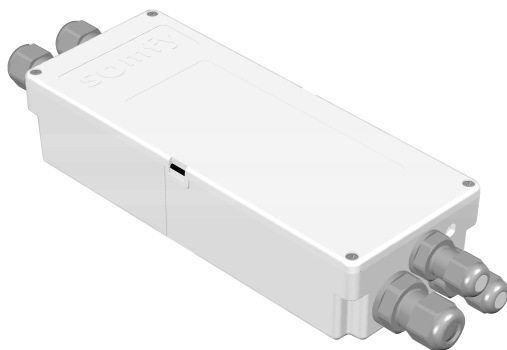




Pergola io LOUVER CONTROL

EN Instructions

ORIGINAL INSTRUCTIONS

These instructions apply to all PERGOLA io LOUVER CONTROL, the different versions of which are available in the current catalogue.

TABLE OF CONTENTS

1. Prior information.....	3
1.1. Field of application.....	3
1.2. Liability	3
2. Installation.....	3
2.1. Assembly	3
2.2. Upper description and connections	4
2.3. Lower description and connections.....	4
2.4. Commissioning	5
2.5. Tips and advice on installation.....	8
3. Use and maintenance	12
3.1. Up, Down and Scroll buttons	12
3.2. My button.....	12
3.3. Tips and advice on operation	13
4. Technical data	13

GENERAL INFORMATION

Safety instructions



DANGER

Indicates a danger which may result in immediate death or serious injury.



WARNING

Indicates a danger which may result in death or serious injury.



PRECAUTION

Indicates a danger which may result in minor or moderate injury.



CAUTION

Indicates a danger which may result in damage to or destruction of the product.

1.PRIOR INFORMATION

1.1.Field of application

The PERGOLA io LOUVER CONTROL is an independent mounted control equipped with io-homecontrol® radio technology which is used to control wired drives for pergolas with oriented slates, from an io-homecontrol control point*.

It is only compatible with 24 V DC drives.

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 provided in the attached **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 field of application described above is prohibited. Such use, and any failure to comply with the instructions given in this guide and in the attached **Safety instructions** document, absolves Somfy of any liability and invalidates the warranty.

After installing the drive, the installer must inform his customers of the operating and maintenance conditions for the drive and must provide them with the operating and maintenance instructions, and the attached **Safety instructions** document. Any After-Sales Service operation on the drive must be performed by a home motorisation and automation professional.

Never begin installing without first checking the compatibility of this product with the associated equipment and accessories. If in doubt when installing this product and/or to obtain additional information, contact a Somfy representative or visit the website **www.somfy.com**.

2.INSTALLATION



WARNING

- These instructions are mandatory for the home motorisation and automation professional installing the product.
- Cables which pass through a metal wall must be protected and insulated using a sheath or sleeve
- For outdoor use, install the product in a UV-resistant duct, for example under a cullis.
- Comply with current standards and legislation in the country of installation.



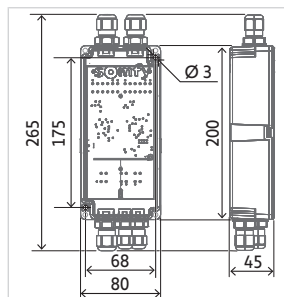
CAUTION

- Never drop, knock or puncture the drive or immerse it in liquid.
- Ensure the power is switched off during the assembly and wiring stages.
- Independently mounted control

2.1.Assembly

2.1.1.Dimensions

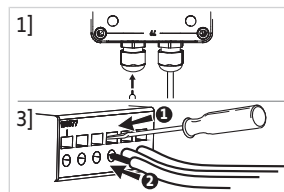
Dimension in millimeters: 80 x 265 x 45



2.1.2.Wiring

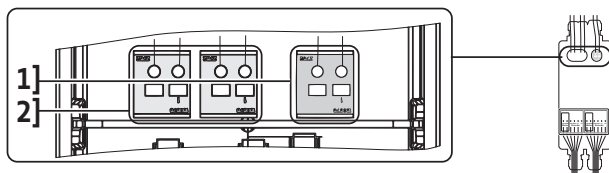
PRECAUTION

- The length of the cables must not exceed 10 meters.
- Only one cable must be inserted into a cable gland.
- Pay attention to the cable courses to avoid water entering.
- If more than two cable transitions are required, use the cable glands supplied with the operating control.
- Do not touch electronic components.
- Make sure the box lid is securely closed.



- 1] Insert each cable through its cable gland. (Diameter of the cables is between 5 and 9 mm, and the minimum cross-section of the wires is 0.2 mm²) and tighten them firmly.
- 2] Strip the wires (between 9 and 10 mm) and tighten the wires in the connectors.

2.2.Upper description and connections



1] Wiring power supply 24 V DC

0 Vdc

Power supply (0 Vdc)

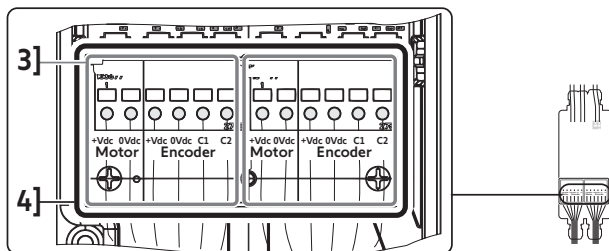
+Vdc

Power supply +24 Vdc

2] Wiring Ondeis 24V rain sensor

Control Unit	+Vdc (Rain sensor)	0 Vdc (Rain sensor)	Contact + -	
	Rain sensor power supply +24 Vdc	Rain sensor power supply 0 Vdc	Contact 1	Contact 2
Rain sensor color cable	Red	Black	Black 1	Black 2

2.3.Lower description and connections



3] Wiring Pergola Tilt io with or without encoder

Pergola io Louver Control	+Vdc (Drive M1)	0Vdc (Drive M1)	+Vdc (Encoder M1)	0 Vdc (Encoder M1)	C1 (Encoder M1)	C2 (Encoder M1)
------------------------------	--------------------	--------------------	-------------------------	--------------------------	--------------------	--------------------

3] Wiring Pergola Tilt io with or without encoder

	Drive power supply +24 Vdc	Drive power supply 0 Vdc	+24 Vdc Encoder	0 Vdc Encoder	Input "Open Collector" Encoder channel 1	Input "Open Collector" Encoder channel 2
Pergola Tilt io color cables	Brown	Blue	Red	Black	Yellow	Green

4] Wiring two drives with encoder

Pergola io Louver Control	+Vdc (Drive M1 & M2)	0Vdc (Drive M1 & M2)	+Vdc (Drive M1 & M2)	0 Vdc (Drive M1 & M2)	C1 (Drive M1 & M2)	C2 (Drive M1 & M2)
	Drive power supply +24 Vdc	Drive power supply 0 Vdc	+24 Vdc Encoder	0 Vdc Encoder	Output "Open Collector" Encoder channel 1	Output "Open Collector" Encoder channel 2
Pergola Tilt io color cables	Brown	Blue	Red	Black	Yellow	Green

2.4.Commissioning

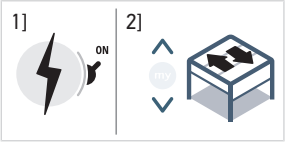
2.4.1.Pre-programming the control point

- 1] Switch on the power supply.
- 2] Briefly press the **Up** and **Down** on the control point simultaneously:

→ The motorised product 1 or 2 will move back and forth briefly (depending on the output used).

→ The control point has been pre-programmed in the drive.

The drive is in programming mode for ≈ 10 min.



2.4.2.Synchronisation of two drives

CAUTION

Mandatory:

- Be sure to follow these steps before choosing the direction of rotation.
- Be sure to use two identical drives with encoders.



NOTICE

Synchronization means:

- Both drives start at the same time.
- Both drives stop at the same time (Even in the event of failure of one or both drives).
- We advise to realize the checking test of synchronization with 2 linked drives in order to be in realistic conditions of use.
- The two motors are not regulated relative to each other.

To Activate/Deactivate synchronisation press and hold the **Up** and **Down** button of the control point until the motorised product moves back and forth.



2.4.3. Checking the direction of rotation

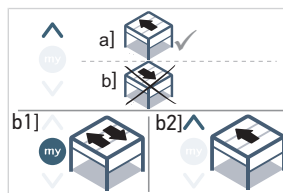
Press the **Up** button on the control point:

a] If the motorised product opens, the direction of rotation is correct: move onto Setting the end limits

b] If the motorised product closes, the direction of rotation is incorrect: move onto the next step.

b1] Press the **My** button on the control point until the motorised product moves back and forth: The direction of rotation has been modified.

b2] Press the **Up** button on the control point to confirm the direction of rotation.



2.4.4. Setting the end limits

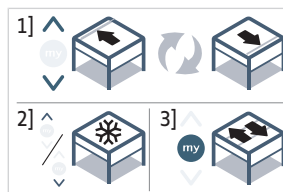
NOTICE

- There are three different ways to set the end limits, it depends on the motorised product used.
- For two independent drives, set the first drive, then repeat from Pre-programming the control point [5] the same settings for the second.

	Fully automatic mode	Semi-automatic mode UP (Only if encoders detected)	Semi-automatic mode DOWN (Only if encoders detected)
Principle:	Up and down end-limits are set automatically. The end limits are detected through the end limits of the Drive (μ-switch) or by a force detection (Closure of the slates or hard point).	Up end limit is set automatically. The Up-end limit is detected through the end limit of the Drive (μ-switch) or by force detection (Closure of the slates or hard point).	Down end limit is set automatically. The down end limit is detected through the end limit of the Drive (μ-switch) or by force detection (Closure of the slates or hard point).
Compulsory:	Drive with integrated end limits OR physical hard point on the pergola.	Drive with integrated Up end limit OR physical hard point on the pergola.	Drive with integrated down end limit OR physical hard point on the pergola.

2.4.4.1. Automatic setting of the end limits

- 1] Briefly press the **Up** and **Down** buttons simultaneously on the control point:
→ The motorised product reaches by itself its end-limits during a "Self-learning phase".



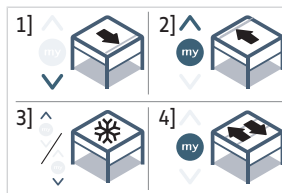
CAUTION

Do not interrupt the movement until the drive reaches its maximal position.

- 2] Press **Up** or **Down** button to reach the desired "Snow position".
- 3] Press and hold the **My** button until the motorised product briefly moves back and forth. End limits and "Snow" position are now programmed.

2.4.4.2. Manual setting of the closing end limit and automatic setting of the opening end limit.

- 1] Press the **Down** button on the control point to reach the closing end-limit.
- 2] Press the **Up** and **my** buttons simultaneously:
 - The motorised product reaches by itself its opening end limit position during a "Self-learning phase".



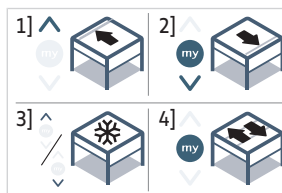
⚠ CAUTION

Do not interrupt the movement until the drive reaches its maximal position.

- 3] Press **Up** or **Down** button to reach the desired "Snow position".
- 4] Press and hold the **My** button until the motorised product briefly moves back and forth.
 - End limits and "Snow" position are now programmed.

2.4.4.3. Manual setting of the opening end limit and automatic setting of the closing end limit

- 1] Press the **Up** button on the control point to reach the opening end-limit.
- 2] Press the **my** and **Down** buttons simultaneously:
 - The motorised product reaches by itself its closing end limit position during a "Self-learning phase".



⚠ CAUTION

Do not interrupt the movement until the drive reaches its maximal position.

- 3] Press **Up** or **Down** button to reach the desired "Snow position".
- 4] Press and hold the **My** button until the motorised product briefly moves back and forth.
 - End limits and "Snow" position are now programmed.

2.4.5. Programming of the first local io control point

ⓘ NOTICE

Programming (final) of the first control point is possible only if the end limits of the driven product are set.

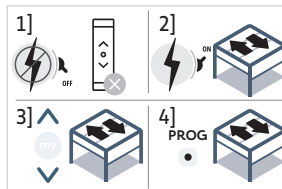
2.4.5.1. Programming of the pre-programmed somfy io-homecontrol® local control point

Press the **PROG** button of the pre-programmed control point: the driven product performs a brief back and forth movement; the control point is programmed definitively.



2.4.5.2. Programming of a non pre-programmed control point

- 1] Switch off the power supply (the pre-programmed control point is deleted).
- 2] Switch the mains power supply back on. The motorised product moves back and forth briefly.
- 3] Simultaneously press the **Up** and **Down** buttons of the control point to be programmed until the motorised product moves briefly.
- 4] Briefly press the **PROG** button of this control point: the motorised product performs a brief back and forth movement; the control point is programmed.



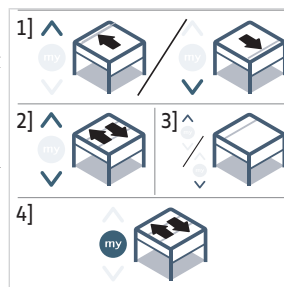
2.5. Tips and advice on installation

2.5.1. Questions about the product?

Observations	Possible causes	Solutions
The motorised product does not operate.	The wiring is incorrect.	Check the wiring and modify it if necessary, referring to Wiring.
	The control point battery is low.	Check the battery and replace it as required.
	The control point is not compatible.	Check the compatibility and replace the control point if necessary.
	The control point used has not been programmed into the drive.	Use a programmed control point or program this control point, referring to Programming the control point.
The motorised product does not respond to the wake-up command.	The motorised product is not set.	Proceed to section Commissioning.

2.5.2. Resetting of the manual end limit setting only

- 1] Reach the end limit position to modify.
- 2] Press the **Up** and **Down** buttons simultaneously until the motorised product briefly moves back and forth.
- 3] Reach a new desired end limit position.
- 4] Press and hold the **My** button until the motorised product briefly moves back and forth.
→ The new end limit position is now programmed and the old one is deleted.



2.5.3. Adding/Deleting a control point

NOTICE

- **First one-way io control point:** This control is already programmed at the outputs concerned which will not be cleared.
- **Second one-way io control point:** This control point must be programmed or cleared at the same outputs as transmitter 1.

- 1] Press the **PROG** button on the back of the first io control point for more than 2 seconds until the motorised product makes back and forth movement on the output concerned.
- 2] Briefly press the **PROG** button on the back of the second io control point until the motorised product makes back and forth movement on the output concerned.



2.5.4. Sensors

① NOTICE

- To customise the setting of the sensors, use the Set&Go io tool (contact a Somfy representative for more information).
- To find compatible products, contact a Somfy representative.
- This chapter describes the default behavior of the sensors.

2.5.4.1. In case of freeze

① NOTICE

For freeze detection, this box has an internal temperature sensor.

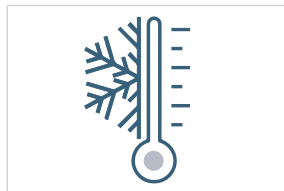
The pergola goes to its « Freeze position » if the current position is under this position.

Default « Freeze position »: 90% CLOSED (Open at 10° approximatively)

Default temperature of detection: 5°C

Refer to Set&Go io Somfy product to customise the internal temperature sensor:

- The position: settable between 0 to 100%.
- The threshold: settable between 0°C to 8°C.
- The status: activation/deactivation.



① NOTICE

Automatic and manual movements are authorized, but if a position under the "Freeze position" is requested, the pergola goes into this position and then immediately returns to "Freeze position".

2.5.4.2. In case of rain

① NOTICE

For rain detection, use a wired rain sensor, directly connected to the box.

The pergola goes to its « Rain position ».

Default « Rain position »: 100% CLOSED

Refer to Set&Go io Somfy product to customise:

The rain position: settable between 0 to 100%.



① NOTICE

- Automatic and manual movements are authorized.
- The sensor is deactivated if the Auto/Manu button of the situio Variation is on « manual mode ».

Water evacuation feature

① NOTICE

Water evacuation is disabled by default and can be activated with Set&Go.

- ✓ During the 6 hours following the disappearance of the rain, when a movement order, the pergola remains at 60% (=45 °) for 4 minutes, allowing perfect evacuation of the water, before continuing its movement.
- ✓ **This behaviour is executed if:**
 - Not yet executed in the last 6 hours.
 - If the requested position is upper than 45°

2.5.4.3. In case of snow

① NOTICE

For snow detection, use a wired "ondeis" sensor in combination with the internal temperature sensor.

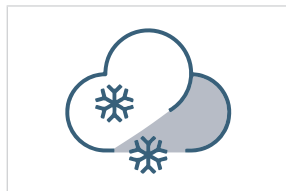
The pergola goes to its « Snow position »

Default « Snow position »: set during the settings

Default temperature of detection: 5°C

Refer to Set&Go io Somfy product to customise:

- The position: settable between 0 to 100%.
- The threshold: settable between 0°C to 8°C.
- The status: activation/deactivation.



① NOTICE

- Automatic movements are authorized 15 minutes after the last detection of snow.
- Manual movements are authorized 30 seconds after the last detection of snow.

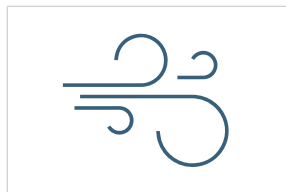
2.5.4.4. In case of wind

The pergola goes to its « Wind position ».

Default « Wind position »: 100% CLOSED

The function is not disable but the wind position is settable between 0 to 100%.

Refer to Set&Go io Somfy product to customise this function.



① NOTICE

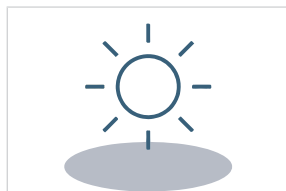
- Automatic movements are authorized 15 minutes after the last detection of wind.
- Manual movements are authorized 30 seconds after the last detection of wind.

2.5.4.5. In case of sun

The pergola goes to its « My position » or at the down end limit (Refer to the notice of the Sun sensor).

Default « My position »: 50% CLOSED (Open at 10° approximatively).

Refer to Favourite (my) position [p. 12] to change the position.



① NOTICE

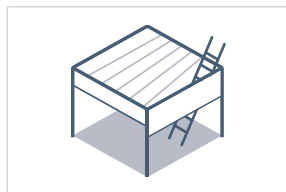
- Automatic and manual movements are authorized.
- The sensor is deactivated if the Auto / Manu button of the Situo io Variation is in manual position.

2.5.4.6. In case of an obstacle

If an obstacle is detected during the backward or forward movement, the drive stops and a release movement of 2 seconds is executed. Then a movement in the same direction is possible.

Refer to Set&Go io Somfy product to customise:

The behaviour: activation/deactivation.



NOTICE

This protection is activated after 1 second of movement in order to avoid any undesirable stop at the start of the movement (depending on the motorised product, there could be a significant current peak during the first centimetres of movement).

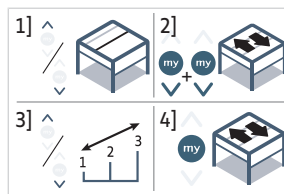
2.5.4.6.1. Setting the detection level of sensitivity in case of obstacle

CAUTION

This function is only accessible by the ergonomics of the remote control (when the motorised product is in the middle position).

To customise the threshold of the obstacle detection:

- 1] Move the motorised product to the middle position.
- 2] Briefly press simultaneously the **my** and **Down** buttons then immediately press simultaneously the **my** and **Down** buttons again for 2 seconds until a back and forth movement.
- 3] Press the **Up** or **Down** to increase/decrease the detection level of 1 to 3.



NOTICE

Level 2 is the factory level

- 4] Press the **my** button until a back and forth movement to save the chosen level.

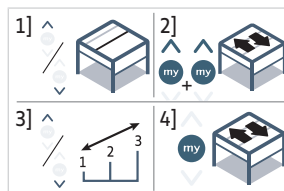
2.5.4.6.2. Setting of the closing or the opening force of the slats

CAUTION

This function is only accessible by the ergonomics of the remote control (when the motorised product is in the middle position).

To customise the threshold of the closure or the opening of the slates:

- 1] Move the motorised product to the middle position.
- 2] Briefly press simultaneously the **Up** and **my** buttons then immediately press simultaneously the **Up** and **my** buttons again for 2 seconds until a back and forth movement.
- 3] Press the **Up** or **Down** to increase/decrease the closure or opening level of 1 to 3.



NOTICE

Level 2 is the factory level

- 4] Press the **my** button until a back and forth movement to save the chosen level.

2.5.5. Restoring the original configuration

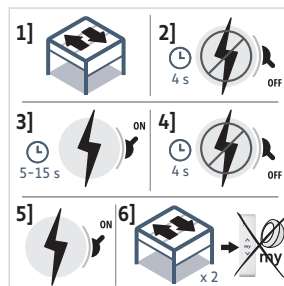
CAUTION

Only switch off power (double cut-out) for the motorised product to be reset.

NOTICE

This reset deletes all the local control points, all the sensors.

- 1] Position the motorised product at the mid-height position.
- 2] Cut the power supply for 4 seconds.
- 3] Switch the power supply back on for 5 to 15 seconds.
- 4] Cut the power supply for 4 seconds.
- 5] Switch the mains power supply back on:
 - ⇒ The motorised product moves for a few seconds. (If the motorised product is in the upper or lower limit position, it will briefly move up and down).
- 6] Press the PROG button on the Somfy local control point **for ≈ 7 s until the motorised product moves up and down twice**:
 - The drive is reset to the original configuration.



Repeat the commissioning procedure (see the section entitled Commissioning).

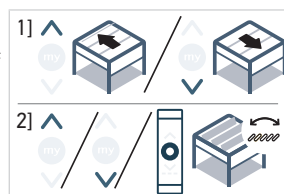
3. USE AND MAINTENANCE

① NOTICE

This drive does not require any maintenance operations.

3.1. Up, Down and Scroll buttons

- 1] To move back or forth, briefly press the **Up** or **Down** button.
- 2] To tilt the slats, press and hold the **Up** or **Down** button or use the **scroll** of the remote control, until the slats reach the desired position.



3.2. My button

3.2.1. Stop function

The motorised product is moving:

Press the **my** button: the motorised product stops.



3.2.2. Favourite (my) position

① NOTICE

- A 50% open position, referred to as the "my" position other than the fully up or fully down position, is programmed by default in the drive.
- The product adjusts its end limits before reaching the "my" position.

- 1] Set the driven product to the desired "my" position.
- 2] Press **my** button until the motorised product moves up and down briefly: the new "my" position is programmed and the old "my" position is deleted.



3.3. Tips and advice on operation

3.3.1. Questions about the product?

Observations	Possible causes	Solutions
The motorised product does not operate.	The control point battery is low.	Change control point battery as required.

NOTICE

If the motorised product still does not operate, contact a drive and home automation professional.

3.3.2. Replacing a lost or broken Somfy control point

To replace a lost or broken control point, contact a drive and home automation professional.

4. TECHNICAL DATA

Power supply	24 V DC SELV +/- 2%
Radio frequency	868-870 MHz
Frequency bands and maximum power used	868.000 MHz - 868.600 MHz e.r.p. <25 mW 868.700 MHz - 869.200 MHz e.r.p. <25 mW 869.700 MHz - 870.000 MHz e.r.p. <25 mW
Index protection rating	IP55
Operating temperature	-20°C to +60°C
Electrical insulation	Class III
Frequency	Continuous current
Drive current	From 0.5 to 5.5 A
Maximum number of associated control points by drive	9
Maximum number of associated sensors by drive	3
Dimension in mm	80 x 265 x 45
Minimum cycle life requirement	10000
Type of control	1
Control-command	Class A



PRECAUTION

Do not set the maximum current more than 50% of the nominal current of the motorisation. Maximum current is settable with Set&Go product between 0.5 A and 5.5 A (Default = 3 A) depending of the drive used.

Drives are not designed to resist to a too exceed current.

If the needed current exceeds 50% of the nominal one, please check the accordance between the drive 's powerful and the maximum force needed to move the slates (Weight, friction, temperature, ...)

NOTICE

For additional information on the technical data for this drive, contact your Somfy representative.



We care about our environment. Do not dispose of the appliance with usual household waste. Give it to an approved collection point for recycling.

CE SOMFY ACTIVITES SA, 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 the Radio Directive 2014/53/EU.

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

Philippe Geoffroy, Approval manager, acting on behalf of Activity director, Cluses, 07/2020.

[illegible]

SOMFY ACTIVITES SA

50 avenue du Nouveau Monde

F-74300 CLUSES

www.somfy.com

somfy®



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