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VL-SMI-WISO-230-  
2x5Nm/2x3Nm EVBVestaline  
SMI-Line motorsVL-SMI-WISO-230-2x3Nm EVB 3.0  
VL-SMI-WISO-230-2x5Nm EVB 3.0Art.no.: 01066453  
Art.no.: 01066455

Vestaline motors for controlling exterior venetian blinds..

## Installation and Operating Instructions

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## 1. Safety precautions

**WARNING!**

**Important safety information.**  
**Follow these instructions to ensure the safety of persons.**  
**The instructions must be stored.**

- Contact a professional electrician to install the motor, because the motor requires a power supply of 230VAC, 50 Hz.
- Check the motor for signs of mechanical damage after unpacking. If you notice any shipping damage, do not start up the motor and notify your supplier immediately.
- The motor should only be used for the purpose specified by the manufacturer (refer to the operating instructions). Any changes or modifications thereof are not permissible and will result in loss of all warranty claims.
- Technical data can be found on the type label of the motor.
- If the motor cannot be operated without presenting a hazard, it must be switched off and prevented from being switched on unintentionally.
- When performing work on the windows, motor or connected shades, protect them against unauthorised or unintentional operation.
- Moving parts of the motor installed under 2.5m above the floor level should be protected.
- This device is not intended for use by persons (including children) with reduced physical, sensory or mental abilities or lack of experience and/or lack of knowledge, unless they are supervised by a person responsible for their safety, or received instructions on how the device is to be used.
- Children should be supervised to ensure that they do not play with the device.
- Children are not allowed, to play with fixed controls. Keep remotes away from children.
- The installation has to be checked frequently for imbalance or of signs of wear, damaged cables or springs, if applicable.
- Before the motor is installed, all unneeded wires must be removed and all devices which are not required for actuation with a power drive must be put out of operation.

- The actuating element of a hand release is to be installed at a height of less than 1.8 m.
- The mains cable of this device cannot be replaced. If the mains cable is damaged, the device has to be discarded.

**WARNING!****Risk of injury due to improper installation and commissioning.**

Improper installation and commissioning may lead to personal injury or property damage.

Therefore:

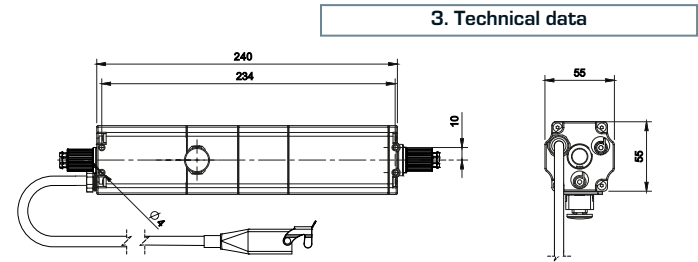
- When connecting the device, observe the currently valid standards, your local power company's regulations and the current accident prevention regulations.
- It is important for the safety of professional electricians to follow the user instructions. Please keep instructions for reference.
- When installing, ensure that the load is evenly distributed and that the installation is centered.
- The rated torque of the drive must be suitable for the system.
- The external overrun limit switch (mushroom button) is the reference point for all limit positions. Operation without overrun limit switch is not permitted.

**ATTENTION!**

- Follow the safety instructions according to EN 60335-2-97.
- When mounting the drive always use the safest and most suitable tubular motor and mounting bracket.

## 2. Short description

- SMI Vestaline 230VAC motor – central motor
- For accurate control of Exterior Venetian Blind
- User-friendly operation in switch mode with standard buttons
- Limit positions can be set virtually or physically via mechanical switch (upper position)
- Setting of the slat angle thus an optimized controlling of the insolation
- Parallel connection allowed
- Programmable upper and lower limit position
- Intermediate position storage
- Simple setting of the limit position with the "VL-Progset-ME/SMI-230" (Art.-no.: 54185775)



| Article               | VL-SMI-WISO-230-2xXNm EVB                                                                                                                                                     |                                   |          |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------|
|                       | Art.-no.:                                                                                                                                                                     | 01066453                          | 01066455 |
| Power supply          | VAC                                                                                                                                                                           | 230                               |          |
| Frequency             | Hz                                                                                                                                                                            | 50                                |          |
| Torque                | Nm                                                                                                                                                                            | 2 × 3                             | 2 × 5    |
| Rated power (nominal) | W                                                                                                                                                                             | 96                                | 132      |
| Rated current max.    | A                                                                                                                                                                             | 0,42                              | 0,58     |
| Operating mode        | min.                                                                                                                                                                          | (S2) 4                            |          |
| Output speed          | min <sup>-1</sup>                                                                                                                                                             | 23                                | 22       |
| Operating temperature | °F                                                                                                                                                                            | -10 °C (14 °F) to +60 °C (140 °F) |          |
| Protection degree     | IP                                                                                                                                                                            | 54                                |          |
| Weight                | kg                                                                                                                                                                            | 1,85                              | 1,94     |
| Protection class      |                                                                                                                                                                               | I                                 |          |
| Cable type            | 0.25 m cable 5G0.75qmm H05RR-F<br>black with STAK4 / STASI                                                                                                                    |                                   |          |
| Conformity            | <div></div> |                                   |          |

4. Standard Motor Interface

What is SMI?

SMI is the abbreviation for **Standard Motor Interface**. SMI has been developed to connect intelligent motors for roller shutters and sun protection devices. SMI allows the transmission of messages from the control system to the motor and vice versa. SMI allows products from different manufacturers to be combined. The SMI interface simplifies the use of highquality solutions and increases the compatibility between standard motors and controls from different manufacturers. Applications for sunscreens require the greatest robustness and economy. SMI was developed to meet these requirements.

**ATTENTION!**

SMI-Motors must be connected to certified SMI-Actuators. Parallel connection of tubular motor with electronic limit position are allowed. The maximum switching contact load of the connected control device (switch, motor control, actuator, etc.) must be observed.

5. Installation note

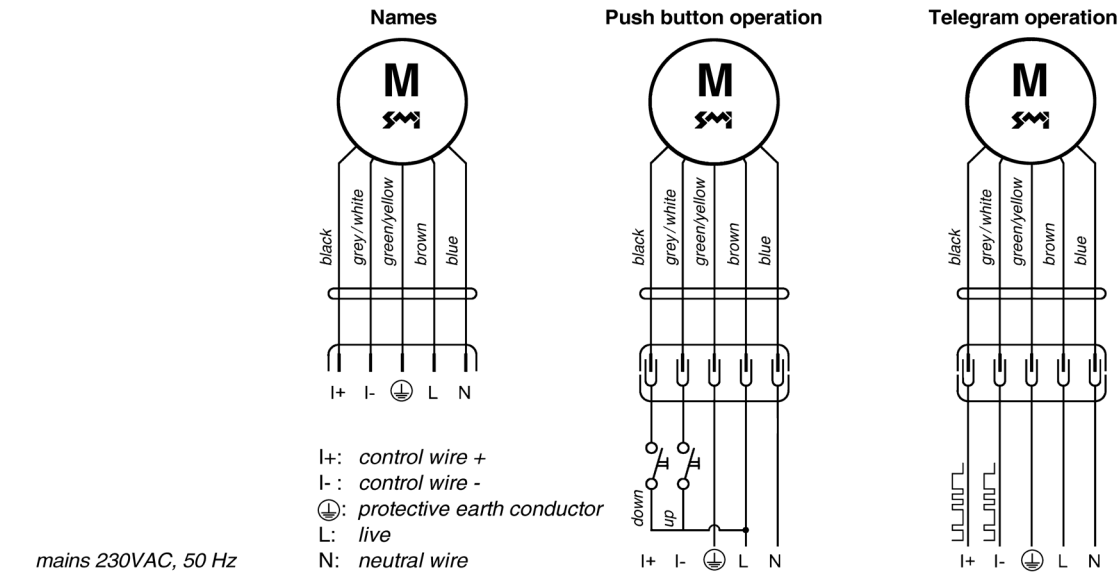
The motor must be installed aligning with the turning bars.  
The motor must be installed in the center. Ensure an even load distribution!

6. Wiring diagram

**ATTENTION!**

Parallel connection of tubular motor with electronic limit position are allowed. The maximum switching contact load of the connected control device (switch, motor control, timer etc.) must be observed.

It is not allowed to combine the operation modes. To change the operation mode from communication mode to switch mode, a one-time sequentially up and down button-press is necessary.



**Note on laying SMI wires in custom cables!**

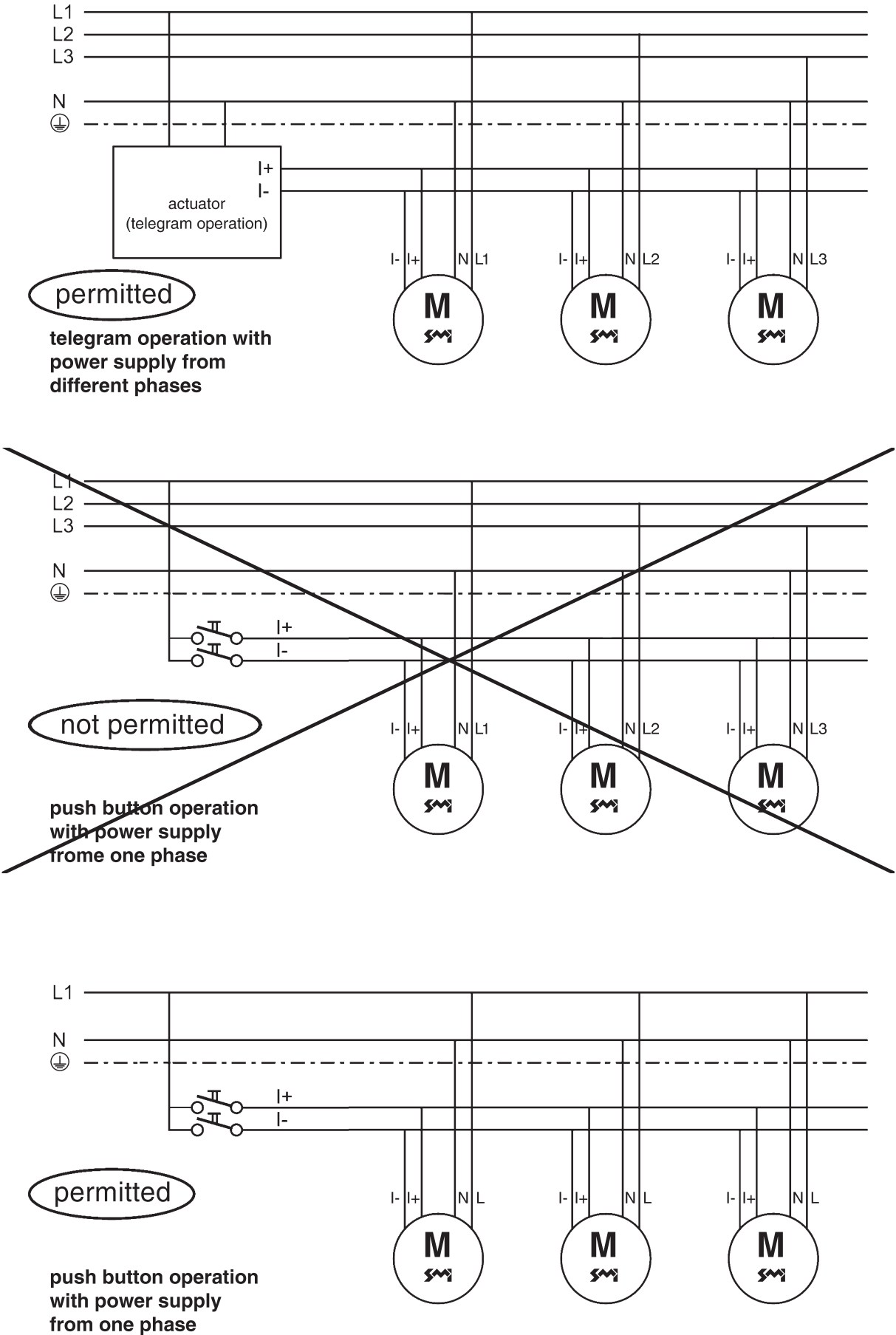
The I+ and I- SMI wires can be laid in the motor connection line of the SMI drive (as above) or in their own cable. It is not permitted to lay SMI wires together with wires carrying other signals in one cable.

If SMI drives wired in parallel are supplied with electrical power from different phases, the SMI I+ and I- wires must be laid in a separate cable.

SMI drives on different AC phases

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**ATTENTION!**  
Parallel connection to the control lines I+ and I- while supplying power to the drives from different phases, is only permissible in telegram operating mode.



## 7. Functional description

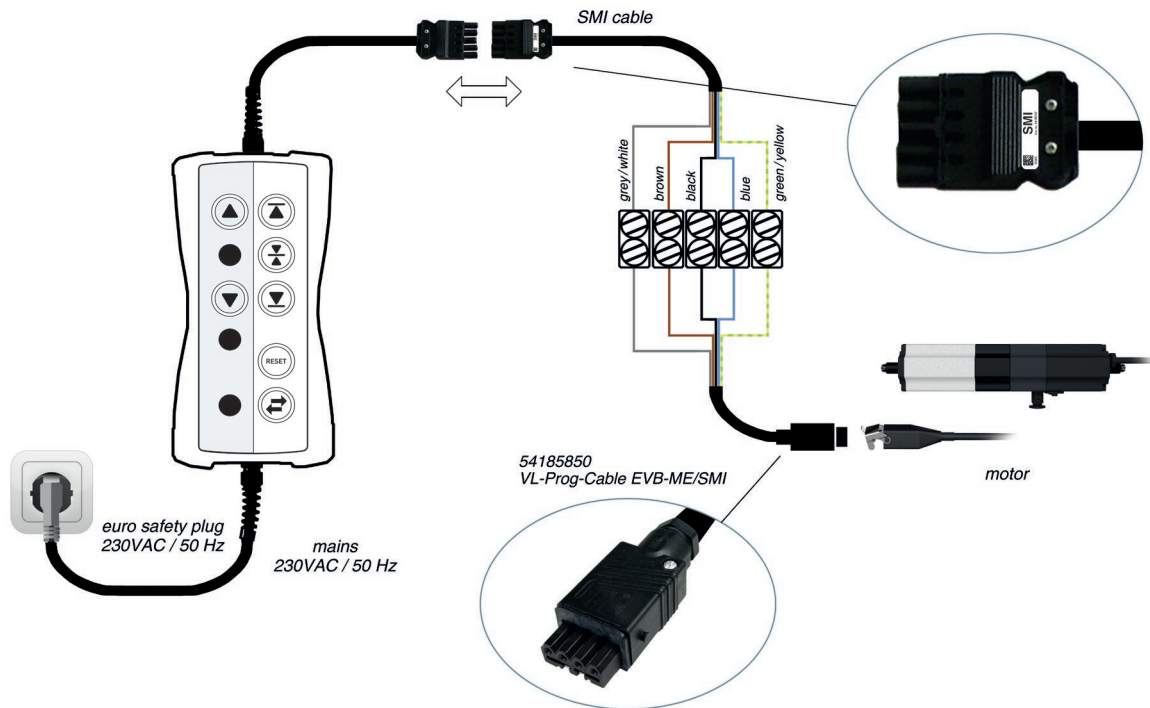
### Electronic limit position setting with Installation tool

How to connect to an Installation tool (VL-Progset-ME/SMI-230 / Art.-no.: 54185775).

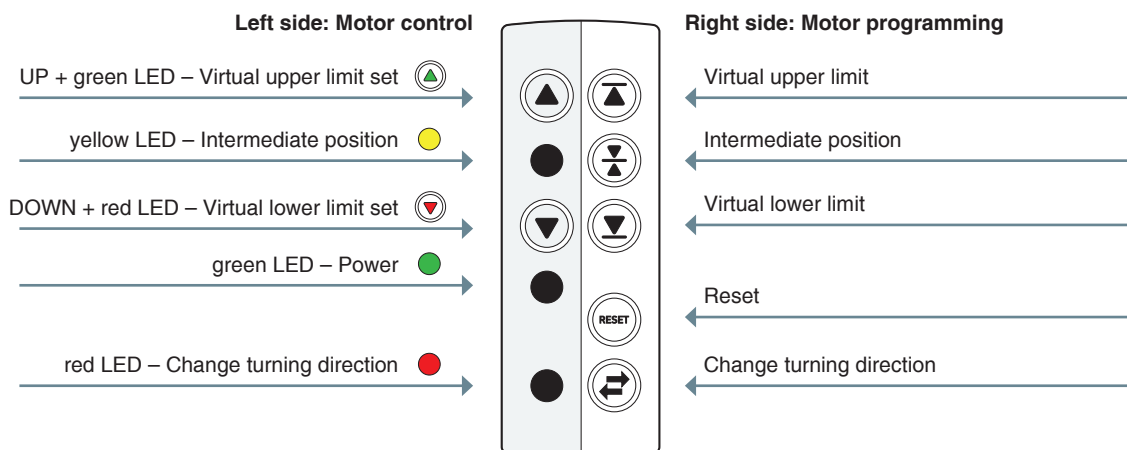


#### IMPORTANT!

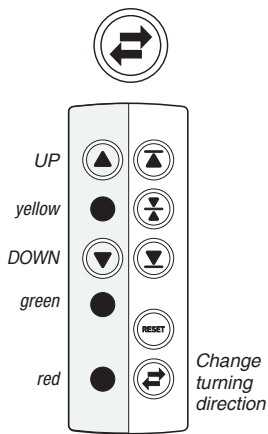
- Switch off the power supply. Connect the wire of the motor to the terminal clamps of the installation tool.
- It is important that the motor-wire-colors correspond with the installation-tool-wire-colors, otherwise the motor turning direction could be set incorrect. Switch on the power supply.
- The installation tool is not suitable for continuous operation and has only been used for set the limit position.



## Description of installation tool VL-Progset-ME/SMI-230



| Motor control |                                                                                                                                                                                                                                                                                                  |                   | Motor programming |               |                                     |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|-------------------------------------|
| <b>Button</b> | Control motor in <b>UP</b> direction<br>Hold down the button to move the motor in <b>UP</b> direction.                                                                                                                                                                                           |                   |                   |               |                                     |
| <b>LED</b>    | <b>green LED</b> – Virtual upper limit position:<br><i>OFF</i> when no “Virtual upper limit” is set.<br><i>Blinking</i> when “Virtual upper limit” or „Reset“ programming is in progress.<br><i>Lit solid</i> when “Virtual upper limit” programming sequence has completed.                     | <br><b>green</b>  |                   | <b>Button</b> | Set “Virtual upper limit position”. |
| <b>LED</b>    | <b>yellow LED</b> – Intermediate position:<br><i>OFF</i> when no “Intermediate position” is set.<br><i>Blinking</i> when “Intermediate position” programming is in progress.<br><i>Lit solid</i> when “Intermediate position” programming sequence has been completed.                           | <br><b>yellow</b> |                   | <b>Button</b> | Set “Intermediate position”.        |
| <b>Button</b> | Control motor in <b>DOWN</b> direction<br>Hold down the button to move the motor in <b>DOWN</b> direction.                                                                                                                                                                                       |                   |                   |               |                                     |
| <b>LED</b>    | <b>red LED</b> – Virtual lower limit position:<br><i>OFF</i> when no “Virtual lower limit” is set.<br><i>Blinking</i> when “Virtual lower limit” or „Reset“ programming is in progress.<br><i>Lit solid</i> when “Virtual lower limit” programming sequence has completed.                       | <br><b>red</b>    |                   | <b>Button</b> | Set “Virtual lower limit position”. |
| <b>LED</b>    | <b>green LED</b> – Power:<br><i>OFF</i> when powerless (it is safe to connect a motor to the Installation Tool).<br><i>Lit solid</i> when attached to mains 230VAC.                                                                                                                              | <br><b>green</b>  |                   | <b>Button</b> | Reset                               |
| <b>LED</b>    | <b>red LED</b> – Change turning direction:<br><i>OFF</i> when no “Change turning direction” is used.<br><i>Blinking</i> when “Change motor turning direction” programming sequence is in progress.<br><i>Lit solid</i> when “Change motor turning direction” programming sequence has completed. | <br><b>red</b>    |                   | <b>Button</b> | Change motor turning direction.     |



#### Changing motor turning direction

- Hold down the button ▲ or ▼ to check the motor turning direction.
- When the motor reacts in opposite direction (when motor goes down when you press up and vice-versa), you need to change the motor direction. Motor direction can only be changed during installation phase, when no limit positions are set.
- Press the button ↻ shortly.
- The *red* LED ● starts blinking as long as the change motor turning direction process is in progress.
- The *red* LED ● lit solid if the process is finished.

#### Setting electronic limit position



#### ATTENTION!

- The motor starts to move with a short delay time during installation phase, when no limit positions are set.

#### Electronic limit position setting combination

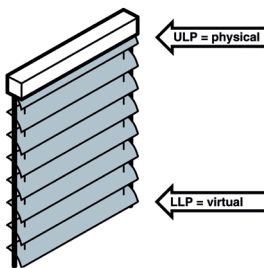
ULP = is an abbreviation for **Upper Limit Position**.

LLP = is an abbreviation for **Lower Limit Position**.

Following combinations virtual/physical limit position settings are possible:

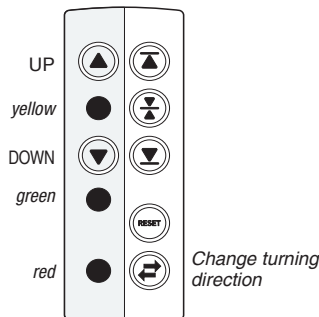
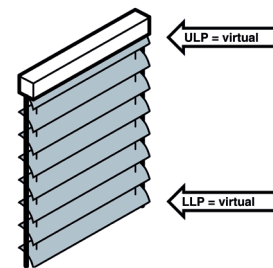
#### Physical – Virtual

##### Physical – Virtual



#### Virtual – Virtual

##### Virtual – Virtual



Upper limit position is physical,  
lower limit position is virtual.

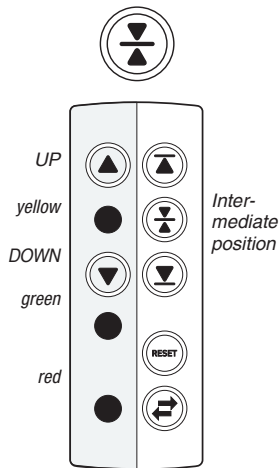
Both upper and lower limit position  
are virtual.

#### Start with lower limit position setting

- Hold down the button ▼ to move the motor in the requested *lower* limit position. For precise moving of the motor briefly press the button ▼, press again and hold.
- Press the button ▼ shortly.
- The *red* LED of button ▼ starts blinking as long as the limit setting process is in progress.
- The *red* LED of the button ▼ lit solid if the process is finished and the motor will give a feedback (short up/down movement).
- Hold down the button ▲ till motor stops automatically at the *upper* limit position.
- The motor then relieves the hangings slightly below the physical upper limit position.
- The installation procedure is finished and the limit position settings are saved.
- Press the button ▼ or ▲ for more than 2 seconds = self-locking
- Press the opposite button to stop drive.
- Briefly press the button ▼ or ▲ = Changing the slat position. (Fine adjustments).

#### Start with lower limit position setting

- Hold down the button ▼ to move the motor in the requested *lower* limit position. For precise moving of the motor briefly press the button ▼, press again and hold.
- Press the button ▼ shortly.
- The *red* LED of button ▼ starts blinking as long as the limit setting process is in progress.
- The *red* LED of the button ▼ lit solid if the process is finished and the motor will give a feedback (short UP/DOWN movement).
- Hold down the button ▲ to move the motor in the requested *upper* limit position. For precise moving of the motor briefly press the button ▲, press again and hold.
- Press the button ▲ shortly.
- The *green* LED of button ▲ starts blinking as long as the limit setting process is in progress.
- The *green* LED of button ▲ lit solid if the process is finished.
- The motor then moves to the physical stop. After that it returns to the virtual upper limit position.
- **Attention:** The motor must not be interrupted by other commands during this process.
- The installation procedure is finished and the limit position settings are saved.
- Press the button ▼ or ▲ for more than 2 seconds = self-locking
- Press the opposite button to stop drive.
- Briefly press the button ▼ or ▲ = Changing the slat position. (Fine adjustments).



#### Save intermediate position

- The intermediate position can be saved only after the lower and upper limit positions have been saved finally.
- Press the button or for more than 2 seconds = selflocking. Press the opposite or STOP button to stop drive.
- Briefly press the button or = Changing the slat position.
- Press button for „Intermediate position“ to store the position.
- The yellow LED flashes while the intermediate position is being stored.
- The yellow LED lit solid if the process is finished.
- The motor will give a feedback (short up/down movement) to confirm that the installation procedure has ended.
- The stored intermediate position can be changed/overwritten at any time.

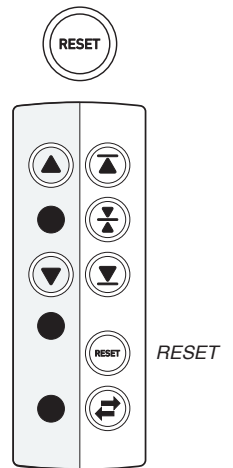
#### Motor – RESET

##### Clear – LED status

- Clear the installation tool LED-status. Keep the RESET button pressed till the LEDs turn off.

##### Delete the limit position settings of the motor

- Press the RESET button , till the LEDs start blinking.
- The LEDs keep blinking as long as the motor reset process is in progress.
- When the RESET process is finished, the LEDs turn off, the motor limit positions have been cleared, and can be set again.
- The motor will shortly move during the RESET sequence.



#### NOTE!

Tubular motor might be switched off before reaching the limit position:  
Extraordinary large increases of load (anti-block-function) – obstacles, sunshade system keeps jamming, tubular motor is overloaded.

#### Remedy action:

- Removing the obstacle.
- Check the mechanical parts of the sunshade system.
- Use the correct tubular motor (rated torque – tractive power) according the specification of the sunshade system.

#### 8. Note for operation

If the slats are supposed to have a different position (angle) after reaching the lower limit position, an intermediate position with the desired angle can be stored on the level of the lower limit position.

##### Manual operation via push button:

- Press the or button for more than 2 seconds = self-locking. The motor moves to the respective limit position or to the intermediate position (if stored).
- Press the opposite button to stop drive.
- Briefly press the button or = Changing the slat position (Fine adjustments).
- Slow turning by pressing the or button for a longer time, complete turning takes approximately 2 seconds.

Skipping the intermediate position (if stored):

Press or for more than 2 seconds = self-locking.

If the motor is in self-locking mode, briefly press the same or button again.

##### Performance of a reference run:

- After 10 complete cycles (up/down) or when the motor was deenergized.
- To test the mechanism, which can change under the influence of temperature and humidity.
- A reference run is always carried out at the end of an ascent, by driving/ detecting the motor against the physical stop. Then it moves back into the position of the upper limit position.

## 9. Troubleshooting

| Problem                                        | Possible cause                                                                          | Solution                                                                                                             |
|------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| ■ Motor is not responding.                     | 1. No mains voltage.<br>2. Connection error.<br>3. Cutoff by internal temperature fuse. | 1. Check mains voltage.<br>2. Check connections (see wiring diagram).<br>3. Allow the motor to cool down for 20 min. |
| ■ Motor starts slowly or makes too much noise. | 1. Connection error.<br>2. Installation error or undersized motor selected.             | 1. Check connections.<br>2. Check installation and motor load.                                                       |
| ■ Motor rotation direction is wrong.           | 1. Motor connection cables are reversed.<br>2. Motor is set incorrectly.                | 1. Black motor connection cable must be DOWN.<br>Gray motor connection cable must be UP.<br>2. Adjust the motor.     |
| ■ Motor stops while moving up or downwards.    | 1. Preset endpoint reached.<br>2. Cutoff by internal temperature fuse.                  | 1. Set the end limits again, according to the instructions.<br>2. Allow the motor to cool down for 20 min.           |
| ■ Motor stops while moving upwards.            | Iced sunshade or obstacle in running rail.                                              | Remove icing or obstacle. Release the sunshade by steering the motor in downward direction.                          |

## 10. Warranty

Principally, the General Terms and Conditions of the manufacturer, Vestamatic CRE GmbH apply. The terms and conditions are part of the sales documents and handed over to the operator upon delivery. Liability claims for personal or material damages are excluded when they can be attributed to one or more of the following causes:

- Unintended use of the product.
- Opening of the product by the customer.
- Improper installation, commissioning, or operation of the product.
- Non-compliance with the specifications.
- Non-observance of the safety provisions and instructions of the Operating Instructions.
- Operation of the product with improperly installed connections, defective safety devices or improperly installed safeguards.
- Modifications to the product.

## 12. Disposal of waste

**The disposal of electrical equipment and batteries in household waste is strictly forbidden.**



The symbol (dustbin crossed out, in line with WEEE Appendix IX) indicates separate collection of electrical and electronic products in EU countries. Do not dispose of the device or battery in your household waste. Ask your town or local council about the return and collection systems available in your area to dispose of this product.

## 13. Declaration of conformity



These products comply with the essential requirements. The Declaration of Conformity concerning these products are available on our website: [www.vestamaticcre.com](http://www.vestamaticcre.com)

## 11. Maintenance

The motor is maintenance-free.

## 14. Support/Contact

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