

# Sonesse® 50 RS485 LT50 RS485

Installation guide

NE

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## 1. INTRODUCTION

The Sonesse® 50 motor range can motorise all tubular applications: Roller shades, Roman shades, Projection screens, ...

The Sonesse® 50 is designed to ensure quiet operations.

The Sonesse® 50 RS485 & LT50 RS485 are digital AC motors, compatible with RS485\* solutions (\*physical layer).

The Sonesse® 50 RS485 & LT50 RS485 motors are designed to be connected on a BUS Line RS485.

Somfy hereby declares that this product conforms to the essential requirements and other relevant provisions of Directive 1999/5/CE. A Declaration of Conformity is available at [www.somfy.com/ce](http://www.somfy.com/ce). Usable in EU, CH and NO. Images are not contractually binding

## 2. SAFETY

### 2.1. Safety and responsibility

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- This Somfy product must be installed by a professional installer of motorisation and home automation, for whom these instructions are intended.
- Before installation, check that this product is compatible with the associated controls and accessories (crown, wheel brackets).
- These instructions describe how to install, set and use this product.
- Moreover, the installer must comply with current standards and legislation in the country in which the product is being installed, and inform his customers of the operating and maintenance conditions for the product.
- Any use outside the application scope specified by Somfy is not approved. Such use, or any failure to comply with the instructions given herein will invalidate the warranty, and Somfy refuses to accept liability.

Subject to technical modifications.

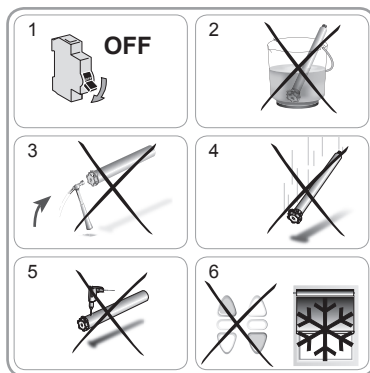
## 2.2. Specific safety advice

**i** In addition to the safety instructions described in this guide, be sure to also observe the instructions set out in the attached document "Safety instructions to follow and keep".

1) Switch off the mains supply of the shade before performing any service operation in the vicinity.

To avoid damaging the product:

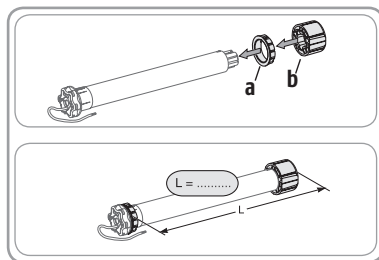
- 2) Never immerse it in liquid!
- 3) Avoid impacts!
- 4) Do not drop it!
- 5) Never drill holes in it!
- 6) Avoid moving the shade if ice has formed on it.



## 3. INSTALLATION

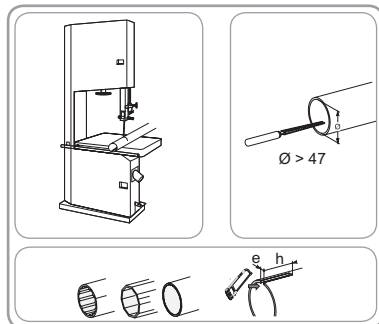
### 3.1. Motor preparation

- 1) Fit the crown (a) and drive wheel (b) to the motor.
- 2) Measure the length (L) between the end of the drive wheel and the head end.




### 3.2. Tube preparation

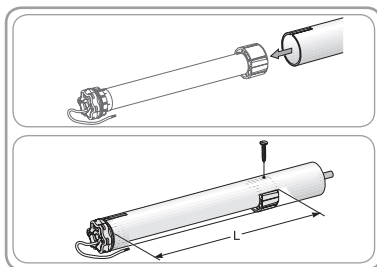
- 1) Cut the tube to the required length.
- 2) Deburr the tube and remove the debris.
- 3) For smooth roller tubes, cut a notch with the following measurements:  
 $e = 4 \text{ mm} / 0.16 \text{ In}$     $h = 28 \text{ mm} / 1.1 \text{ In}$



### 3.3. Motor/tube assembly

- 1) Slide the motor into the tube.  
For smooth roller tubes, position the notch previously cut on the crown.
- 2) Fix the tube to the drive wheel with 4 self-tapping screws with a diameter of 5 mm or 4 steel pop rivets with a diameter of 4.8 mm located at  $L - 15 \text{ mm} \pm 3 \text{ mm}$ .

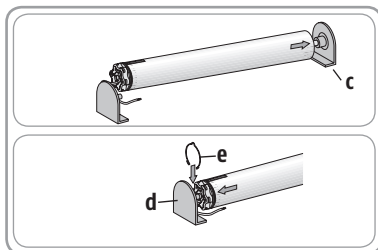
 Warning: The screws or pop rivets must only be attached to the drive wheel and not to the motor.



### 3.4. Mounting the motorized tube on the brackets

If necessary, screw the bracket interface on the motor head.

- 1) Mount the motorized tube on the end bracket (c).
  - 2) Mount the motorized tube on the motor bracket (d).
- Fit the stop ring (e).

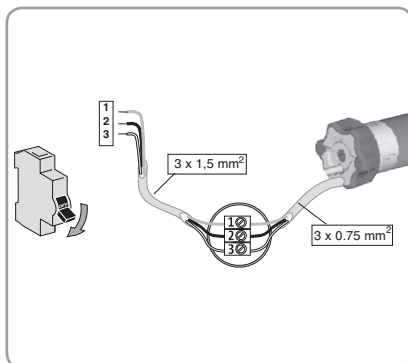


## 4. WIRING

### 4.1. Power wiring

- 1) Cut off the mains power supply.
- 2) Connect the motor according to the information in the table below:

RANGE	Neutral	Live	Earth
230V-50Hz	Blue	Brown	Yellow/ Green
220V-60Hz			
120V-60Hz	White	Black	Green
100V-50/60Hz			

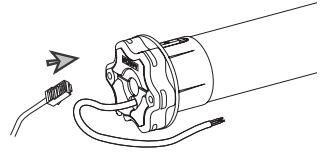


## 4.2. Data wiring

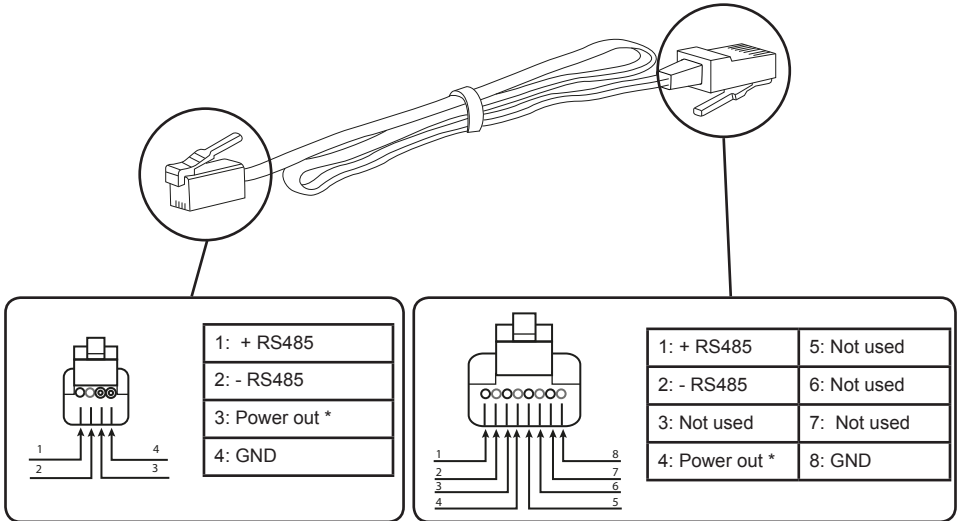
Connect the data cable to the motor according to the information in the tables below:



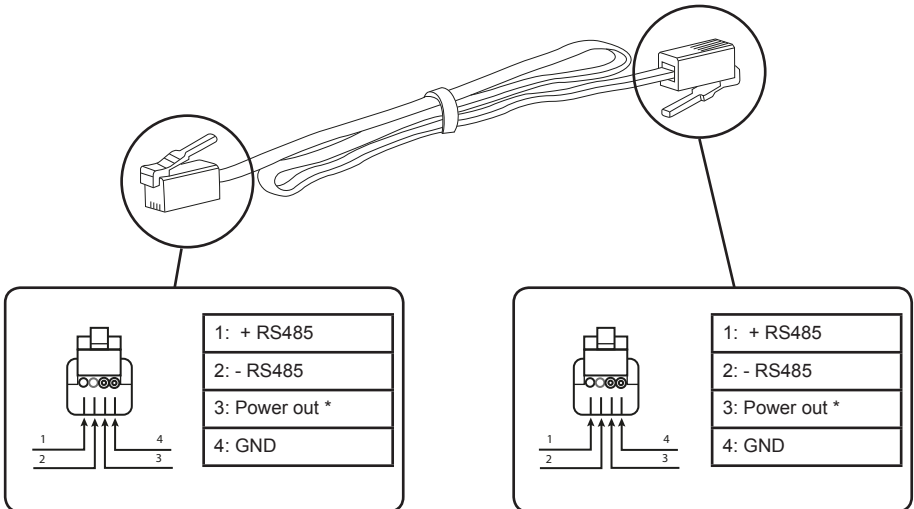
Between the RS485 data wire and the RS485 product, the cable length should not exceed 10m.



### 1) Data cable RJ9/RJ45



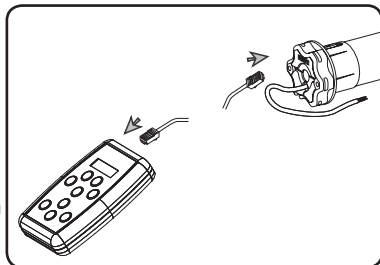
### 2) Data cable RJ9/RJ9



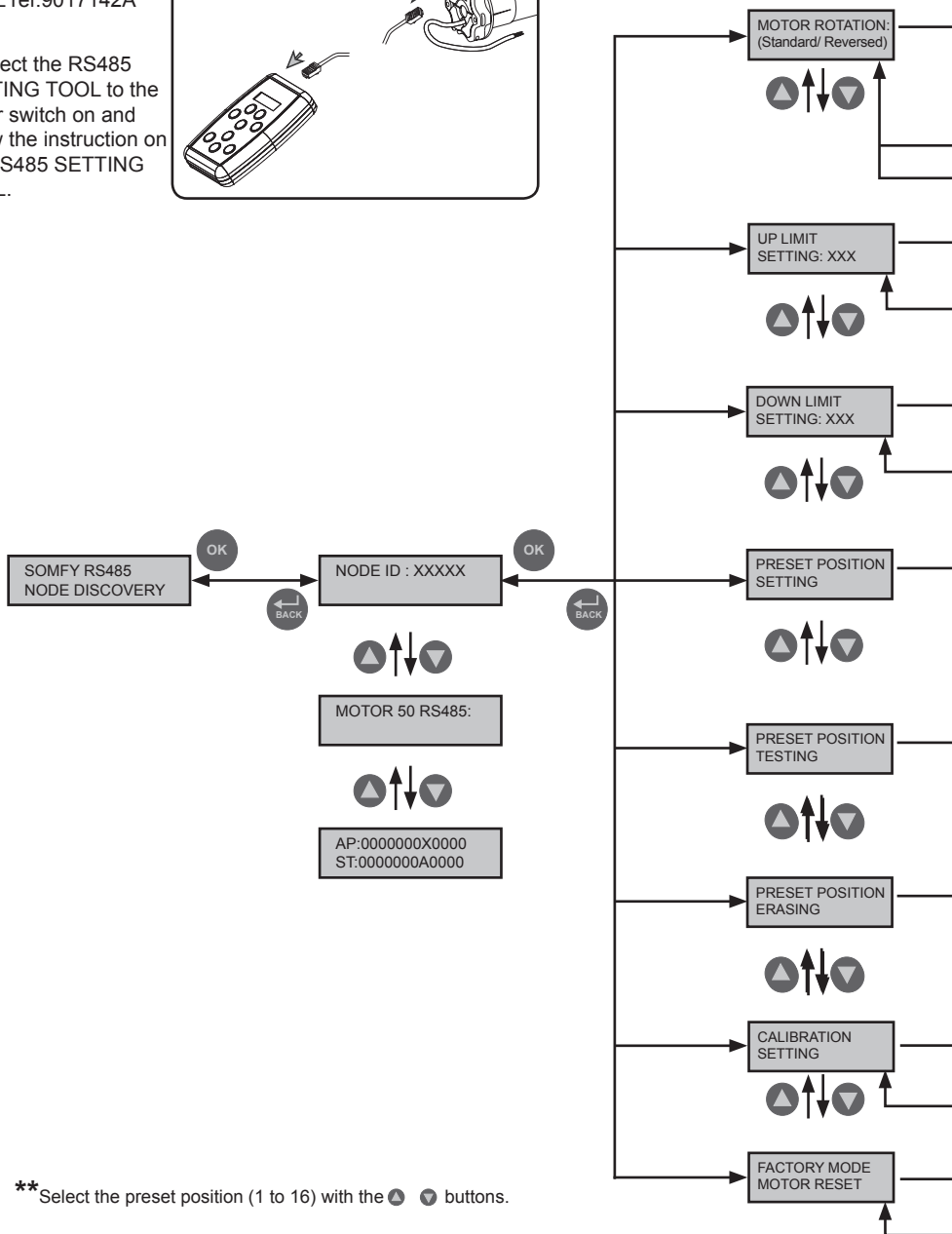
\* Power out specification : 7,5V /30 mA max

## 5. COMMISSIONING

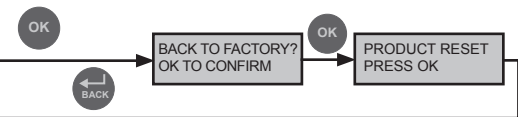
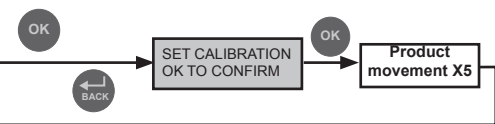
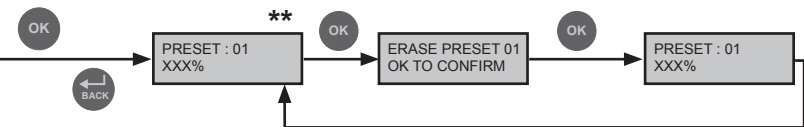
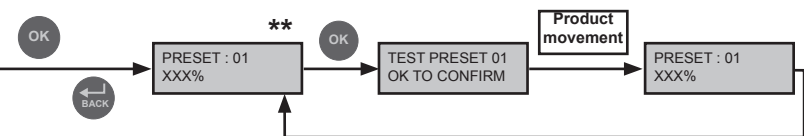
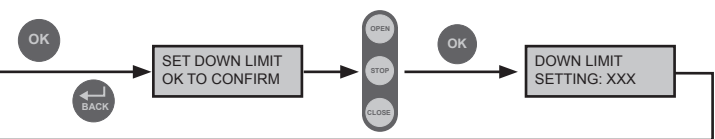
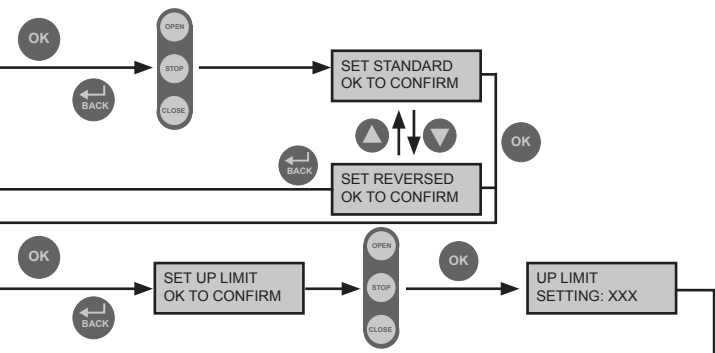
To set the motor, use the RS485 SETTING TOOL ref:9017142A



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



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



## 6. OPERATION

To control the motor, please refer to the installation instruction of the used control.

## 7. TROUBLESHOOTING

### 8.1. Questions on the Sonesse® 50 RS485 or LT50 RS485?

**The motor doesn't work:**

**Verify:**

- The wiring of the motor.
- The power supply specifications.
- The compatibility of the control.
- The heat generated (wait for the cooling of the motor).

**The equipment stops too soon:**

**Verify:**

- The operation of end-limits during the motor rotation.
- The crown is properly fitted to the tube.
- The end-limits of the motor are properly adjusted.
- That the blind is within the recommended weight limit.

**The equipment is noisy:**

**Verify:**

- The wheel and the crown are well adapted to the used tube.
- The mechanical plays between motor, accessories, tube and end cap are minimized.
- The wheel is properly fixed to the tube.
- The equipment is not constrained between the brackets.
- The length of the notch is adapted to the motor crown or to the used crown.
- Debris, screws or other are not in your tube.
- The power supply specifications.
- The temperature of the environment is in conformity with the operating temperature.



## 8. TECHNICAL DATA

Power supply	230V-50Hz	120V-60Hz	100V-50/60Hz	220V-60Hz
Operating temperature	LT50 & Sonesse 50 $\geq$ 4Nm : - 20°C to + 70°C			
	Sonesse 50 $\leq$ 4Nm : 0°C to + 60°C			
Protection rating	LT50 & Sonesse 50 $\geq$ 4Nm : IP 44			
	Sonesse 50 $\leq$ 4Nm : IP31			
Safety level	Class I			
Connector	RJ9			



Damaged electric products and batteries should not be disposed of with normal household waste. Make sure to drop them in specially provided containers or at an authorized organization that will ensure they are recycled.





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