

Tubular Motor:

## **GEIGER-SOLIDline**

Motor Control:

## **GEIGER-SoftZeroWireless (GU45..F02)**

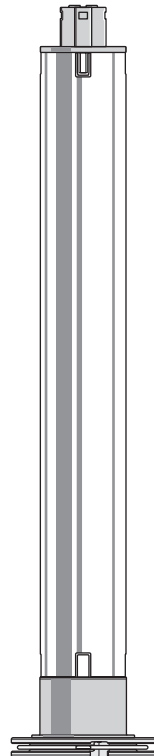
for awnings

**DE** Bedienungsanleitung

**EN** **Operating Instructions**

**FR** Manuel d'utilisation

**EN**



# Contents

## Characteristics ..... 3



### 1. General ..... 4



### 2. Guarantee ..... 4



### 3. Safety Notes ..... 4



### 4. Proper Use ..... 6



### 5. Installation Instructions ..... 6



### 6. Initial Operation ..... 7



### 7. Teaching-in/Deleting Remote Codes ..... 8



### 8. Setting up the End Position ..... 9



### 9. Teaching-in an Incline Position ..... 10



### 10. Changing the Power Levels (GEIGER-Powertronic) ..... 11



### 11. Description of the Remote Control Motor Function ..... 13



### 12. Technical Data ..... 18



### 13. Notes for the Certified Electrician ..... 19



### 14. What To Do If ..... 20

# Characteristics of the GEIGER-SoftZeroWireless

## Safety

---

- A safe locking of the casing through torque shutoff

## Fabric Protection

---

- GEIGER-Locking power minimisation (automatic function)
- GEIGER-Powertronic (manual function: power level)

...for a nice long lasting fabric.

## Hanging Length Adjustment

---

- Modifications in fabric lengths are recognised and compensated for.

## Incline Position

---

- Setting a predefined glare cover position

EN

## Obstacle Recognition

---

- Protection of the awning system by retracting the equipment

## GEIGER-Operating Radius Identification

---

- Modern electronic control identifies the equipment's torque curve, and makes available to the motor the exact amount of power in the inflexion point range needed during operation, and while closing.



## 1. General

Dear customer,

By purchasing a GEIGER tubular motor you have decided on a quality product from GEIGER.

Thank you very much for your decision and the confidence placed in us.

Before you put this drive into operation please observe the following safety information. It serves for the prevention of danger and for the avoidance of personal injury and damage to property.

**Please retain this information for future reference.**

- ▶ **Suitable for all awnings**
- ▶ **Actuators can be switched in a parallel manner**
- ▶ **Suitable for all GEIGER remote control products**
- ▶ **Automatic identification of right hand/left hand installation**



## 2. Guarantee

In the case of incorrect installation contrary to the operating instructions and/or constructional modification, the legal and contractual guarantee for property damage and product liability lapses.



## 3. Safety Notes



**ATTENTION: Important safety information. For personal safety, it is important to follow these instructions. The instructions should be kept.**

- ▶ **This appliance is not to be used by persons (including children) whose physical, sensorial or mental capacities are impaired, or who have no experience or know-how, unless they have been supervised or been given instructions on the use of the appliance by someone who is responsible for their safety.**
- ▶ **Children must be supervised to make sure they do not play with the appliance.**
- ▶ **The installation is to be checked regularly for defective balance, wear and damage.**
- ▶ **Damaged connecting leads must be replaced by the GEIGER connecting lead of the same wire type.**
- ▶ **During operation observe the danger zone.**
- ▶ **If people or objects are in the danger zone, do not use the installation.**



- ▶ **Urgently shut down damaged installations until repair.**
- ▶ **Unconditionally shut down the unit during maintenance and cleaning operations.**
- ▶ **Pinching and shearing sites are to be avoided and to be safeguarded against.**
- ▶ **When operating the manual actuator with the open sun protection system, exercise caution as it can fall down quickly if springs expand or are broken.**
- ▶ **Do not operate the device if operations such as, for example, window cleaning are to be carried out in the vicinity.**
- ▶ **Disconnect the device from the mains power supply if operations such as, for example, window cleaning are being carried out in the vicinity.**



**ATTENTION: Important safety information. Follow all installation instructions, as incorrect installation can lead to serious injuries.**

- ▶ **Connection must be carried out by a skilled electrician according to the regulations in force locally.**
- ▶ **The mains plug of the tubular motor must be accessible after installation.**
- ▶ **On the installation of the tubular motor without mechanical protection of the driven parts, the tubular motor must be installed at a height of at least 2.5 m above the ground or of another level which provides access to the drive.**
- ▶ **Before the tubular motor is installed, all leads which are not needed are to be removed and all equipment which is not needed for actuation is to be put out of operation.**
- ▶ **If the tubular motor is controlled by a switch or pushbutton, the switch or pushbutton must be mounted within eyeshot of the tubular motor. The switch or pushbutton must not be located in the vicinity of moving parts. The height of installation must be at least 1.5 m above the floor. If the apparatus is equipped without a pin and a socket connector (STAS3K) in the connecting lead, or other means for disconnecting from the mains with at least a 3 mm contact opening on each pole, a disconnecting device of this type must be incorporated into the permanently installed electrical installation according to the wiring rules.**
- ▶ **Permanently installed control devices must be attached visibly.**
- ▶ **The correct dimensioning of the drive is to be observed.**

**We recommend the following procedural methods:**

- 1.....Installation Instructions ..... **(Chapter 5)** ..... page 6
- 2.....Initial Operation ..... **(Chapter 6)** ..... page 7
- 3.....Inputting/Deleting Remote Codes ..... **(Chapter 7)** ..... page 8
- 4.....Setting Up the End Position ..... **(Chapter 8)** ..... page 9



## 4. Proper Use

The tubular motors of the model range **SOLIDline (GU45..F02)** with the **SoftZeroWireless** system are designed exclusively for the operation of awnings and screens.

If the tubular motors are used for other applications and/or modifications are performed to the tubular motors, which have not been discussed with GEIGER Antriebstechnik, then the manufacturer is not liable for personal injury and/or damage to property and for consequential damage.



## 5. Installation Instructions

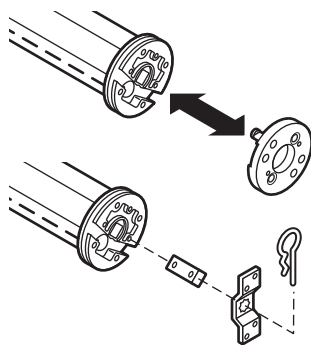
### Installing the awning:

Insert the motor with the applicable adapter and attachment into the shaft until the shaft adaptor stops.

Fasten the motor clip bracket (M45E166) onto the awning. Plug the motor onto the motor clip bracket with the fabric spindle. The bracket locks into place. To loosen, turn the spring washer.

### Alternative:

- Fasten the motor onto the awning bracket with the appropriate screws (M6 or M8) depending on the size of the pitch circle.
- Attach the motor with a square-end in the awning bracket and secure with a cotter pin (M45F880).





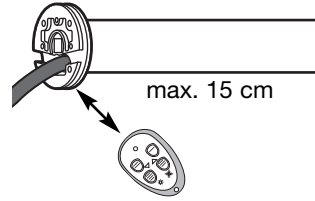
## 6. Initial Operation

### Definition 'Close range':

Distance between hand-held remote control and motor control: max. 15 cm,

or

Hold the hand-held remote control directly next to the motor connector cable. The motor connector cable consequently serves as an 'antenna' up to a distance of 3 m.

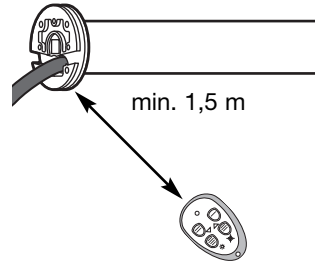


### Definition 'Far range':

Distance between hand-held remote control and motor control: min. 1.5 metres,

or

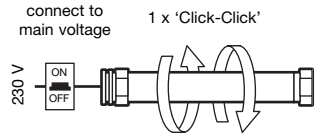
Distance between hand-held remote control and motor connector cable min. 0.5 metres.



## Activating Input Mode:

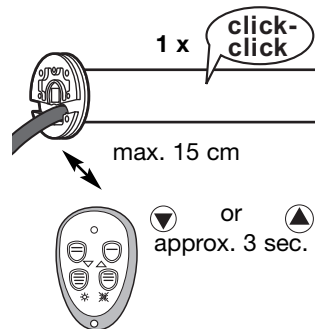
Connect the motor to the electrical power line. Turn the line on. The motor makes a short up and down movement (1 x 'Click-Click').

Each time the power supply is interrupted; input mode **can** be activated for 30 mins.



**Input mode is to assign remote codes and to be able to readjust the end position.**

At close range, press the 'Up' or 'Down' button and hold approx. 3 seconds until you hear the motor (1 x 'Click-Click').



**Should no action be taken within 60 seconds, input mode will be deactivated! The motor returns to its normal operation (3 x 'Click-Click').**

EN



## 7. Teaching-in/Deleting Remote

At close range, press the 'Up' or 'Down' button for approx. 3 seconds until you hear the motor (1 x 'Click-Click').

**The remote code has been taught-in to the motor!**



**Should no action be taken within 60 seconds, input mode will be deactivated! The motor returns to its normal operation (3 x 'Click-Click').**

### Deleting the Taught-in Transmission

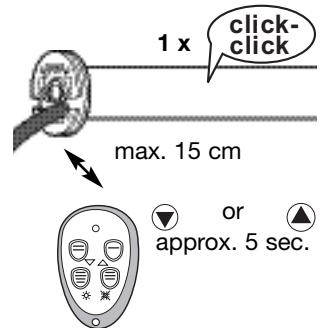
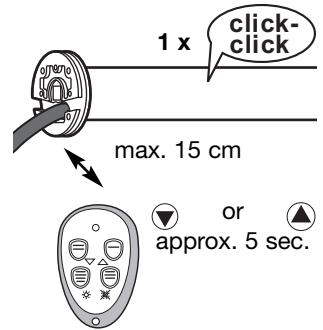
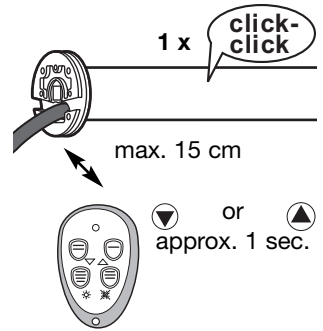


**The learning mode must be activated first in order to delete the radio codes.**

At close range, press the UP or DOWN key and hold approx. 5 seconds. The motor reacts immediately (1 x 'Click-Click'). Keep the key pressed about 5 sec. until the motor confirms the deleting of the radio codes with 1 x 'Click-Click'.



**Please note:**  
**You can only delete all remote codes and sensor remote codes together.**  
**It is not possible to delete individual remote codes.**







## 8. Adjusting the End Position

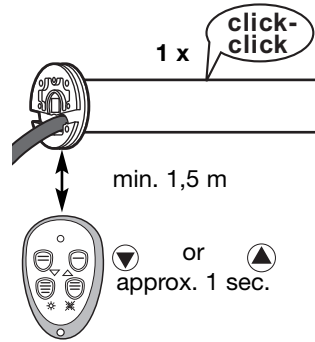
It is required for the upper end position to act as a stopper for torque deactivation (e.g. casing contour).

In order to adjust the end position, the input mode must first be activated (see page 7)!

### Activating the end position mode:

From far range, press the up or down button and hold until you hear the motor (1 x 'Click-Click').

**Please note!**  
The correct button allocation for **up** and **down** happens automatically **after** programming of the end position is complete.



## Adjusting the Lower End Position

**The lower end position must be adjusted first.**

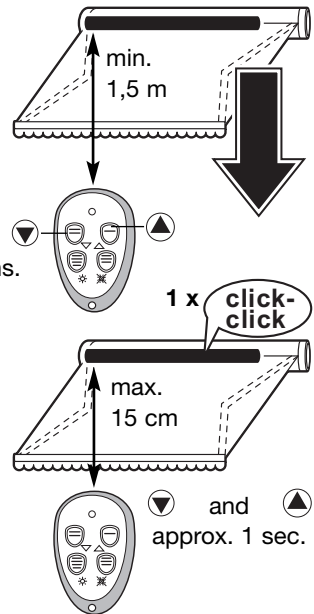
From far range, press the up or down button and hold until the awning has reached the desired end position.

Corrections are possible with the up and down buttons.

### Saving the lower end position:

From close range, press the up or down button and hold approx. 1 second, then release.

The motor responds (1 x 'Click-Click').

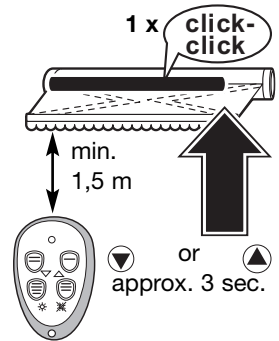






## Adjusting the Upper End Position

From far range, press the up or down button and hold approx. 3 seconds until the awning retracts and locks.

As soon as the casing is closed, the motor automatically turns off and the upper end position is saved. You will hear the motor (1 x 'Click-Click'). The up and down buttons are now assigned to the corresponding turning direction of the motors!



 **Finally, conduct at least one trial run, so that the motor electronics can automatically detect the threshold of the torque disconnection.**

 **Please note!**  
**When changing the end position, the power level is reset to its standard setting (Level 0).**

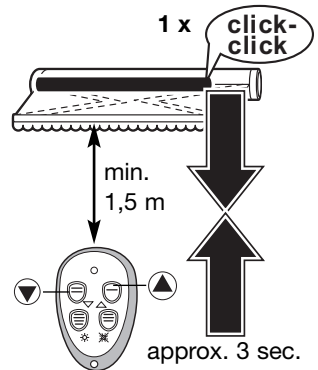
## 9. Teaching-in the Incline Position

To move from an arbitrary position to the desired end position, press and hold the two-way button for approx. 3 sec. until you hear the motor (1 x 'Click-Click'). Then release the button!

The incline position is now saved.

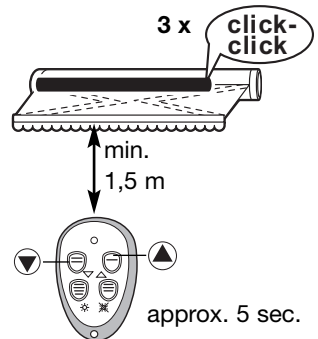
### Changing the Incline Position

See 'Teaching-in the Incline Position'. However, this is for a newly desired position.



### Deleting the Incline Position

Stop the awning from moving up and down and press and hold the button approx. 5 sec. until you hear the motor (3 x 'Click-Click').





## 10. GEIGER-Powertronic

The GEIGER-Powertronic enables the user to change the motor's closing characteristics. The user can raise or reduce the closing power applied through the motor. This way, he or she influences the closing characteristics of the casing. A rise in the closing power causes a tighter closing of the casing with increased stress on the fabric; a reduction in the closing power causes a looser closing and less strain to the fabric.

**Closing power levels:** from level 0 to level 7

**GEIGER-delivery setting:** level 0



**Caution: By manually raising the closing power (e.g. from level 0 to level 7) the fabric endures more strain.**

### **In which situations is the GEIGER-Powertronic applied?**

- If the casing does not completely close.
- If the closing operation should be optimised for better fabric protection.

### **When can the GEIGER-Powertronic be applied?**

- Anytime; this function can be activated during initial operation, as well as at a later date.

### **Which resources are necessary?**

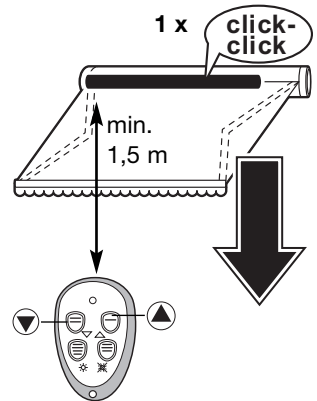
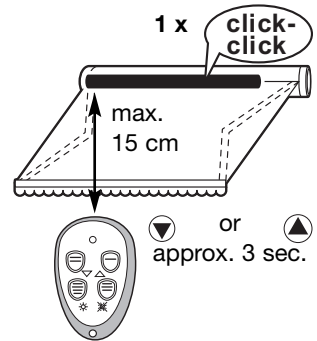
- GEIGER-hand-held remote, which is taught-in in accordance with Chapter 7 (page 8).

### **Please note:**

- The end positions are not affected when the GEIGER-Powertronic is activated.
- When the end position teach-in mode is activated, the power level is reset to level 0 (GEIGER-delivery setting).
- Only activate the GEIGER-Powertronic after the end positions have been taught-in and a complete trial has been conducted.

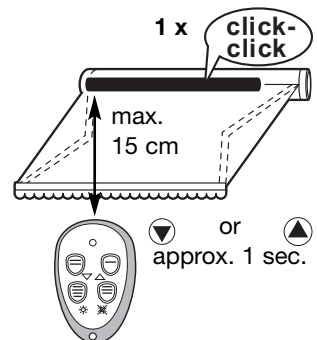
## Activating the GEIGER-Powertronic:

1. At close range, press the 'Up' or 'Down' button and hold approx. 3 seconds until you hear the motor (1 x 'Click-Click').
2. From far range, press the 'Up' or 'Down' button and hold approx. 1 second until you hear the motor (1 x 'Click-Click').
3. At close range, press the 'Up' or 'Down' button and hold approx. 3 seconds until you hear the motor (1 x 'Click-Click').
4. Now the power can be incrementally increased with the 'Up' button and incrementally reduced with the 'Down' button.
5. When the desired power level is reached, at close range, press the 'Up' or 'Down' button and hold approx. 1 second. The motor is now in its normal operating mode. (1 x 'Click-Click').



**As soon as the lowest or highest power level has been reached and you try to continue to raise or lower the level, you will hear a signal from the motor (2 x 'Click-Click').**

Should there be no activity for 60 seconds, input mode will be deactivated. The power level set will be assumed!





## 11. Description of the Remote Motor Function

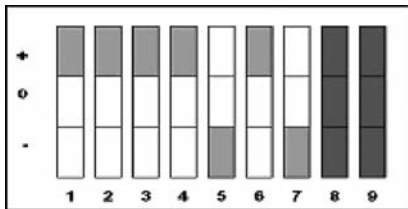
When delivered, every GEIGER-remote receiver and remote transmitter comes with the 'GEIGER-Code' + + + + - - - so that the motor can be immediately operated in order, for example, to facilitate the installation of an awning on the roll shaft.



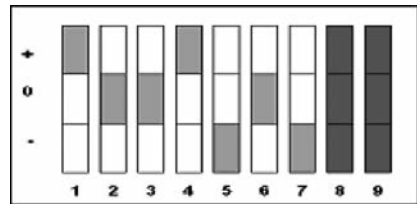
**For safety reasons, the 'GEIGER-Code' must be overwritten by an individual code!**

**This occurs automatically the first time an individual code is taught-in. (see Chapter 7 Inputting/Deleting Remote Codes on page 8).**

'GEIGER-Code'



Individual Code (Example)



**The DIP-Switch No. 8 and No. 9 have no function!**

For descriptions and adjustments, please see the instruction manual of the corresponding hand-held / wall-mounted remote control.






## Remote Codes

A maximum of three different remote codes can be taught-in. The motor can therefore be a part of three independent groups. Additionally, two remote sensor codes can be taught-in.

Should there already be three remote codes and you attempt to teach-in a fourth, the old third code will be deleted and the new one will replace it.

Should there already be two remote sensor codes and you attempt to teach-in a third, the old second code will be deleted and the new one will replace it.

### Example:

Remote Receiver in the Motor				
Group 1 Code	Group 2 Code	Group 3 Code	Sensor 1 Code	Sensor 2 Code
+ 0 0 + - 0 -	+ + + 0 0 + +	+ - + + - + +	+ - + + - + +	+ + + - - + +
				

**For your documentation record any hand-held remote/sensor codes taught into the motor here:**

Group 1	Group 2	Group 3	Sensor 1	Sensor 2
_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _

### Programming From Close Range / Far Range

An approximation detector is integrated in the motor's remote receiver, which recognises whether a remote transmission is being operated from a distance = **far range**, (at least 1.5 metres from the motor control and 0.5 metres from the motor cables), or in tight on the antenna = **close range**, (maximum 15 cm away and directly on the motor connection cable).



#### Caution:

Should remote receivers or motor connection cables lie near one another, codes could unintentionally be transferred to other remote receivers.

#### Recommendation:

Motors operated via a different pair of buttons, or through a different code, should be disconnected from the power line during initial operation.

## Initiating End Positions

### **No incline position has been programmed in:**

To initiate the end positions, a short press of the button in the corresponding direction of movement is enough.

To stop the movement, a short press of the button in the opposite direction is enough.

Should a sun-wind sensor be integrated into the system, in automatic mode (solar-on) the end positions are initiated.

### **An incline position is programmed in:**

To initiate the end positions, the button corresponding to the correct direction of movement must be pressed for **at least 1.5 seconds**.

A short press of the button: **less than 1.5 seconds** will cause the **incline position** to initiate. To stop the movement, a **short** press of the button in the opposite direction is enough.

Should a sun-wind sensor be integrated into the system, in automatic mode (solar-on) the end positions will always be initiated.



## Obstacle recognition

When, after the teaching of the first complete, uninterrupted travel from one end position to the other end position is carried out, the torque needed is learnt. In any following complete, uninterrupted travel from end position to end position, the torque needed is automatically reset. Slow changes in the installation due to ageing, soiling, cold or heat are thus automatically taken into consideration.

If a travel movement in UP direction is blocked by an obstacle, the motor switches off and a small return motion takes place.

The running direction in which the obstacle was recognized is blocked.

The block is removed if the motor has been operated in the opposite direction for a certain time. An obstacle must thus first be released before the motor can be operated again in the direction of the obstacle.





## End Position Correction

If a **lengthening/shortening of the hanging** has resulted due to e.g. temperature changes, this will be automatically corrected by closing the awning.

If, due to temperature changes, an **adjusted sleeve performance** is set and the hanging runs against the stop unit, the end position is immediately corrected.

After the first trial, the motor automatically identifies the torque necessary to close the awning and closes it with the lowest possible power, so that the fabric is optimally protected.



## 12. Technical data

### Technical data of short motor SOLIDline (GU45..)

	<b>GU4510</b>	<b>GU4520</b>	<b>GU4530</b>	<b>GU4540</b>
<b>Voltage</b>	230V~/50Hz	230V~/50Hz	230V~/50Hz	230V~/50Hz
<b>Current</b>	0,47 A	0,63 A	0,8 A	1,0 A
<b>Cos Phi (cosφ)</b>	>0,95	>0,95	>0,95	>0,95
<b>Inrush current (factor)</b>	x 1,2	x 1,2	x 1,2	x 1,2
<b>Power</b>	105 W	140 W	180 W	220 W
<b>Torque</b>	10 Nm	20 Nm	30 Nm	40 Nm
<b>Speed of rotation</b>	16 1/min	16 1/min	16 1/min	16 1/min
<b>Protection type</b>	IP44	IP44	IP44	IP44
<b>Total length</b>	515,5 mm	545,5 mm	565,5 mm	584,5 mm
<b>Operating type</b>	S2 4 min	S2 5 min	S2 4 min	S2 4 min
<b>Diameter</b>	45 mm	45 mm	45 mm	45 mm
<b>Weight</b>	1,920 kg	2,200 kg	2,410 kg	2,750 kg

Subject to technical modifications



### Declaration of conformity

This product complies with the essential requirements of the directives 2006/95/EC and 2004/108/EC. It is authorised for use in all EC member states and in Switzerland without any need of prior registration. The Declaration of Conformity concerning this product is available on our website: [www.geiger-antriebstechnik.de](http://www.geiger-antriebstechnik.de).

EN



## 13. Information for the specialist electrician

### Caution:

**Wrong installation and wrong connection can lead to serious injuries.**

The parallel operation of the several **SOLIDline SoftZeroWireless** is possible. Please observe the rating of the control switch used.

Connecting cables with plug connectors of the Hirschmann Company, type STAS 3K or the Phoenix Mecano Company, type GLS/3+PE may only be used in connection with the Hirschmann cable socket STAK 3K.

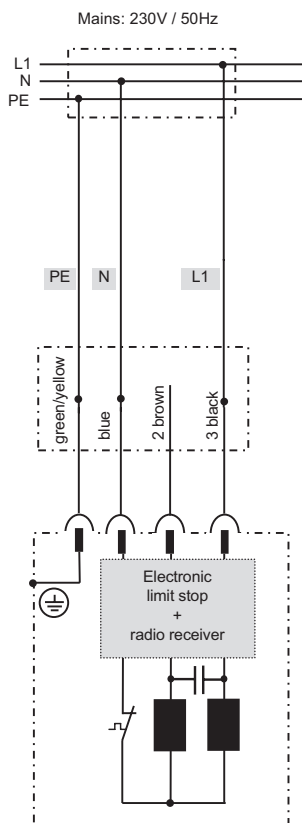
## Notes on waste disposal

### Recycling of packaging materials

In the interest of environmental protection, please contact your local government's recycling or solid waste management department to learn more about the services it provides.

### Waste disposal of electric and electronic equipment

Electronic equipment or batteries cannot be discarded along with the normal household waste. Keep for more information on the recycling and disposal methods envisaged by the local regulations in your area.





## 14. What To Do If...

<b>Problem</b>	<b>Solution</b>
<b>No short 'Click-Click' when turning on the motor.</b>	<ul style="list-style-type: none"><li>• Motor not plugged in. Please inspect the plug connection.</li><li>• Inspect the connector cable for poss. damages.</li><li>• Check the line voltage and have the cause of the power failure checked by a certified electrician.</li></ul>
<b>Motor runs upwards, rather than downwards.</b>	<ul style="list-style-type: none"><li>• End positions have been set wrong. First set the bottom, then the upper end position.</li></ul>
<b>Hand-held remote control doesn't work.</b>	<ul style="list-style-type: none"><li>• Check the batteries.</li><li>• The wind sensor has triggered a cut-off time. Try again after the wind cut-off time has run its course.</li><li>• The remote code was accidentally deleted. Repeat teaching-in (see page 8).</li></ul>
<b>After several runs, the motor remains still and no longer reacts.</b>	<ul style="list-style-type: none"><li>• The motor has become too hot and has turned itself off. Try again after a cooling period of approx. 15 min.</li></ul>
<b>The motor no longer runs automatically.</b>	<ul style="list-style-type: none"><li>• The solar self-winding has been turned off.</li><li>• The wind sensor has triggered a cut-off time. Try again after the wind cut-off time has run its course.</li><li>• The remote code was accidentally deleted. Repeat teaching-in (see page 8).</li></ul>
<b>The motor no longer reacts in close range.</b>	<ul style="list-style-type: none"><li>• Place the remote as close as possible to the motor head to the connector cables.</li><li>• Change the batteries in the hand-held remote.</li></ul>

**For technical questions, please call our service team at: +49 (0) 7142 938-300  
They will be happy to assist you.**

**Gerhard Geiger GmbH & Co. KG**  
Schleifmühle 6  
D-74321 Bietigheim-Bissingen  
Telephone: +49 (0) 7142 938-0  
Fax: +49 (0) 7142 938-230  
[www.geiger-antriebstechnik.de](http://www.geiger-antriebstechnik.de)  
[info@geiger-antriebstechnik.de](mailto:info@geiger-antriebstechnik.de)

