

# Electro-mechanical tubular motor

## Series SL 35/ SL 45



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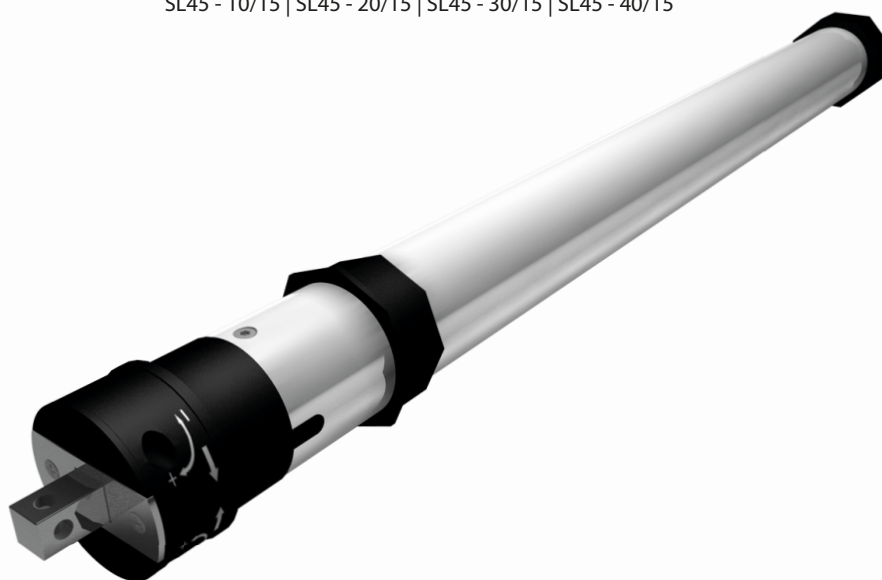
Valid for the following models:

For shaft sizes 40 mm and over:

SL35 - 10/17 mini | SL35 - 10/17 | SL35 - 13/14

For shaft sizes 60 mm and over:

SL45 - 10/15 | SL45 - 20/15 | SL45 - 30/15 | SL45 - 40/15



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- (GB) An English manual can be downloaded at <http://www.jarolift.de/en/manuals>
- (F) Vous trouverez des instructions en français sur <http://www.jarolift.de/fr/instructions>
- (I) Una guida in italiano è disponibile alla pagina <http://www.jarolift.de/it/guida>
- (E) Encontrará un manual en idioma español en <http://www.jarolift.de/es/manual>
- (NL) Een handleiding in Nederlands kan u vinden op <http://www.jarolift.de/ne/handleiding>
- (PL) Instrukcja w języku polskim znajduje się na stronie <http://www.jarolift.de/pl/instrukcje>
- (TR) Türkçe kılavuzu <http://www.jarolift.de/tr/kilavuzu> adresinde bulabilirsiniz

Roller shutter models SL35-10/17 mini, SL35-10/17, SL35-13/14, SL45-10/15, SL45-20/15, SL45-30/15, SL45-40/15, meet the requirements of the relevant European and national regulations

2006/42/EG - Machinery regulations  
2014/30/EU - EMC regulations  
2014/35/EU - Low voltage regulations

#### Manufacturer's declaration

The products above meet the requirements of the German Product Safety Legislation (ProdSG) with regard to guaranteeing health and safety.

EN 60335 - 2 - 97 : 2006+A11+A2  
EN 60335 - 1 : 2002+A1+A11+A12+A2+A13+A14+A15

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Michael Mayer  
Managing Director



**WARNING: Important safety notice!**

To ensure personal safety, it is important to follow these instructions! Please keep these instructions and pass them on to any new owners when the property changes hands!



Any work on electrical equipment carries the risk of fatal injury from electric shock.

- Connecting the tubular motor to the mains, and any work on electrical equipment, must only be carried out by an approved electrical specialist in accordance with the connection plans included in these instructions (see Page 4).
- Only carry out fitting and connection work in a voltage-free state.



Failure to follow these instructions can endanger life!

Observe the regulations regarding installation in damp areas. In particular, observe DIN VDE 0100, section 701 and 702 when using in damp areas. These regulations contain compulsory protective measures.



Use of defective equipment can cause a hazard for persons and material damage (electric shock, short circuit).

- Never use defective or damaged units.
- Check the motor and mains cable for any damage.
- Please refer to our Service Team (see last page), if you find any damage to the equipment.



Improper use may lead to an increased risk of injury.

- Instruct all persons in the safe use of the tubular motor.
- Watch the moving awning carefully and keep people away until it has stopped moving.
- Do not allow children to play with fixed controls or the remote control.
- Keep the hand transmitter in such a way to prevent any accidental operation, e.g. by children playing.
- Disconnect the equipment from the electricity supply before cleaning the awning.
- For permanently installed devices, a cut off device must be present on the installation side for each phase in accordance with DIN VDE 0700. Cut off devices include switches with a contact opening of at least 3 mm (e.g. circuit breakers, fuses or RCD's) Check the installation regularly. Where there is any damage (e.g. signs of wear and tear, damaged cables and misplaced final position), the equipment should not be used.

- When operating the unit in extended or open mode, take care, as items may fall off, if fixings drop or are broken.

- The mains connection cable for this motor may only be replaced (by the manufacturer themselves, their customer service personnel or a similarly qualified person) by a cable of the same type, supplied by the manufacturer of the motor, in order to avoid any hazards.

- Permanently mounted control units must be fitted in a visible manner. Rated torque and rated operating time must be compatible with the properties of the unit to be powered.

- If the tubular motor is controlled by a switch with an OFF pre-setting, then this switch must be mounted in sight of the tubular motor, away from moving parts, at least 1.5 m high.

- For motors which were delivered without an associated unit, the rated torque and rated operating time must be compatible with the properties of the unit to be powered.

- Proper operation of the unit can only be guaranteed if it is correctly installed and fitted, and where there is adequate electricity supply and maintenance. The equipment must be protected against unauthorised use. Take safety precautions to make sure the equipment cannot be turned on accidentally.

- Disconnect all connection cables from the electricity supply before working on the equipment. All cables not required should be removed and all fittings not required for activation with the motor should be made inoperative.



Disconnect the equipment from the mains and do not operate when work (e.g. window cleaning) is being carried out nearby.

- The activation element of a manual release unit (emergency hand crank) should be mounted at a height below 1.8 m.

- When changing operating direction, the changeover time must be at least 0.5 seconds. The switches used must not carry out simultaneous UP / DOWN commands. The motor must only be used for the purposes described in the instructions.



## Correct use / operating conditions

Use the tubular motor only to open and close roller shutters and awnings.

- The motor cable must be laid in an empty conduit as far as the junction box, in accordance with local electrical regulations.
- Only use the manufacturer's original components and accessories.

### Conditions for use

- For electrical connection, the installation site must have a constant 230 V / 50 Hz electricity supply, with a main circuit disconnect device (fuse) on site.



## Important fitting instructions



### IMPORTANT!

Before assembly, compare the voltage / frequency information on the type label with that of the local electricity network.

- Before installing the tubular motor, remove or decommission any cables or units not needed for operation.
- Any moving parts of motors which are operated under a height of 2.5 m from the ground must be protected.
- The roller shaft must be mounted horizontally! Any winding of the roller shutter if this is not horizontal may lead to damage to the motor or the roller shutter.
- The roller shutter housing inspection cover must be easily removable and accessible, and should not be wallpapered over or plastered over.

After unpacking, compare the following:

- contents of package and the delivery information in these instructions.
- the type of motor and the corresponding information on the type label.



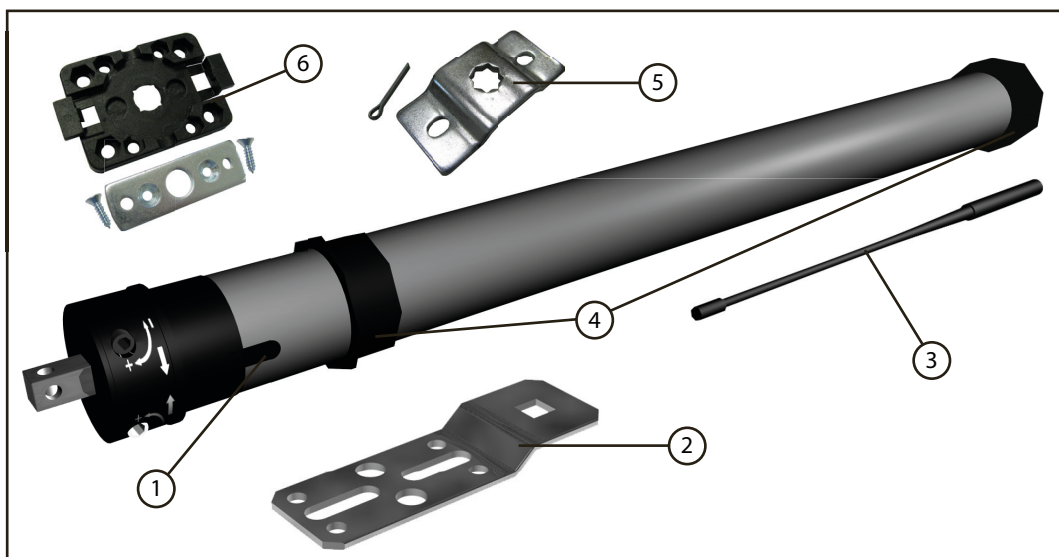
## Technical data

Motor type:	Voltage:	Frequency:	Rotation speed:	Power consumption:	Power output:	Operating time:	Torque:	Noise emission:
SL35-10/17 mini	230 Volt	50 Hz	17 rpm.	0.53 A	121 W	4 min.	10 Nm	<70dB
SL35-10/17	230 Volt	50 Hz	17 rpm.	0.53 A	121 W	4 min.	10 Nm	<70dB
SL35-13/14	230 Volt	50 Hz	14 rpm.	0.53 A	121 W	4 min.	13 Nm	<70dB
SL45-10/15	230 Volt	50 Hz	15 rpm.	0.49 A	112 W	4 min.	10 Nm	<70dB
SL45-20/15	230 Volt	50 Hz	15 rpm.	0.64 A	145 W	4 min.	20 Nm	<70dB
SL45-30/15	230 Volt	50 Hz	15 rpm.	0.83 A	191 W	4 min.	30 Nm	<70dB
SL45-40/15	230 Volt	50 Hz	15 rpm.	0.86 A	198 W	4 min.	40 Nm	<70dB

After unpacking, compare the following:

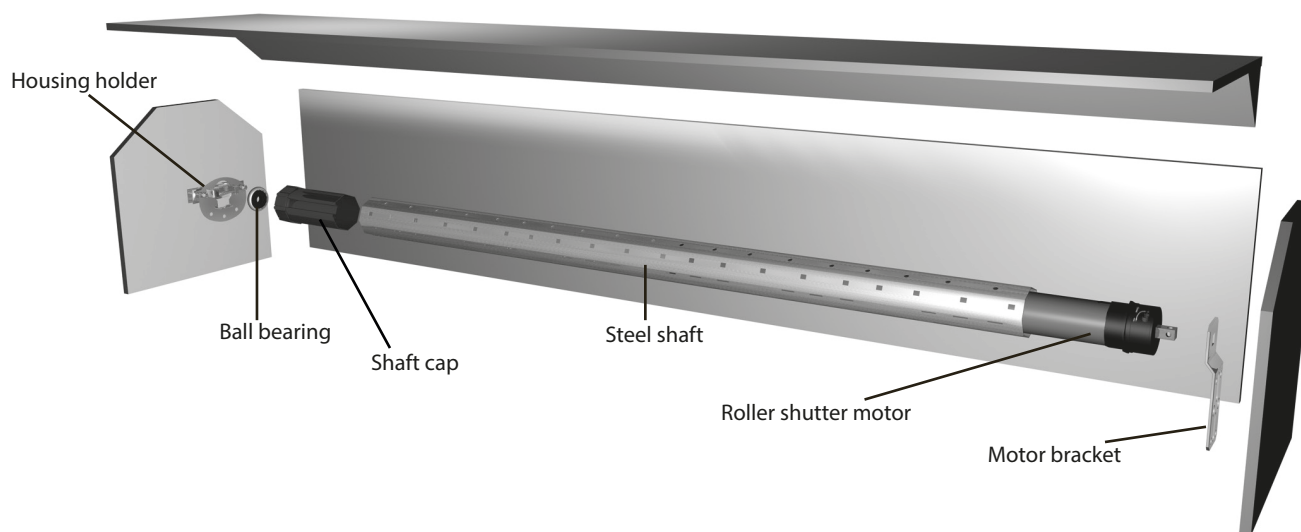
- contents of package and the delivery information in these instructions.
- the type of motor and the corresponding information on the type label.

1. motor
- 2 Motor flat bracket (Model SL45 only)
3. Motor setting pin
4. Adapter and carrier
- 5 Motor star bracket
6. Motor click-in bracket (Model SL35 only)
- + Instructions



Before you begin assembly:

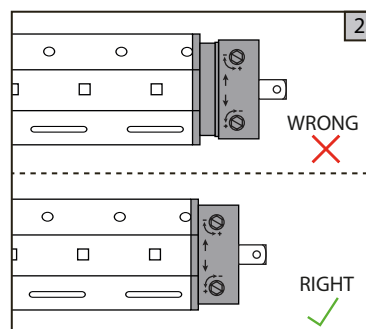
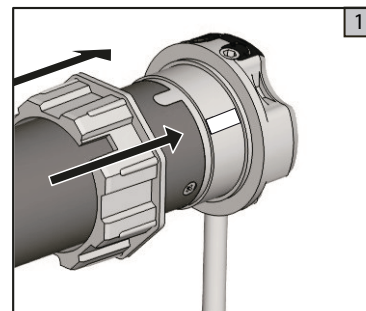
1. Please read the instructions fully and carefully before beginning the installation.
- 2 Ensure the roller shutter is not damaged, and that it can be opened and closed smoothly. If necessary, replace damaged parts.
3. Roll the roller shutter out fully and determine whether the motor should be installed on the left or right of the roller shutter casing. Always choose the shortest route to the next junction box, as cables may not be laid in the roller shutter casing.
4. The end position is determined when the plastic ring is fully pushed on. Always ensure the motor can be pushed into the shaft until it stops.





## Fitting the tubular motor

1. First, lay the connection cable as far as the junction box in an empty conduit in accordance with local building and electrical regulations.
2. Roll the roller shutter fully out and loosen the shaft connection.
3. Dismantle the roller shutter shaft.
4. Fit the motor bracket supplied on the side where you would like to fit the motor. The motor can be fitted on the left or the right.
5. Push the bearing ring adapter over the bearing ring on the motor head until it clicks into position. Please make sure the groove is correctly positioned in the adapter. (Fig. 1)
6. Now push the motor into the roller shutter shaft, until it is fully inserted in the shaft with the bearing ring. (Fig 2). Do not use a hammer for this under any circumstances! Under certain circumstances, the adapter and carrier may not be easy to push in, but the motor should be not be struck.
7. Now check whether the shaft with the motor built in can be easily fitted in the housing or if you may need to shorten the shaft. Now place the shaft in the housing and secure the square motor head pin using the locking pin supplied with the housing.



### IMPORTANT!

Do not drill or screw into the motor!

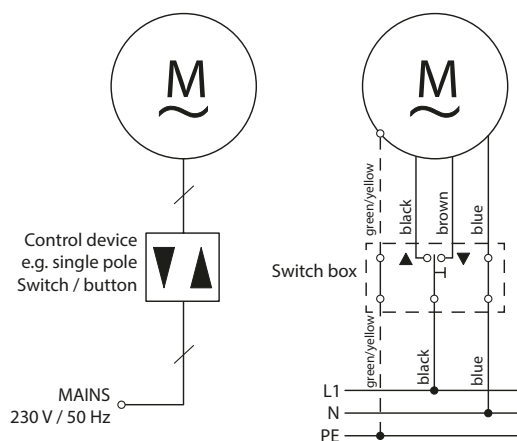
When installed, the unrolled shutter must run vertically in the window guide rails.

Please make sure the housing is installed horizontally. A roller shutter which is not horizontal may block and damage the motor.

Please make sure the motor is installed in such a way that the motor end point setting screws remain accessible!

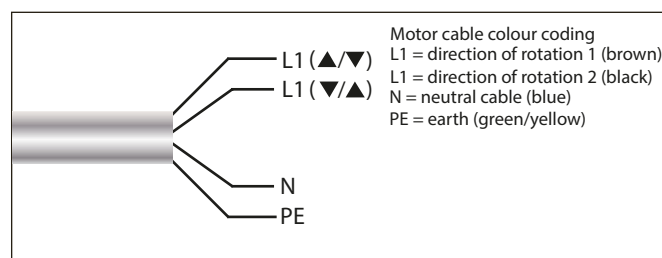


## Electrical connection



Controlling a motor with a single pole roller shutter switch.

Installation plan and connection plan for assembly on the right hand side.

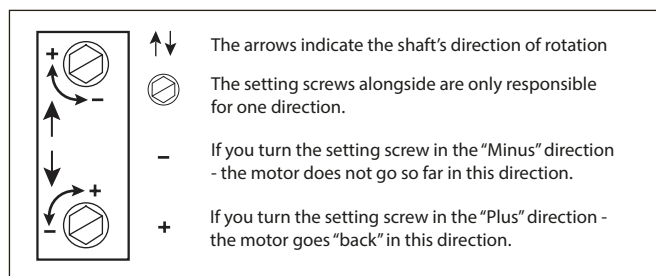




1. Connect the roller shutter motor to an appropriate switch!
2. Using the switch, run the motor downwards until the motor switches off and it reaches the end point set in the factory.



Please note you should never connect several motors in parallel to one switch, and one switch per motor must be connected. If you would like to connect several motors in parallel, you must fit a cut-off relay before every motor. You can get appropriate cut-off relays from our partner [www.jalousiescout.de](http://www.jalousiescout.de) or in specialist retailers.

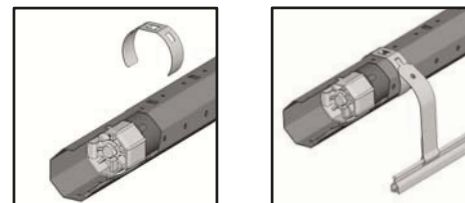


3. Now attach the roller shutter to the roller shaft. To attach the roller shutter to the shaft please use steel strip hangers, also known as retaining springs. You can get these from our partner [www.jalousiescout.de](http://www.jalousiescout.de) or in specialist retailers.



If you drive screws into the roller shutter shaft in order to hang the shutters, then please make sure these are so short they do not touch the motor under any circumstances!

With roller shutter motors type SL-35, we recommend use of suspension clamps for the retaining springs. You can get these from our partner [www.jalousiescout.de](http://www.jalousiescout.de) or in well-stocked specialist retailers. The clamps make sure the roller shutter motors are not damaged by the dovetails on the retaining springs during installation in the 40 or 50 8 sided steel shaft.



4. Now retract the roller shutter approx. three quarters and stop it by hand. (If the motor stops already automatically, continue from point 5). Turn the upwards direction setting screw (arrow direction downwards) about 10 - 15 turns in the minus direction (-). Activate the upwards button on your switch again -if the roller shutter goes up more, stop it by hand again and turn the setting screw around 10 turns again in the minus direction. Repeat this process until the motor does not go up any more.
5. Then leave the connected switch in the UP position and turn the upwards direction setting screw (arrow direction down) in the plus direction (+). The motor will now move up very slightly with each turn.
6. If you have reached your desired end point, stop the roller shutter by hand and remove the setting tool.
7. Now approach both end points once for testing purposes. If the roller shutter stops at the set end points, you have completed the setting process and the roller shutter casing can be closed.



Please note that the end switches on the motor only function properly when the motor is fully and correctly incorporated into the shaft!

Please note, the motor is fitted with a thermo protection switch, and it is possible that the motor will switch off if it reaches a high temperature after a number of operations. The motor will be ready for use again after a cooling period of around 15 - 20 minutes.

8. **Changing the end point:**  
Retract the roller shutter to the mid point and start from the beginning.

The motor does not lower / raise the shutters, starts too slowly or makes loud noises.

Possible cause 1:

- The connections are not correct.

Solution 1:

- Check the connections.

Possible cause 2:

- Incorrect installation or overloading.

Solution 2:

- Check the installation and roller shutter load.

The roller shutter stops while lowering or raising!

Possible cause 1:

- You have reached the set end point.

Solution 1:

- Re-set the end points as per the instructions.

Possible cause 2:

- Operating time exceeded (4 mins.).

Solution 2:

- Allow the tubular motor to cool for around 20 minutes.

The motor does not run!

Possible causes:

- No electricity supply.

Solution:

- Use a voltage meter to check availability of mains voltage (230 V) and check the wiring.
- Please pay special attention to the unapproved types of connection.
- Check the installation.

The motor runs in the wrong direction when a button is pressed!

Possible causes:

- The control directions are reversed.

Solution:

- Disconnect the mains power supply and exchange the black or brown wire in your control unit.

The motor does not stop independently during setting and test runs.

Possible cause 1:

- The adapter has possibly slipped from the bearing ring on the motor head.

Solution 1:

- Check that the adapter is sitting firmly in front of the motor head and is fully inserted in the shutter shaft. Push the adapter on firmly in front of the motor head and push the roller shaft fully onto the adapter. If necessary, reset the end points.

Possible cause 2:

- Roller cap not attached or roller shaft too short.

Solution 2:

- Attach roller cap or insert an appropriate roller shaft.

The motor stops between the two end points during normal operation!

Possible causes:

- The thermo protection system has cut in.

Solution:

- Allow the motor to cool for around 20 minutes.

The roller shutter stops while going up!

Possible causes:

- Iced shutters or obstruction in the guide rail.

Solution:

- Remove ice or other blockage.
- Move the roller shutter in a downwards direction.

If you experience problems with one of our products, or you have received a defective unit, please contact the following address in writing or by email:

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