

# LS 40

**FR** Notice  
**DE** Anleitung  
**IT** Manuale  
**NL** Handleiding  
**EN** Instructions  
**ES** Guía

**PT** Instruções  
**EL** Οδηγίες  
**DA** Brugsanvisning  
**FI** Käyttöopas  
**SV** Bruksanvisning  
**NO** Veiledning

Ref. 5119106A



# ORIGINAL INSTRUCTIONS

These instructions apply to all LS 40 drives, in all torque/speed.

## SUMMARY

<b>1. Prerequisite information</b>	<b>21</b>	<b>3. Operation and maintenance</b>	<b>25</b>
1. 1. Fields of application	21	3. 1. Up and Down buttons	25
1. 2. Liability	21	3. 2. STOP function	25
<b>2. Installation</b>	<b>22</b>	3. 3. Tips and recommendations for use	25
2. 1. Assembly	22	<b>4. Technical data</b>	<b>25</b>
2. 2. Wiring	23		
2. 3. Commissioning	23		
2. 4. Tips and recommendations for installation	24		

## 1. PREREQUISITE INFORMATION

### 1. 1. FIELDS OF APPLICATION

The LS 40 drive is designed to drive all types of roller blinds, outdoor vertical blinds, vertical awnings, lateral arm awnings and interior blinds, which fulfil at least one of the following conditions:

- The motorised product is controlled by a momentary switch (wired or radio technology), (refer to 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 which cannot be removed without tools).
- The roller shutter is equipped with a safety arrangement that prevents any contact in the crush zone (a guard which cannot be removed without tools).
- For awnings or screens, the load bar moves by gravity only and weighs less than 15 kg.
- The roller shutter apron can be lifted by 4 cm when an upward force of 150 N is applied to the end slat positioned at 16 cm from its totally extended position.

If the roller shutter is equipped with openwork slats, a 5mm diameter rod must not pass through the openings.

### 1. 2. LIABILITY

Before installing and using the drive, 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 drive must be installed by a drive 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 drive 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 of any liability and invalidates the warranty.

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

If in doubt when installing the drive, 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









Up




Down

## 2. INSTALLATION

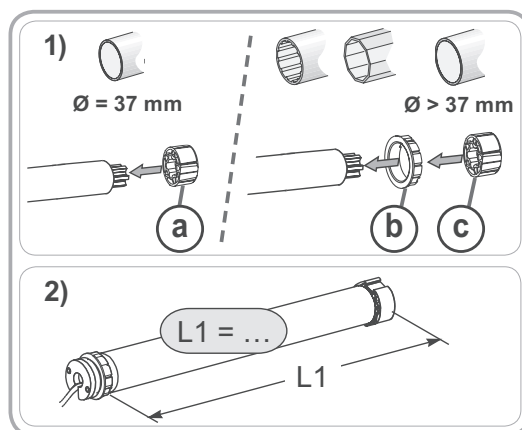
-  Instructions which must be followed by the drive and home automation professional installing the drive.
-  Never drop, knock, drill or submerge the drive.
-  Install a separate control point for each drive.
-  Never connect two control points to a single motor.
-  Never connect two motors to a single control point.
-  Never use a double push-button type control point.

### 2. 1. ASSEMBLY

#### 2. 1. 1. Preparing the drive

 Check that the inner diameter of the tube is 37 mm or greater.

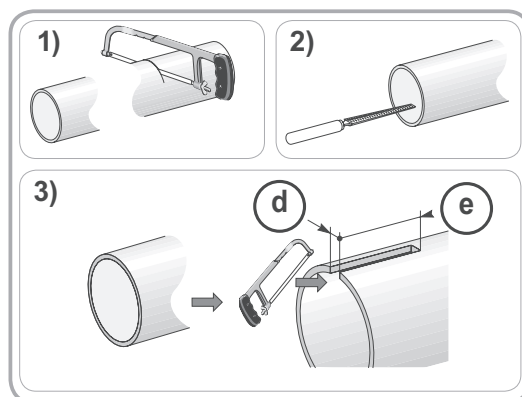
- 1) Fit the accessories required to integrate the drive in the roller tube :
  - Either fit the drive wheel (a) on the drive.
  - Or fit the crown (b) and the drive wheel (c) on the drive.
- 2) Measure the length (L1) between the inner edge of the drive head and the rim of the drive wheel.



#### 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..
- 3) For roller tubes which are smooth inside, cut a notch with the following measurements:

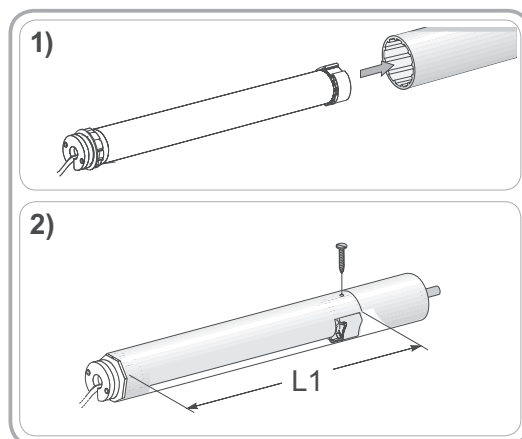
	d	e
Ø 40 x 1.5 mm	7 mm	8.5 mm
Ø 40 x 1 mm	6 mm	8.5 mm



#### 2. 1. 3. Drive/tube assembly


- 1) Slide the drive into the roller tube.  
For roller tubes which are smooth inside, position the notch previously cut on the boss on the crown.
- 2) Secure the roller tube onto the drive wheel using 3 self-tapping screws or 3 steel pop rivets positioned between 5 mm and 15 mm from the outer edge of the drive wheel, for all types of roller tube.

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

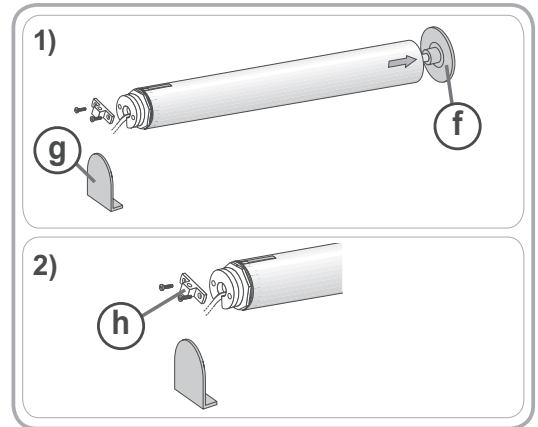


### 2. 1. 4. Installing the drive/tube assembly


1) Install and fix the drive/tube assembly onto the end bracket (f) and onto the drive bracket (g) :


 Ensure that the drive/tube assembly is secured onto the end bracket. This operation prevents the drive/tube assembly from coming out of the end bracket mounting.


2) Depending on the type of bracket, fit the stop ring (h) in place.





### 2. 2. 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 motor is used outdoors and if the power supply cable is of the H05-VVF type, then run the cable in a UV-resistant conduit, e.g. trunking.

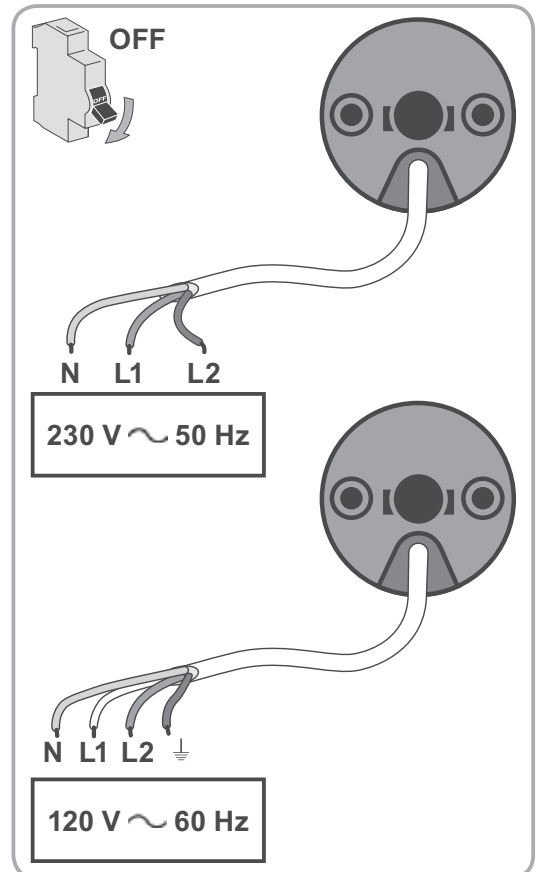
 The cable for the LS 40 cannot be removed. If it is damaged, return the drive to the After-Sales department.

 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:

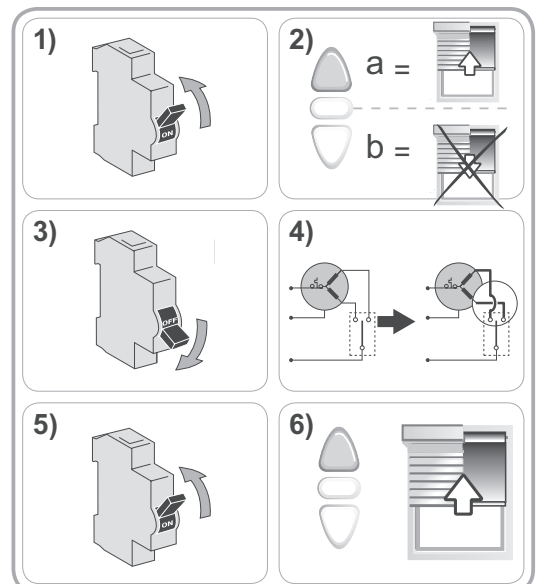
	Cable			
	Neutral (N)	Live (L1)	Live (L2)	Earth (⊥)
230 V ~ 50 Hz	Blue	Brown	Black	-
120 V ~ 60 Hz	White	Black	Red	Green



### 2. 3. COMMISSIONING

#### 2. 3. 1. Checking the direction of rotation

- 1) Switch the power back on.
- 2) Press the **A** button on the control point:
  - 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.
- 3) Switch off the power supply.
- 4) Reverse the 2 phase wires on the control point.
- 5) Switch the power back on.
- 6) Press the **A** button.

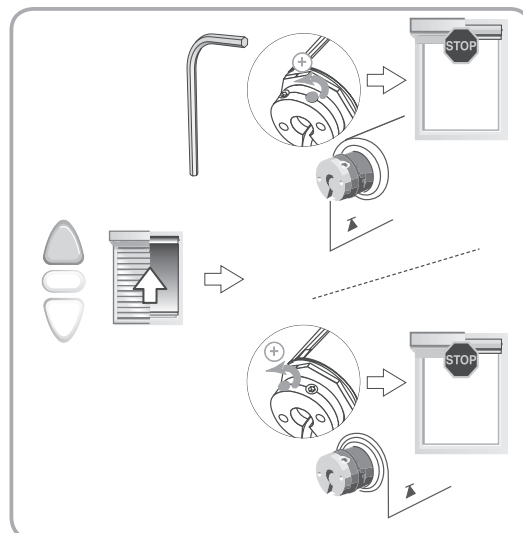


### 2. 3. 2. Setting the end limits

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

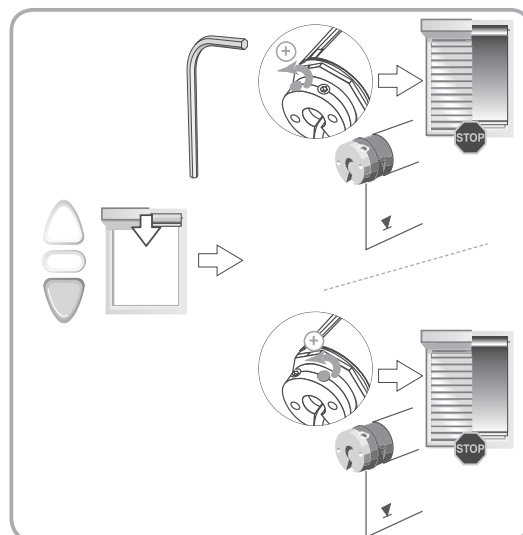
#### Setting the upper end limit

Press the **Λ** button on the control point to raise the motorised product to the upper end limit and turn the corresponding setting screw to set the required upper end limit.



#### Setting the lower end limit

Press the **V** button on the control point to lower the motorised product to the lower end limit and turn the corresponding setting screw to set the required lower end limit.



## 2. 4. TIPS AND RECOMMENDATIONS FOR INSTALLATION

### 2. 4. 1. Questions about the LS 40 ?

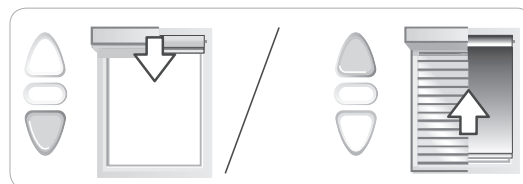
Observations	Possible causes	Solutions
The motorised product does not operate.	The wiring is incorrect.	Check the wiring and modify it if necessary.
	The drive is in thermal protection.	Wait until the motor cools down.
	The control point is not compatible.	Check for compatibility and replace the control point if necessary.

## 3. OPERATION AND MAINTENANCE

**i** This drive is maintenance-free.

### 3. 1. UP AND DOWN BUTTONS

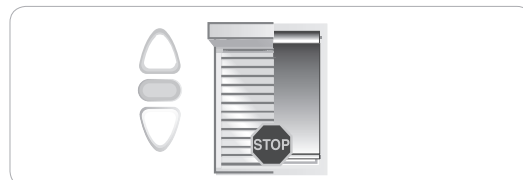
Pressing the **Λ** or **V** button fully raises or lowers the motorised product.



### 3. 2. STOP FUNCTION

The motorised product is moving.

- Pressing the **Stop** button stops the motorised product.



### 3. 3. TIPS AND RECOMMENDATIONS FOR USE

#### 3. 3. 1. Questions about the LS 40 ?

Observations	Possible causes	Solutions
The motorised product does not operate.	The drive is in thermal protection.	Wait until the motor cools down.

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

## 4. TECHNICAL DATA

Power supply	230V ~ 50Hz	120V ~ 60Hz
Operating temperature	- 20°C à + 60°C	
Index protection rating	IP 44	
Electrical insulation	Class II	Class I

**CE** intended according to these instructions, is in compliance with the essential requirements of the Machinery Directive 2006/42/EC and the EMC Directive 2004/108/EC.

An EC declaration of conformity detailing standards and specifications used and stating all particulars for identification of the drive, name and address of the person(s) authorised to compile the technical file and empowered to draw up the declaration including place and date of issue can be found at the Internet address [www.somfy.com/ce](http://www.somfy.com/ce).