

# ORIGINAL INSTRUCTIONS

These instructions apply to all Orea 50 WT, Orea 50 WT RH and Orea 60 WT drives, whatever the torque/speed combination.

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The Orea WT can be fitted on the left or the right. It is controlled from a fixed- or temporary-position reversing switch control point.

## 1. PRIOR INFORMATION

### 1. 1. SPHERE OF APPLICATION

Orea 50, Orea 50 RH and Orea 60 drives are designed to drive all types of outside cassette awnings  that meet at least one of the following conditions:

- The driven product is controlled by a press-and-hold control point (wireless or wired) (see the enclosed **Safety instructions** document).
- The crush or shear zone is located at a height in excess of 2.50 m from the ground or any permanent access level.
- The awning is equipped with a safety device that prevents any contact in the shear or crush zone (a guard that cannot be removed without tools).

### 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](http://www.somfy.com).

 Safety Warning!

 Caution!

 Information

## 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.
-  Never connect 2 control points to the same drive.
-  Check compatibility if the drive is being used with a bus system (e.g.: a "KNX" system).

### 2. 1. ASSEMBLY

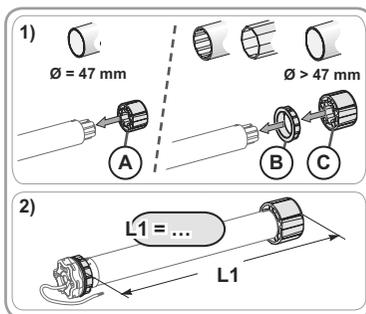
-  Check that the awning and its accessories are securely fixed.
-  Make sure that the drive used is suitable for the size of the awning to prevent damage to the awning and/or the Somfy product.
-  Please consult the awning manufacturer or Somfy for information on the compatibility of the drive with the awning and its accessories.

#### 2. 1. 1. Drive preparation

 **Orea 50 WT:** Make sure that the inner diameter of the tube is at least 47 mm.

 **Orea 60 WT:** Make sure that the inner diameter of the tube is at least 60 mm.

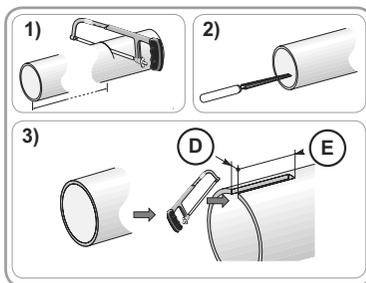
- 1) Fit the accessories necessary to incorporate the drive into the winding tube:
  - Either only the wheel (A) on the drive.
  - Or the ring (B) and the wheel (C) on the drive.
- 2) Measure the length (L1) between the inside edge of the drive head and the end of the wheel.



#### 2. 1. 2. Tube preparation

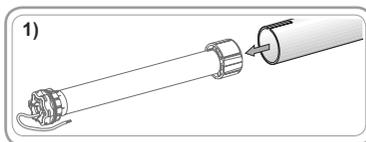
 Install an Orea WT drive in a winding tube at least 0.5 mm thick with a smooth inner surface (no welds, crimps, folds, etc. inside the tube).

- 1) Cut the winding tube to the desired length depending on the driven product.
- 2) Deburr the winding tube and remove all chips.
- 3) For smooth winding tubes, cut a notch to the following dimensions:
  - **Orea 50 WT:** (D) = 4 mm; (E) = 28 mm.
  - **Orea 60 WT:** (D) = 8 mm; (E) = 35 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 prevented from moving back and forth 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.

3) Fit the tube end into the winding tube.

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

### 2. 1. 4. 1. Star head drive

- 1) Fit the tube-drive assembly to the end support (F).
- 2) Fit the tube-drive assembly to the drive support (G). Depending on the type of support, position the retaining ring (H). For drives  $\geq 85$  Nm, with a retaining ring, a lockable retaining ring (I) must be used.

### 2. 1. 4. 2. Round head drive

- 1) Fit the support to the drive head, and then the removable side plate.
- 2) Slide the tube-drive-removable side plate assembly into the head rail.

## 2. 2. WIRING

 Cables routed through a metal internal wall must be protected and insulated by sleeving or sheathing.

 Secure the cables to prevent any contact with moving parts.

 If the drive is used outdoors and if the power supply cable is of the H05-VVF type, run the cable in a UV-resistant duct, e.g. trunking.

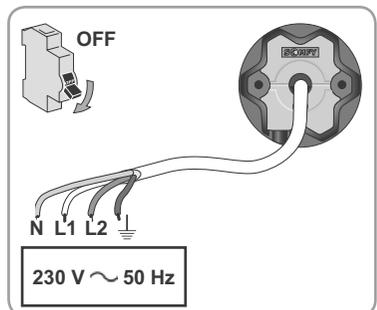
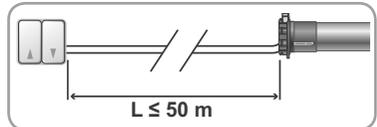
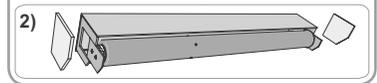
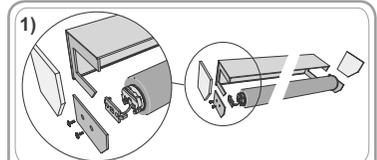
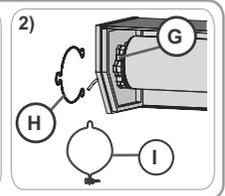
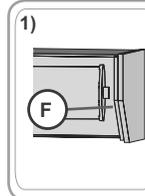
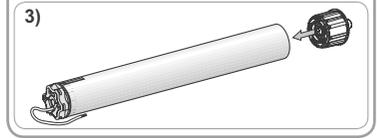
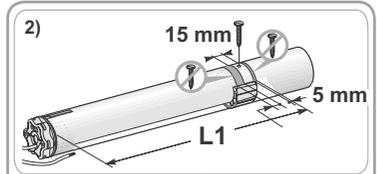
 The drive cable can be removed. If it becomes damaged, replace it with an identical cable.

 Leave the drive power supply cable accessible: it must be easily replaceable.

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

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

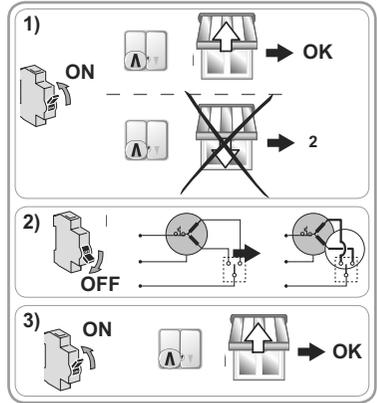
|               | Cable       |           |           |              |
|---------------|-------------|-----------|-----------|--------------|
|               | Neutral (N) | Live (L1) | Live (L2) | Earth (⊥)    |
| 230 V ~ 50 Hz | Blue        | Brown     | Black     | Green-yellow |



**2. 3. SET-UP**

**2. 3. 1. Checking the rotation direction**

- 1) Switch the power supply back on.
  - Press the "Up" button on the control point:
    - If the awning moves upwards, the wiring is correct and set-up is complete.
    - If the awning moves downwards, move on to the next step.
- 2) Switch the power supply off.
  - Switch over the brown and black wires connected to the control point.
- 3) Switch the power supply back on.
  - Press the "Up" button to check the rotation direction.



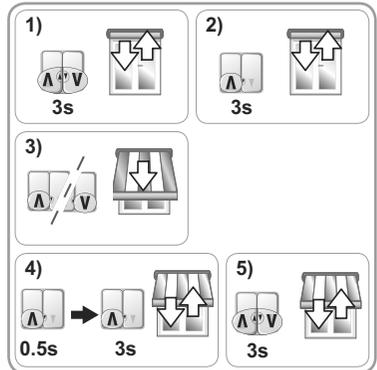
**2. 3. 2. Setting the end limits**

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

The upper end limit is set automatically, while the lower end limit must be set manually.

**Setting the lower end limit**

- 1) Press the "Up" and "Down" buttons until the awning moves back and forth.
- 2) Press the "Up" button until the awning moves back and forth.
- 3) Place the awning in the desired lower end limit position.
  - If necessary, adjust the position of the awning using the "Up" or "Down" button.
- 4) Briefly press the "Up" button and then press it again until the awning moves back and forth.
- 5) Press the "Up" and "Down" buttons until the awning moves back and forth.
  - ▶ The lower end limit position is programmed.



## 2. 4. TIPS AND ADVICE ON INSTALLATION

### 2. 4. 1. Questions about the Orea WT?

| Problems   | Possible causes   | Solutions  |
|--|---|--|
| The awning rotates in the wrong direction.       | The wiring is incorrect.  | Check the wiring and modify as required.   |
| The awning does not operate.                     | The wiring is incorrect.  | Check the wiring and modify as required.   |
|  | The overheating protection on the drive has been activated.   | Wait for the drive to cool down.   |
|  | The control point is not compatible.  | Check the compatibility and replace the control point as required.   |
| The awning stops too soon.                       | The awning is encountering friction when it moves: rubbing on the guide rails and cassette, interference between the winding tube and the drive, etc. | Check the installation of the awning and adjust any rubbing points. If the problem persists, restore the drive to its original configuration.                      |
|  | The drive has been installed in a new awning.   | Restore the drive to its original configuration (see section entitled "Restoring the original configuration").   |
| The awning does not stop at the lower end limit. | The fixings used are unsuitable.  | Check that the awning is secured to the winding tube with rigid links.   |
| The awning does not stop at the upper end limit. | The system for stopping the awning in the upper position is unsuitable.   | Check that the awning is fitted with stops screwed to the end slat, fixed or removable stops incorporated into the guide rails or an end slat that acts as a stop. |

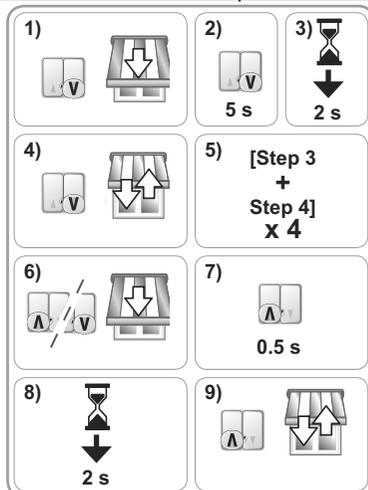
### 2. 4. 2. Re-setting the end limits

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

#### 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 end product.

- 1) Place the awning 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 awning moves back and forth.
- 5) Repeat steps 3 and 4 four times.
  - *The last back and forth movement is brief.*
- 6) Place the awning in the desired lower end limit position.
- 7) Briefly press the "Up" button.
-  If the awning reacts, repeat step 6.
- 8) Wait for 2 seconds.
- 9) Press the "Up" button until the awning moves back and forth.
  - ▶ The new lower end limit position is programmed.



### 2. 4. 3. Advanced functions

 Contact the manufacturer of the driven product before using these functions to ensure that they are compatible with your installation.

#### Obstacle detection function

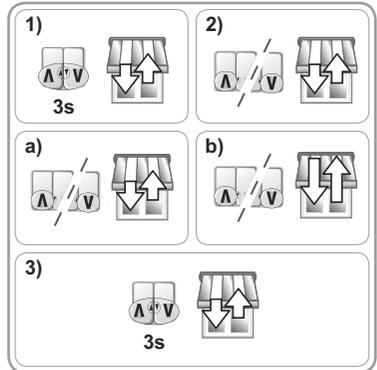
This function is used to increase or decrease the obstacle detection sensitivity of the awning cassette, which can be set to three levels (high-medium-low).

By default, the drive is factory-set to medium sensitivity.

 Before starting the setting procedure, place the awning at its half-way position.

To activate this function:

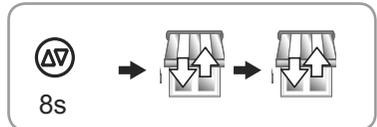
- 1) Press the "Up" and "Down" buttons until the awning moves back and forth.
- 2) Press the "Up" or "Down" buttons until the awning moves back and forth to adjust the obstacle detection level.
  - a) A brief back and forth movement indicates that obstacle detection is set to medium sensitivity.
  - b) A long back and forth movement indicates that obstacle detection is set to either low or high sensitivity.
- 3) Press the "Up" and "Down" buttons until the awning moves back and forth.
  - ▶ The last level is saved.



### 2. 4. 4. 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.

- Simultaneously press the adjusting cable or non-locking double push-button switch "Up" and "Down" buttons until the awning moves back and forth once, then again.
  - The drive is back in its original configuration.

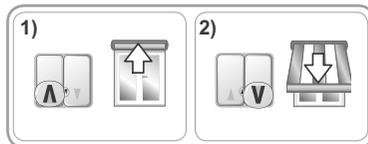


## 3. OPERATION AND MAINTENANCE

This drive does not require any maintenance operations

### 3. 1. RAISING AND LOWERING THE AWNING

- 1) Press the "Up" button:
  - The awning is raised and automatically stops at the upper stop.
- 2) Press the "Down" button:
  - The awning is lowered and automatically stops at the lower stop.

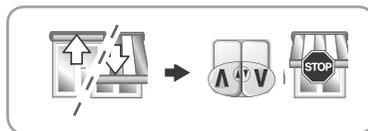


### 3. 2. STOP FUNCTION

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

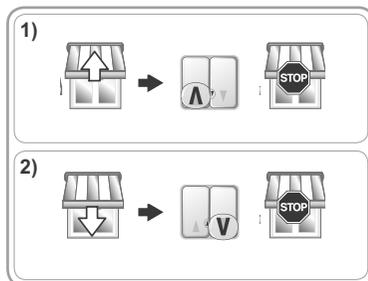
The driven product is moving.

- 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.



## 4. TIPS AND ADVICE ON OPERATION

### Questions about the Orea WT?

| Problems                     | Possible causes   | Solutions                        |
|------------------------------|---|----------------------------------|
| The awning does not operate. | The overheating protection on the drive has been activated. | Wait for the drive to cool down. |

## 5. TECHNICAL DATA

|                       |                    |
|-----------------------|--------------------|
| Power supply          | 230 V ~ 50 Hz      |
| Operating temperature | - 20 °C to + 60 °C |
| Protection rating     | IP 44              |
| Electric insulation   | Class I            |

**EN**



Somfy hereby declares that the drive covered by these instructions, marked for input voltage 230 V 50 Hz and used as set out in these instructions, is in compliance with the essential requirements of Machinery Directive 2006/42/EC and EMC Directive 2004/108/EC.

A CE declaration of conformity setting out the standards and specifications used and giving all necessary details for the identification of the drive and the name and address of the person(s) authorised to produce the technical dossier and qualified to produce the declaration including the place and date of issue, can be found at [www.somfy.com/ce](http://www.somfy.com/ce).