# WISO Timer Control 50 D

# Installation and Operating Instructions



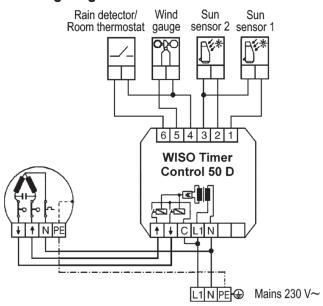


WISO Timer Control 50 D including frame

## **Contents**

- 1. Safety precautions
- 2. Installing the control device
- 3. Wiring diagram
- 4. Starting up the control device
- Overview of display and operating elements
   Operation modes manual and automatic operation mode
- 6. Programming menu layout
- 7. Programming menu
- 8. Programming details
- 9. Display of warning signals on the screen9.1 Wind gauge cable rupture9.2 Wind gauge signal monitoring
- 10. Display of the sun function on the screen
- 11. Display of the wind function on the screen
- 12. Display of the active multifunctional input on the screen
- 13. Restoring the control system's default settings
- 14. Replacing the batteries
- 15. Technical data
- 16. Warranty terms

# 3. Wiring diagram



# 1. A Safety precautions

- Note that the **Vestamatic** WISO Timer Control 50 D sunshade control requires a power supply of 230 V∼, 50 Hz. Contact a professional electrician to install the control system.
- Turn off the power supply before performing work on any awnings or blinds driven by the sunshade control.
- The control system 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
- Check the control for signs of mechanical damage immediately after unpacking. If you notice any shipping damage, notify your supplier immediately.

### If damaged, the control unit should not be operated.

- If there is reason to believe that the control unit cannot be operated without presenting a hazard, it must be switched off and prevented from being switched on unintentionally.
- This device contains a pollutant battery. The end user must recycle all
  used batteries in accordance with regulation 91/157/EWG). Disposing
  of the batteries in household waste is strictly forbidden.

## 2. Installing the control device

The **Vestamatic** *WISO Timer Control 50 D* for awnings and blinds must be installed and connected by a professional electrician.

- 1. Switch off the power supply.
- Connect the power pack or sensors in accordance with the wiring diagram. Make sure that the mains cables do not cross or touch the sensor cables.
- 3. If possible, fit the power pack into a deep flush box and fix in place.
- 4. Fit the frame cover.
- 5. Fit the operating device carefully into the power pack by applying gentle pressure to the frame cover.
- 6. Switch on the power supply.
- 7. You can test the direction of the sunshade using the "Retract" and "Extend" buttons.

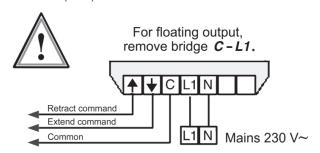
Warning: When connecting the device, observe the currently valid VDE standards (in particular DIN VDE 0100/0700), your local power company's regulations and the current accident prevention regulations.

**Important:** Parallel control of more than one conventional drive motor can only be implemented by means of isolating relays and group control devices.

For the control of two drives, we recommend our isolating relays:

Isolating relay TR N2S, article-no. 01054220 article-no. 01054120

Please note: When using decentralised control systems, the wire bridge (C-L1) must be removed.



When controlling decentralised controls such as MS P2, for example

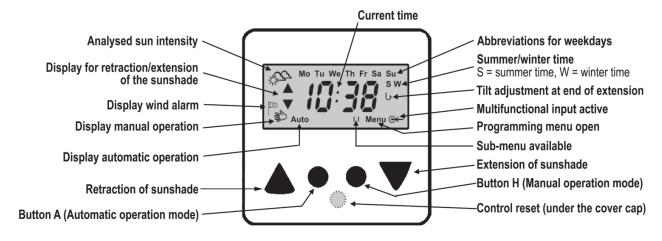
## 4. Starting up the control device

Once the **Vestamatic** *WISO Timer Control 50 D* awning and blind control system has been installed and switched on, it will be immediately ready for use and will start in manual operation mode. All automatic functions will be disabled but the sunshade can be operated using the retract and extend buttons. The current time, date and daily standard extend/retract times, as well as other basic settings, are already preset (see table 1), so these simply need to be adapted to your own personal requirements if necessary. To switch to automatic operation mode, press the automatic selector button. The manual symbol will disappear and the auto symbol will appear. The sunshade will then retract or extend, triggered by the data gathered by the sensors or the times which have been programmed. Switch to manual operation mode by pressing the manual operation button. Even in automatic operation, the sunshade can be operated at any time using the  $\blacktriangle$  or  $\blacktriangledown$  buttons. To interrupt the sunshade's movement, press the opposite button.

Table 1: Basic settings for the main menu and sub-menu

| Main<br>menu | Sub-<br>menu | Function                                     | Manufacturer's default setting | Adjustment option  | Personal settings |
|--------------|--------------|--|--------------------------------|--------------------|-------------------|
| H 1          |              | Time-controlled retract command              | OFF                            | 00:00 - 23:59; OFF |                   |
| H 2          |              | Time-controlled extend command               | OFF                            | 00:00 - 23:59; OFF |                   |
| H 3          |              | Automatic lock                               | OFF                            | ON / OFF           |                   |
|              | U 3.1        | Start automatic lock                         | 9:00                           | 00:00 - 23:59      |                   |
|              | U 3.2        | End automatic lock                           | 16:00                          | 00:00 - 23:59      |                   |
| H 4          |              | Sun function                                 | ON                             | ON / OFF           |                   |
|              | U 4.1        | Threshold setting (extension)                | 15 kLux                        | 5 – 40 kLux        |                   |
|              | U 4.2        | Extend time delay (extension)                | 2:30 min.                      | 00:10 – 05:00 min. |                   |
|              | U 4.3        | Threshold setting (retraction)               | 10 kLux                        | 3 – 38 kLux        |                   |
|              | U 4.4        | Retract time delay (retraction)              | 16 min.                        | 02:00 – 40:00 min. |                   |
| H 5          |              | Wind function                                | 28 km/h                        | 10 – 60 km/h       |                   |
|              | U 5.1        | Reset delay wind alarm                       | 16 min.                        | 2 – 20 min.        |                   |
|              | U 5.2        | Wind gauge type                              | CO 1                           | CO 1 – CO 3        |                   |
| H 6          |              | Motor run time / IDS function                | 180 sec.                       | IDS; 3 – 180 sec.  |                   |
|              | U 6.1        | Tilt time                                    | 0.0 sec.                       | 0.0 – 30 sec.      |                   |
|              | U 6.2        | Inching mode                                 | OFF                            | ON / OFF           |                   |
| H 7          |              | Multifunctional input                        | OFF                            | ON / OFF           |                   |
|              | U 7.1        | Function selection for multifunctional input | FA 1                           | FA 1 – FA 4        |                   |
|              | U 7.2        | Multifunctional input reset time delay       | 5 min.                         | 02:00 – 15:00 min. |                   |
| H 8          |              | Time / Date                                  | current                        | 00:00 - 23:59      |                   |
|              | U 8.1        | Year   | current                        | 2004 – 2099        |                   |
|              | U 8.2        | Date   | current                        | 01.01 – 31.12      |                   |
|              | U 8.3        | Automatic summer/winter time changeover      | ON                             | ON / OFF           |                   |
|              | U 8.4        | Manual summer/winter time changeover         | W                              | S/W                |                   |

# 5. Overview of display and operating elements



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### 5.1 Operation modes – manual and automatic operation mode

In manual operation mode, all automatic functions are disabled. Only the wind function or an activated multifunctional input FA 3 will remain active and will be monitored. You can operate the sunshade at any time using the ▲ and ▼ buttons. To swtich to automatic operation mode, press the A button (automatic operation mode). When triggered by the data gathered by the sensors or by the programmed times, the control system will retract or extend the sunshade. Even in automatic operation mode, the sunshade



Picture manual operation mode



Picture automatic operation mode

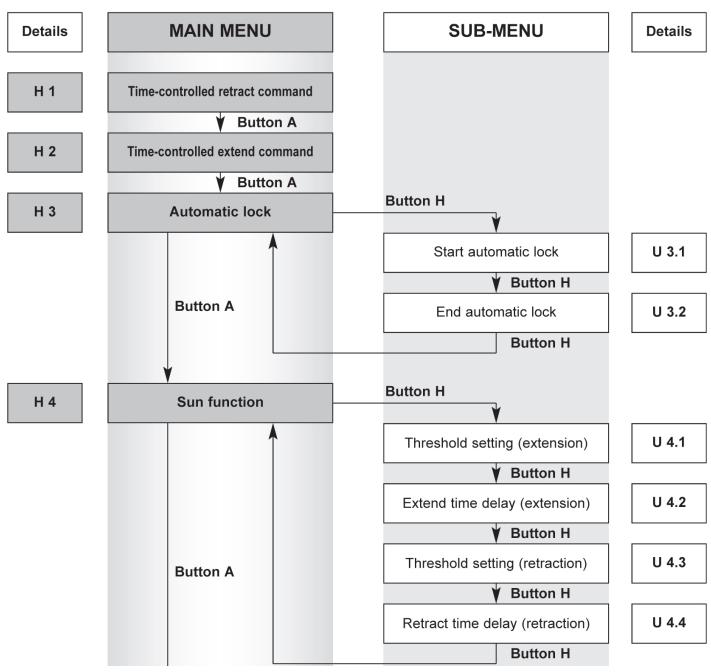
can be operated at any time using the  $\triangle$  and  $\nabla$  buttons. To interrupt the sunshade's movement, simply press the opposite button. To switch to manual operation mode, press the  $\mathbf{H}$  button (manual operation mode).

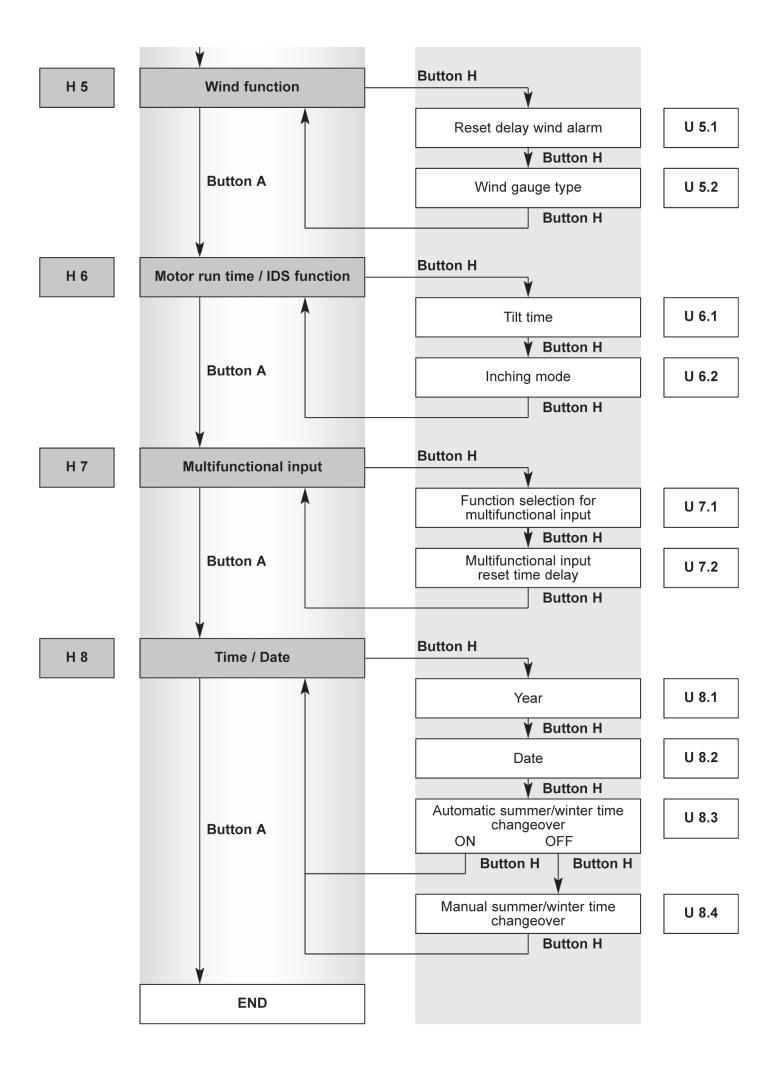
Note: A flashing Auto symbol indicates that the automatic lock is active. For more detailed information, see section 8: Programming details – menu option H 3.

## 6. Programming menu layout

The **Vestamatic** *WISO Timer Control 50 D* for awnings and blinds has a wide range of functions which can be set to meet your individual requirements. To access the main menu, press the **A** and **H** buttons at the same time and push them for 3 seconds. To go to the next option on the main menu, press the **A** button again. To go to a sub-menu option, press the **H** button. To go to the next option on a sub-menu, press the **H** button again. To go from a sub-menu option directly to the next main menu option, press the **A** button. There are two ways of setting values in the individual menus: briefly press for step-by-step programming or press and hold for more than 2 seconds to scroll through the available values using the  $\blacktriangle$  and  $\blacktriangledown$  buttons. After menu option H 8, pressing the **H** button again will exit the programming menu. If no button is pressed for over 3 minutes in the programming menu, the programming menu will exit automatically.

# 7. Programming menu





## 8. Programming details

To simplify programming of the **Vestamatic** WISO Timer Control 50 D for awnings and blinds, all main menu and sub-menu options have an ID code. All main menu options start with the letter H and all sub-menu options start with the letter U, followed by a number. This helps you to find menu options more quickly. These ID codes appear for 1 second before the respective menu appears on the display. In addition, if a sub-menu is available for a main menu, two flashing bars appear on the display before the text Menu.

You can use the ▲ or ▼ buttons to switch a function ON or OFF or to reduce or increase a setting.

#### H 1 Time-controlled retract command

In automatic operation mode, this menu item enables a daily retract time to be programmed for each weekday, to retract the sunshade.



#### H 2 Time-controlled extend command

In automatic operation mode, this menu item enables a daily extend time to be programmed for each weekday,



to extend the sunshade. A set tilt will not be performed at the end of the extension.

Note: There will be no time-controlled extension if the wind alarm is on, or if multifunctional inputs FA 3 or FA 4 are active.

#### H 3 Automatic lock

This menu item enables you to programme a period of time during which automatic operation mode is disabled. This means that no automatic retract or extend commands (triggered by the



sun or the temperature) will be performed during the selected period. To enable this function, switch the function ON using the ▲ or ▼ buttons. If this function is disabled, sub-menu options U 3.1 and U 3.2 will not be displayed.

Note: The wind function and the FA 3 or FA 4 multifunctional inputs will not be influenced by the automatic lock. If the automatic lock is enabled, Auto will flash in the display.

When switching from manual to automatic operation mode, no extend/retract commands will be performed if automatic lock is enabled.

#### U 3.1 Start automatic lock

This sets the time at which the automatic lock will be started.



#### U 3.2 End automatic lock

This sets the time at which the automatic lock will end. At this point, the connected sensors will be analysed again and, if necessary, an extend/ retract command will be performed.



#### H 4 Sun function

This menu option allows you to turn the sun function on or off. To disable the sun function, set this option to OFF. If the sun function is disabled, sub-menus U 4.1 to U 4.4 will not be displayed.



**Note:** If the word "ON" flashes on the screen, automatic operation mode will be enabled by the room thermostat only, as FA 2 multifunctional input has been enabled (see U 7.1 function selection FA 2). The sun/cloud symbol will not be displayed in automatic operation mode.



#### U 4.1 Threshold setting (extension)

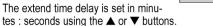
This menu item enables you to set the threshold value (in kLux) for extending the sunshade. The threshold value can be set individually using the ▲ or ▼



buttons. The measured sun intensity will be displayed in the form of a bar diagram. Once the bars have exceeded the central line, the sunshade will only extend once the extend time delay has expired.

#### U 4.2 Extend time delay (extension)

The extend time delay ensures that the sunshade will not immediately extend if the sun threshold value is exceeded. The extend time delay is set in minu-





#### U 4.3 Threshold setting (retraction)

This menu item enables you to set the threshold value (in kLux) for retracting the sunshade. The threshold value can be set individually using the ▲ or ▼



buttons. The measured sun intensity will be displayed in the form of a bar diagram. Once the bars fall below the central line, the sunshade will only retract after the retract time delay has expired.

#### U 4.4 Retract time delay (retraction)

The retract time delay ensures that the sunshade will not immediately retract if the value falls below the sun threshold value (e.g. during brief cloudy spells).



The retract time delay is set in minutes using the ▲ or ▼ buttons.

#### H 5 Wind function

If the measured wind speed exceeds the set threshold value, the sunshade will retract immediately. The wind threshold setting (km/h) depends on the sunshade's size and design. The sunshade cannot be extended again until after the retract time delay has expired. If a wind gauge is not connected to the control system, set the wind threshold value to the "wire bridge" symbol (see fig. 2). This symbol will be displayed if the maximum



Fig. 1



Fig. 2

programmable wind speed of 60 km/h is reached. In this case, a wire bridge must also be fitted between wind gauge terminals 4 and 5.

Note: The bars beneath the display showing the wind threshold indicate whether or not the wind gauge is operating correctly. If the wind gauge gives the necessary signals while turning, the bars will fill once from left to right, indicating that the wind gauge is operating correctly (see Fig. 1).

#### U 5.1 Reset delay wind alarm

The reset delay for the wind alarm enables you to programme a reset time in minutes so that the sunshade will not extend immediately after a wind alarm.



#### U 5.2 Wind gauge type

This sub-menu option allows you to set the type of wind gauge being used.

The following adjustments can be carried out.



CO 1 = Vestamatic Wind gauge WM1, Article-no.: 01100310 or 01100410

CO 2 = Vestamatic Wind gauge WM2, Article-no.: 01100235

CO 3 = Vestamatic Wind gauge WM3, Article-no.: 01305700

#### H 6 Motor run time / **IDS** function

Setting the motor run time depends on the sunshade's size and design. When using blinds, you are recom-



mended to use the precise run time, so that the slats are positioned to the correct angle (tilted) immediately after the motor has stopped running. You can also set the IDS operating mode. The IDS (Intelligent Decentralised Sunshade control) feature is used to differentiate between sun-dependent, time-dependent, manual and safety-related central controls without any additional installation work required. For example, you can mask the sun-

dependent extend/retract commands while the remaining central commands (such as safety-related or timedependent commands) continue to operate. IDS operating mode is displayed before a run time of 3 seconds. In IDS operating mode, sub-menu items U 6.1 and U 6.2 are unavailable.



Note: IDS operating mode may only be used in conjunction with Vestamatic controls equipped with the IDS feature.

#### U 6.1 Tilt time

Tilt time setting depends on the sunshade's size and design; it is set (in seconds) using the ▲ or ▼ buttons. Once the motor run time has expired, the sunshade will briefly retract,



enabling the slats to be positioned to the correct angle. The tilt function is performed in both automatic and manual operation mode. If the ▼ extend button is pressed while the sunshade is extending the tilt movement will not be performed once the sunshade has extended.

If the set tilt time flashes, this indicates that the set tilt time is longer Note: than the motor run time.

#### U 6.2 Inching mode

If this function has been activated an inching mode of up to 2 seconds is enabled. This means that the run time command is not executed for 2 seconds.



#### H 7 Multifunctional input

You can connect a commercially available room thermostat (break contact) or rain detector to the multifunctional input using clamps 4 and 6 of the power supply. This menu option turns



the multifunctional input on or off. If the multifunctional input is deactivated, sub-menu options U 7.1 and U 7.2 cannot be selected. To activate the multifunctional input, please set this to ON.

#### U 7.1 Function selection for multifunctional input

You can choose between four different functions.



FA 1 = The input is connected to the room thermostat (Article-no. 01100271) and works in conjunction with a sun

sensor which is also connected. The sunshade will only extend if the set room temperature or sun threshold value is exceeded. If the value falls below the set temperature or sun threshold, the sunshade will retract again once the retract time delay has expired. If FA 1 flashes in the display, enable the sun function in the H4 main menu (H4 = ON).

**FA 2** = The input is connected to the room thermostat (Article-no. 01100271). Device operation is triggered by room temperature alone. If the set temperature is exceeded, the sunshade will extend. If the value falls below the set temperature, the sunshade will retract again once the retract time delay has expired.



FA 3 = The input is connected to a rain sensor (Article-no. 01083520). If the sensor detects rain, an immediate retract will be performed in automatic or manual operation mode.

FA 4 = The input is connected to a rain sensor (Article-no. 01083520). If the sensor detects rain, an immediate retract command will be performed, but only in automatic operation mode. In manual operation mode, the sunshade can still be controlled manually.

#### U 7.2 Multifunctional input reset time delay

The multifunctional input reset time delay enables you to programme a reset time delay (in minutes) so that when the multifunctional input is disa-



bled, the extend/retract command will not immediately be performed.

#### H 8 Time / Date

In this menu, you can set the current time using the ▲ or ▼ buttons.



#### U 8.1 Year

In this sub-menu, you can set the current year using the ▲ or ▼ buttons. Programmable range: 2004 to 2099.



#### U 8.2 Date

In this sub-menu, you can set the date using the ▲ or ▼ buttons.

The first two digits represent the day and the last two digits, the month. When changing the setting, the month



will be automatically adjusted and cannot be altered separately.

### U 8.3 Automatic summer/winter time changeover

In this sub-menu you can determine whether the control carries out the changeover from summer to winter time (and vice-versa) independently.



If you wish to use this function, set it to ON. If you wish to change the setting manually, set the function to OFF using the ▲ or ▼ buttons.

#### U 8.4 Manual summer/winter time changeover

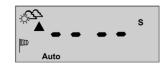
This sub-menu will only appear if U 8.3 is set to OFF. You can now manually set the appropriate time using the A or ▼ buttons. S will flash in the display for summer time and W for winter time.



## 9. Display of warning signals on the screen

## 9.1 Wind gauge cable rupture

If the wind gauge connection cable is damaged, this fault will be indicated on the display by a flashing windsock, retract arrow and two middle segments. The sunshade will retract



immediately and will be secured in the retracted position until the fault is repaired.

# 9.2 Wind gauge signal monitoring

If the externally fitted wind gauge does not send a signal for a period of 48 hours, the windsock symbol will



flash, the time will be masked and, in its place, the warning "48 h" symbol will be displayed. This warns you that you need to check the wind gauge. In this case, test that the wind vanes are turning smoothly by pushing them by hand. If, after this test, the display does not change, you cannot be guaranteed safe use of the sunshade. This alarm can be acknowledged using any button but after an hour it will be displayed again. We recommend that you turn off the control system and ensure that it cannot be operated unintentionally.

# 10. Display of the sun function on the screen

If the sun function is activated in automatic operation mode, it will be indicated by a sun/cloud symbol in the top left-hand corner of the display.



flashes: sun response delay

continuous: sun threshold value exceeded

🗠 flashes: sun retract time delay

continuous: sun intensity between extend/retract threshold

# 11. Display of the wind function on the screen

If the wind speed threshold value is exceeded, the sunshade will retract without delay and can no longer be extended by pressing the extend button. The display indicates this status with a flashing retract arrow and wind



sock. If the wind sock remains continuously lit, the wind speed threshold value has been exceeded; if the wind sock flashes, the measured wind strength is below the set wind speed threshold value and the reset delay time starts to run. After the wind reset delay time has expired, in automatic operation the sunshade will be controlled using the sensor data which has been gathered. In manual operation the sunshade can be controlled using the  $\blacktriangle$  or  $\blacktriangledown$  buttons to achieve the required position.

# 12. Display of the active multifunctional input on the screen

If the multifunctional input is activated (ON) in menu H 7 and the function selection is set in U 7.1, the corresponding command will be executed if the multifunctional input is active. This is represented by the ⊕ sym-



bol in the lower right part of the display. If the symbol flashes, the multifunctional input is no longer active and the reset delay time starts to run. At the end of the reset delay time, the symbol disappears again.

**Note:** The times and values used in the displays shown in this user guide are given as examples. Only the symbols, arrows, text, etc. and the warning notes correspond to the actual display.

## 13. Restoring the control system's default settings

The **Vestamatic** *WISO Timer Control 50 D* for awnings and blinds is reset to the factory default settings by pressing the Reset button (below the cover cap). By doing this, all your programming – including time and date – will be deleted and the factory default time settings will be reloaded (see point 4, table 1). To carry out this process, remove the cover cap by pulling it gently and press the reset button.

## 14. Replacing the batteries

In the event of a power failure, all previously programmed times and settings will be stored for up to 2 years. At the start of the power failure, the display will flash for the first 20 minutes. After that, the screen will go blank. When the power supply returns, the control system will automatically display the current time. If a retract or extend command is pending during the power failure, this command will be automatically performed once the power returns. To replace the batteries, remove the operating device from the power pack and remove the batteries from the back of the operating device. After replacing the batteries, press the rest button. This will automatically reset the control system and restore the default settings (see Point 4, table 1). Everything you have programmed yourself (incl. time and date) will be deleted.

## 15. Technical data

Power supply: 230 V~, 50 Hz

Impulse voltage withstand level: 2.5 kV
Rated power: approx. 2 W

Output (retract/extend):

Maximum load: 250 V $\sim$ , 50 Hz, 3A,  $\cos \varphi \ge 0.8$  ind.

Align switching time extend: 3 - 180 seconds Tilt time: 0 - 30 seconds

Software class: A

Operating temperature: 0 °C (32 °F) to +40 °C (104 °F)

IP class: IP 40
Degree of contamination: 2
Battery: CR 2032



The CE mark is a free market mark, which exclusively refers to the authority but does not guarantee any properties. For the full declaration of conformity for this product, refer to the home page on our website: http://www.vestamatic.de

All technical data is subject to change.

## 16. Warranty terms

For new devices, Vestamatic GmbH issues a warranty period of 24 months, starting from the date of purchase, provided the device was mounted in accordance with the installation instructions. The warranty applies to all design, material and manufacturing defects.

The warranty does not include faults and defects due to:

- faulty mounting or installation,
- failure to observe of the installation and operating instructions,
- inappropriate operation and strain,
- detrimental effects such as impacts or weather,
- non-authorised repairs or modifications,
- use of inappropriate accessories.

Product faults occurring within the warranty period will be remedied free-ofcharge by Vestamatic, either by means of repair or by exchange of the device. A replacement delivery due to warranty claims does not extend the original warranty period. The buyer shall bear all costs for mounting and installation.



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

The symbol (dustbin crossed out, in line with WEEE Appendix IV) 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.