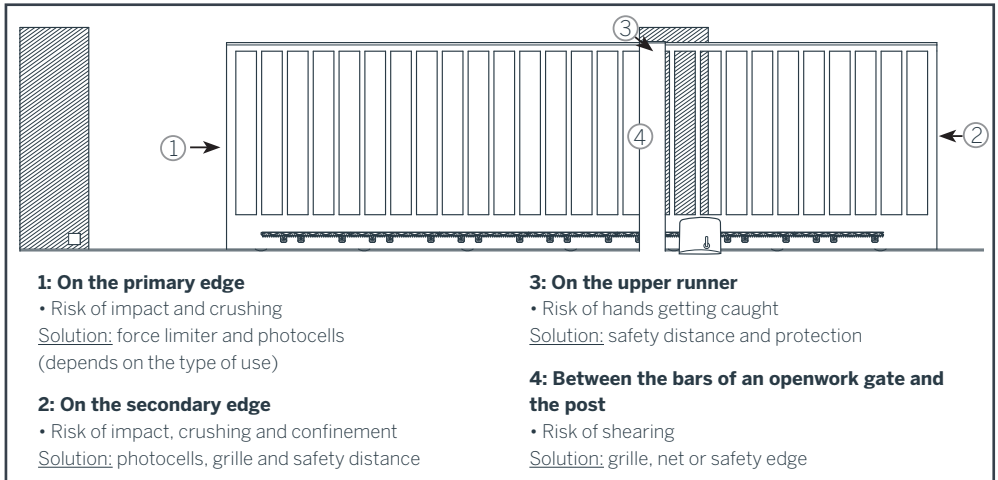
The EN 12453 standard specifies the performance requirements relating to the safe use of all types of motorised doors, gates and barriers which are intended to be installed in areas accessible to people, and whose main intended use is to enable access for merchandise and vehicles accompanied or driven by people, in total safety, on industrial, commercial or residential premises.

The actual opening of a door may create dangerous situations for people, goods and vehicles in the vicinity that by nature, cannot always be avoided by design.

The possible hazards depend on the condition of the gate, the manner in which it is used and the installation site.

After having checked that the gate to be motorised is compliant, a hazard analysis of the installation must be conducted in order to eliminate all dangerous situations or to inform users of them if they cannot be eliminated.

The hazards posed by a motorised sliding gate, as well as solutions adopted to eliminate those hazards, are shown on the diagram below.

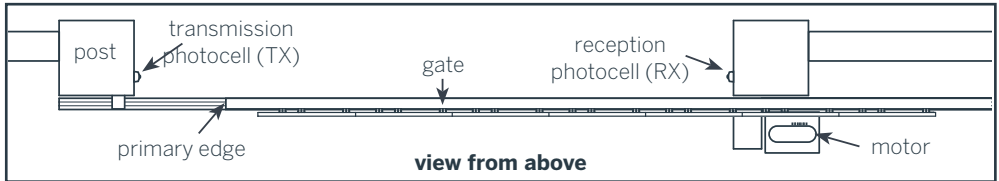


C - INSTALLATION

2. ELIMINATING HAZARDS

2.1. On the primary edge

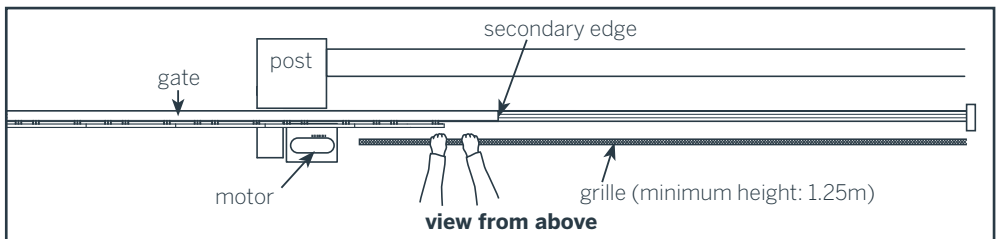
There is a risk of crushing between the gate's primary edge and the post when it closes. To reduce this risk, the motor drive has an obstacle detector. If the motor needs to force more than it is authorised (by adjusting a threshold of sensitivity to effort), the motor drive will stop of its own accord and release the pressure against the obstacle (person or vehicle). It is also possible to install the photocells provided to detect a person or vehicle moving when the gate is closing.



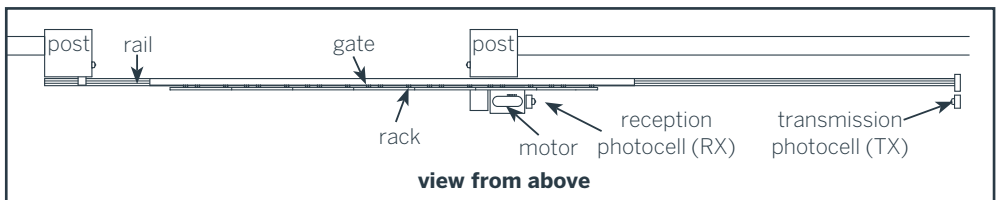
2.2. On the secondary edge

Depending on your installation, there may be risks of impact or crushing in the gate's clearance zone. In this case, you must remove these risks, by screening off the clearance zone, for example, or by using photocells.

• Example with 20 x 20 mm maximum grille



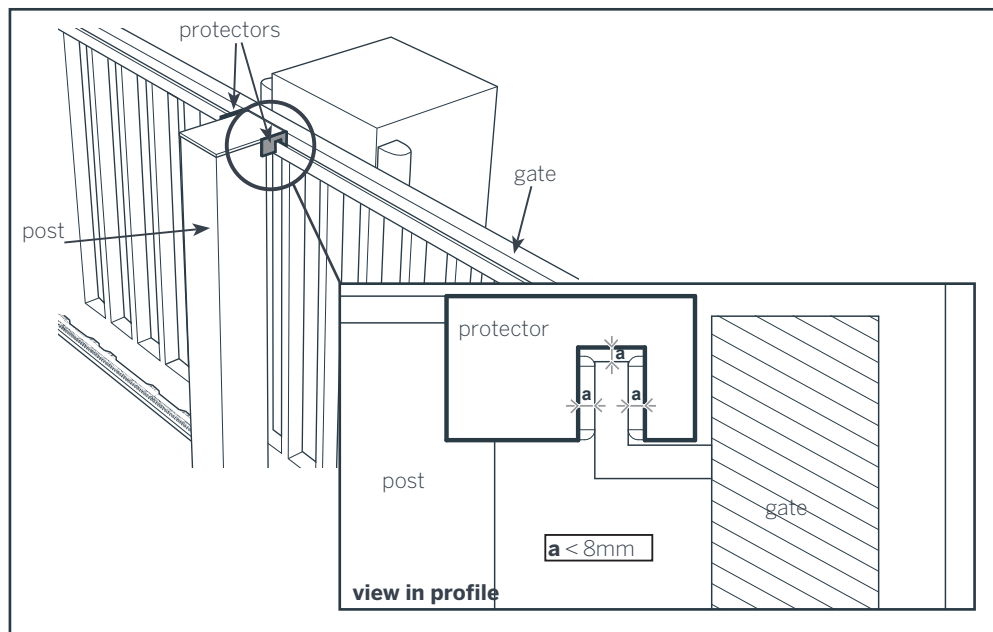
• Example with photocells (optional)



If the photocell beam is cut, it will cause the gate to emergency stop. In this case, the normally closed reception photocell (RX) output must be connected to the **STOP** input on the electronic card.

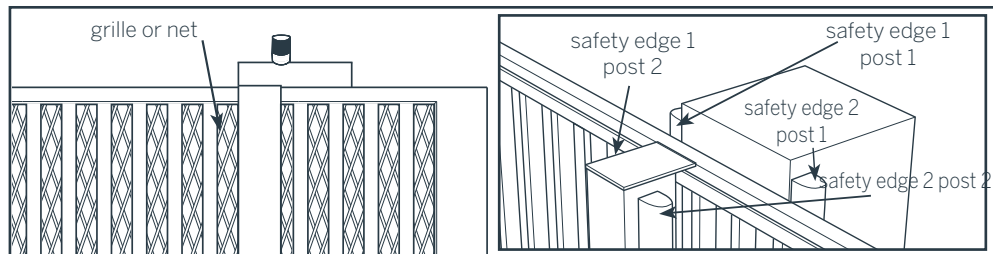
2.3. On the upper runners

There is a risk of hands getting caught between the rollers of the upper runner and the gate. To avoid this hazard, it is recommended that you observe the safety distances given in the diagram below.

**2.4. Between the bars of an openwork gate and the post**

If the gate is openwork type, there is a risk of shearing between the gate bars and the post when the gate is moving. There are two solutions to remove this hazard:

- Install a grille or net on the gate. The mesh must be as fine as possible to avoid fingers getting caught.
- Install one or more safety edges on each post.



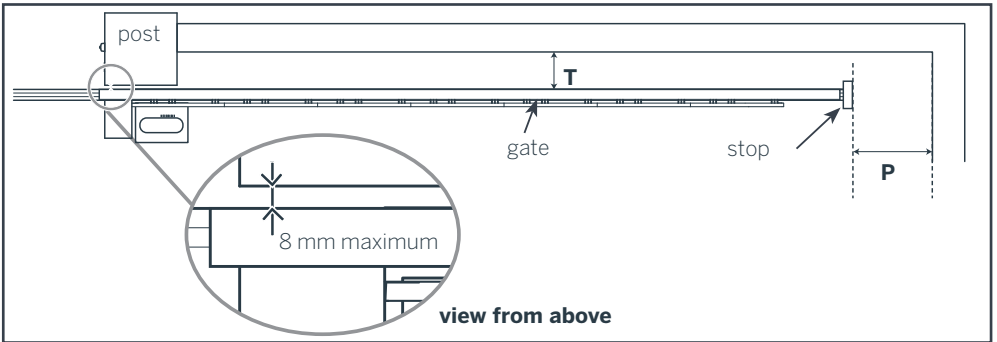
C - INSTALLATION

Safety edge 2 of post 1 is necessary if the post and the low wall (or fence) are not aligned (like in the diagram) thereby creating a crush zone between the edge of the post and a gate bar. The safety edges used must have sufficient deformation between the trigger and the position where the gate stops (around 6 cm) (residual travel according to the EN 12978 standard).

Note: A safety edge is an emergency stop part with normally closed contact output. It must be connected to the STOP input of the electronic card.

2.5. Confinement area

To avoid any risk of confinement in the gate clearance zone, it is recommended that you observe the safety distances given in the diagram below.



- If distance T is below 100 mm, distance P must be above 200 mm
- If distance T is below 100 mm, distance P must be above 500 mm

2.6. Preventing other hazards

The body of a switch without a lock must be located in direct view of the driven part but away from moving parts. Unless it operates with a key, it must be installed at a minimum height of 1.5 m and must not be accessible to the public.

After installation, ensure that the components of the gate do not hang over a footpath or public access road.

3. INSTALLATION

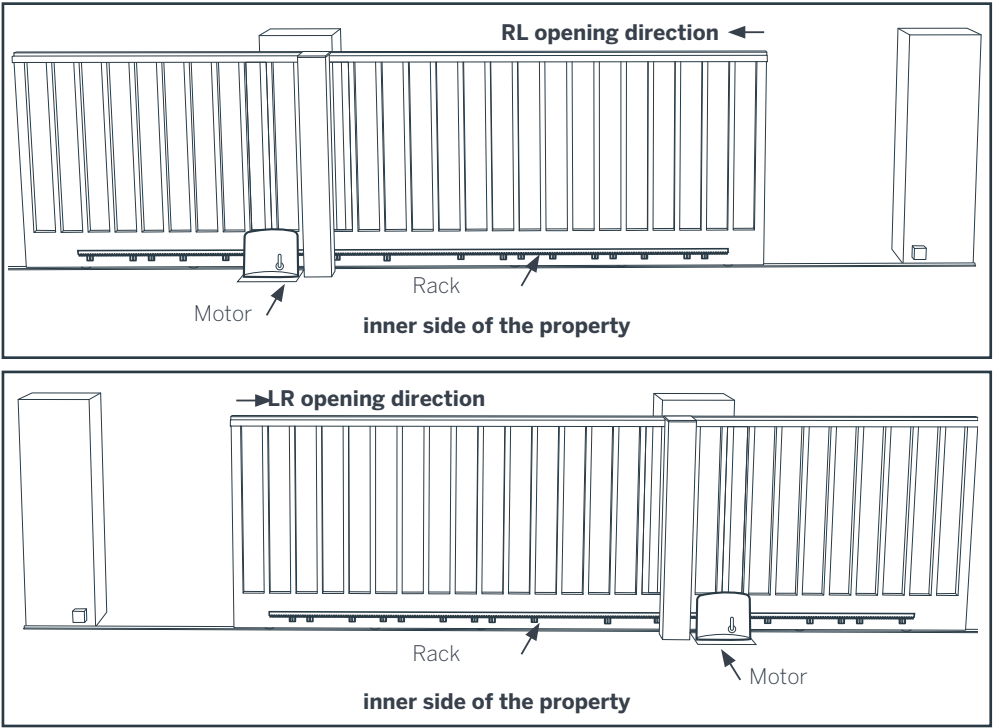
Installation must be done by qualified staff and observe all the indications given in this manual, in particular "analysing hazards" and "eliminating hazards".

Before starting installation, ensure that:

- The desired use has been correctly defined.
- The gate complies with the specifications given in the Chapter "Specifications of the gate to motorise".
- The risks have been reduced following the recommendations of the "Analysing hazards" and "Eliminating hazards" chapter.

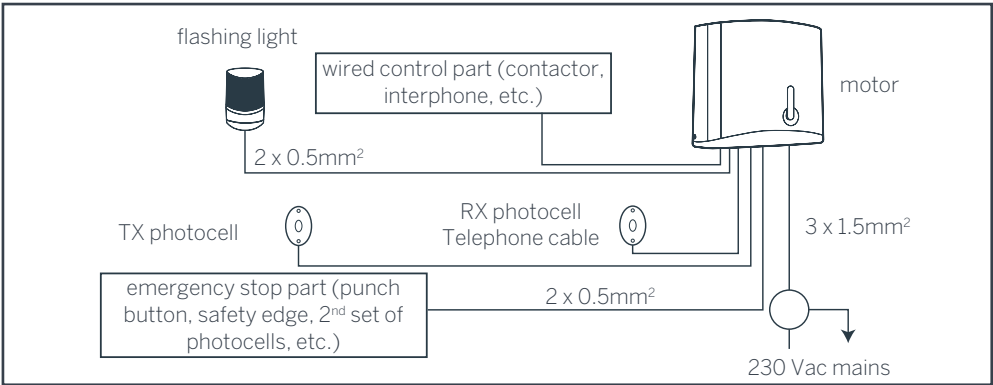
C - INSTALLATION

The different stages of installation must be followed in order and in compliance with the indications given. A left to right opening will be written "LR Opening" and a right to left opening will be written "RL opening"



Typical connection

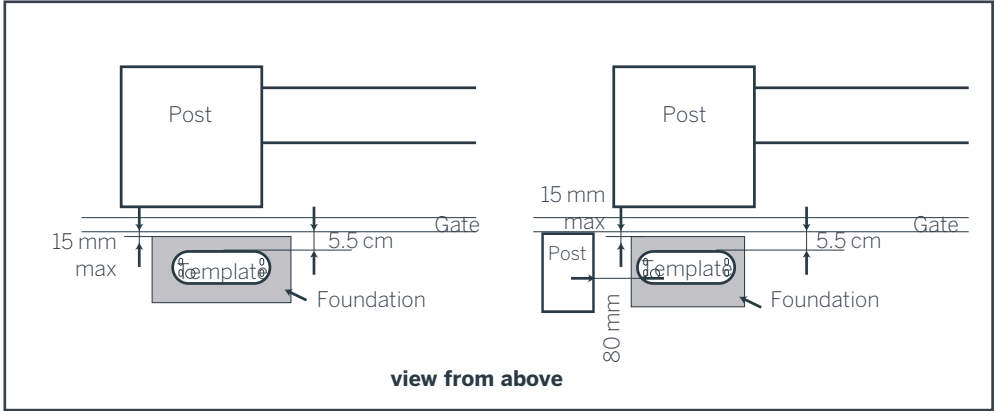
It is recommended to run the cables before starting installation. The cables run must comply with applicable standards (NFC 15-100). Either the cable is 80 cm deep with red warning mesh, or the cable is run through a sheath.



C - INSTALLATION

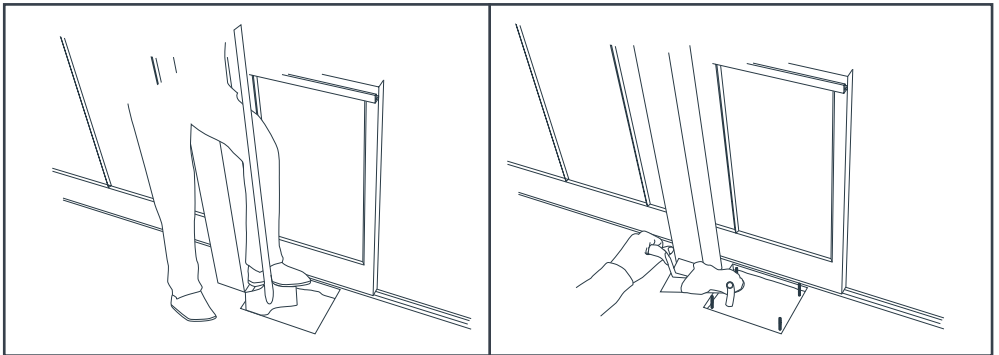
3.1. Attaching the geared motor

There must be a foundation where the motor will be attached. The foundation type and dimensions depend on the nature of the ground. Plan one or more cable runs depending on the applicable electrical standards. The foundation must be placed 15 mm maximum from the gate. An installation template is provided in the kit to facilitate installation.

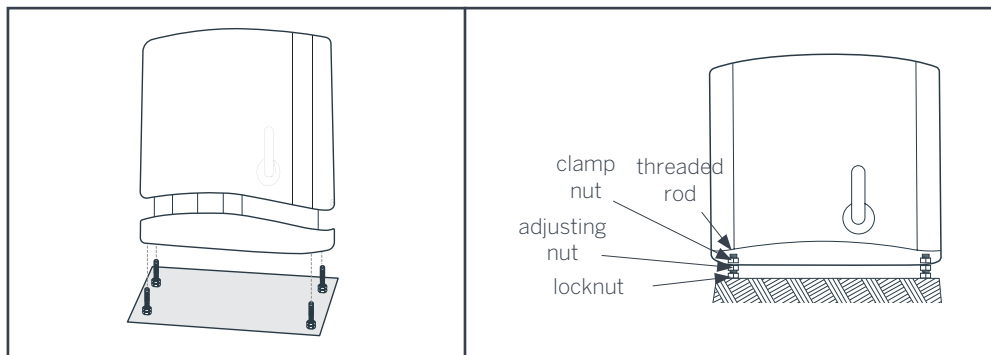


The cables run must comply with applicable standards (NFC 15-100). Either the cable is 80 cm deep with red warning mesh, or the cable is run through a sheath.

Place the cable run sheath as well as the floor fastening pins as shown in the diagram below before pouring the concrete:



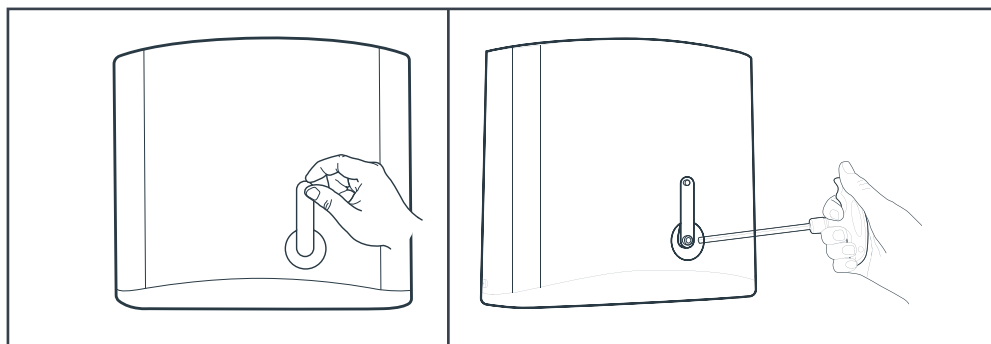
The pins must match the installation template provided. Wait until the seal is dry before assembling the motor.



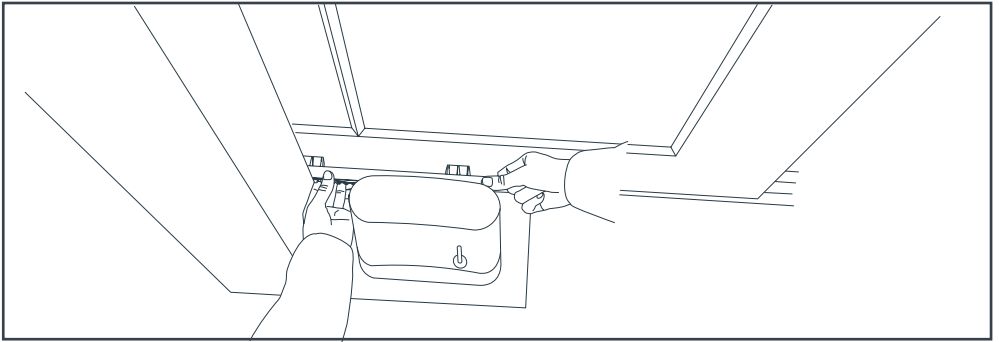
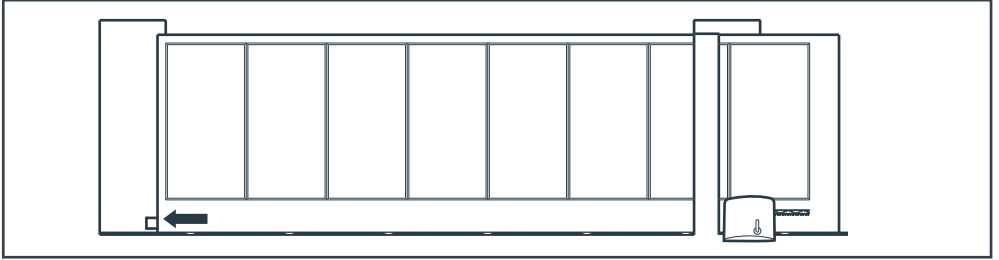
When the motor is horizontal, tighten the locknuts to block the clamp nut, then tighten the clamp nuts to keep the motor in position.

3.2. Attaching the rack

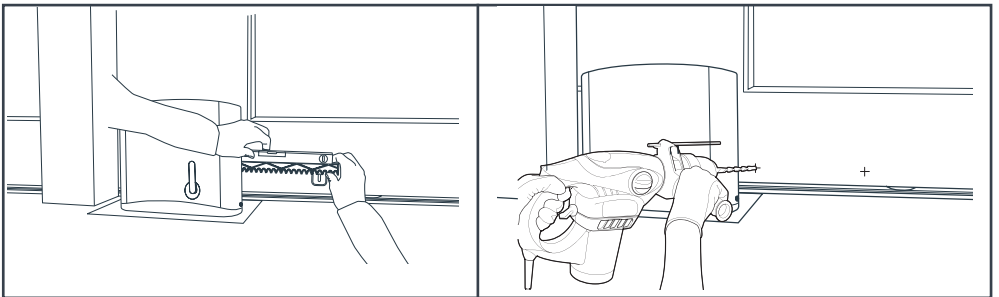
Disengage the motor in order to manoeuvre the gate manually during installation of the rack



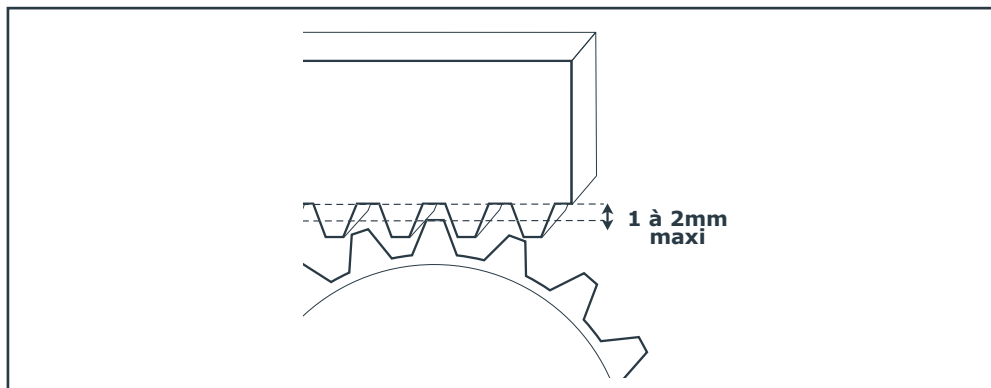
Close the gate completely. Position the first part of the rack on the engine's cog. The part of the gate where the rack parts should be attached must be rigid.

C - INSTALLATION

Slightly open the gate, keeping the rack's position against it until the two first mounting brackets appear. Then mark the location of the first two holes.



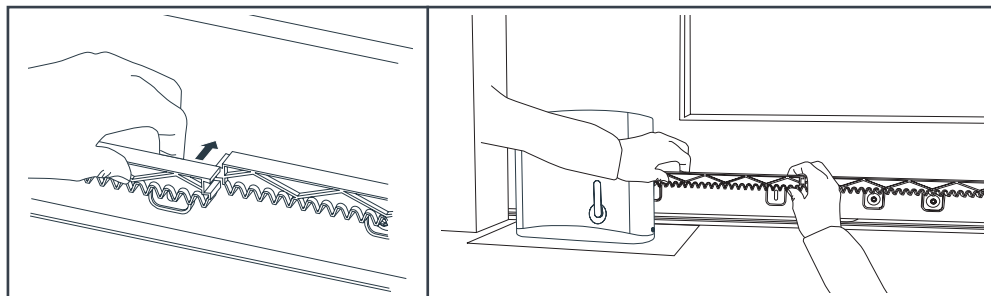
The rack must be perfectly horizontal. Use a spirit level if necessary. Leave a distance of 1 to 2 mm maximum between the rack and the geared motor's cog.



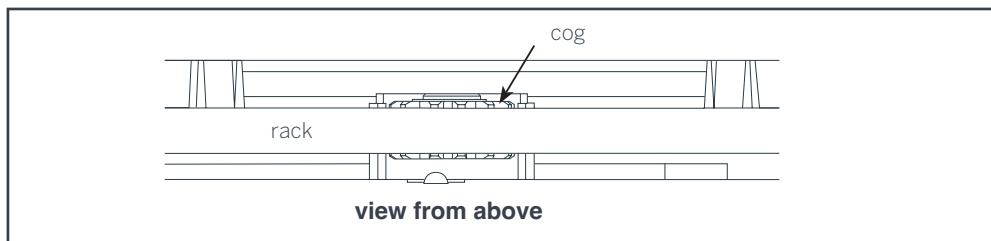
Attach the rack with the washers and screws provided. Then slightly open the gate to fasten the rack's third bracket.

Open the gate a little more in order to connect the second part of the rack with the first. Position the left-hand end of the new part in contact with the cog. Mark the holes, drill and fasten.

Continue in the same way with as many parts as necessary to open the gate fully.



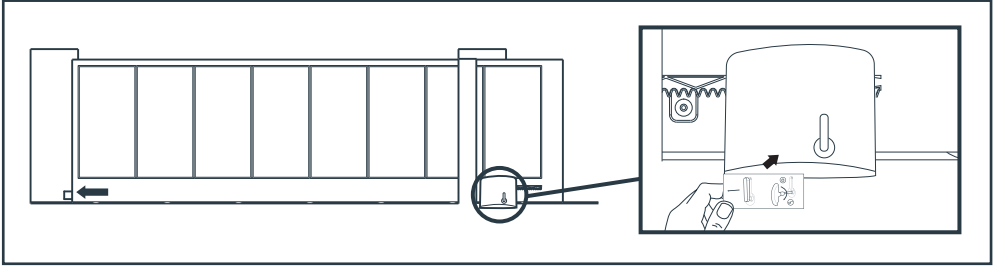
Check that the whole rack is centred on the motor's cog. If it is not, adjust the position of the motor on its base.



C - INSTALLATION

3.3. Attaching the label about the disengagement mechanism

Fasten the label (sticker) about the disengagement mechanism permanently on the visible part of the motor.

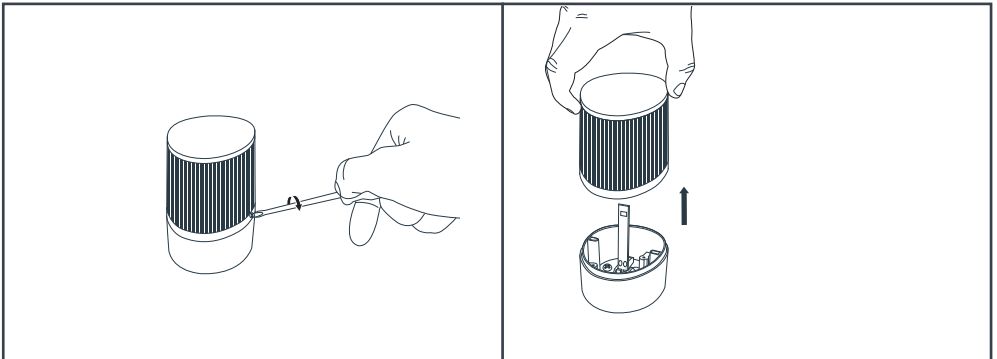


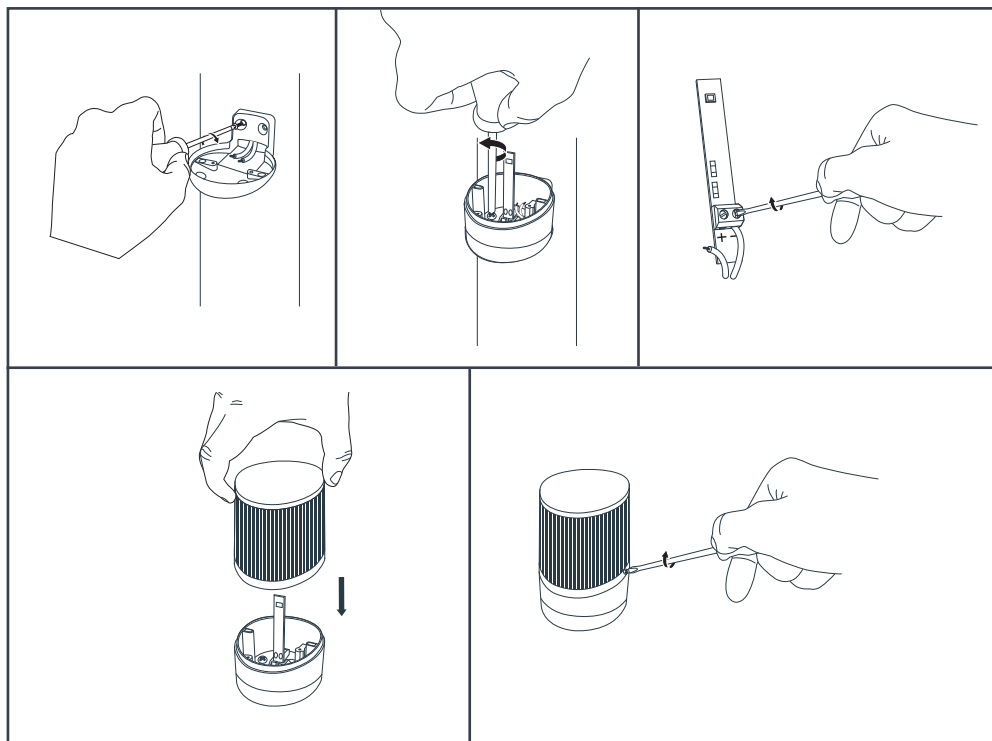
3.4. Flashing light installation

The flashing light must be fastened at the top of the post on which the switchgear is attached and must be visible both inside and outside. Only use the light provided in the kit (24 V - 2 W).

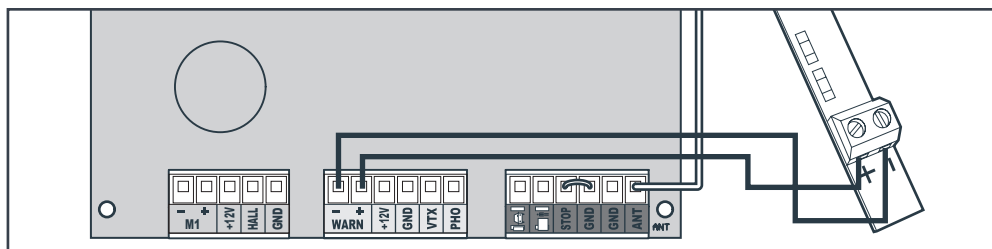
The flashing light may be fastened on the wall with or without support.

- With a screwdriver, remove the transparent part of the flashing light by unscrewing the 2 screws that hold the upper part of the flashing light.
- Still with a screwdriver, remove the flashing light bracket by unscrewing the 2 screws inside the light.
- Fasten the flashing light bracket to the wall (ignore this step if you are fastening the light directly to the wall).
- Run the wires into the flashing light and connect them to the LED lightbulb (maintaining the "+" and "-" polarity).
- Screw the flashing light to its bracket and screw in the transparent part.





- Use 2 x 0.5 mm² minimum section cable
- Maintain the polarity

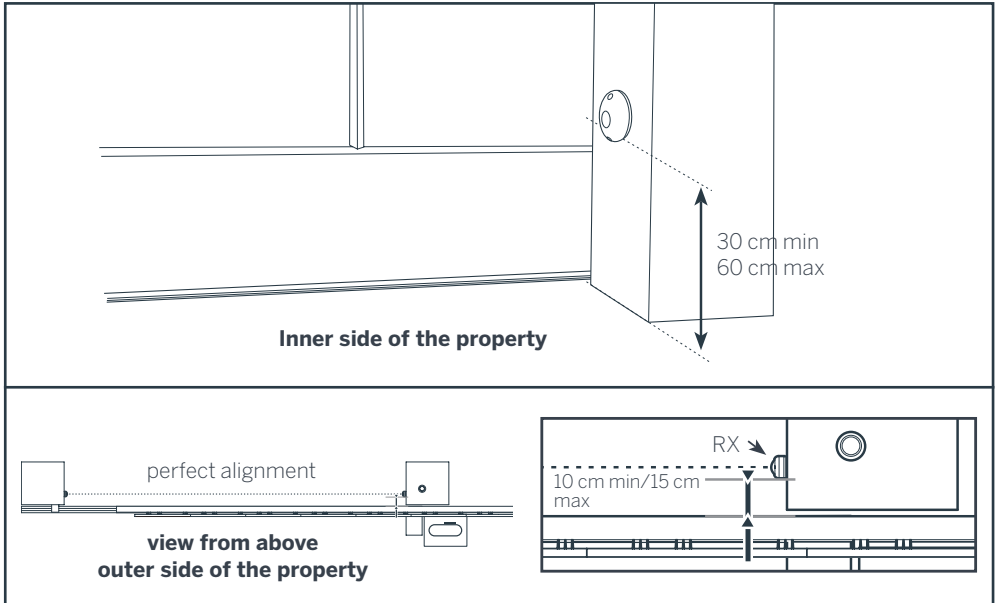


C - INSTALLATION

3.5. Attaching the set of photocells

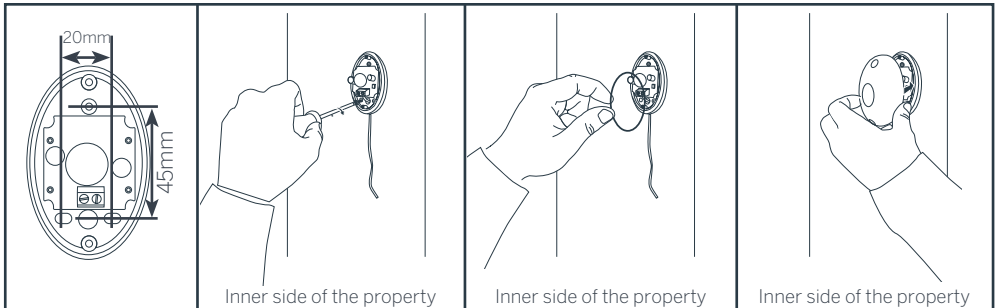
Install the photocell receptor (RX is inscribed on back) on the same side as the motor. The surface of the posts must be perfectly flat in order to properly align the infrared beam of the photocells.

- Place the photocells at exactly the same height from the ground; they must be perfectly aligned. The height must be between 30 cm and 60 cm.
- The distance between the outer side of the gate and the photocells must be between 10 and 15 cm.

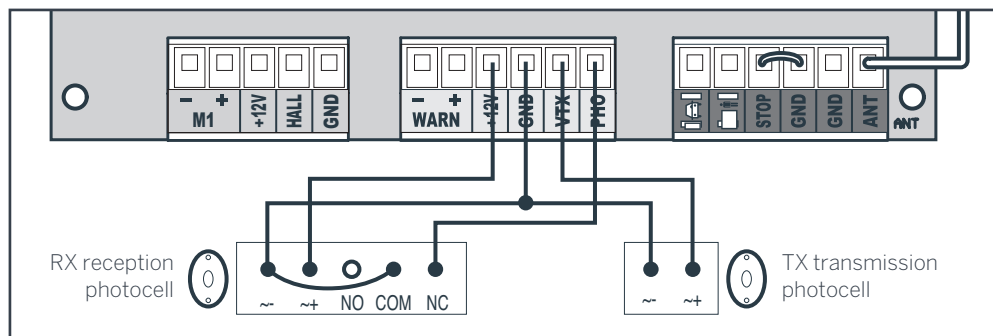


Fastening the photocells:

- Open the photocells by removing the 2 covers.
- Position the photocell in a vertical position in the location defined.
- Mark the position of the two fastening holes and the position of the hole for the cable to run through.
- Drill and fasten the photocells on the posts.



Electrically connect the photocells and identify the colour of the wires to then connect them to the electronic card.



When the photocells have power, a red indicator is lit inside each one. When the photocells are aligned, only one red indicator is lit inside the RX photocell. If the photocells are not aligned, a second indicator is lit in the RX photocells.

Move your hand in front to hide the infrared beam. The second indicator should light up in the RX photocell. A relay click can be heard when the status changes.

Note: The electronic card of this motorised gate goes on standby after 1 minute with no action. On standby, the photocells no longer have power. To come out of “standby” mode, press one of the buttons of the control card.

If you have other photocell configurations, refer to the “connections” paragraph, PHOTOCELLS, page 23.

4. CONNECTIONS

The cables run must comply with applicable standards (NFC 15-100). Either the cable is 80 cm deep with red warning mesh, or the cable is run through a sheath.

Safety instructions:

All electrical connections must be made with the power off, by a qualified electrician.

4.1. Connection to the mains electricity

Important notes:

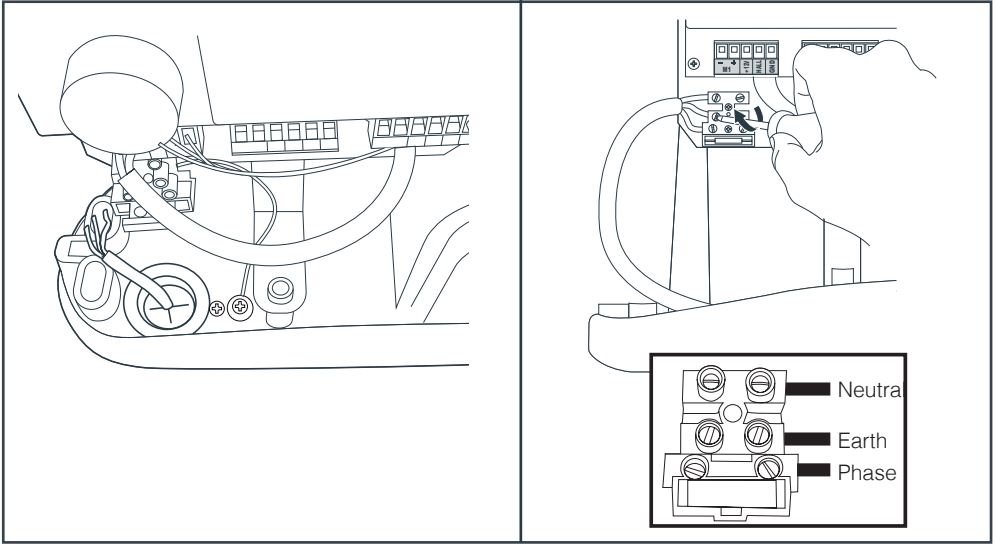
The electrical line must solely be used to power the gate motor drive and protected by a fuse or circuit breaker (6A min, 16A max) and a differential device (30mA). It must be compliant with the applicable electrical safety standards.

The motor drive is protected by a 250V - 5A time-delay fuse.

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The 230V power cable must be HO5RN-F type.

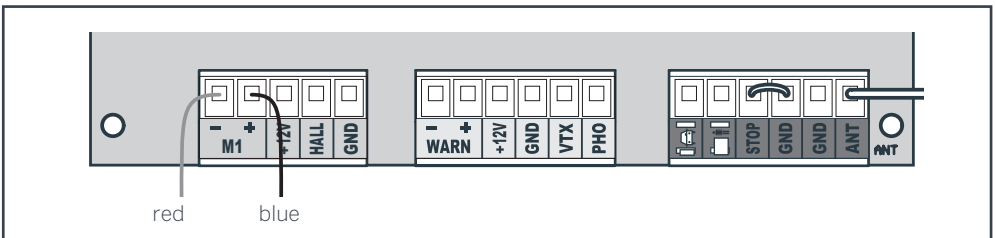
- Make the connections to the terminal block using the recommended cable.
- Screw in.



4.2. Motor polarity

The motor is already connected to the electronic card, but its connection direction depends on the direction in which the gate opens ("LR opening", "RL opening").

- If the opening is only from left to right ("LR opening"), there is nothing to be done.
- If opening is from right to left ("RL opening"), reverse the motor connection polarity as shown below:

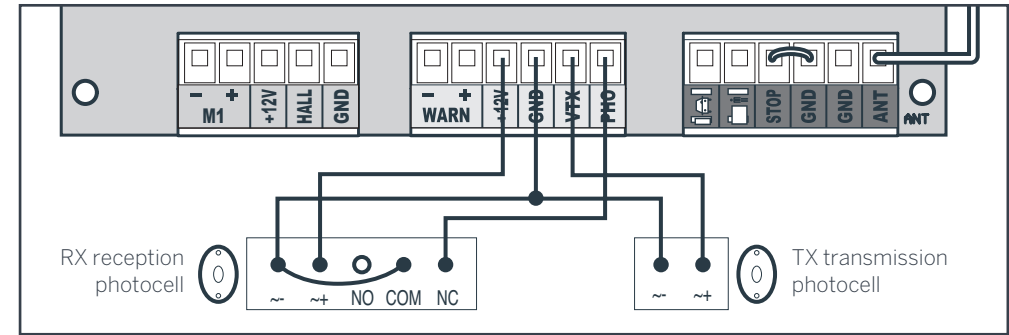


4.3. Flashing light

Connect the flashing light wires as described in the “Installation” part, FLASHING LIGHT INSTALLATION, page 20.

4.4. Photocells

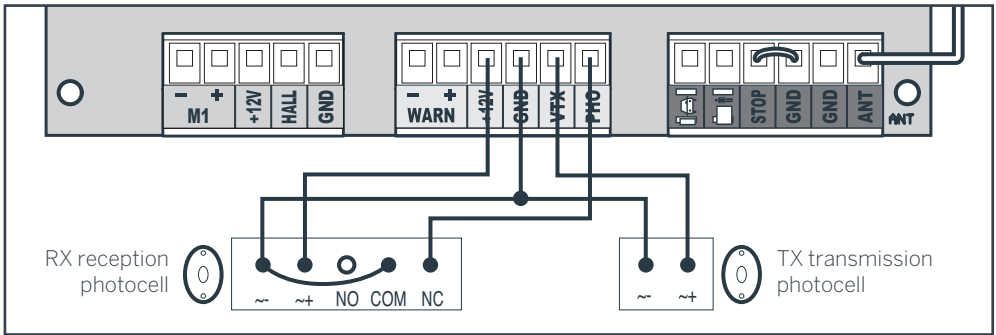
- Connect the photocell wires to the terminal block as shown in the diagram below, then reconnect the terminal block.



4.4.1. One set of photocells

By connecting the photocells in this way, the system reacts to the infrared beam being cut only during closing. To validate the presence of the photocells, you must restart the card by disconnecting the power until the LEDs are off. It is important to remember the bridge between “-” and “COM”.

Reminder: the photocells are detected when the electronic card is switched on. If you install the photocells after the first time it is switched on, please remove the power supply for 2 minutes, then put it back.



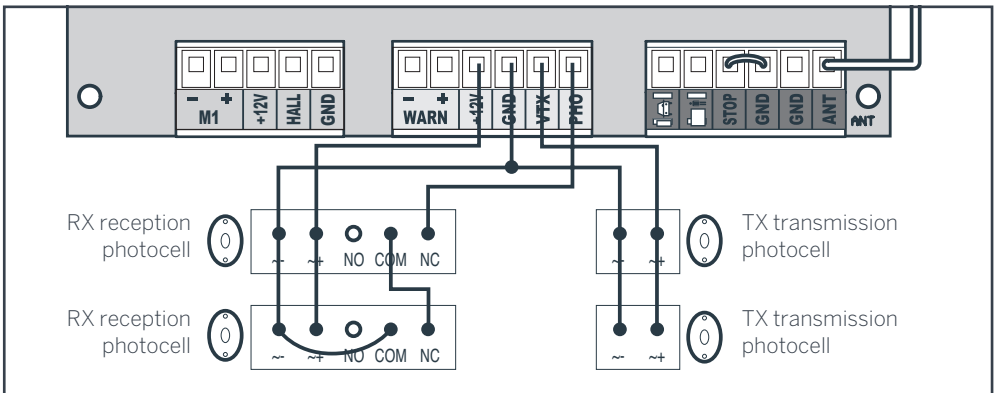
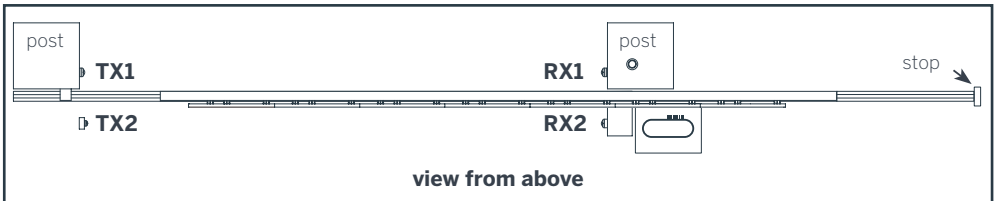
C - INSTALLATION

4.4.2. Two sets of photocells

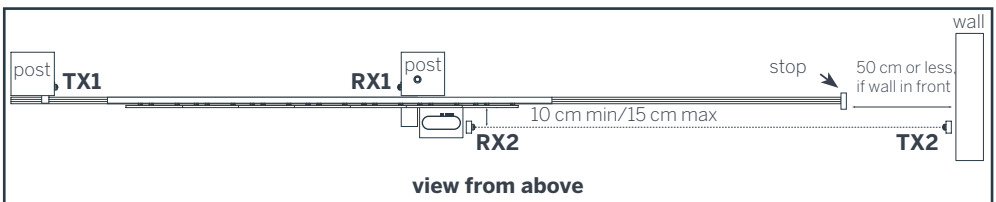
For use when the gate is not visible. You must install a second set of photocells to prevent the gate from opening when an item (car, person, etc.) is behind the gate.

Primary edge protection: by connecting the photocells in this way, the system reacts to one of the infrared beams being cut only during closing. It is important to remember the bridge between "-" and "COM".

Reminder: the photocells are detected when the electronic card is switched on. If you install the photocells after the first time it is switched on, please remove the power supply for 2 minutes, then put it back.

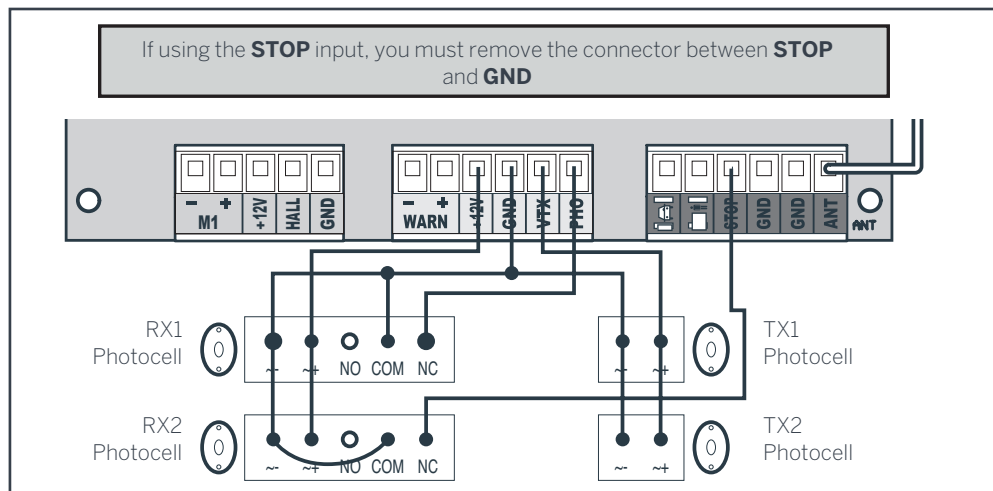


Primary and secondary edge protection: in the previous case, the second set cannot be mounted to protect the secondary edge of the gate during opening. For this type of operation, connect the second set of photocells to the "emergency stop" input as shown below:



By attaching the photocells in this way, the system reacts to either of the infrared beams being cut during closing, and the secondary edge beam during opening. It is important to remember the bridge between "-" and "COM".

Reminder: the photocells are detected when the electronic card is switched on. If you install the photocells after the first time it is switched on, please remove the power supply for 2 minutes, then put it back.

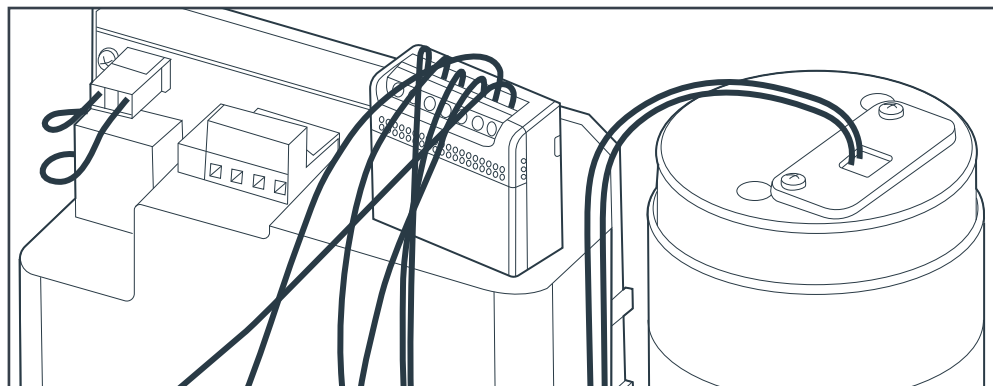


4.5 - Connection of the Guardian connected module (ref: 520015)

NOTE: this module is compatible with all ADSL 2.4GHz routers.

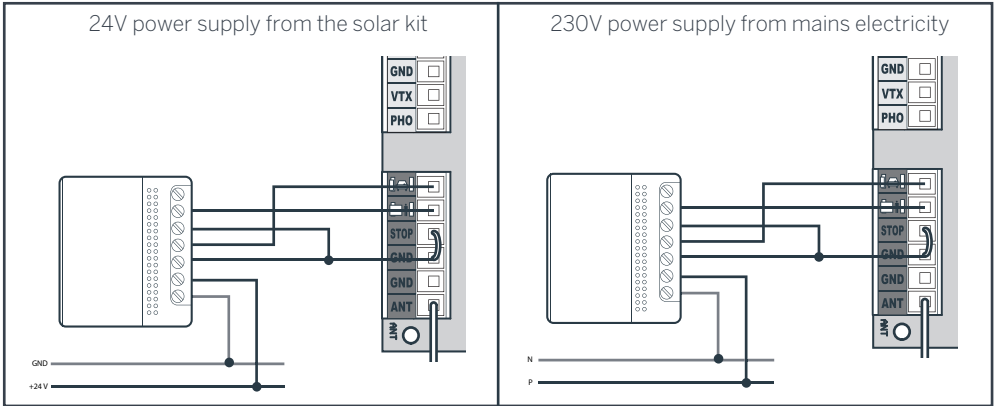
This micromodule will enable you to control your gate or your garage door remotely from your smartphone and the At Home application. The module has two outputs, one to open the gate, the other to open in door mode if the motor drive allows it.

IMPORTANT: Before permanently attaching your accessory, we advise you to check the range. To do so, place your micro module as close as possible to its final location before you attach it and test your accessory.



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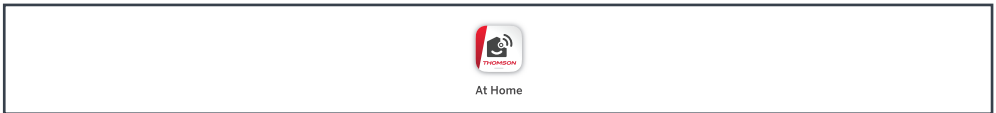
Connect the dry contact output wires as on the diagram below. The module can be powered either by 230V AC mains voltage or by DC 24V voltage which may come from a solar kit. Observe the polarity +/-.



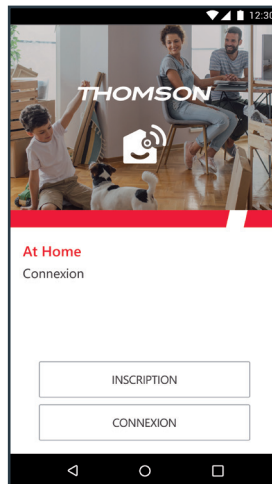
4.5.1. - Pairing the module

Once the Guardian module is connected, follow the instructions below to pair it. The 230V power supply or solar kit must be operational.

- Download the Thomson At Home application from the Android Play Store or Apple store



- Launch the application and log in if you already have an account. If you do not, press REGISTER and let yourself be guided by the application



Once you have entered your e-mail and password, you will receive a confirmation code in your e-mail inbox. Enter this code to finalise the registration.

At Home
Code de confirmation

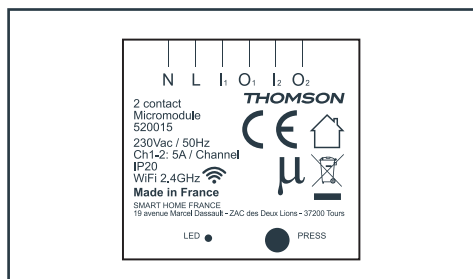
Un mail vous a été envoyé avec un code de confirmation à entrer ci-dessous pour confirmer la création de l'utilisateur

votre-email@thomson.com

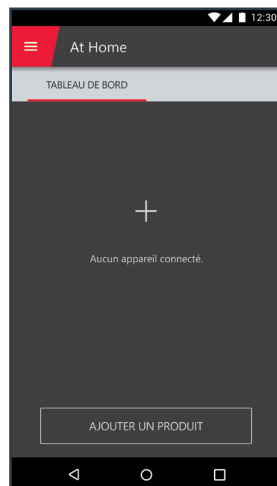
Code de confirmation

RETOUR **SUIVANT**

- The module is in pairing mode by default. If it has previously been paired, press the RESET button for 10s to reset the module and make pairing possible.

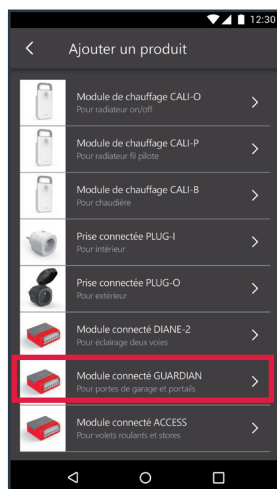


- To start pairing, press ADD A PRODUCT.



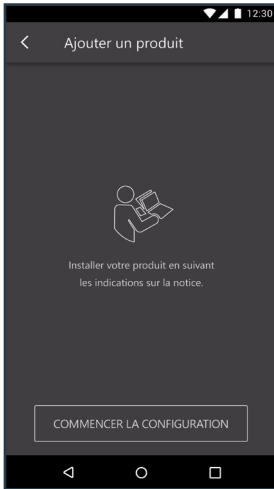
Once pairing is complete, the product will be linked to your account.

- Select the product that you want to pair and select the GUARDIAN module



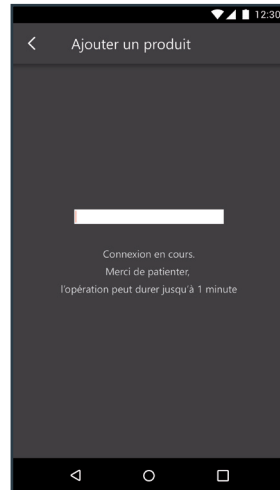
C - INSTALLATION

- Check the connection and press START CONFIGURATION

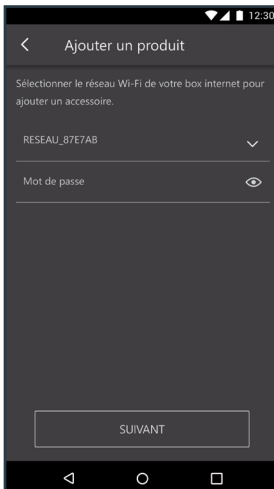


- Please wait during the pairing procedure. This stage can take several minutes.

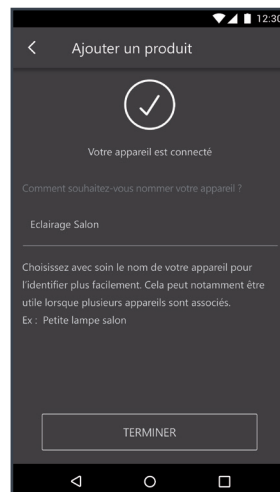
- In case of failure, check the Guardian module Wi-Fi range. To do so, set up short wiring, in the vicinity of your Wi-Fi network. Check your network password and check that you are on 2.4GHz Wi-Fi.



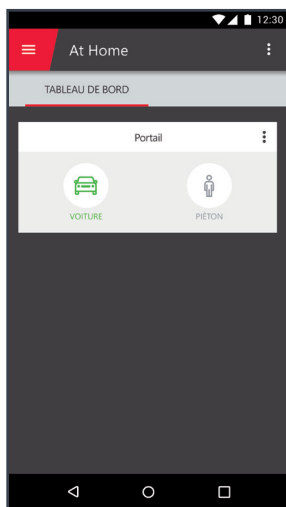
- Select your 2.4GHz Wi-Fi network (Note that your smartphone must be connected to the Wi-Fi network to which the Guardian module will be connected), insert your network password and press NEXT



- Your module has been paired successfully. You can set a name and press FINISH



- Your module is now operational and appears in your dashboard. You can now control your gate from your smartphone.

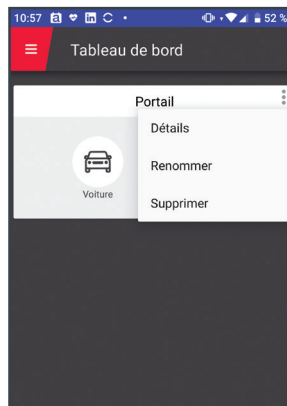


- The icon changes to green a few seconds after gate activation. If this does not happen and the icon remains grey, you must have a connection problem. Check the range and your Wi-Fi connection.
- From this step, you can add this device to the Google Home and Alexa voice assistants.
- If you want to give access to your family, they must download the At Home application and connect to the account on which the module is saved.

For more details and other features, download the full instructions for your module from our <https://www.mythomson.com>

The following indications may help you if you have any problems during the pairing procedure:

- A long press (more than 10s) on the button located on the back of the module enables you to reset the module. The module must also be deleted from the application.

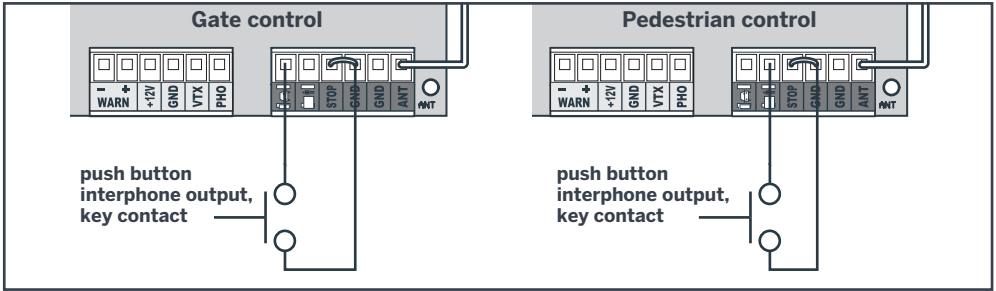


- The LED located on the control module gives the following indications:
 - **Fast flashing:** The module is in pairing mode with the smartphone
 - **Slow flashing:** The module is connecting to the server
 - **LED off:** The module is connected; it can be controlled

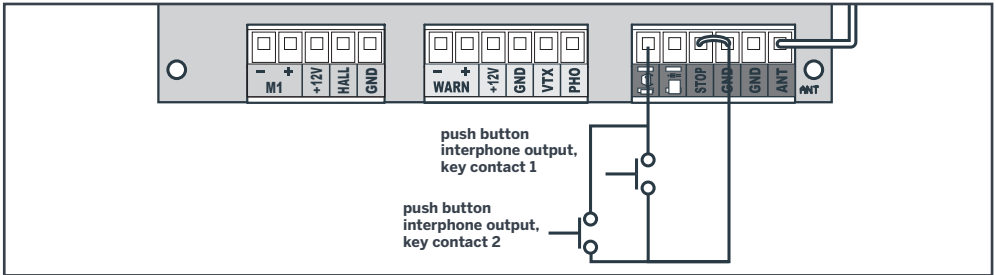
C - INSTALLATION

4.6. Control parts (optional)

Note: These control parts must be normally open dry contacts (push button type).



It is possible to use several wired control parts on the same input, but for this they must be connected in parallel:

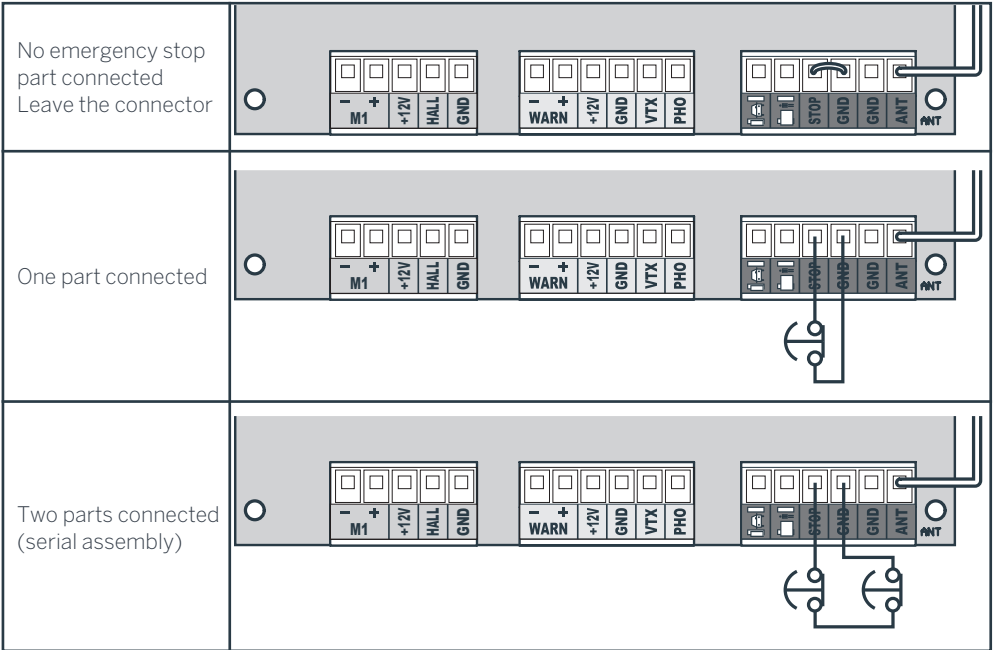


4.7. Emergency stop parts (optional)

The input for emergency stop parts is normally closed dry contact type. If no emergency stop part is installed, you must leave the connector closing the contact between STOP and GND.

Examples of emergency stop parts:

- Emergency stop punch button
- Safety edge
- Gate secondary edge protection photocells

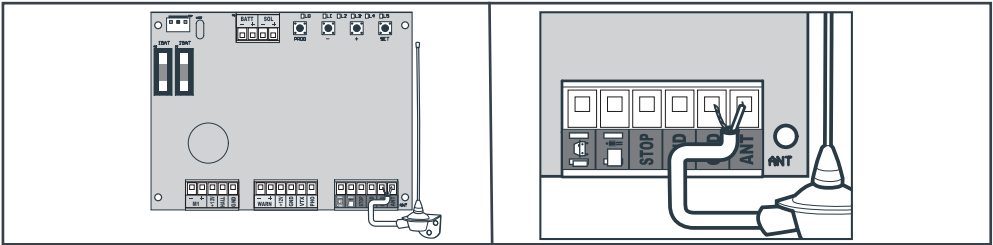


4.8. Additional antenna (optional)

An additional antenna enables you to considerably improve the remote control radio signal reception. The range is thereby increased (the gate can then be set in motion from further away). The additional antenna must be installed as high as possible and have as few obstacles as possible between the antenna and the place where you press the remote control.

Connections

- Remove the original antenna wire.
- Connect the coaxial cable on the remote antenna to the red terminal (the braid to GND and the central strand to ANT).

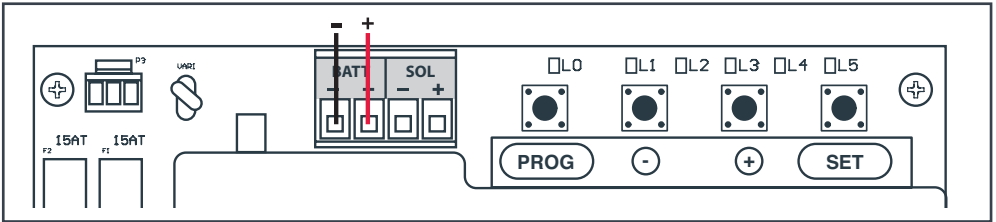


C - INSTALLATION

4.9. Backup battery (optional)

The backup battery is useful in case the power is cut and it enables you to operate the motor drive for several days. The battery voltage must be 12 V. When operating on the battery, the gate will move more slowly.

- Cut off the 230V power supply (safety switch to the OFF position).
- Connect the battery, be careful with the polarity and do not create a short-circuit. (Never cut the battery wires at the same time)
 - Cut the red cable and connect the cable to "+" on the "BATT" terminal
 - Cut the black cable and connect the cable to "-" on the "BATT" terminal



- Put the 230V power supply back on (safety switch to the ON position).
- The battery will load in 24 hours approximately. Beyond this time, test the gate's operation (1 opening + 1 closing) after having switched the motor drive off (safety switch in the OFF position).
- After this test, reconnect the power supply (safety switch to the ON position). The battery will take over if the power is cut.

4.10. Solar power kit (optional)

This motor drive may be completely powered by solar energy.

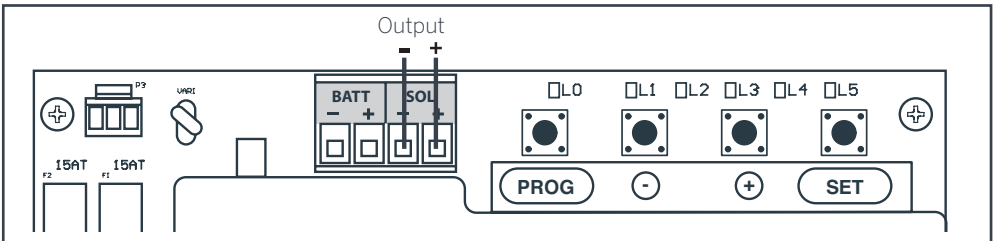
There is a kit with two batteries and a solar panel to be connected to replace the 230V power supply.

Note: it is essential to disconnect the 230 V power supply when the solar power supply kit is connected. (Disconnect the transformer from the electronic card)

Installing the solar panel and the battery: refer to the solar power kit instructions.

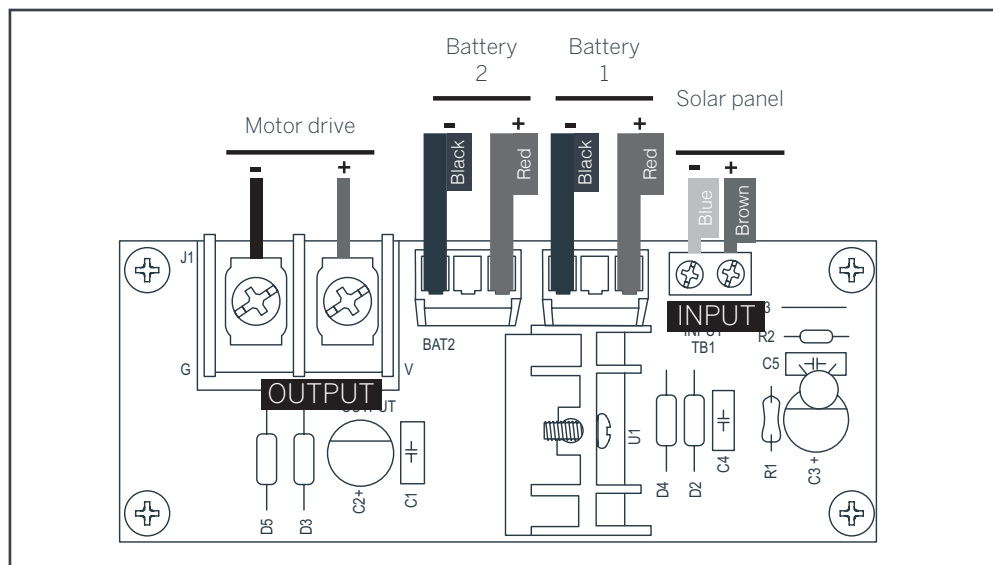
Connections

The solar kit "OUTPUT" is connected to the "SOL" input like on the drawing below



1. Connect the motor drive to the "OUTPUT" terminal using a 2 x 1.5 mm² cable that is no longer than 2 m. If the cable length necessary to the connection is above 2 m, use 2 x 2.5 mm² (maximum 5 m) cable.

Be careful to respect the polarity and follow the connection diagram very closely.



2. Connect the solar panel to the green "INPUT" terminal. Respect the polarity by following the connection diagram closely.
3. Put the two batteries in place. Fasten the hoop to hold the batteries.
4. Reconnect the battery terminals
5. Close the housing lid and put the screws on the sides.
The motor drive is now powered by the batteries.

Notes:

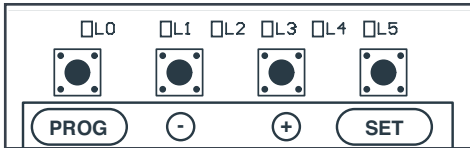
- Depending on how long the batteries have been stored in the warehouse, it may be necessary to leave the system to charge for several days (preferably sunny days) before being able to use the gate motor drive.
- The solar power kit allows you to operate the gate for 10 open/close cycles a day.

D - BEGINNING OPERATION

Note: Operation must be begun and adjustments made by a person qualified to work on this equipment because the active parts are accessible.

1. SETTINGS INTERFACE

Indicators



- **L0** = Green LED (switched off when the card is on standby)
- **L1 to L5** = Red LEDs, display information concerning settings, events (or errors) or the battery status.

Buttons

- **PROG** = Enter or exit settings menus.
- **“-” / “+”** enables you to select, adjust a value and browse the event history.
- **SET** = Enter sub-menus, confirm a setting, view the battery voltage or history of events, enter manual control.

Important notes:

You can do a short press on a button (hold the button down for less than 1 second) or long press (hold the button down for 3 seconds). In the following, when we write:

- “Press the button”, this means a short press (one press) on this button.
- When we write “long press”, you must press the button for 3 seconds.

In the following, what to press on the buttons is described from MENU 0. It's the display menu that appears just after the power has been switched on for example, just after the gate has moved (before standby) or even when the card is on standby (in this case, the green LED L0 is switched off).

To be sure of being on MENU 0 of the display, press on PROG 2 or 3 times and the green LED should be switched on (only the green LED).

With no user action on a button for 15 seconds, the system automatically goes back to MENU 0.

2. QUICK SETTINGS

2.1. Self-learning

Self-learning enables the card to learn how far the gate moves. Before starting this step, the gate must have fixed stops at the end of closing and end of opening to stop its movement.

Self-learning starts with a closing cycle. If this is not the case, stop the learning cycle by pressing the **“SET”** button and reverse the motor's connections (see paragraph 4.2 Motor polarity page 24)

Self-learning procedure:

- The flashing light starts (1 flash per second).
- **Phase 0:** Detection of the closing stop; the gate closes up to the closing stop.
- **Phase 1:** Measurement of opening length, the gate opens up to the opening stop.
- **Phase 2:** Measurement of the closing length; the gate closes up to the closing stop.

Starting self-learning:

- Press on **PROG** 2 or 3 times and the green LED should be switched on (only the green LED)
- Long press on the **“+”** button and self-learning will start.

Once self-learning has finished, you can use your gate motor drive.

If self-learning has stopped, see “ANOMALY GUIDE page 43” to find out the cause. Resolve the problem with the table and restart self-learning.

If you would like to change the settings on your motor drive, go to the “ADVANCED SETTINGS” paragraph

2.2. Adding remote controls

You can control the complete or partial (pedestrian) opening of the gate. On a remote control, it is possible to decide which button will be used as the gate command and which button will be used as the pedestrian command.

2.2.1. Programming with the card

• Programming a button for the COMPLETE OPENING command:

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED)
- Press “-” for 3 seconds and L1 will switch on.
- Press SET and L1 and L5 will switch on alternately.
- While the indicators are flashing, press the remote control button to be memorised.
- The red LEDs will all switch on for 1 second (memorisation is successful).

If the red LEDs switch off without having flashed, this means that the system has exceeded the 10 second wait without anything being confirmed. Restart programming.

• Programming a button for the PARTIAL OPENING command:

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED)
- Press “-” for 3 seconds and L1 will switch on.
- Press “+” and L1 will switch off and L2 will switch on.
- Press SET and L1 and L5 will switch on alternately.
- While the indicators are flashing, press the remote control button to be memorised.
- The red LEDs will all switch on for 1 second (memorisation is successful).

If the red LEDs switch off without having flashed, this means that the system has exceeded the 10 second wait without anything being confirmed. Restart programming.

2.2.2. Copy programming

From a remote control that has already been memorised, you can memorise other remote controls (“copy” function).

For each new remote control to be memorised, follow this procedure:

- Press simultaneously on both buttons at the bottom of the remote control already in the memory until the flashing light switches on (around 6 seconds).
- Press the button of the new remote control to be memorised. The flashing light will flash 3 times to confirm the new remote control.

Your new remote control is now memorised (the buttons will have the same function as the original remote control).

2.3. Deleting all remote controls

To deprogramme all the remote control buttons learnt, follow this procedure:

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED)
- Press “-” for 3 seconds and L1 will switch on.
- Press “+” twice and L1 will switch off and L3 will switch on.
- Press SET and the 5 red LEDs will switch on.
- Press SET for 3 seconds and all the LEDs will switch off and switch on to confirm the operation.

All the remote controls will be deleted from the memory.

3. ADVANCED SETTINGS

In this part we are going to see how to perform the remote settings. Below is the list of possible settings:

D - BEGINNING OPERATION

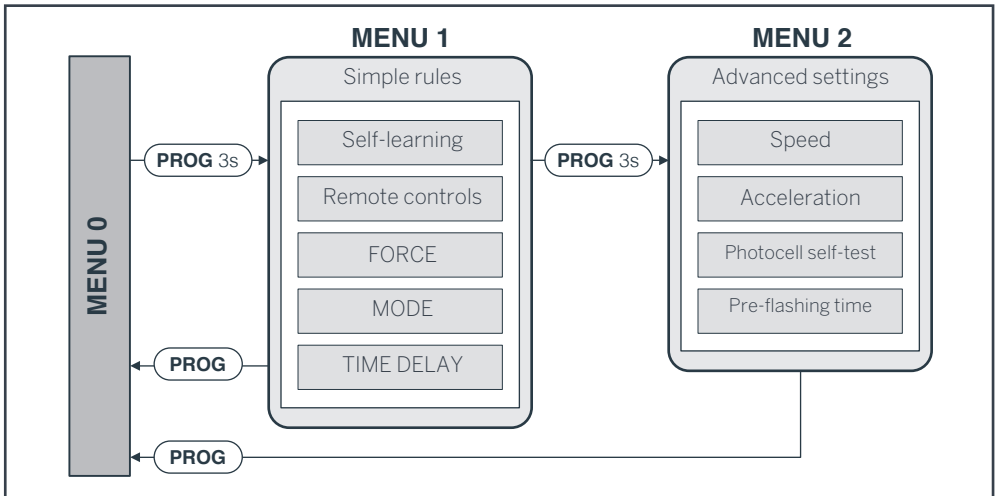
• MENU 1

- Self-learning
- Programming remote controls
- Motor force
- Operating mode (automatic closing or semi-automatic closing)
- Time delay (for automatic mode)

• MENU 2

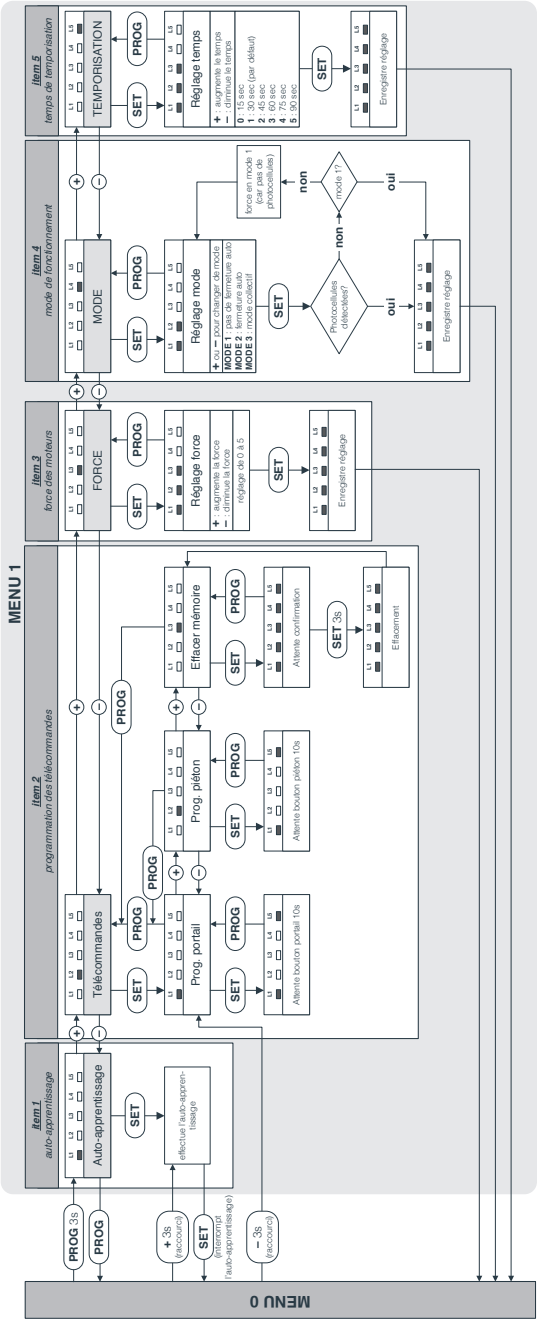
- Motor speed
- Acceleration/deceleration at end of travel
- Photocell self-test
- Flashing light pre-flashing time

After each new adjustment it is necessary to start new self-learning



3.1. Menu 1

To access menu 1, press the “PROG” button for 3 seconds. L0 will flash once and L1 will switch on.



D - BEGINNING OPERATION

3.1.1. Self-learning

See the "QUICK SETTINGS" paragraph, page 31

3.1.2. Programming remote controls

See the "ADDING REMOTE CONTROLS" paragraph, page 32

3.1.3. Motor force

This system controls the motor force by limiting the maximum power. The force can be adjusted from 0 to 5. The default force is set to 3. In most cases, it is not necessary to change this setting.

However, if the gate is very heavy, or there is too much friction due to the guide rails, it may be necessary to increase the force. After the having completed the self-learning and programmed a button on the remote control, initiate the gate to open completely, to see if it opens fully, without appearing to struggle. If it is struggling, increase the force.

To adjust the force, follow this procedure:

- Press "PROG" for 3 seconds. L0 will flash once and L1 will switch on.
- Press "+" twice and L3 will switch on instead of L1.
- Press "SET", and the number of LEDs lit will then show the value of the force set.
- Use the "+" and "-" buttons to change the force and confirm with the SET button. All the LEDs will switch on and off to confirm the operation.
- Restart self-learning to confirm the force; long press on the "+" button and self-learning will start

3.1.4. Operating mode (automatic closing or semi-automatic closing)

This motorised gate has 3 operating modes

Semi-automatic mode (mode 1) (default)

- Closed gate, one press on the gate command (complete or partial) opens the gate.
- Open gate, one press on the gate command (complete or partial) closes the gate.
- While the gate is in motion, you can stop it by pressing a command (complete or partial).
- By pressing on the gate command again, the gate starts in the opposite direction.

Automatic closing mode (mode 2)

In this operating mode, you must connect the photocells and they must be functional.

- Closed gate: one press on the gate command (complete or partial opening) opens the gate, which remains open for a certain time (adjustable time, see "Time delay"), then closes automatically.
- During the time delay, you can cancel the automatic closure by pressing a command (complete or partial). The gate stays open and you must press the command to close the gate.
- While the gate is in motion, you can stop it by pressing a command (complete or partial).
- By pressing on the command again, the gate starts in the opposite direction.

Collective mode (mode 3)

This mode is used for a gate with collective access. In this operating mode, you must connect the photocells and they must be functional.

- Closed gate: one press on the gate command opens the gate, which remains open for a certain time (adjustable time, see "Time delay"), then closes automatically.
- If you press a command during opening, it will not be acknowledged.
- If you press a command during the time delay, instead of cancelling the automatic closure, the time delay starts again at 0.
- If you press a command during closure, the gate shuts, opens again and starts the automatic closure time delay.

Note: you can only control complete opening; the partial opening command does not work.

D - BEGINNING OPERATION

To choose the operating mode, follow this procedure:

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED).
- Press “PROG” for 3 seconds. L0 will flash once and L1 will switch on.
- Press “+” 3 times and L4 will switch on instead of L1.
- Press SET and the number of LEDs switched on will then indicate the operating mode that has already been set (mode 1 by default).
- To change the operating mode, use the “+” and “-” buttons, then confirm with the SET button.

At the time of this confirmation, the system will detect whether there are photocells.

Modes 2 and 3 requires the presence of photocells to protect the gate’s passage when closing automatically (5.5.1 of NF EN 12453 standard). If photocells have not been detected when you have set mode 2 or 3, the system reverts to mode 1 by switching only LED L1 on.

- If no photocells are connected, mode 1 is confirmed by default.
- If photocells are connected, but not detected, check that they are connected correctly and correctly aligned.
- If photocells have been detected, irrespective of the mode set, all the LEDs switch on and off to confirm the operation.

Note:

Irrespective of the mode, the system registers or does not register the fact that the photocells are connected to the electronic card.

Reminder: the photocells are detected when the electronic card is switched on. If you install the photocells after the first time it is switched on, please remove the power supply for 2 minutes, then put it back.

The presence of photocells protects the passage when the gate is closing and to ensure that they are in working order, each time the gate starts to close, the system performs the photocell detection procedure (photocell self-test).

3.1.5. Time delay (for automatic mode)

The time delay is the time during which the gate remains open before closing automatically (if automatic closing is activated).

To adjust this value, follow this procedure:

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED).
- Press “PROG” for 3 seconds. L0 will flash once and L1 will switch on.
- Press “+” 4 times and L5 will switch on instead of L1.
- Press “SET”, and the number of LEDs lit will then show the value set.
- Use the “+” and “-” buttons to change this value (see table below).
- Press “SET” to confirm this value, and all the LEDs will switch on and off to confirm the operation.

This time is adjustable from 15 seconds to 90 seconds by 15 second interval as defined in the table below (set to 30 seconds by default).

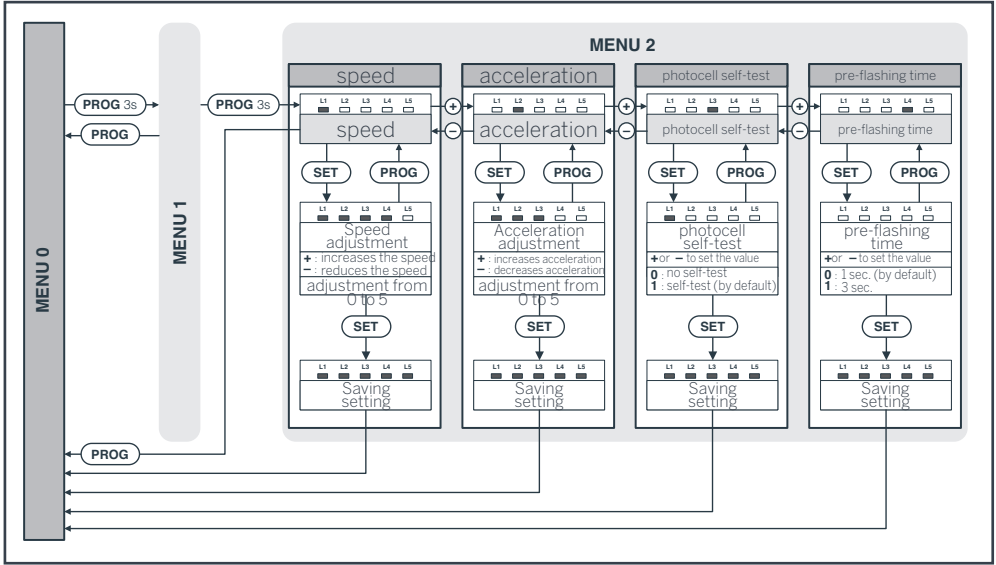
LED on	L0	L1	L2	L3	L4	L5
Real time	15 secs	30 secs	45 secs	60 secs	75 secs	90 secs

3.2. Menu 2

To access menu 2

- Press the “PROG” button for 3 seconds. L0 will flash once and L1 will switch on.
- Press the “PROG” button for 3 seconds again. L0 will flash twice and L1 will remain on.

D - BEGINNING OPERATION



3.2.1. Motor speed

You can adjust the speed by a value of 0 to 5. The default speed is set to 3.

To adjust this value, follow this procedure:

- Press "PROG" for 3 seconds. L0 will flash once and L1 will switch on.
- Press "PROG" for 3 seconds. L0 will flash twice.
- Press "SET", and the number of LEDs lit will then show the value set.
- Use the "+" and "-" buttons to change this value.
- Press "SET" to confirm this value › all the LEDs will switch on and off to confirm the operation.

Note:

To meet the requirements of EN 12453 standards, it is recommended to adjust the motor speed to the gate's weight:

LED on	L0	L1	L2	L3	L4	L5
Speed	0	1	2	3	4	5
Max weight (kg)	200	170	130	100	70	50

3.2.2. Acceleration/deceleration at end of travel

You can adjust the acceleration at the start and as the gate approaches the stops by a value from 0 to 5. Default acceleration is set to 3. The higher this value, the more quickly the gate will start and slow down at the end of travel.

This value corresponds to the distance of the gate's journey in the acceleration or deceleration phase. The default value is 3, which gives a distance of 31 cm approximately. It may be useful to increase this distance for a softer start.

To adjust this value, follow this procedure:

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED).
- Press "PROG" for 3 seconds. L0 will flash once and L1 will switch on.
- Press "PROG" for 3 seconds. L0 will flash twice.
- Press "+" once and L2 will switch on instead of L1.
- Press "SET", and the number of LEDs lit will then show the value set.
- Use the "+" and "-" buttons to change this value (see table below).

- Press “SET” to confirm this value, and all the LEDs will switch on and off to confirm the operation.

LED on	L0	L1	L2	L3	L4	L5
Distance	78 cm	63 cm	47 cm	31 cm	23 cm	16 cm

3.2.3. Photocell self-test

The system will perform a self-test on the photocells (connected to “PHO”) several times:

- When the power is switched on.
- When the operating mode setting is confirmed.
- Before the gate is set into motion if they are active for the time of movement requested.
- The reception and transmission photocells have a separate power supply.

The photocell self-test is activated by default. Most photocells on the market have a separate power supply. If you wish to connect photocells with a shared power supply, the self-test will not detect these photocells. You can then deactivate it.

To activate or deactivate this function, follow this procedure (the self-test should not be deactivated if the photocells are not connected):

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED)
- Press “PROG” for 3 seconds. L0 will flash once and L1 will switch on.
- Press “PROG” for 3 seconds. L0 will flash twice.
- Press “+” twice and L3 will switch on instead of L1.
- Press SET
- If L1 is switched on, the function is activated. Press “-” to deactivate it, then SET to confirm.
- If L1 is switched off, the function is deactivated. Press “+” to activate it, then SET to confirm.

D - BEGINNING OPERATION

If 2 sets of photocells are connected in a series, this function does not enable you to detect a potential fault in one of the sets.

It is still necessary to perform a manual test of all the safety parts at least once every 6 months.

3.2.4. Flashing light pre-flashing time

The flashing light is an essential safety component. It starts when a command to set the gate in motion is received by the electronic card. The gate is set in motion around one second after a command is received. In certain use cases, it is better that the time between receiving a motion command and the start of the manoeuvre is longer. It is possible to increase this time to 3 seconds.

To set the pre-flashing time, follow this procedure:

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED).
- Press “PROG” for 3 seconds. L0 will flash once and L1 will switch on.
- Press “PROG” for 3 seconds. L0 will flash twice.
- Press “+” 3 times and L4 will switch on instead of L1.
- Press SET.
- If L1 is switched off, the time is 1 second. Press “+” to increase it to 3 seconds, then SET to confirm.
- If L1 is switched on, the time is 3 seconds. Press “-” to reduce it to 1 second, then SET to confirm.

E - OPERATION

1. WARNINGS

A motorised gate is a product that can cause injury to people and animals and damage to property. Our motorised gate as well as its installation and user guides were designed to remove all hazardous situations.

Avidsen cannot be held liable for any installation or use that does not comply with the instructions and causes damage. It is essential to read the instructions carefully before using your motorised gate and to keep these instructions for any later use.

2. OPENING/CLOSING

The gate can be controlled from a programmed remote control or a wired control device.

3. TYPE OF COMMAND

There are two types of command to manoeuvre the gate:

- **Complete opening command**, activation by a remote control button programmed for complete opening or by the dry contact input



- **Partial opening command (opening to 1m20)**, activation by a remote control button programmed for partial opening or by the dry contact input



4. OPERATING MODES

The operating mode is set by following the instructions in the "BEGINNING OPERATION" paragraph

4.1. "Semi-automatic closure" mode

Description of operation from the closed gate position:

To open the gate:

- Activate the complete (or partial) opening command.
- The flashing light will flash (1 flash per second).
- 1 second later, the gate will start and open fully (around 1m20 for partial opening).
- The flashing light will stop flashing and the manoeuvre is complete.

To close the gate:

- Activate the complete or partial opening command.
- The flashing light will flash (1 flash per second).
- 1 second later, the gate will start and close fully.
- The flashing light will stop flashing and the manoeuvre is complete.

At any time, you can stop the gate's movement by activating a command (total or partial). If you activate the gate control again, the gate will start in the opposite direction.

4.2. "Automatic closure" mode

Description of operation from the closed gate position; the photocells must be operational:

- Activate the complete opening command.
- The flashing light will flash (1 flash per second).
- 1 second later, the gate will start and open fully (around 1m20 for partial opening).
- When the gate has reached its opening stop, the flashing light will change how it flashes (1 short flash every 1.25s): the time delay before closing will start.
- When the time delay is over, the flashing light will start its normal pace (1 flash per second).
- 1 second later, the gate will start and close fully.
- The flashing light will stop flashing and the manoeuvre is complete.

At any time, you can stop the gate's movement by activating a command (total or partial). If you activate the gate control again, the gate will start in the opposite direction. If you activate a command during the time delay, it will be stopped and automatic closure will be cancelled.

Pedestrian access mode will not trigger automatic closure. You will need to press the remote control button again to activate closure of the motor drive.

4.3. "Collective" mode

Operation is identical to "automatic closure" mode, except:

The photocells must be operational.

- You cannot stop the gate from opening, either with the complete or partial opening command. However, you can still stop the movement by activating an emergency stop part connected to the "STOP" input (see "emergency stop" explanations).
- If you activate the complete opening command during the time delay, it is reloaded with the initial time to extend the time before automatic closure.
- If you activate the complete opening command during closure, the gate will stop and open again and the time delay before automatic closure will start.
- The partial opening command is inoperative.

5. EMERGENCY STOP

Should an emergency stop part (punch button, safety edge, etc.) be connected to the "STOP" input, you can stop the gate's movement by activating this emergency stop part.

In this case, the flashing light will emit double flashes to signal the anomaly.

If, after 30 seconds, the emergency stop part is still activated, the flashing light will stop and the electronic card will go on standby.

To start the gate again, you must deactivate the emergency stop part (unlock the push button or release the pressure on the safety edge), then

activate the command that had set the gate in motion to restart the gate's manoeuvre (no reverse in direction in this case).

5.1. Photocells

During closure, if an object or a person cuts the infrared beam between the two photocells protecting the gate's primary edge (connected to the "PHO" input), the gate will stop and start opening again.

If automatic closure is activated, the time delay will start.

If at the end of the time delay, the photocell beam is cut, the gate will wait for the beam to be released before closing again. If after 3 minutes, the beam has still not been released, automatic closure will be cancelled, the system will go on standby.

Photocells can also be activated during opening (useful if a second set of photocells is installed - see "Advanced settings") if the contact of the RX photocell is connected to STOP on the card.

- If this is not the case and the beam is cut when the portal should start to open, the flashing light will emit double flashes for 30 seconds unless you activate a command.
- For the gate to be able to open, you must release the beam and activate a command.

5.2. Obstacle detection

During opening or closure, the gate may hit an obstacle.

- For safety, if the motor is forcing too much (the force is adjustable in advanced settings), the gate will stop and release the pressure and the flashing light will emit double flashes for 30 seconds.
- By activating a command, the flashing light will stop.
- By activating a command again, the gate will start in the opposite direction.
- If an obstacle is detected during closure and the operating mode is "automatic closure" or "collective", the gate will open again and the time delay will start again.

E - OPERATION

Note: After three consecutive detections, automatic closure is stopped

6. MANUAL MOVEMENT

To be able to manoeuvre the gate manually, you must disengage the geared motor.

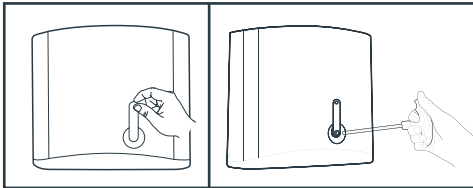
Note:

When the geared motor is disengaged, the gate may be set in motion by the wind or an external push. It is therefore important to be careful or block the gate to avoid any risk of injury.

7. MOTOR ENGAGEMENT AND DISENGAGEMENT

The action below must be performed by a qualified individual.

- Remove the red cover at the front of the motor.
- Turn the override key provided clockwise to disengage the motor
- Turn the override key anti-clockwise to engage the motor

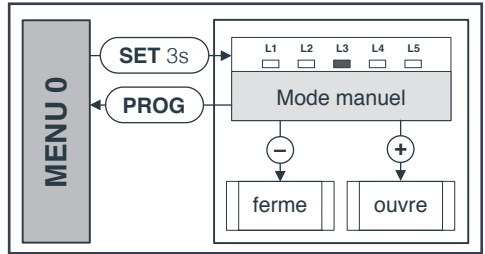


8. MANUAL CONTROL

You can manoeuvre the gate with no programming, for example during installation, to check the opening direction is correct.

- Press on PROG 2 or 3 times and the green LED should be switched on (only the green LED).
- To enter manual mode, press "SET" for 3 seconds and LED L3 will flash.
- Hold the button "+" or "-" pressed to open or close the gate.
- To finish, press the "PROG" button.

- After a minute with no action on a button, the system will automatically exit manual control.



9. RESETING

You can reset to factory settings.

To do so, press "-", "+" and "SET" at the same time for 5 seconds until an LED display appears.

All the settings now have their default value and you must redo the self-learning.

However, this procedure does not delete the remote controls from the memory.

1. MAINTENANCE WORK

Maintenance work must be carried out by the installer or a qualified individual to guarantee the installation's operation and safety.

The number of maintenance and upkeep operations must be proportional to the frequency the motorised gate is used.

Note: The warranty may be voided if the motor drive and gate are not checked regularly.

Important: All the installation or maintenance operations must be performed with the motor drive disconnected from electrical power supply.





If the disconnection device is not visible where the motor drive is located, before starting work, you must attach a sign to the disconnection device.

The first check must be carried out 1 month after installation, to check that all the instructions have been followed.

Points to check:

- The water inputs (the product is intended for outdoor use, however, incorrect positioning of the lid, the holes made to run the cable, or an incorrectly positioned grommet... can damage the product). Any trace of infiltration must be eliminated (if silicone is used, do not use an acetic acid-based silicone (smells like vinegar).
- Traces of external items (Insects can sometimes find refuge in the fixed parts. Their presence must be eliminated and the possible entrances closed off).
- The 1st month of use already gives a good idea of the motorised gate's operation.

The following checks must be performed each time the season changes:

	printemps 	été 	automne 	hiver 
vérifier le nettoyage du rail et des roues	éliminer les traces de boue, de graviers etc	éliminer les traces de poussière, de graviers etc	éliminer les feuilles mortes, boue, graviers etc	éliminer les cailloux, neige, graviers etc
vérifier que l'engrenage soit toujours propre et le lubrifier*	x	x	x	x
vérifier les sécurités	détection ampère métrique, arrêt d'urgence, photocellules, barres palpeuses			
vérifier que les zones dangereuses (cisaillement, écrasement...) soient toujours protégées	x	x	x	x
vérifier les avertisseurs (clignotant)	x	x	x	x
vérifier les réglages (force, temps de réaction, sensibilité)**	x	x	x	x
contrôler l'état de la carte électronique (élimination des poussières, insectes etc)	x	x	x	x
vérifier la position des crémaillères***	x	x	x	x
vérifier les commandes (interphones, clavier, poussoir)	x	x	x	x
vérifier les piles des télécommandes	x	x	x	x
vérifier le support moteur (déformation etc) et les fixations	x	x	x	x

* do not use grease, which tends to attract dust or dirt ** note that one adjustment made in summer may need to be changed according to the seasons (more wind in autumn, frost in winter, etc.) *** vibrations due to opening and closing may move the racks. Check the 1 mm distance between the teeth and the motor gear.

F - MAINTENANCE AND UPKEEP

2. BATTERY VOLTAGE INDICATORS

The battery voltage indicator may be operational when a 24V backup battery is connected. You can display the battery charge level:

- From MENU 0, press "SET", and the battery charge level is then shown by the number of red LEDs lit.
- If the battery voltage level is too low (no LED lit), the gate will refuse to shut to avoid closing off access

3. ANOMALY GUIDE

TYPE OF FAULT	PROBABLE CAUSE	WHAT YOU SHOULD DO
When activating the opening command, the gate does not move and the motor does not start	No 230-volt power supply	Switch the power back on
	Emergency stop pressed and/or the optional safety edge has failed	Connect the STOP terminals to the earth Check the safety edge
	Fuse(s) blown	Replace the fuse(s) with (a) fuse(s) of identical value
When activating the opening command, the motor starts but the gate does not move	There is not enough closing and opening force	Adjust the force setting according to the instructions (page 35)
	Check that the rollers are lubricated or are not impeded by an obstacle on the ground	Lubricate the rollers and let the gate move freely
	Check that the engine is engaged	Engage the motor with the disengagement system
The gate closes instead of opening	The motor is connected the wrong way round	Check the wiring according to the instructions provided (see "motor polarity" page 24)
The gate opens but does not close	Photocells not aligned	Check the alignment and wiring page 22
	Obstacle in front of the photocells	Check the clearance and cleanliness of the photocells
When activating the closing command, the gate partially closes	The motor is connected the wrong way round	Check the wiring according to the instructions provided (see "motor polarity" page 24)

4. FAULT CODES

In operation, there may be events that are malfunctions of the motor drive, or consequences of the user's action. Each different event has a code that is displayed by a combination of red LEDs switched on or off on the MENU 0 display.

F - MAINTENANCE AND UPKEEP

When you press “SET” or “PROG”, this code is deleted. However, the last 4 codes generated are memorised, and can be viewed in a history.

To access it:

- Press SET twice then use the “+” and “-” buttons to scroll through the memorised codes.

To diagnose any problems, here is the list of codes and their meaning:

☐: LED off

☒: LED on

Faults that may appear during self-learning:

L1	L2	L3	L4	L5	MEANING
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All the LEDs are off. Self-learning has been successful.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The motor is not connected to the electronic card.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The motor has run for 60 seconds on opening without the gate finding a stop; this is not normal.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The motor has run for 60 seconds on closing without the gate finding a stop; this is not normal.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The motor has run for less than 3 seconds to open the gate; this is not normal. Can the gate open and close freely?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The motor has run for less than 3 seconds to close the gate; this is not normal. Can the gate open and close freely?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The motor is idling - check that the motor is engaged.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The gate has not covered the same distance in opening and closing (at least 12 mm difference). Check the stiffness of the stops. Check the condition of the racks (no broken teeth).
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Self-learning was interrupted by the user.

Faults that may appear during the product's life cycle:

There are two types of code: **Error (E)** or **Information (I)**. Note that an error requires action from the installer to correct the motor drive problem.

L1	L2	L3	L4	L5	MEANING	TYPE
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The emergency stop input has been activated	I
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A card power supply fault has been detected. May be a short-circuit on the +12V output. Check the connections.	E

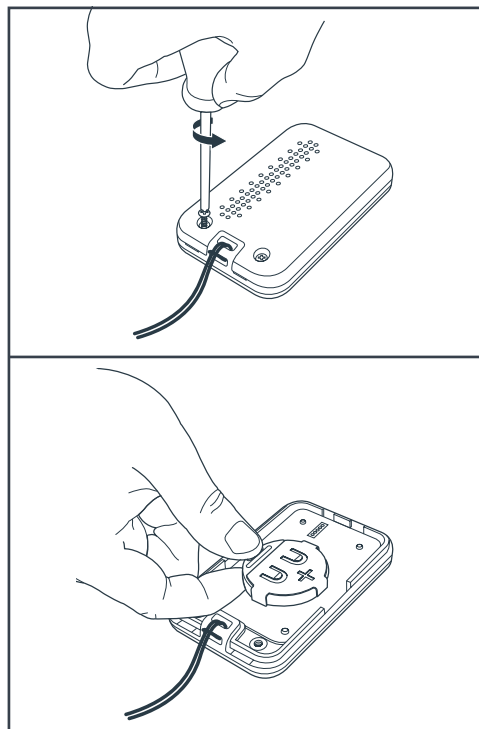
F - MAINTENANCE AND UPKEEP

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	An obstacle has been detected in the gate when opening	I
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The photocell beam has been cut	I
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Photocell self-test failure. The PHO input has remained earthed. Check the connections	E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Photocell self-test failure. The PHO is never earthed (this is normal if no photocells are connected). Check the connections.	E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Photocell self-test failure. The TX photocell power supply has caused a short-circuit. Check the connections.	E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The main power supply was cut during a movement phase	E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The power voltage is really too low for the card to work	E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Self-learning is not valid because it has never been done. Run self-learning	E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Automatic closure has been cancelled. Generated if the gate re-opens 3 times (10 times in collective mode) following the photocell beam being cut during automatic closure OR if the photocell beam has been cut for more than 3 minutes. Check photocell operation	E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The complete opening command input is permanently earthed. Check the connections	E
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The partial opening command input is permanently earthed. Check the connections.	E
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	An obstacle has been detected in the gate when closing	I
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The maximum operating time has been reached (the motor is idle and is not reaching the stop?). Check the installation and that the motor is engaged	E
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Power voltage too low when attempting to close the gate	E
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Three obstacles detected in a row during opening	I
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Three obstacles detected in a row during closing	I

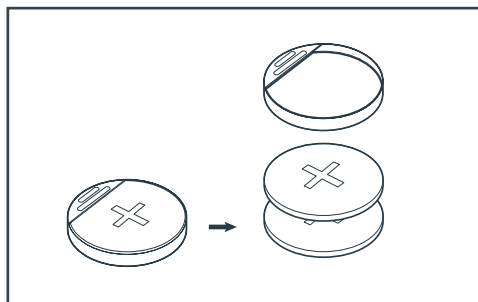
4.1. Replacing the remote control battery

When the remote control range is very reduced and the red indicator is weak, this means that the remote control battery will soon run out. The batteries used in the remote control are CR2016 type and are connected to one another. Replace the battery with a battery of the same type as originally used.

- With a Philips screwdriver, remove the 2 screws behind the remote control.
- Open the remote control and remove the batteries.
- Insert the new batteries, respecting the polarity.
- Close the remote control and screw in the fastening screws.

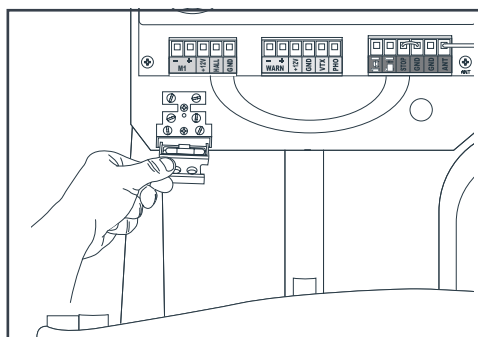


F - MAINTENANCE AND UPKEEP



4.2. Replacing the power fuse

- Switch the motor drive off.
- Use a 250V 5A time-delay fuse



G - TECHNICAL AND LEGAL INFORMATION

1. COMPATIBLE ACCESSORIES

DESCRIPTION	REFERENCE
Solar power kit	114373
Thomson 4-button remote control	510050
Key control	104258
Wireless keypad	104252
Additional 433.92 MHz antenna	104445
A set of general purpose 12/24 V photocells	114359
Additional rack - 0.5M - Nylon left	104452
Additional rack - 0.5M - Nylon right	104453
A 12V 4A/h rechargeable battery	104901
General purpose remote control pack for all Thomson powered equipment	500021

2. TECHNICAL SPECIFICATIONS

The technical specifications are provided as an indication only and for a temperature of +20°C. avidsen reserves the right to modify these specifications at any time, while under all circumstances guaranteeing these products' smooth operation and the type of use intended, in an aim to improve these products.

MOTOR DRIVE	
Type	Motor drive + in-built electronic control
Contents	24V motor, mechanical reducer, control electronics
Power supply	230Vac, 12Vdc per backup battery or 24Vdc with the solar kit
Maximum power	250 W
Maximum force	50 N
Assigned operating duration	10 minutes
Maximum number of cycles/hour	10
Nominal force	50N
Flashing light output	24V/10W
Photocell output	3 pairs max

G - TECHNICAL AND LEGAL INFORMATION

Photocell input	Input for compatible photocells
Gate command input	Input for dry contact that is normally open
Partial command input (pedestrian)	Input for dry contact that is normally open
Emergency stop input	Input for dry contact that is normally closed
Operating temperature	-20°C/ +60°C
Protection rating	IP44
Number of remote controls that can be memorised	20 with 1 gate command button and 1 pedestrian command button

FLASHING LIGHT

Type	LED lighting 2W max, flashing managed by the electronic card
Power supply	Max supply voltage: 24 VDC
Operating temperature	-20°C/ +60°C
Protection rating	IP44

BATTERY

Type	OOK AM modulation. 16-bit Rolling code encoder (i.e. 65,536 possible combinations)
Frequency	433.92 MHz
Open air range	80 m
Power supply	2x CR2016
Buttons	4 keys
Radiated power	< 10 mW
Battery life	1 year at a rate of 10 x 2s uses per day
Operating temperature	-20°C/ +60°C
Protection rating	IP40 (For indoor use only: home, car or sheltered location)

G - TECHNICAL AND LEGAL INFORMATION

PHOTOCELLS	
Type	Modular infrared beam presence detector. D type safety system according to EN 12453
Contents	1 TX transmitter and 1 RX receiver
Power supply	12Vdc, 12Vac, 24Vdc, 24Vac
Maximum assigned power	0.7W for the pair
Output	- 1 output with normally closed dry contact (COM/ NC) - 1 output with normally open dry contact (COM/NO)
Transmission angle/Reception angle	10° approx. / 10° approx.
Range	15m maximum (range may be reduced due to weather disruption)
Operating temperature	-20°C/+60°C
Protection rating	IP44

GUARDIAN CONNECTED MODULE	
Connection	Wired with two outputs
Cable cross-section	Up to 1.5mm ²
Operating temperature	-10°C/+50°C
Storage temperature	-20°C/+70°C
Electrical supply	230Vac / 50Hz or 24V DC
Average consumption	< 1 W
Protection rating	IP20
Weight	65g
Radio frequency	2.4GHz
Radio range	Unobstructed range: 80 m / Through stonework: 20 m

G - TECHNICAL AND LEGAL INFORMATION

3. WARRANTY

- This product is guaranteed for 3 years, parts and labour for repair.
- Product dismantling and reassembly costs are not covered.
- The warranty does not cover: consumables (batteries, etc.) and damage caused by misuse, improper use, improper installation, external intervention, damage due to physical or electrical shocks, dropping or atmospheric phenomena.
- Do not open the mechanical parts of the motor unit as doing so will void the warranty.
- If returning the product for after-sales service, protect the device to prevent scratches and knocks.
- Clean with a soft cloth only, no solvents. Before cleaning, disconnect the equipment or switch it off at the mains.

Note: Do not use any carboxylic acid, alcohol, or similar chemicals on the product. In addition to damaging your device, the fumes are also hazardous to your health and are explosive. Do not use any tool that can conduct voltage (wire brush, sharp tool, etc.) for cleaning.

The receipt or invoice is proof of purchase date.

4. HELP AND ADVICE

- If, despite the care we have taken in designing our products and drafting these instructions, you do encounter difficulties when installing your product or you have any questions, we urge you to contact one of our specialists who will be glad to help.
- If you encounter operating problems during the installation or a few days afterwards, it is essential that you are in front of your installation when contacting us, so that one of our technicians can diagnose the source of the problem, as it will probably be the result of a setting that is incorrect or an installation that is not to specification.

Contact our customer service technicians on:

0 892 701 369	Service 0,35 € / min + prix appel
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Monday to Friday, 9AM to 12PM and 2PM to 6PM CET.

The Thomson chatbot is available for free 24/7:

<http://www.avidsen.com/chatbot-thomson.html>

5. PRODUCT RETURNS - AFTER SALES SERVICE

If, despite the care we have taken in designing and manufacturing your product, it needs to be returned to our customer service centre.

Avidsen undertakes to keep a stock of spare parts for this product throughout the contractual warranty period.

G - TECHNICAL AND LEGAL INFORMATION

6. DECLARATION OF CONFORMITY

With the RED directive, avidsen declares that the following equipment: Motor drive kit for sliding gates SWIP 200 CONNECT reference 510063 complies with the RED 2014/53/EU directive and its conformity has been assessed pursuant to the applicable standards in force:

- RED EN 300 220-1 V3.1.1
- RED EN 300 220-2 V3.1.1
- LVD EN 62479:2010
- LVD EN 60335-1:2012 + A11:2014
- LVD EN 60335-2-103:2015
- EMC EN 301 489-1 V2.2.0
- EMC EN 301 489-3 V2.1.1
- EMC EN 55014-1:2017
- EMC EN 55014-2:2015
- EMC EN 61000-3-2:2014
- EMC EN 61000-3-3:2013

The remote control included with the abovementioned product complies with the RED 2014/53/EU directive. Its conformity has been assessed pursuant to the applicable standards in force:

- EN 62368-1:2014 + A11:2017
- ETSI EN 301 489-1 V2.2.3:2019
- ETSI EN 301 489-3 V2.1.1:2019
- ETSI EN 300 220-1 V3.1.1:2017
- ETSI EN 300 220-2 V3.2.1:2018
- EN 62479:2010

The GUARDIAN module included in this kit complies with the RED 2014/53/EU directive. Its conformity has been assessed pursuant to the applicable standards in force:

- EN 60669-1: 1999 + A1: 2002 + A2: 2008
- EN 60669-2-1:2004 + A1:2009 + A12:2010
- EN 60669-2-2:2006
- EN 62311:2008
- EN 301,489-1 V2.1.1
- EN 301,489-17 V3.1.1
- EN 300 328 V2.1.1

Signed in Tours on 05 January 2021 by Alexandre Chaverot, CEO

