

# Sonesse Ultra 50 DC RS485

**EN** Instructions

# ORIGINAL GUIDE

These instructions apply to all Sonesse 50 DC irrespective of torque and speed variations.

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The Sonesse ULTRA 50 DC motor has been developed for interior use.

Its ultra quiet operation ensures user comfort and well-being.

For more information, and to optimise the acoustic performance of your interior application, please contact a Somfy adviser.

## 1. PREREQUISITE INFORMATION

### 1.1 FIELDS OF APPLICATION

The Sonesse ULTRA 50 DC motor is designed to operate interior Roller blinds applications.

The Sonesse ULTRA 50 DC motor is designed to operate multiple roller blinds simultaneously (multi-banding), where these are interconnected by an intermediate bracket.

The Sonesse ULTRA 50 DC motor is not designed to be used with a compensating spring.

Any use outside the fields of application is prohibited, in particular:

The Sonesse ULTRA 50 DC motor is not designed for outdoor applications (e.g. outdoor vertical blinds, roller shutters, etc.)

## 1.2 LIABILITY

Before installing and using the motor, please read **operating and installation guide carefully**. In addition to following the instructions given in this guide, the instructions detailed in the attached **Safety instructions** document must also be observed.

**The motor must be installed by a motor and home automation professional, according to instructions from Somfy and the regulations applicable in the country in which it is commissioned.**

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

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

If in doubt when installing the motor, or to obtain additional information, contact a Somfy adviser or go to the website [www.somfy.com](http://www.somfy.com).



Safety warning!







Caution!



Information

## 2. INSTALLATION

-  Instructions which **must** be followed by the motor and home automation professional installing the motor.
-  Never drop, knock, drill or submerge the motor.
-  Install a separate control point for each motor.
-  To optimize ultra quiet operation, the mechanical plays between motor, accessories, tube and end of tube must be decreased to the maximum.

### 2.1. INSTALLATION

#### 2.1.1. Preparing the motor

Check that the inner diameter of the tube greater than 47mm.

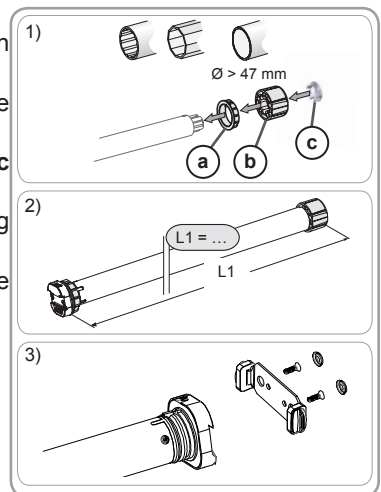
1) Fit the accessories required to integrate the motor in the roller tube:

- Fit the crown **a**, the motor wheel **b** and the stop wheel **c** on the motor.

The stop wheel must be screwed with a torque ranging between 1.5 and 1.8 Nm.

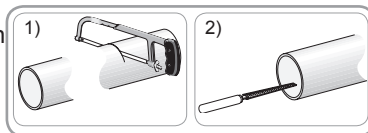
2) Measure the length (L1) between the inner edge of the motor head and the edge of the motor wheel.

3) Screw the bracket interface on the motor head.



### 2.1.2. Tube preparation

- 1) Cut the roller tube to the required length, depending on the motorised product.
- 2) Deburr the roller tube and remove the swarf.




### 2.1.3. Motor/tube assembly

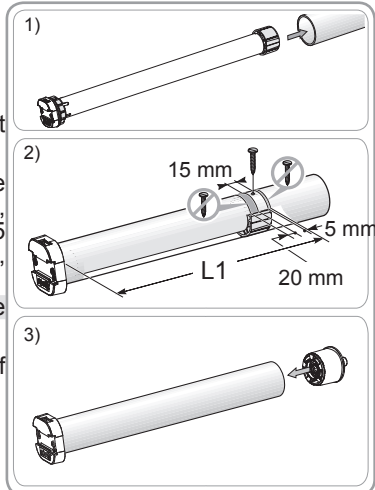
- 1) Slide the motor into the roller tube.

2) The motor wheel must be locked in place to prevent movement inside the roller tube:

- This can be done either by fixing the roller tube to the motor wheel using 4 x Ø 5 mm self-tapping screws, or by using 4 x Ø 4.8 mm steel pop rivets placed 5 mm to 15 mm from the outer edge of the motor wheel, regardless of the roller tube.

 The screws or pop rivets must only be attached to the motor wheel and not to the motor.


- 3) Slide the end cap into the roller tube and locked it if necessary.



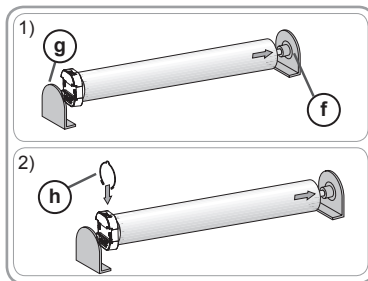
### 2.1.4. Installing the motor/tube assembly

 The motorised product must not be compressed between the brackets


- 1) Install and fix the motor/tube assembly onto the end bracket **f** and onto the motor bracket **g**:


 Ensure that the motor/tube assembly is secured onto the end bracket. This operation prevents the motor/tube assembly from coming out of the end bracket mounting when the roller blind reaches the lower end limit position.

- 2) Clip the stop ring **h** in place.



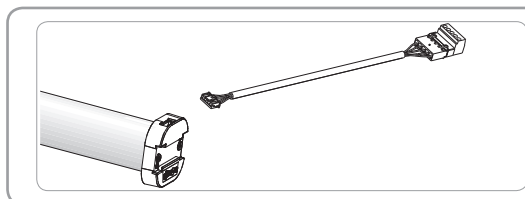
## 2.2. WIRING

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

 Attach cables to prevent any contact with moving parts.

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

- Switch off the power supply (compatible power supply, see p9).
- Connect the cable to the motor head.



#### Power Data

V+	V-	+	-	G

## 2.3. COMMISSIONING

Switch on the power supply.

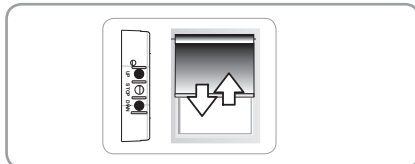
If the motor is not set, the Led switches ON.

If the motor is already set, the Led Stay OFF.

### WITH THE MOTOR HEAD BUTTONS

Press the **Up** and **Down** buttons on the motor head buttons at the same time: The motorised product moves up and down.

The motor is in commissioning mode.



#### 2.3.1. Checking the direction of rotation

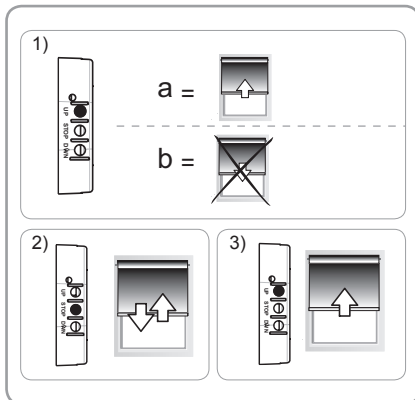
1) Press the **Up** button on the motor head:

a) If the motorised product rises (a), the direction of rotation is correct: Move onto the section entitled "Setting the end limits".

b) If the motorised product lowers (b), the direction of rotation is incorrect: Move onto the next step.

2) Press the **Stop** button on the motor head until the motorised product moves up and down: The direction of rotation has been modified.

3) Press the **Up** button on the motor head to check the direction of rotation.



#### 2.3.2. Setting the end limits

**ⓘ The end limits can be set in any order.**

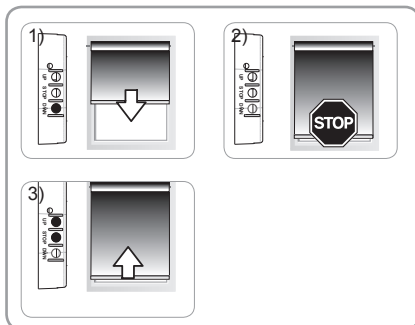
##### Setting the lower end limit

1) Press the **Down** button on motor head to lower the motorised product to the lower end limit.

2) Release the button to stop the motorised product. If necessary, adjust the down position, using the **Up** or **Down** buttons.

3) Press the **Up** and **Stop** buttons at the same time until the motorised product moves.

The lower end limit is memorised.



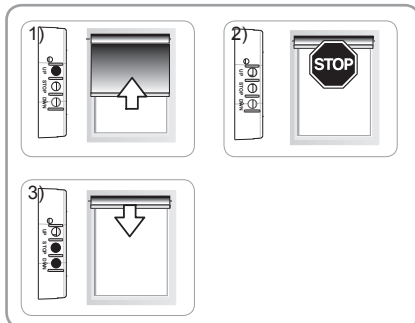
##### Setting the Upper end limit

1) Press the **Up** button on motor head to raise the motorised product to the upper end limit.

2) Release the button to stop the motorised product. If necessary, adjust the down position, using the **Up** or **Down** buttons.

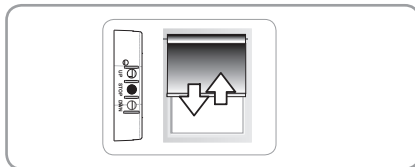
3) Press the **Down** and **Stop** buttons at the same time until the motorised product moves.

The lower end limit is memorised.



### 2.3.4. Validation of the setting

To confirm the end limits, press the **Stop** button until the motorised product moves up and down. The end limits are programmed (the Led switches OFF).



### WITH THE RS485 SETTING TOOL

Connect the RS485 SETTING TOOL to the motor switch on and follow the instruction on the RS485 SETTING TOOL (p10).

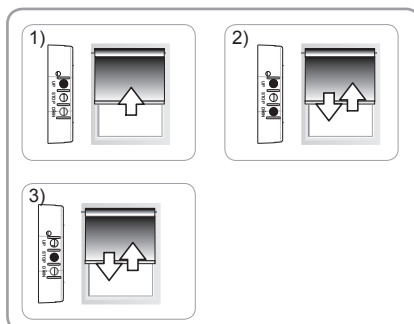
## 2.4. TIPS AND RECOMMENDATIONS FOR INSTALLATION

### 2.4.1. Questions about the Sonesse ULTRA 50 DC RS485?

Observations	Possible causes	Solutions
The motorised product does not operate.	The wiring is incorrect.	Check the wiring and modify it if necessary.
	The control point is not compatible.	Check for compatibility and replace the control point if necessary.
The motorised product is noisy:	The motor wheel and the crown are not suitable for the tube.	Replace the motor wheel and the crown
	The motorised product is compressed between the brackets	Increase the play between the brackets
	The tube contains swarf and screws.	Clean the roller tube.
During setting with the RS485 SETTING TOOL, the following message error " <b>Not accepted by the node</b> " appears on the screen	One step of the setting process wasn't performed correctly	Restoring the original configuration (according to: factory default...) then start again the setting process from step 1 to X

### 2.4.2. Readjusting the motor rotation direction

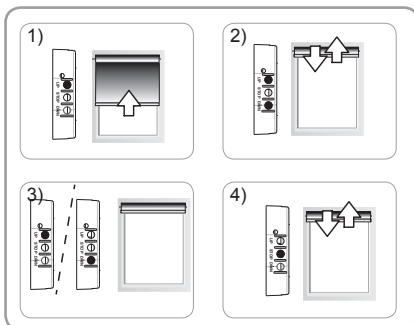
- 1) Position the motorised product at the mid-height position.
- 2) Press the **Up** and **Down** buttons at the same time until the motorised product moves up and down.
- 3) Press the **Stop** button on the motor head until the motorised product moves up and down: The direction of rotation has been modified.



### 2.4.3. Readjusting the end limits

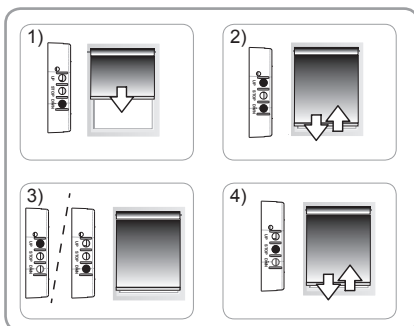
#### Readjusting the upper end limit

- 1) Press the **Up** button to bring the motorised product to the end limit to be readjusted.
- 2) Press the **Up** and **Down** buttons at the same time until the motorised product moves up and down.
- 3) Press the **Up** or **Down** buttons to move the motorised product to the new desired position.
- 4) To confirm the new end limit, press the **Stop** button until the motorised product moves up and down.



#### Readjusting the lower end limit

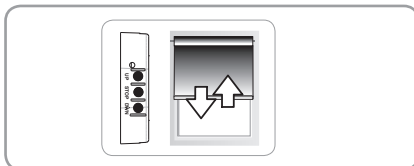
- 1) Press the **Down** button to bring the motorised product to the end limit to be readjusted.
- 2) Press the **Up** and **Down** buttons at the same time until the motorised product moves up and down.
- 3) Press the **Up** or **Down** button to move the motorised product to the new desired position.
- 4) To confirm the new end limit, press the **Stop** button until the motorised product moves up and down.




### 2.4.4. Restoring the original configuration (Factory mode)


Press the **Up**, **Stop** and **Down** buttons at the same time ( $\approx 7s$ ) until the motorised product moves up and down once.

The motor is now in Factory mode, and the led switches ON.



## 3. USE AND MAINTENANCE

 This motor is maintenance-free

 For the safety of goods and people, Somfy motors are equipped with thermal protection that will trigger the motor stops in the event of overheating.

Repeated activation of this protection can degrade motor performance.

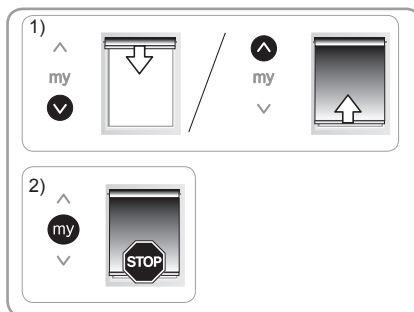
If the motor goes to thermal protection, please check your installation and check that the motor is rated for the intended use.

A normal installation is not expected to trigger this protection.

### 3.1. OPERATION

To control the motorised product, please refer to the technical instructions of the dedicated controller.

The images of the control point are not contractually binding



### 3.2. TIPS AND RECOMMENDATIONS FOR USE

#### 3.2.1. Questions about the Sonesse ULTRA 50 DC RS485?

Observations	Possible causes	Solutions
The motorised product does not operate.	The motor is in thermal protection mode.	Wait for the motor to cool down.
The motorised product realise a movement in the opposite direction of the last order.	The motorised product detect an obstacle.	Remove the obstacle.

If the motorised product still does not work, contact a motorisation and home automation professional.

## 4. TECHNICAL DATA

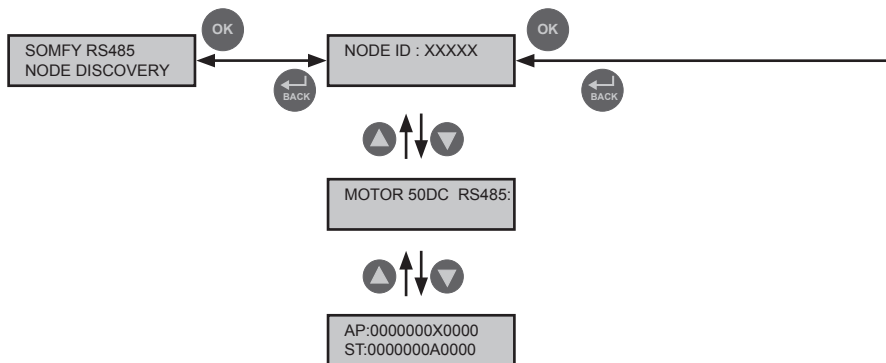
Power supply	24V dc
Operating temperature	0°C to + 60°C
Index protection rating	IP 20
Safety level	Class III

## 5. POWER SUPPLY

The Sonesse ULTRA 50 DC RS485 is only compatible with the following power supplies:

Manufacturer	Model	Ratings
CUI INC (E210311)	EMSA240125	Input: 100 - 240 Vac, 50-60 Hz, 1.0 A Output: 24 VDC, 1.25 A, LPS (#)
CUI INC (E210311)	EMSA240167	Input: 100 - 240 Vac, 50-60 Hz, 1.0 A Output: 24 VDC, 1.67 A, LPS (#)
POWERTRON ELECTRONICS (E248122)	PA1030-3y (\$)	Input: 100-240 Vac, 0.8 A, 50-60Hz Output: 24 VDC, max 2 A, max 30 W, LPS (#)



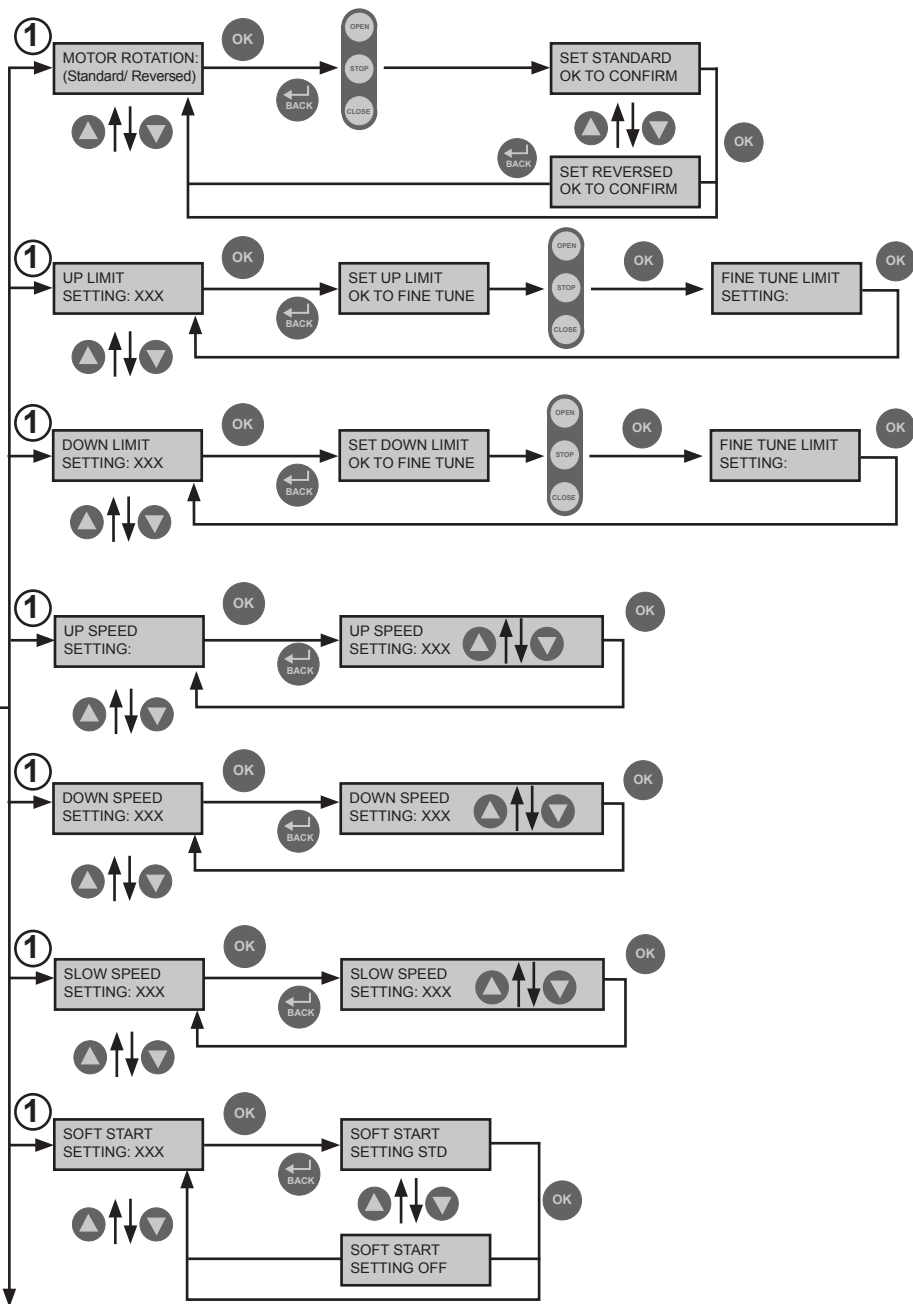


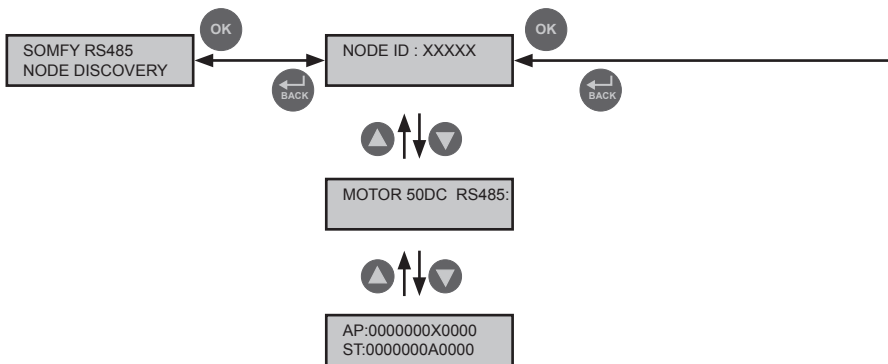
**EN** \*\*Select the preset position (1 to 16) with the ▲ ▼ buttons.

**IT** \*\*Selezionare la posizione prerogolata (1 - 16) con i pulsanti ▲ ▼ .

**ES** \*\*Seleccione la posición predefinida (1 a 16) con los botones ▲ ▼ .

**ZH** \*\*使用 ▲ ▼ 按钮选择预设位置（1至16）。





**EN** \*\*Select the preset position (1 to 16) with the ▲ ▼ buttons.

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