EN

TRANSLATED VERSION

These instructions apply to all variations of the MAESTRIA WT, which are available in the current catalogue.

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1. PRIOR INFORMATION

1. 1. SPHERE OF APPLICATION

MAESTRIA WT drives are designed to power all types of exterior vertical blinds excepted catching system.

The installer, a home motorisation and automation professional, must ensure that once the driven product is installed, it respects the current standards in the country of installation, notably standard EN 13561 relative to exterior blinds.

1. 2. LIABILITY

Before installing and using the drive, please read these instructions carefully. In addition to the instructions provided in this guide, please also comply with the instructions set out in the enclosed ***Safety instructions*** document.

The drive must be installed by a home motorisation and automation professional, in accordance with Somfy's instructions and the applicable regulations in the country of installation.

Any operation of the drive outside the sphere of application described above is prohibited. Such operation shall exclude Somfy from all liability and invalidate the Somfy warranty, as will any failure to comply with the instructions given herein and in the enclosed ***Safety instructions*** document.

After installing the drive, the installer must inform his customers of the operating and maintenance conditions for the drive and must pass the operating and maintenance instructions on to them, as well as the enclosed ***Safety instructions*** document. Any After-Sales Service operation on the drive requires intervention by a home motorisation and automation professional.

Should any doubt arise during installation of the drive or for additional information, consult a Somfy contact or visit www.somfy.com.

⚠ Safety Warning ! | Warning ! | ⓘ Information

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2. INSTALLATION

These instructions are **mandatory** for the home motorisation and automation professional installing the drive.

Never drop, knock or puncture the drive or immerse it in liquid.

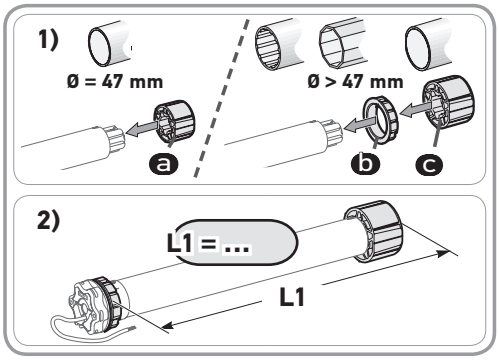
Install an individual control point for each drive.

2. 1. ASSEMBLY

2. 1. 1. Drive preparation

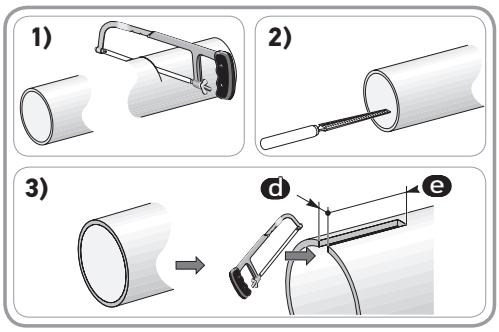
Make sure that the inner diameter of the tube is at least 47 mm.

1) Fit the accessories necessary to incorporate the drive into the winding tube:
   either only the wheel ⓐ on the drive,
   or the ring ⓑ and the wheel ⓒ on the drive.
2) Measure the length (**L1**) between the inside edge of the drive head and the end of the wheel.



2. 1. 2. Tube preparation

1) Cut the winding tube to the desired length depending on the product to be motorised.
2) Deburr the winding tube and remove all chips.
3) For winding tubes that are smooth inside, cut a notch to the following dimensions: ⓓ = 4 mm ⓔ = 28 mm.

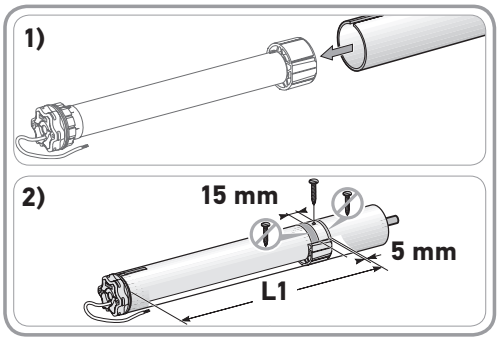


2. 1. 3. Drive-tube assembly

1) Slide the drive into the winding tube. For winding tubes that are smooth inside, position the cut notch on the protruding part of the ring.
2) The wheel must be locked in a straight line inside the winding tube:
   either by securing the winding tube to the wheel using 4 Ø 5 mm Parker screws or 4 Ø 4.8 mm steel pop rivets located between 5 mm and 15 mm from the outside edge of the wheel, irrespective of the type of winding tube.

The screws or pop rivets must only be fastened on the wheel and not on the drive.

   or by using a wheel lock, for non-smooth tubes.



2. 1. 4. Mounting the tube-drive assembly

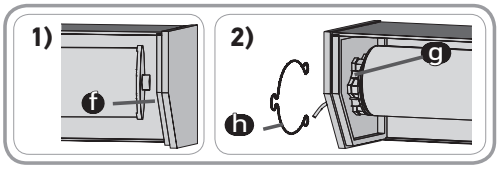
- Fit the tube end into the winding tube.

Star head drive

1) Fit and attach the tube-drive assembly to the end support ⓕ and the star head support for the drive ⓖ.

Make sure that the tube-drive assembly is locked in place on the end support. This prevents the tube-drive assembly from coming out of the end support fixing.

2) Depending on the type of support, fit the retaining ring ⓗ.



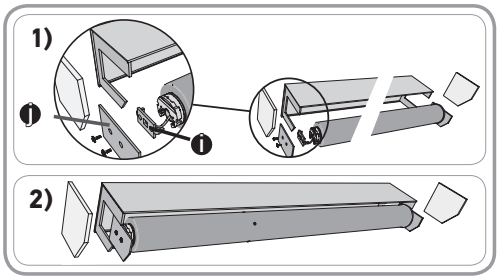
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Round head drive

For drives greater than 25 Nm, use an adapted support referenced by Somfy.

1) Install the support ❶ on the drive head, then the removable end caps ❶.
2) Slide the tube-drive-removable end cap assembly into the head rail.



2. 2. WIRING AND COMPATIBILITY RULES

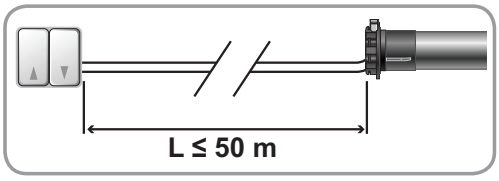
2. 2. 1. Power supply

Do not connect a motor to an isolation transformer.

Do not use a mains-failure control device with a motor.

2. 2. 2. Switches and control system

The total cable length between the switch and the motor must not exceed 50 metres.



Do not use more than one switch per motor.

Use only mechanical or electromechanical switches (e.g. relays) to control a motor. The relay contacts must not be bypassed by capacitors.

In user mode, do not use an electrical switch that allows the "Up" and "Down" buttons to be pressed simultaneously.

The motors should not be controlled by a relay with static or triac capacitor.

Always refer to the control system instructions for proper wiring.

For control systems using an “automatic operating time recognition procedure”, please follow the recommendations made by the controller manufacturer: The Controller neutral must be connected to Neutral of each motor.

2. 2. 3. Wiring

Cables which pass through a metal wall must be protected and isolated using a sheath or sleeve.

Attach cables to prevent any contact with moving parts.

If the drive is used outdoors, and if the supply cable is a type H05-VVF cable, the cable should be installed in a UV-resistant duct, e.g. under a gland.

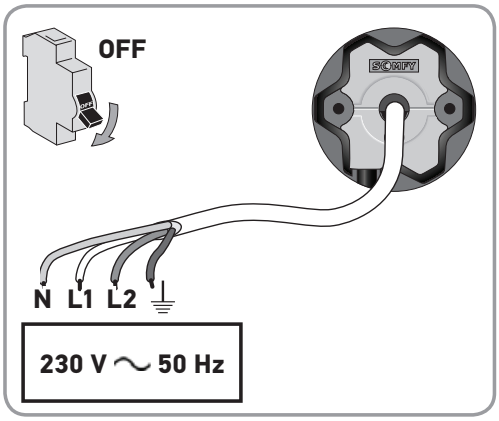
The drive cable can be removed. If it becomes damaged, replace it with an identical cable.

Leave the drive power supply cable accessible: it must be possible to replace it easily.

Always make a loop in the power supply cable to prevent water entering the drive!

- Switch off the power supply
- Connect the drive according to the information in the table below:

	Cable			
	Neutral (N)	Live (L1)	Live (L2)	Earth (⏚)
230 V ~ 50 Hz	Blue	Brown	Black	Green-Yellow

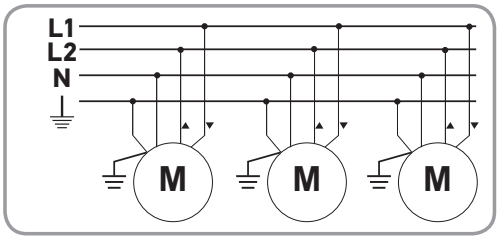


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The motor can be wired in parallel. In this case, take into account the maximum load of the switch or controller used.

The phases and neutrals of each motor must be interconnected respectively.

Do not use multi-pole cables to control several motors. Each motor must be connected to its own power cable.



2. 3. SET-UP

Use universal adjusting cable 9015971 (follow the instructions in the corresponding manual for connection), or use a non-locking double push-button switch to adjust settings.

Follow the following steps for set-up:

1) Checking the rotation direction (***§2. 3. 1***)
2) Setting the end limits (***§2. 3. 2***)
3) Setting advanced functions (***§2. 3. 3***)

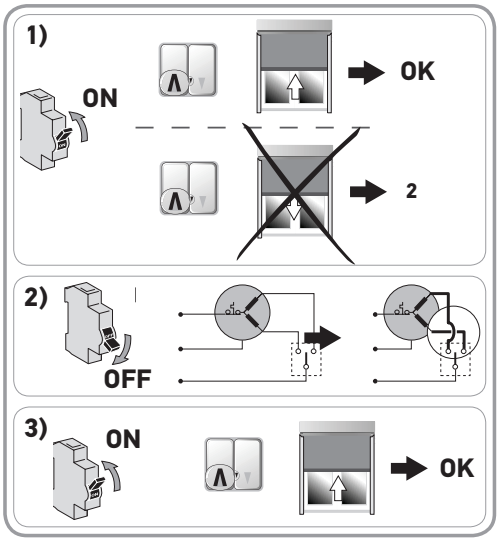
2. 3. 1. Checking the rotation direction

1) Switch the mains power supply back on.
   Press the "Up" button at the control point:
   - If the driven product raises, the wiring is correct, go to end limits setting step (***§2.3.2***).
   - If the driven product is lowered, go to the next step.
2) Switch off the power.

- Reverse the brown wire and the black wire connected to the control point.

3) Switch the power back on.

- Press the "Up" button to check the direction of rotation.



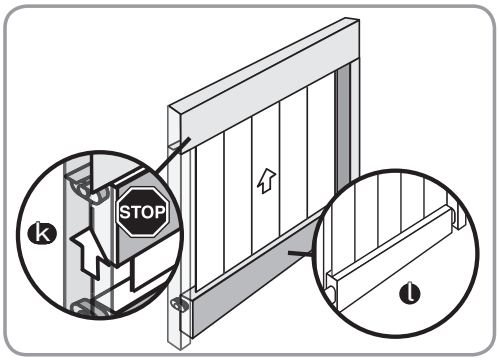
2. 3. 2. Setting the end limits

The procedure used to set the end limits depends on the equipment of the driven product (see table below).

Pressing and holding the "Up" or "Down" buttons causes the driven product to raise or lower continuously.

Pressing the "Up" or "Down" buttons briefly causes the driven product to raise or lower briefly.

Available devices		
Top stop	Heavy load bar	Steps to performed
-	-	***See E1***
☑	-	***See E2***
☑	☑	***See E3****



*This step is especially suitable for "ZIP screens" or for any other specific driven product with a heavy load bar and a top stop.

Use universal adjusting cable 9015971 (follow the instructions in the corresponding manual for connection), or use a non-locking double push-button switch to adjust settings.

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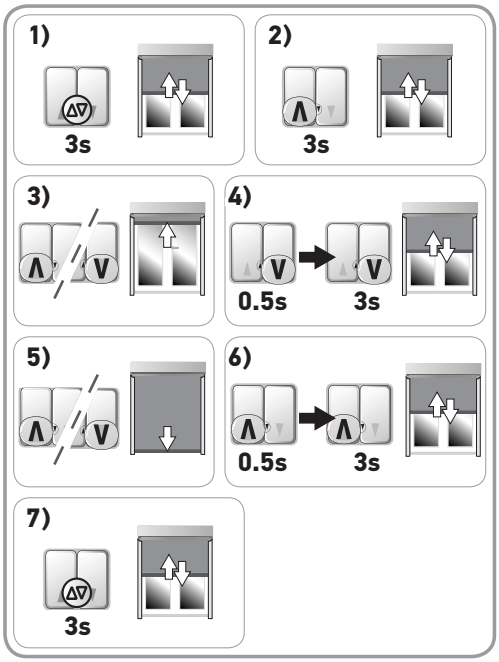
E1. MANUAL ADJUSTMENT OF END LIMITS

Setting the upper end limit

1) Press the "Up" and "Down" buttons simultaneously until the driven product moves up and down briefly.
2) Press the "Up" button until the driven product moves up and down briefly.
3) Place the driven product in the d sired upper end limit position
   - If necessary, adjust the position of the driven product using the "up" or "Down" button.
4) Briefly press the "Down" button and then press it again until the driven product moves up and down briefly.

Setting the lower end limit

5) Place the driven product in the desired lower end limit position.
   - If necessary, adjust the position of the driven product using the "Up" or "Down" button.
6) Briefly press the "Up" button and then press it again until the driven product moves up and down briefly.
7) Press the "Up" and "Down" buttons simultaneously until the driven product moves up and down briefly to validate end limit setting.

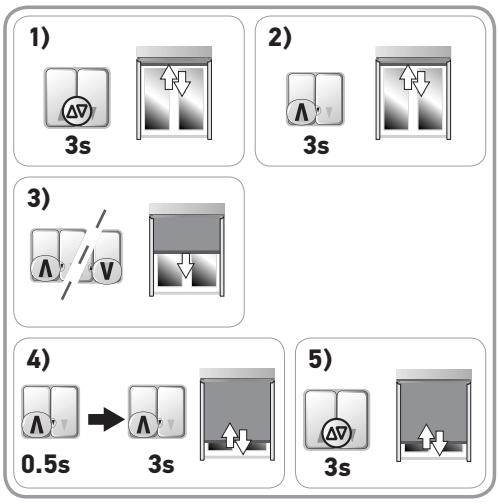


E2. MANUAL ADJUSTMENT OF THE LOWER END LIMIT AND AUTOMATIC ADJUSTMENT OF THE UPPER END LIMIT

Upper end limit is set automatically whereas down end limit must be set.

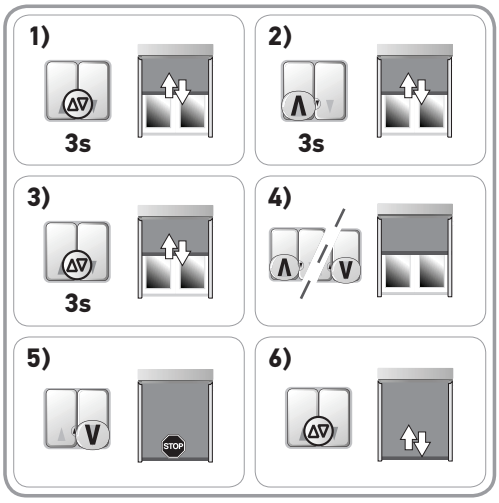
Setting the lower end limit

1) Press the "Up" and "Down" buttons simultaneously until the driven product moves up and down briefly.
2) Press the "Up" button until the driven product moves up and down briefly.
3) Place the driven product in the desired lower end limit position.
   - If necessary, adjust the position of the driven product using the "Up" or "Down" button.
4) Briefly press the "Up" button and then press it again until the driven product moves up and down briefly.
5) Press the "Up" and "Down" buttons simultaneously until the driven product moves up and down briefly to validate end limit setting.



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E3. END LIMIT AUTOMATIC SETTINGS



When specific driven product is equipped with a heavy load bar and a top stop, end limits set automatically after following next step below:

1) Press the "Up" and "Down" buttons simultaneously until the driven product moves up and down briefly.
2) Press the "Up" button until the driven product moves up and down briefly.
3) Press the "Up" and "Down" buttons simultaneously until the driven product moves up and down briefly.
4) Place the driven product at its half-way position
5) Press and hold the "Down" button: the driven product lowers until it detects the lower end limit.
6) Press the "Up" and "Down" buttons simultaneously until the driven product moves up and down briefly to validate the setting.

ⓘ If the lower end limit is not set automatically after several attempts, perform the step ***E2***.

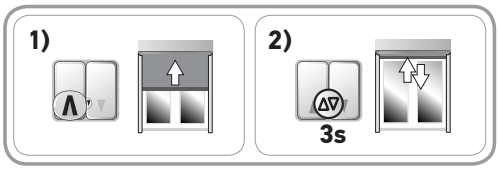
2. 3. 3. Setting advanced functions

ⓘ Set the advanced functions after having performed the end limits setting (***§2.3.2***).

Use universal adjusting cable 9015971 (follow the instructions in the corresponding manual for connection), or use a non-locking double push-button switch to adjust settings.

"BACK-RELEASE" FUNCTION FOR DRIVEN PRODUCTS WITH TOP STOP ONLY

ⓘ This function releases tension on the fabric after the driven product is closed at the top stop against the head rail.



The Back Release function is deactivated by default.

- To activate or deactivate the function:

1) Place the driven product at its upper end limit.
2) Press the "Up" and "Down" buttons simultaneously until the driven product moves.
   - If the "Back release" function was deactivated, it is now activated.
   - If the "Back release" function was activated, it is now deactivated.

- In order to check the "Back release" function, position the driven product at its half-way position, then press "Up" to raise the driven product to the top stop.

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2. 4. TIPS AND ADVICE ON INSTALLATION

2. 4. 1. Re-setting the end limits

ⓘ The following steps apply only for end limits that are set manually

READJUSTMENT OF END LIMITS SET IN MANUAL MODE

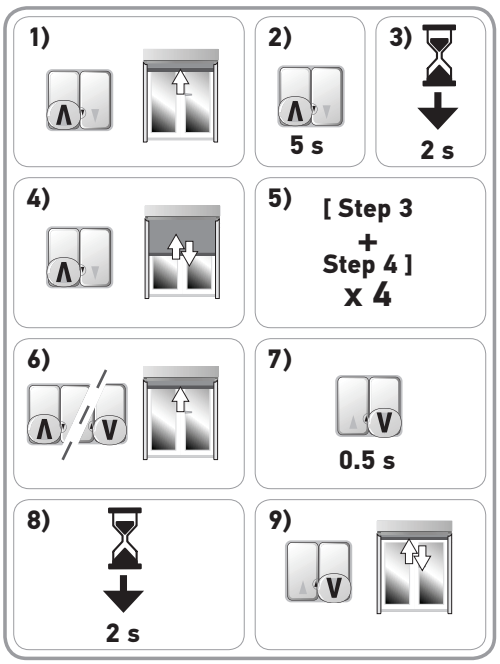
Re-setting the upper end limit

ⓘ In this mode, there is a response time between the activation of the control point and the reaction by the application.

1) Place the driven product at its upper end limit.
2) Press the "Up" button for approximately 5 seconds.
3) Wait for 2 seconds.
4) Press the "Up" button until the driven product moves up and down.
5) Repeat steps 3) and 4) four times
   - *The last up and down movement is brief.*
6) Place the driven product in the desired upper end limit position.
7) Briefly press the "Down" button.

✋ If the driven product reacts, repeat step 6).

8) Wait for 2 seconds.
9) Press the "Down" button until the driven product moves up and down briefly to validate the setting.



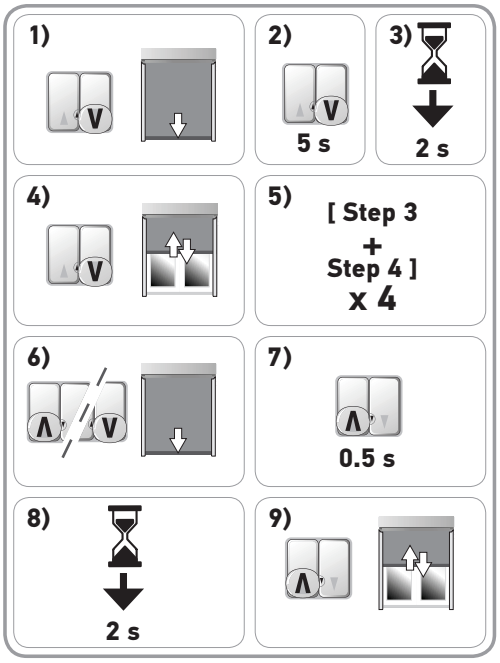
Re-setting the lower end limit

ⓘ In this mode, there is a response time between the activation of the control point and the reaction by the application.

1) Place the driven product at its lower end limit.
2) Press the "Down" button for approximately 5 seconds.
3) Wait for 2 seconds.
4) Press the "Down" button until the driven product moves up and down.
5) Repeat steps 3) and 4) four times
   - *The last up and down movement is brief.*
6) Place the driven product in the desired lower end limit position.
7) Briefly press the "Up" button.

✋ If the driven product reacts, repeat step 6).

8) Wait for 2 seconds.
9) Press the "Up" button until the driven product moves up and down briefly to validate the setting.

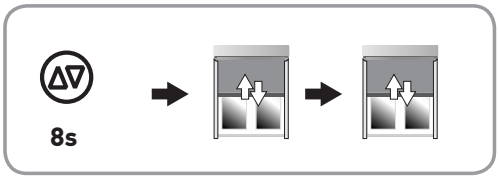


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2. 4. 2. Restoring the original configuration

ⓘ Use universal adjusting cable 9015971 (follow the instructions in the corresponding manual for connection), or use a non-locking double push-button switch.

- Press the adjusting cable "Up" and "Down" buttons simultaneously or the non-locking double push button switch until the driven product moves up and down once, then again.
  - The drive is back in its original configuration.



2. 4. 3. Questions about the drive?

Observations	Possible causes	Solutions
The driven product does not operate.	The wiring is incorrect.	Check the wiring and modify as required.
	The drive's overheating protection has tripped.	Wait for the drive to cool down.
	The cable used is not compliant.	Check the cable and make sure that it has 4 conductors.
	The control point is not compatible.	Check the compatibility and replace the control point as required.
The driven product stops too soon.	The ring is not correctly installed.	Secure the ring correctly.
	The end limits are incorrectly programmed.	Reset the end limits.
The end limit setting procedure does not work after several attempts.	The re-setting procedure has been disabled.	Consult a Somfy contact.

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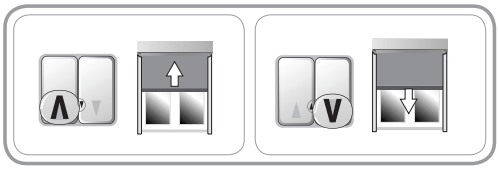
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3. OPERATION AND MAINTENANCE

This drive does not require any maintenance operation.

3. 1. "UP" AND "DOWN" FUNCTIONS

- Briefly press the "Up" or "Down" button: the driven product raises or lowers.



3. 2. STOP FUNCTION

3. 2. 1. With a non-locking double push-button switch

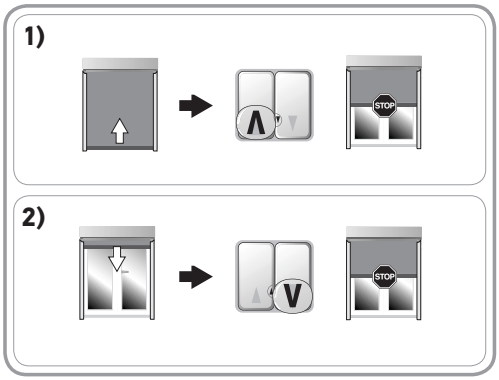
The driven product is moving.

- Simultaneously press the "Up" and "Down" buttons on the control point: the driven product stops automatically.

3. 2. 2. With a locking double push-button switch

1) The driven product is moving upwards.
- Press the "Up" button on the control point: the driven product stops automatically.

2) The driven product is moving downwards.
- Press the "Down" button on the control point: the driven product stops automatically.



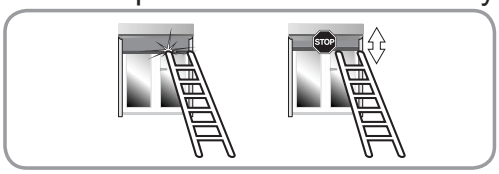
3. 3. TIPS AND ADVICE ON INSTALLATION

3. 3. 1. Obstacle detection

ⓘ Obstacle detection is operational only with compatible driven products. Consult a home motorisation and automation professional to find out which products are compatible.

Automatic obstacle detection can be used to protect the driven product and remove any obstacles:

If the driven product encounters an obstacle when moving upwards or downwards, the driven product stops automatically and raises or lowers slightly so the obstacle can be removed.



3. 3. 2. Questions about the drive?

Observations	Possible causes	Solutions
The driven product does not operate.	The drive's overheating protection has tripped.	Wait for the drive to cool down.
Obstacle detection does not work whereas the driven product is compatible.	The obstacle detection has been disabled.	Consult a Somfy contact.

ⓘ If the driven product still does not operate, consult a home motorisation and automation professional.

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4. TECHNICAL DATA

Power supply	230 V ~ 50 Hz
Operating temperature	- 25 °C à + 60 °C
Protection rating	IP 44
Safety level	Class I

CE Somfy SAS, F-74300 CLUSES as manufacturer hereby declares that the drive covered by these instructions when marked for input voltage 230V~50Hz and used as intended according to these instructions, is in compliance with the essential requirements of the applicable European Directives and in particular of the Machinery Directive **2006/42/EC** and EMC Directive **2014/30/EU**.

The full text of the EU declaration of conformity is available at www.somfy.com/ce.

Antoine Crézé, Approval manager, acting on behalf of Activity director, Cluses, 10/2016.

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