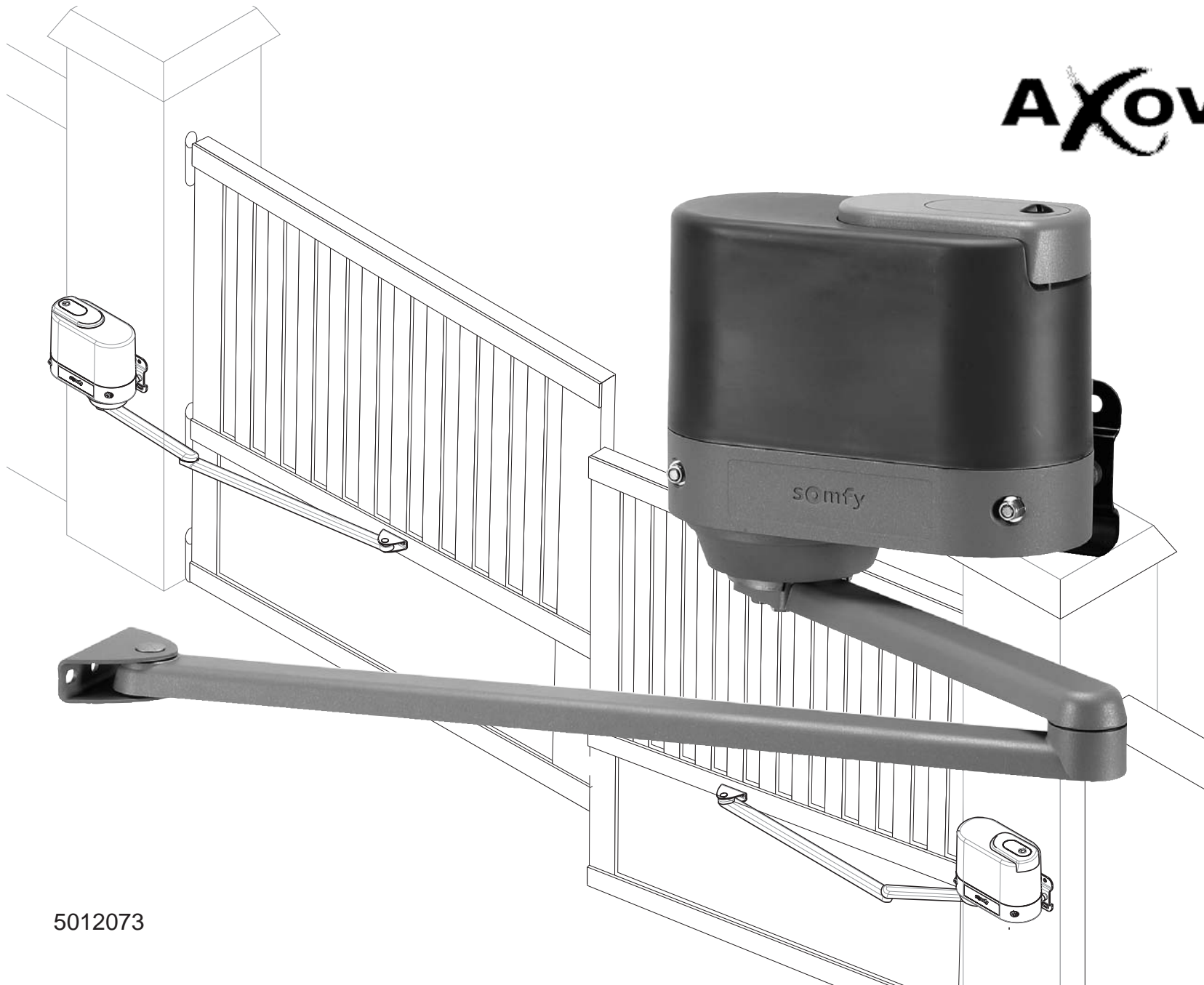


Wing gate hydraulic actuators – Installation instructions

Axovia multi

Mechanical assembly



5012073

HOME
MOTION BY

somfy®

Standard model

1 Safety instructions

2 Mechanical kit composition

3 Technical characteristics

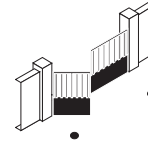
4 Pre-assembly checks

5 Assembly process

Specific / standard kits

6 Assembly constraints

1 Safety instructions



Make sure that the hazardous areas (crushing, shearing, wedging) between the driven part and the surrounding fixed parts due to the opening movement of the driven part are avoided.

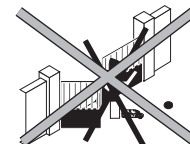
Regularly inspect the state of the gate. Those gates in poor condition should be repaired, reinforced or even changed prior to installation. Regularly check that the screws and fastenings of the Axovia's various components are securely tightened.

Maintain a clearance area of 500 mm at the back of each wing when the gate is completely open.



Do not clean your Axovia with a high-pressure water flow rate cleaning appliance.

Disconnect your Axovia from any electricity source while carrying out cleaning operations or other maintenance operations if the appliance is controlled automatically.



Never allow children to play near moving gates.

Never allow children to play with fixed control devices.

Always place the remote control devices out of reach of children.

Always keep a watch over your gate while it is moving.

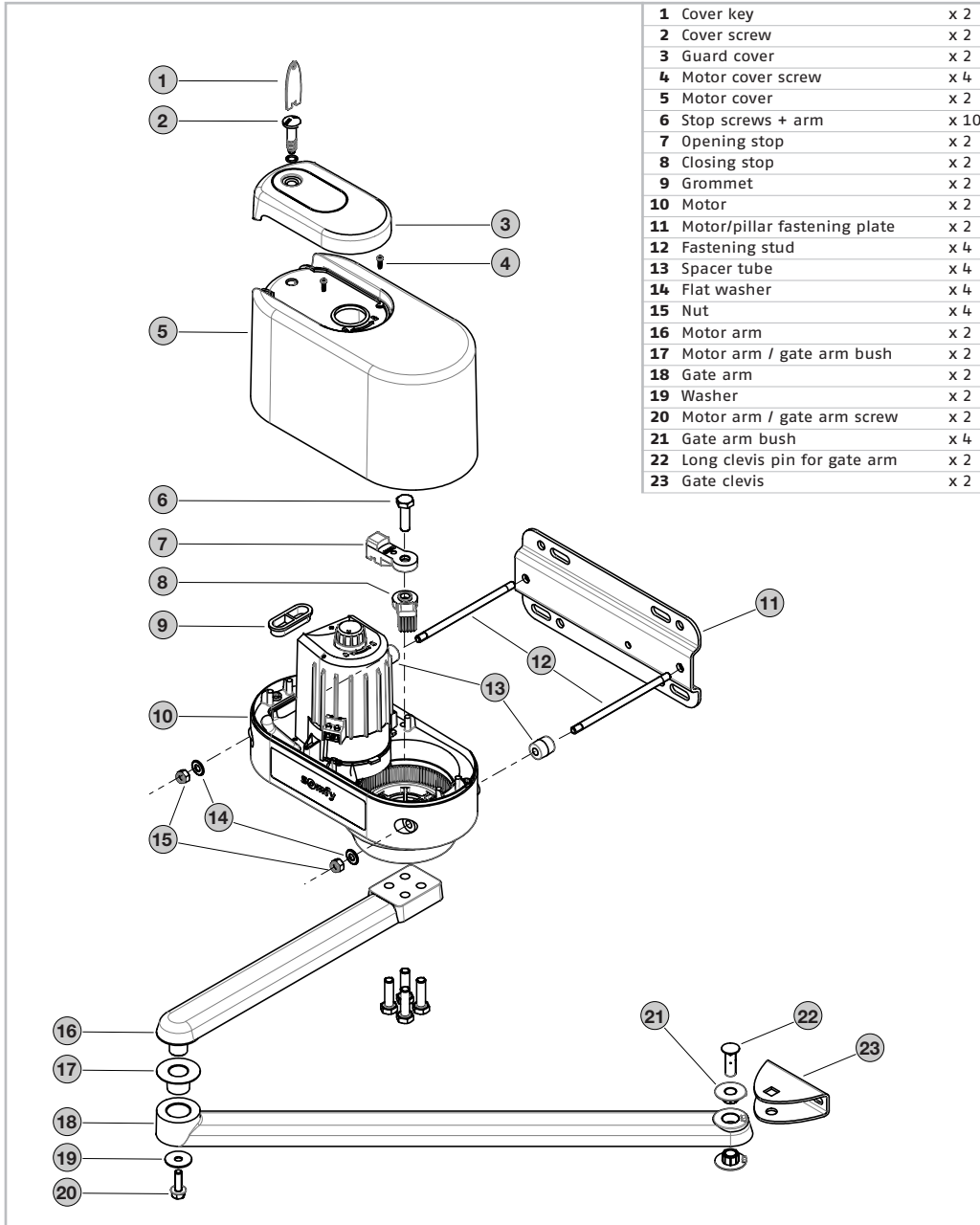


Never handle your Axovia while it is energized or with the battery.



Wear protective goggles during the drilling phases.

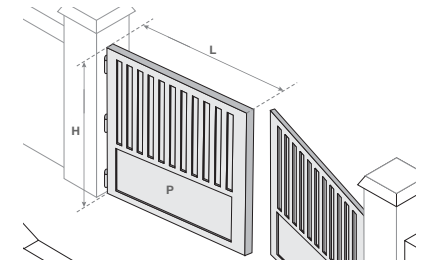
2 Mechanical kit composition



3 Technical characteristics

Scope

Maximum dimensions of a gate	
H max. height	2 m
L max. width	2 m 50
P max. weight	300 Kg
S max. full surface	4 m ²



General overall dimensions (mm)

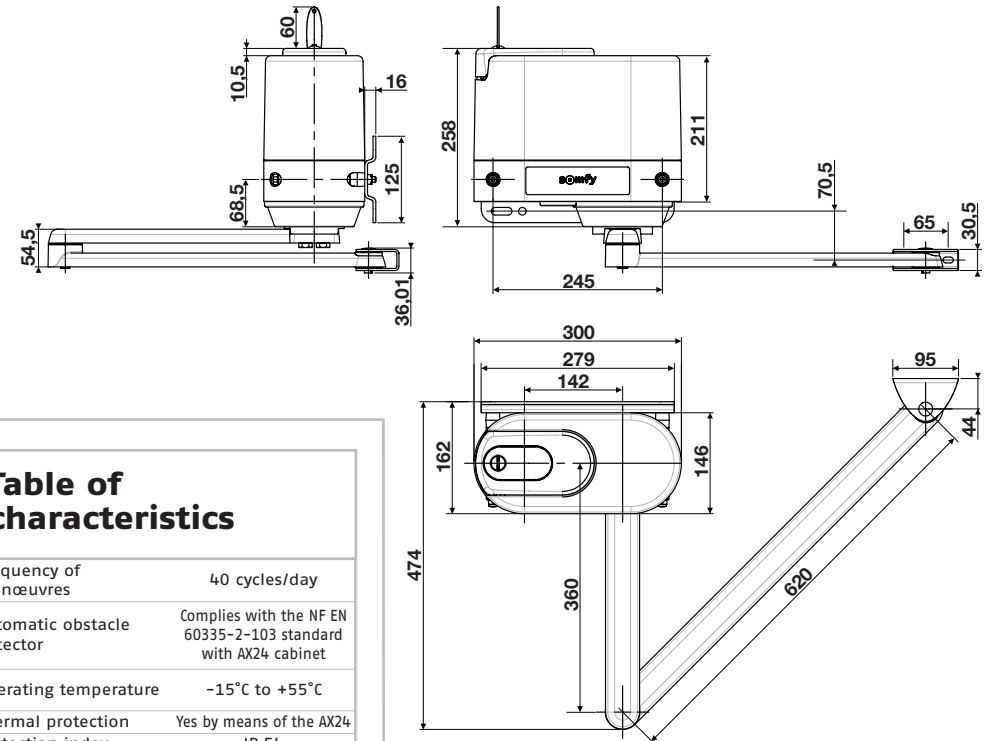


Table of characteristics

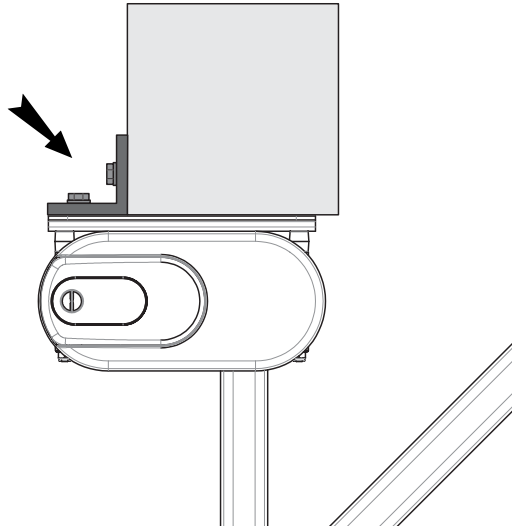
Frequency of manœuvres	40 cycles/day
Automatic obstacle detector	Complies with the NF EN 60335-2-103 standard with AX24 cabinet
Operating temperature	-15°C to +55°C
Thermal protection	Yes by means of the AX24
Protection index	IP 54
Motor power supply outlets	24 VDC
Power per motor	130 W

4 Pre-assembly checks

Pillar reinforcement bracket

When one of the motor support plate fastening holes is either in empty space or near the angle of the pillar, it is absolutely essential to add a **reinforcement bracket** (not supplied).

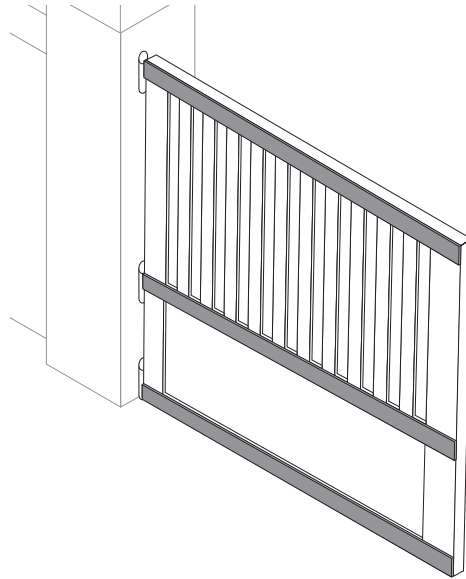
⚠ For an opening $> 90^\circ$, the dimension of the pillar should be **40 cm**; otherwise, you **MUST** use a bracket.



Wing brace

If the gate does not have any wings, provide for metal **backing plates** (e.g. 40x40 mm and 4 mm thick) to fasten the wing clevis.

⚠ For a large wing (> 2 m) or in a windy region, **SOMFY** recommends installation of an electric lock.



5 Assembly process

Locating axis markout

The AM vertical axis gives the position of the motor/pillar fastening plate.

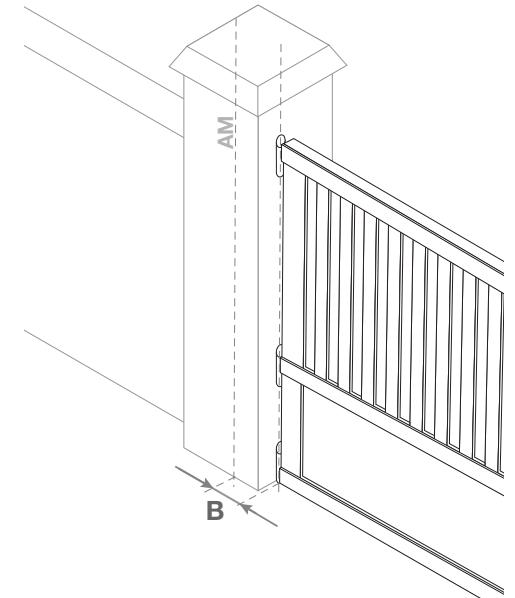
B is the distance between the gudgeon and the AM axis. B depends on the opening angle of the wing:

If $\alpha \leq 90^\circ$ B = 70 mm min

If $\alpha > 90^\circ$ B = 150 mm

Mark out the AM axis.

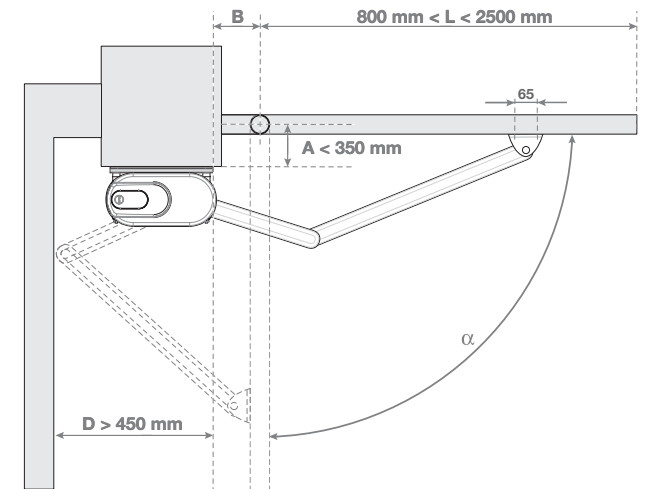
⚠ Check that the open wing does not knock against the motor.



Required clearance

To be on the safe side, check distance D: distance between the AM axis and the first obstacle on the side opposite the wing (quoin) **D \geq 450 mm**.

Distance **L** should be between **800 mm** and **2500 mm**.



5 Assembly process

Mounting the fastening plate

Mark out a horizontal axis (AH) in the middle of the brace, perpendicular to the wing's axis of rotation.

Extend this axis onto the pillar as far as the intersection with AM.

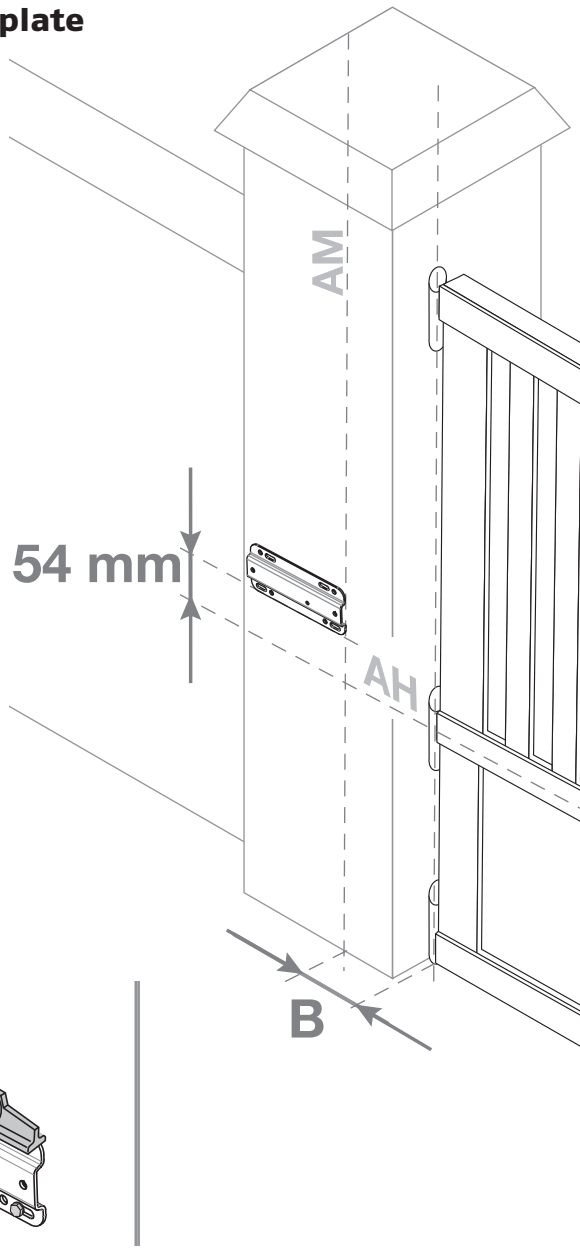
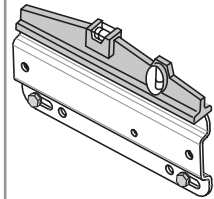
Gate with no brace: if the gate has no brace, place the motors at approx. 1/3 of the height of the wings starting from the ground.

In addition, you will be required to provide for brackets for fastening the clevises (see page 4).

Place the motor/pillar fastening plate at a distance of **54 mm** above AH.

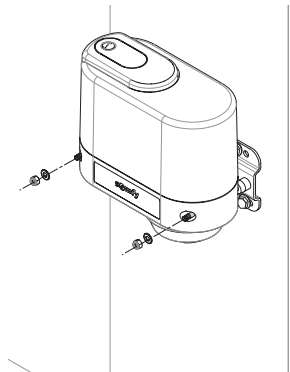
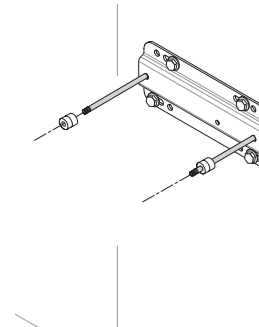
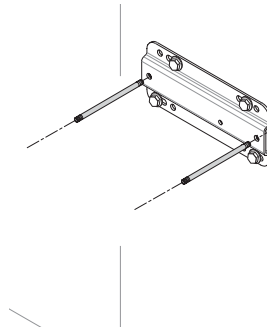
Mark out the drilling points and drill them: to improve adjustment, use the round holes to make your mark, drill, then turn the fastening plate over and fix using the oblong holes.

Check that the plate is in a perfectly horizontal position.

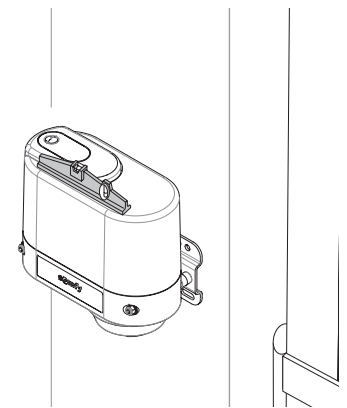


Mounting the motor on the plate

1. Mount the fastening gudgeons on the pillar fastening plate, screw them as far as the thread will go.
2. Slide the spacers onto the fastening gudgeons.
3. Position and fasten the motor.



Check that it is in a perfectly horizontal position:



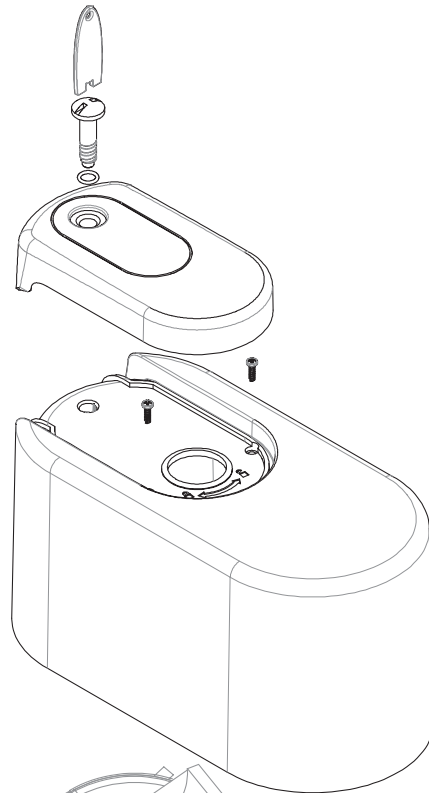
5 Assembly process

Unlocking the motor

Open the top cover using the specific key.

Unscrew the 2 screws on the bottom cover and remove the cover.

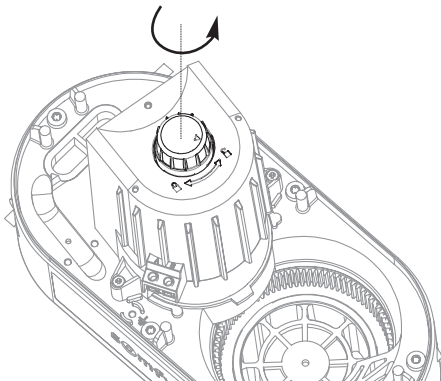
Remove the opening and closing stops by taking out the central screw.



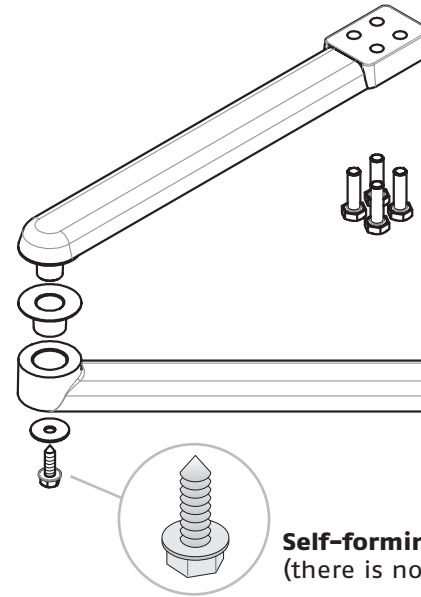
Unlock the motor by means of the button located on the top part of the motor.

! When in unlocked position, the arms should be manoeuvred slowly so as to avoid any damage occurring to the motors.

(Padlock closed: arms locked; padlock open: manual operation).



Assembling the arms

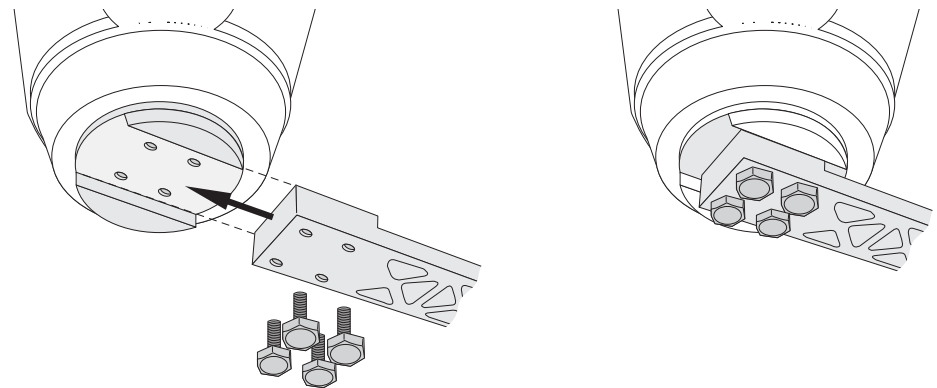


Do not use a tool in order not to damage the rings.

Assemble the arms, position the wing clevis without joining it completely to the fastening axis.

Self-forming screw
(there is no thread in the motor arm).

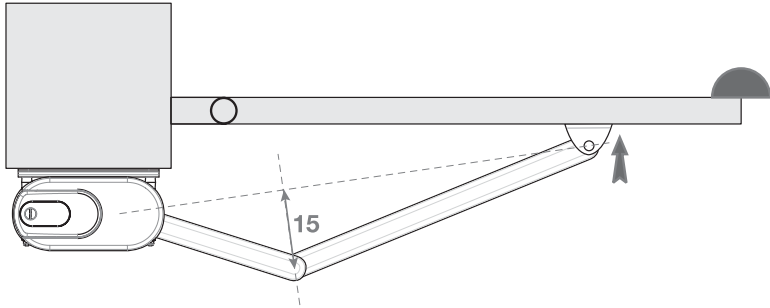
Mounting the arms on the motor



Insert the arm into the slide and fasten it.

5 Assembly process

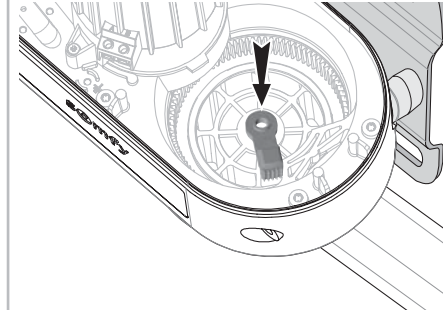
1 Put the arms into the closing position



The wings are in the closed position, against the central closing stop.

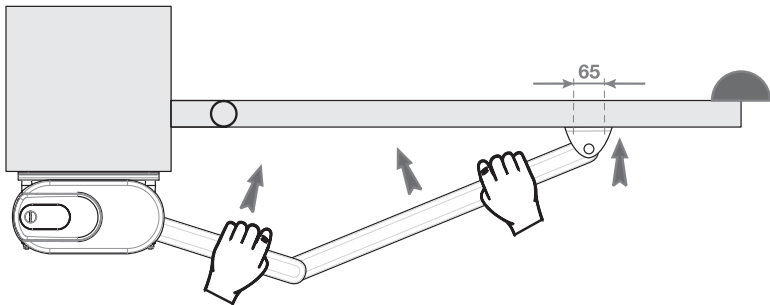
Unfold the arms in the direction of the gate, keeping a distance of **15 cm** between the fastening axis of the arms and the fold in the arms.

2 Mount the lower closing stop

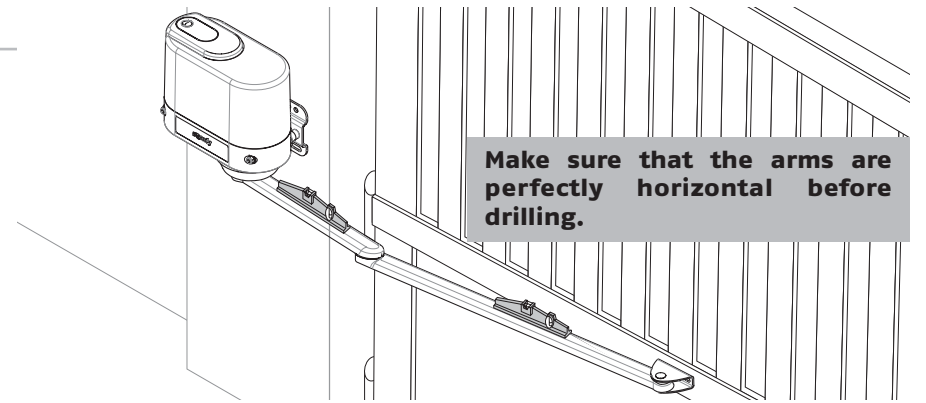


Place the lower closing stop against the stationary retainer (opposite side to the pillar/motor fastening plate).

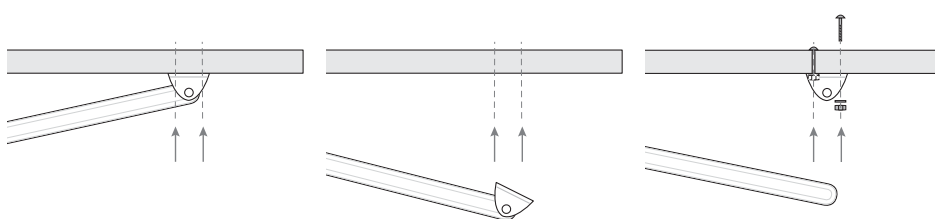
3 Position the wing clevis



Push the motor arm flat against the inside closing stop.



4 Fasten the wing clevis

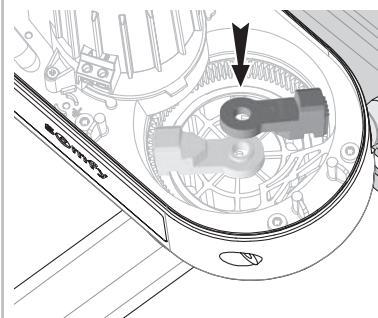


Mark out the centre distances on the wing.

Remove the arms, Drill.

Fasten the clevis.

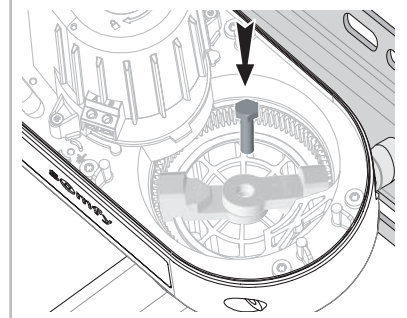
5 Mount the upper opening stop



Open the wing according to the desired angle.

Place the upper opening stop against the stationary retainer (pillar/motor fastening plate side).

6 Block the stops



5 Assembly process

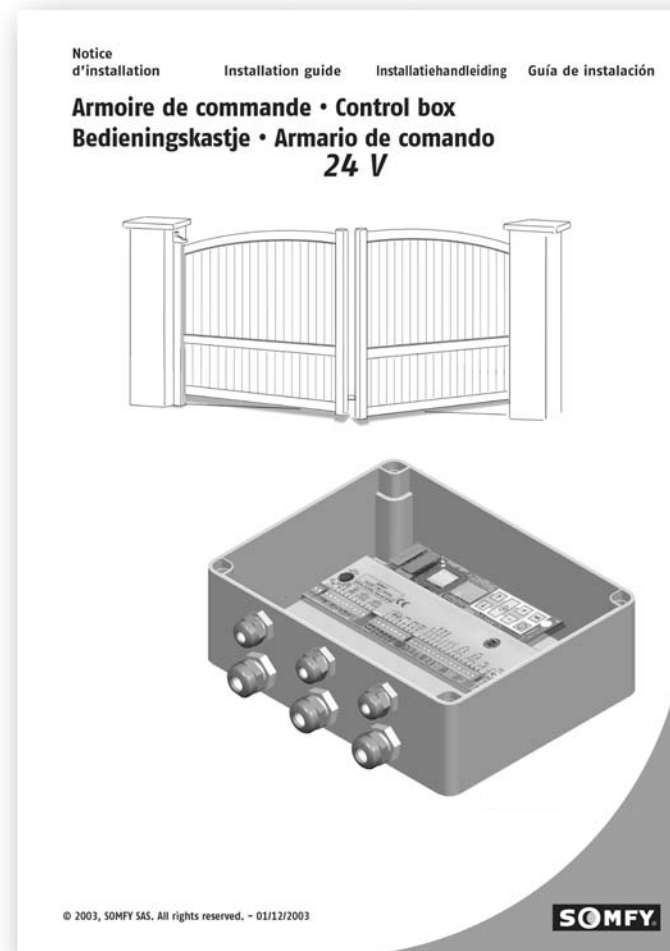
Wiring the 24 VDC motor



Connect the 24 VDC power supply cable to the terminal block.
Pass it through the grommet and fasten it to the pillar.

Re-lock the motor prior to any power-up.

Electrical connection and programming



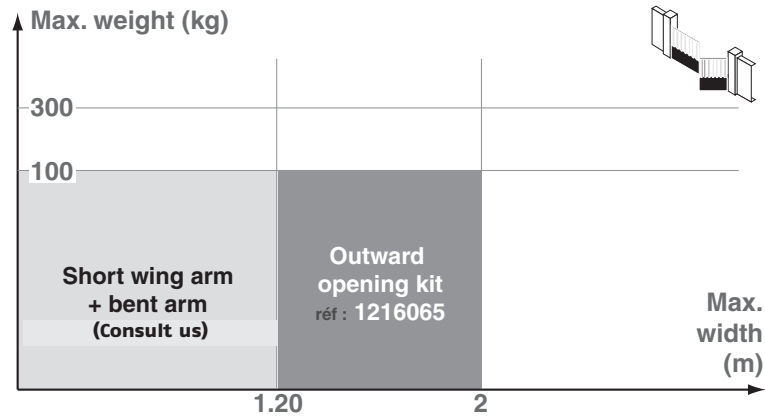
Refer to the AX24 control cabinet installation instructions.

6 Specific kits mounting constraints

Outward opening kit

For gates which open outwards.

Scope, wing characteristics



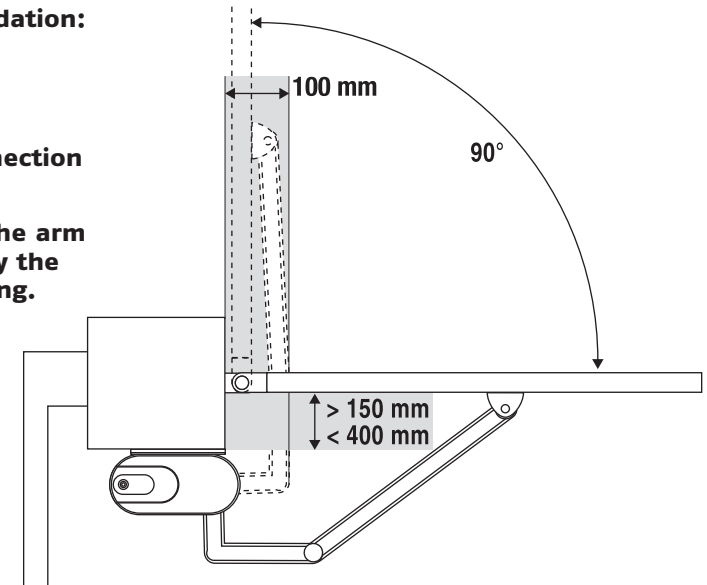
! Do not open onto the public highway!
A set of photoelectric cells is highly recommended.

Mounting recommendation:

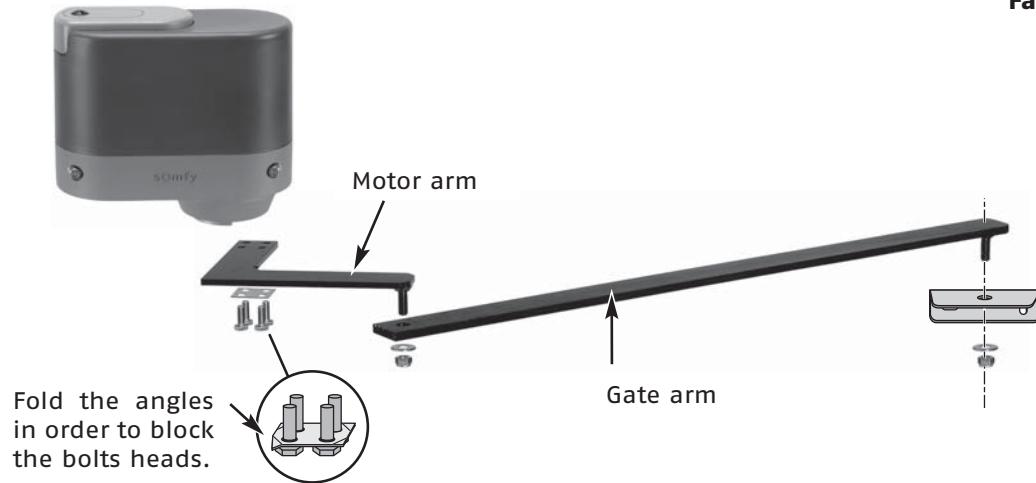
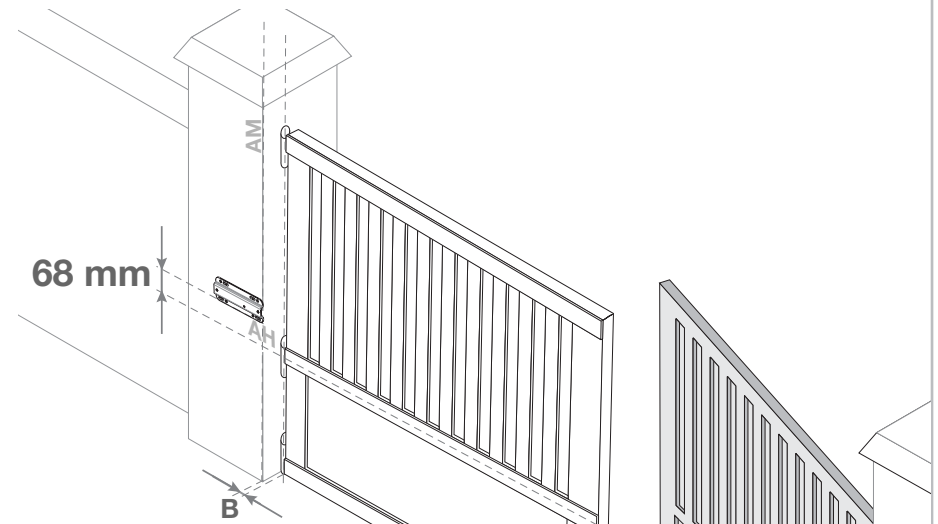
! The motors' connection is inverted!

! The position of the arm should be exactly the same as in the drawing.

! The motor is placed as close as possible to the edge of the pillar (dimension B = 0).



Fastening plate position:

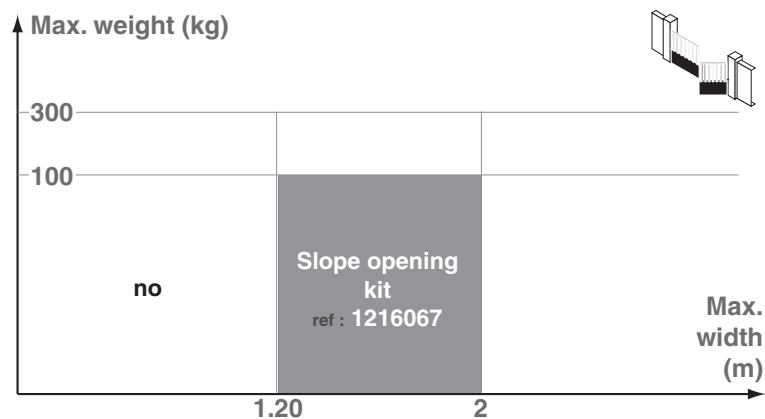


6 Specific kits mounting constraints

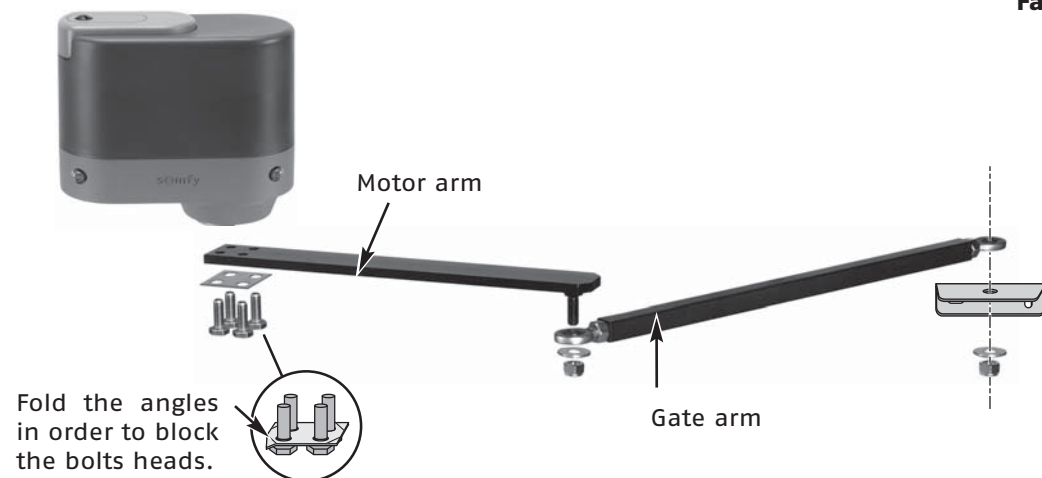
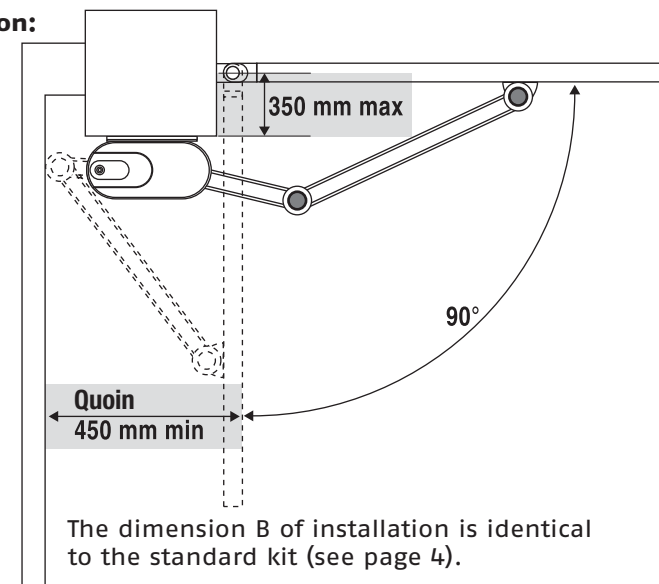
Slope opening kit

For gates mounted on a slope (maximum 20%).

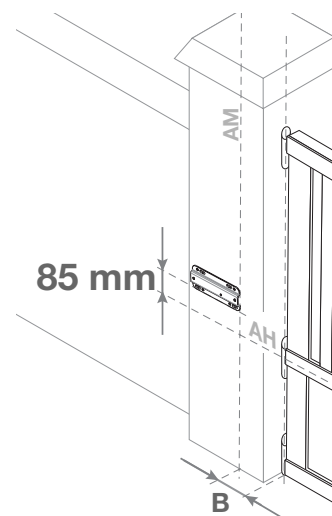
Scope, wing characteristics



Mounting recommendation:

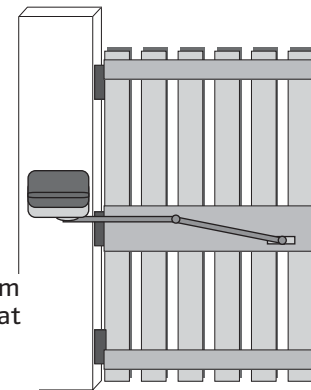


Fastening plate position:



For **85mm**, the gate arm is inclined

For a horizontal arm closed gate, place at **75mm**.

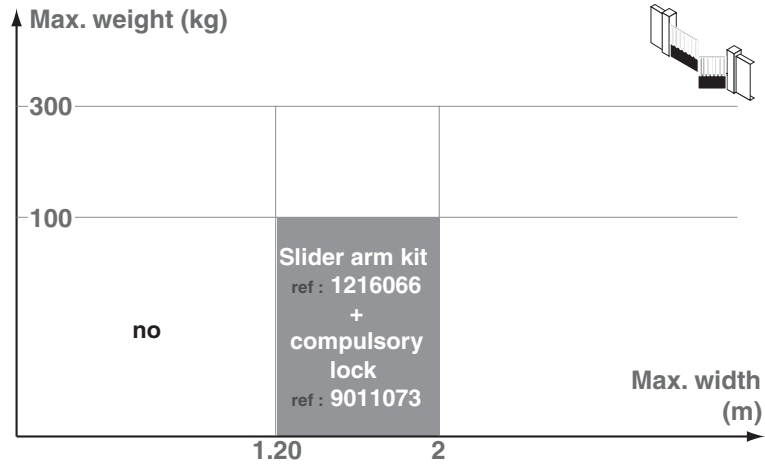


6 Specific kits mounting constraints

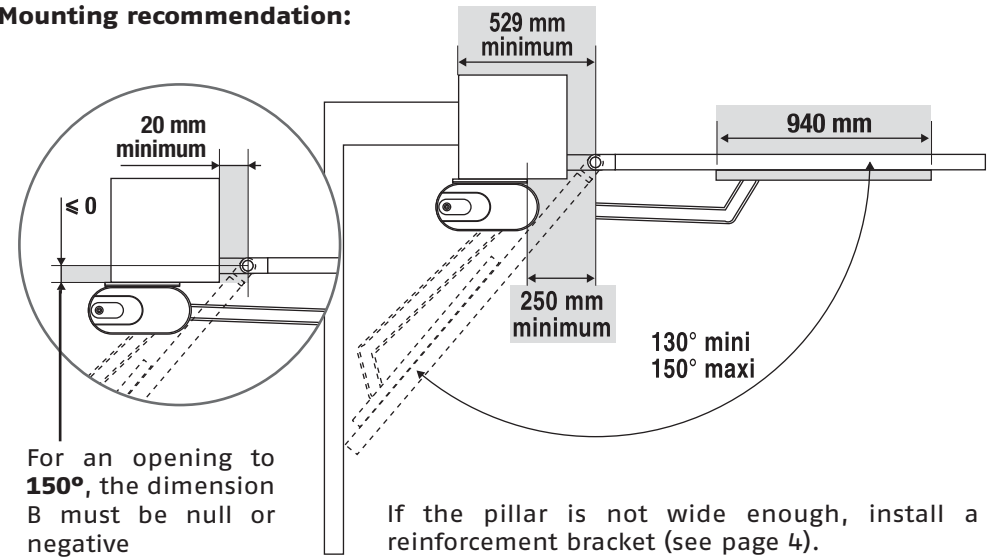
Slider arm kit (compulsory lock)

Kit for an opening angle of between 130 and 150°.

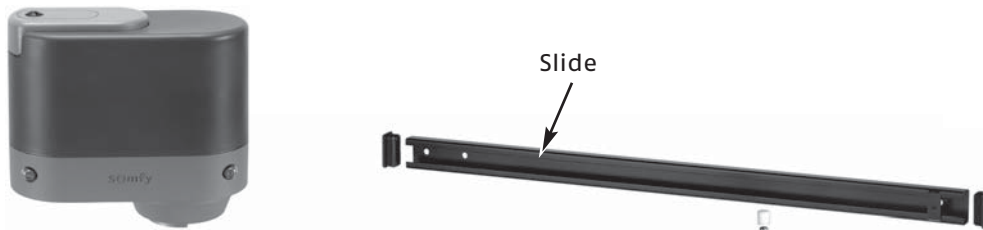
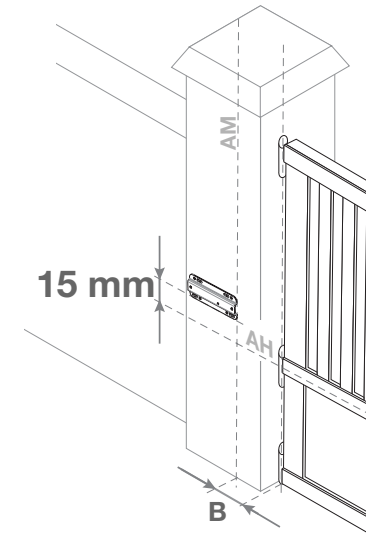
Scope, wing characteristics



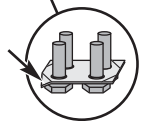
Mounting recommendation:



Fastening plate position:



Fold the angles in order to block the bolts heads.

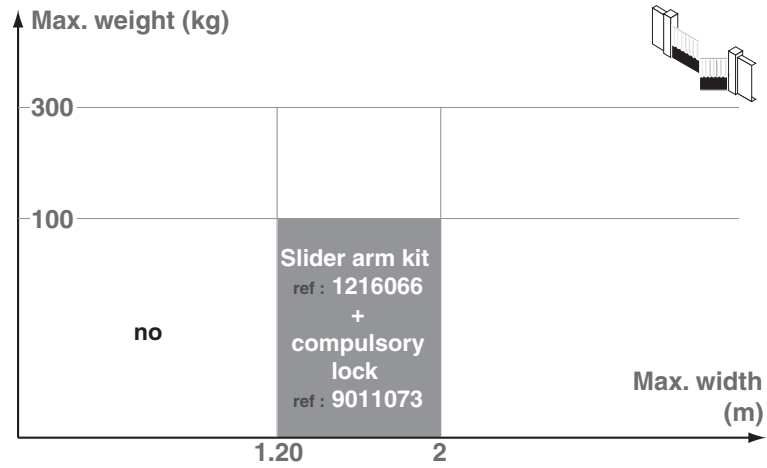


6 Specific kits mounting constraints

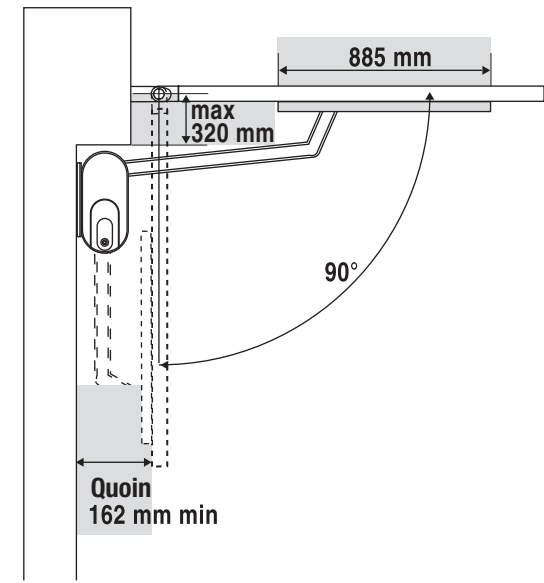
Slider arm kit (compulsory lock)

Opening kit for small-sized quoin

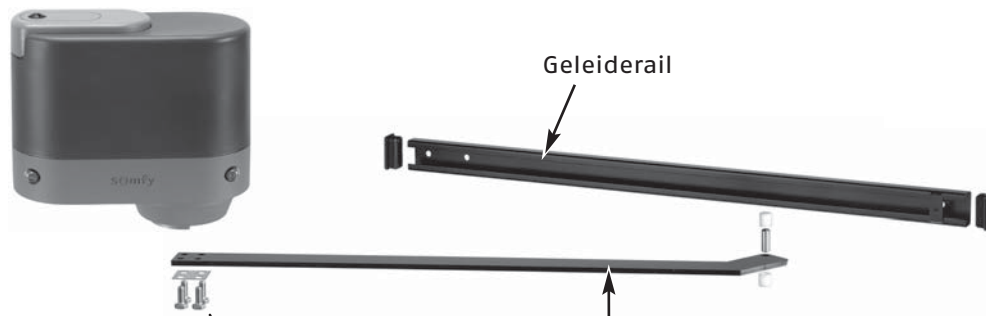
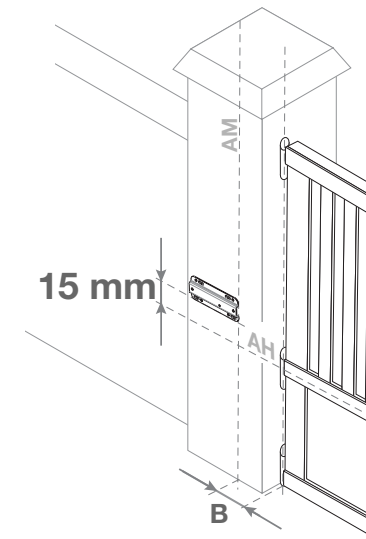
Scope, wing characteristics



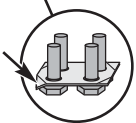
Mounting recommendation:



Fastening plate position:



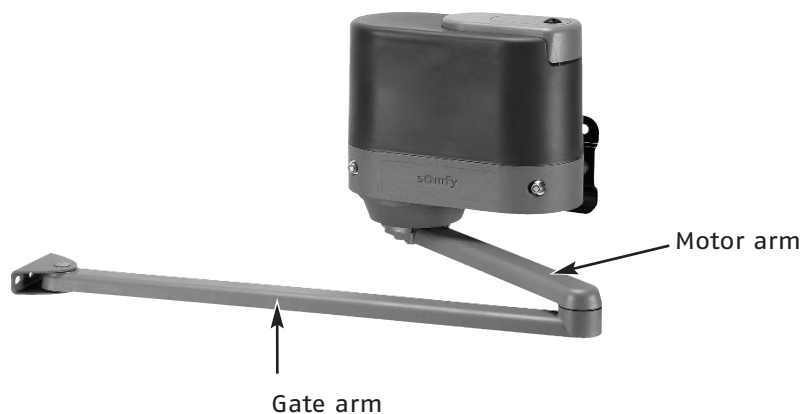
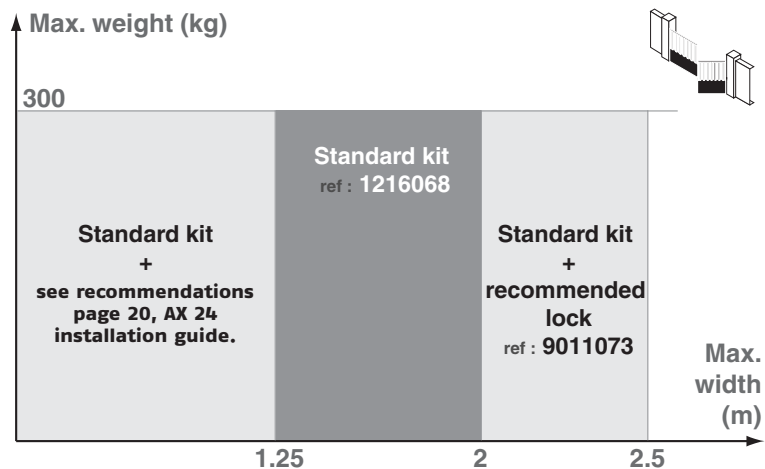
De hoeken vouwen om de hoofden van de bouten te blokkeren.



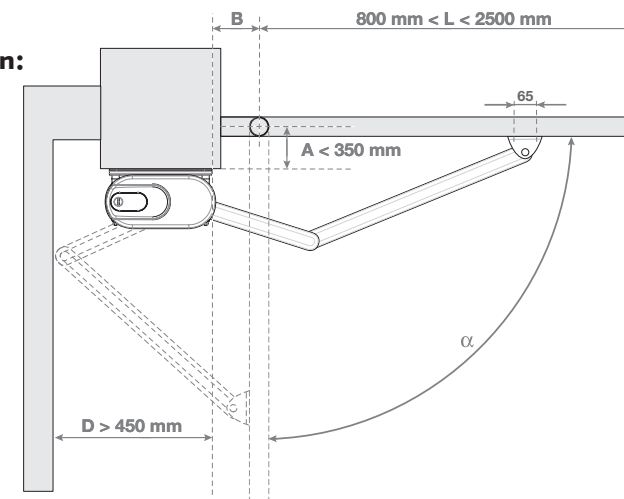
6 Summary of standard kit

Standard opening kit

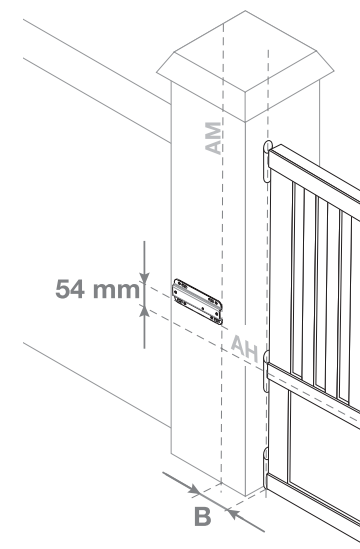
Scope, wing characteristics



Mounting recommendation:



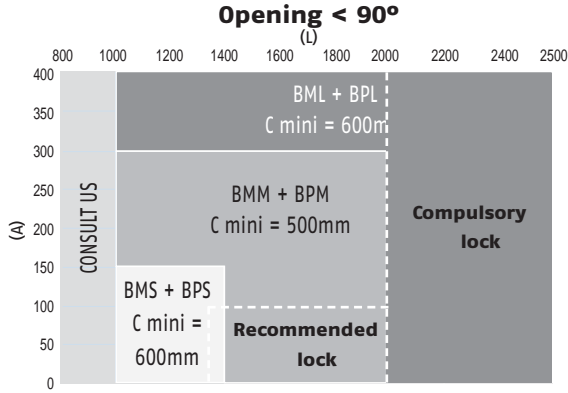
Fastening plate position:



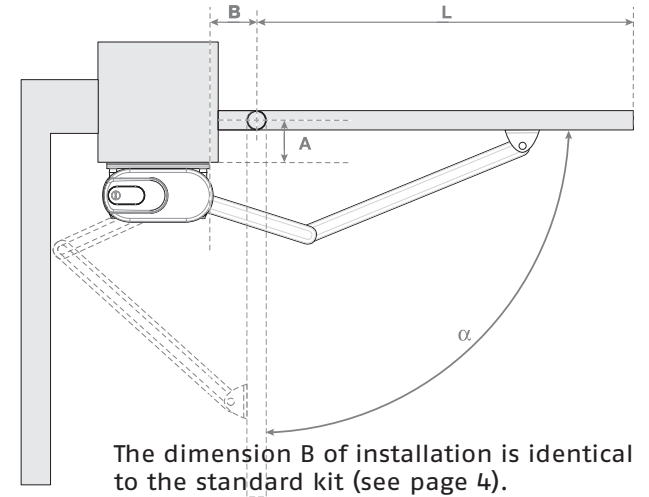
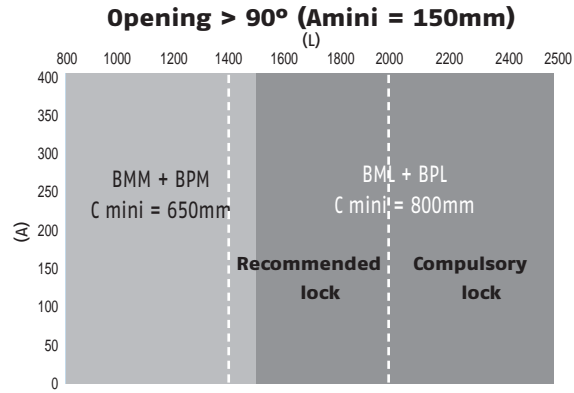
6 Summary of standard kit

Standard opening kit with arm steel

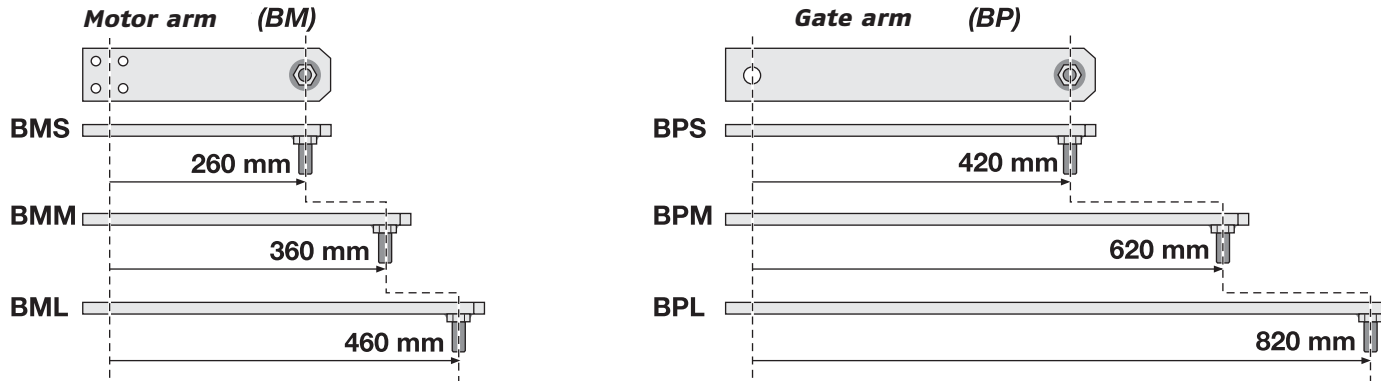
Scope, wing characteristics



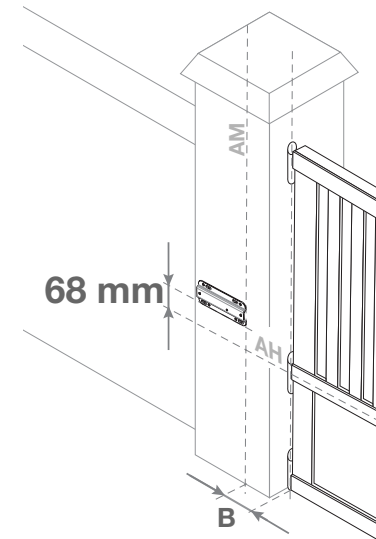
Mounting recommendation:



Possibility of mixing the arms steel in the event of specific assembly:



Fastening plate position:





A series of horizontal dashed lines spanning the width of the page, intended for writing notes.

Technical assistance U.K.: (44)113 391 3030

www.somfy.com

somfy®

In its concern to constantly improve its offer, SOMFY reserves the right to modify the characteristics and components of this product at any time it should be deemed useful.
©SOMFY. GMD030110 -SOMFY SAS, capital 20.000.000 Euros, RCS Bonneville 303.970.230

Utilisable en UE, ®
Usable in the EU, ®
Bruikbaar in EU, ®
Utilizable en la UE, ®



07/2005