

# Rollmat Plus G/S

## Roller Shutter Control



Art.-no.: 01655030

## Installation and Operating Instructions



### Safety precautions



- Contact a professional electrician to install the control system, because the control system requires a power supply of 230VAC, 50 Hz.
- Check the control system for signs of mechanical damage after unpacking. If you notice any shipping damage, do not start up the control system and notify your supplier immediately.
- 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.
- If the control unit or the connected sunshade 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, controls or connected shades, protect them against unauthorised or unintentional operation.

## Contents

<b>Introduction</b>	General	page 43
	Manual mode	page 44
	Automatic mode	page 45
<b>Programming the basic functions</b>	General	page 46
	Summer/winter time	page 47
	Current time	page 48
	Note	page 49
	Up time	page 50
	Down time	page 51
	Random generator	page 52
<b>Programming the special functions</b>	Week function	page 53
	Astro function / Run time correction	page 54 – 57
	Astro function – Germany	page 58
	Astro function – Europe	page 59
	Reverse function	page 60
	Example for DIP switch setting	page 61

## Contents

<b>G/S functions</b>	General	page 62
	Functional description broken glass sensor	page 63
	Functional description sun protection	page 64
	Setting the response (sun intensity)	page 65
<b>Trouble shooting</b>		page 66
<b>Installation</b>	Notes for professional electricians	page 67 – 68
	Installation instructions / Technical data	page 69
	Wiring diagram	page 70
	Installation broken glass sensor	page 71 – 72
	Installation lux sensor	page 73 – 74
<b>Wiring diagram</b>		Inside back cover
<b>Overview operating elements</b>		Inside back cover

Congratulations for buying the roller shutter control. You have purchased a high-quality product that features many practical programming options and has been manufactured according to the highest quality standards which will guarantee optimum efficiency and reliability. Please take the time to read these operating instructions carefully before starting up. We have tried to make sure that all programming instructions are easy to understand.

The delivery extent of the roller shutter control includes the following items:

1. Cover cap
2. Basic housing
3. Adjustment tool

In case of power failure, the entire display starts flashing. Yet, the previously programmed times remain saved for several years. The times or functions, you have previously programmed, can be checked by performing a quick run. Press the **time** and **day** button simultaneously for 3 seconds to activate the quick run. The time function will now run 60 times faster. Shortly tap the **time** and **day** button simultaneously to stop the quick run.

The roller shutter control features a selector switch with which manual mode (**H**) or automatic mode (**A**) can be selected.

Push the selector switch to (**H**), all the way to the right until you hear the “click” in order to activate the **manual mode**.

All automatic functions are now disabled. Pressing the **up** or **down** button will move the roller shutters up or down.

Simply press the opposite button to stop the motion, i.e.:

- press the **down** button, if the roller shutter is moving up,
- press the **up** button, if the roller shutter is moving down.

Accurate positioning of the roller shutter is guaranteed because the roller shutter will only move up or down again after the **up** or **down** button has been pressed.

Push the selector switch to **(A)**, all the way to the left until you hear the “click” in order to activate the **automatic mode**.

The automatic mode is now activated and the roller shutter will move up and down at the programmed times. Regardless of the programmed times, it is still possible to move the roller shutter up and down by pressing the **up** or **down** button and the programming remains unaffected.

If you press the **up** or **down** button longer than 2 seconds, the roller shutter moves up or down.

Simply press the opposite button to stop the motion, i.e.:

- press the **down** button, if the roller shutter is moving up,
- press the **up** button, if the roller shutter is moving down.

The roller shutter will only move up or down again after the **up** or **down** button has been pressed.

By simply pushing the selector switch to manual mode **(H)**, the automatic mode can be interrupted for an extended period of time.

After selecting the automatic mode again, the roller shutter control will execute the last pending command from the automatic mode. The last pending command will also be executed when resetting after power failure.

After the installation has been completed correctly (for instructions please see pages 67 to 74), you can start programming.

**IMPORTANT:**

Please note that the roller shutter control cannot be programmed in case of power failure.

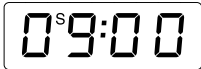
Carefully pull to remove the cover cap and press the **reset** button with the delivered adjustment tool or something else suitable. Pressing the **reset** button will activate the default times preprogrammed by the manufacturer.

- Current time – 08:00
- Up time – 06:00
- Down time – 20:00

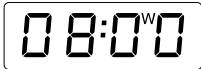
On the following pages, you will find instructions how to customize these times to your personal requirements.

The display will indicate which time has been set.

The **(S)** in the upper left hand corner of the display stands for summer time.



The **(W)** in the upper right hand corner of the display stands for winter time.



If the present setting is incorrect and does not correspond with the current time, you can simply update the time by pressing the **summer/winter** button. The selected setting will appear in the display and the time will be changed by one hour.

By operating the combination of **set** and **time** button you can set the current time.

Setting the time can be performed as follows:

1. Press the **set** button first and keep it pressed, then:
  - A. Press the **time** button and keep it pressed to **fast forward** the time.
  - B. Shortly tap the **time** button to **slow forward** the time.

or

2. Press the **time** button first and keep it pressed, then:
  - A. Press the **set** button and keep it pressed to **fast reverse** the time.
  - B. Shortly tap the **set** button to **slow reverse** the time.

The roller shutter control is delivered with the following manufacturer's default up and down times (day function is activated):

- Daily up time – 06:00 every morning
- Daily down time – 20:00 every evening

**Please find the manufacturer's default DIP switch settings in the tables on page 58 and page 61.**



#### IMPORTANT:

It is important to push the selector switch “automatic/manual mode” to **automatic mode (A)**, in order to be able to perform the following programming steps.

Check the current setting. If the selector switch is not set on **(A)**, correct the setting by pushing it all the way to the left until you hear the “click”.

By operating the combination of **set** and **up** button you can set the up time.

Setting the up time can be performed as follows:

1. Press the **set** button first and keep it pressed, then:
  - A. Press the **up** button and keep it pressed to **fast forward** the up time.
  - B. Shortly tap the **up** button to **slow forward** the up time.

or

2. Press the **up** button first and keep it pressed, then:
  - A. Press the **set** button and keep it pressed to **fast reverse** the up time.
  - B. Shortly tap the **set** button to **slow reverse** the up time.

The display will now indicate the set value. Once the programming buttons are no longer operated, the display will indicate the current time again. Tapping the **up** button will check the set value and the display will again indicate the previously set up time. After approx. 2 seconds, the display will indicate the current time again.

By operating the combination of **set** and **down** button you can set the down time.

Setting the down time can be performed as follows:

1. Press the **set** button first and keep it pressed, then:
  - A. Press the **down** button and keep it pressed to **fast forward** the down time.
  - B. Shortly tap the **down** button to **slow forward** the down time.

or

2. Press the **down** button first and keep it pressed, then:
  - A. Press the **set** button and keep it pressed to **fast reverse** the down time.
  - B. Shortly tap the **set** button to **slow reverse** the down time.

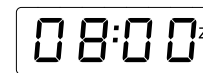
The display will now indicate the set value. Once the programming buttons are no longer operated, the display will indicate the current time again. Tapping the **down** button will check the set value and the display will again indicate the previously set down time. After approx. 2 seconds, the display will indicate the current time again.

The random generator generates the so-called random time which causes the roller shutters to move up or down with a deviation of +/-15 minutes to the previously programmed times(\*).

The “randomly” moving up and down roller shutters give the impression of an inhabited house and thus provide additional protection in case the house owner is absent for an extended period of time.

Simply press the **random** button to activate the random generator.

The display will now indicate a **(Z)** in the upper right hand corner.



**NOTE:**

The random generator will disable any previously set reverse function (please see page 60).

Press the **random** button again to deactivate the random generator. The random generator is now turned off, the **(Z)** in the display will disappear and the roller shutter will move up and down accurately at the times you have previously programmed.

**(\*)Annotation:** If the Astro function is activated, the times will deviate by +/-15 minutes from the actual sunrise and sunset times.

## Week function

## Special functions

The week function enables you to program a particular up and down time for each individual day of the week.

In order to activate the week function, all DIP switches in the rear of the housing must be set according to the table on page 61.

The following times were preset for this operation mode by the manufacturer:

- Up time Monday through Friday – 06:00
- Down time Monday through Friday – 20:00
- Saturday / Sunday – no preset time.

If you wish different up and down times, perform the following steps:



Press the **day** button. The display will show a new day of the week after every press.



...etc.

Perform the steps described on page 50 to 51 to program the up and down times for the currently displayed day.

## Special functions

## Astro function

The Astro function is basically an electrical calendar. Depending on the stored sunrise and sunset times, the up or down times are automatically corrected under consideration of the geographical location of your residence. This correction is based on the up or down times you previously set.

For more information on the programming of the Astro function please see page 56.

### Example:

*You have activated the Astro function and previously programmed the following up and down times according to the instructions on page 50 and page 51:*

*Up time – 06:30 (½ an hour before sunrise according to the diagram on page 57)*

*Down time – 19:30 (½ an hour before sunset according to the diagram on page 57)*

*Given the current calendar week 14.*

In this example, the roller shutter does not move up at 6:30, as programmed but moves up at 7:00 when the sun rises. In the evening, it moves down at 19:30 at the programmed time.

**Note:**

If the up time is programmed before sunrise, the roller shutter moves up at sunrise.

If the up time is programmed after sunrise, the roller shutter moves up at the programmed up time.

If the down time is programmed after sunset, the roller shutter moves down at sunset.

If the down time is programmed before sunset, the roller shutter moves down at the programmed down time.

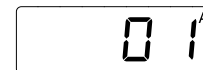
**IMPORTANT:**

Activating the **Astro** function automatically disables the **week** function.

Activating the Astro function and setting the current calendar week will be performed in one programming step.

First press the **set** button and keep it pressed. Then press the **day** button twice.

The display will indicate the following:



Now set the current calendar week by pressing the **day** button. Keep pressing the set button. Each additional pressing of the **day** button will move to the next calendar week.

After you have set the current calendar week and released both buttons, the Astro function will be activated. The display will now switch to the current time. The display will continue to indicate the **(A)** in the upper right hand corner.

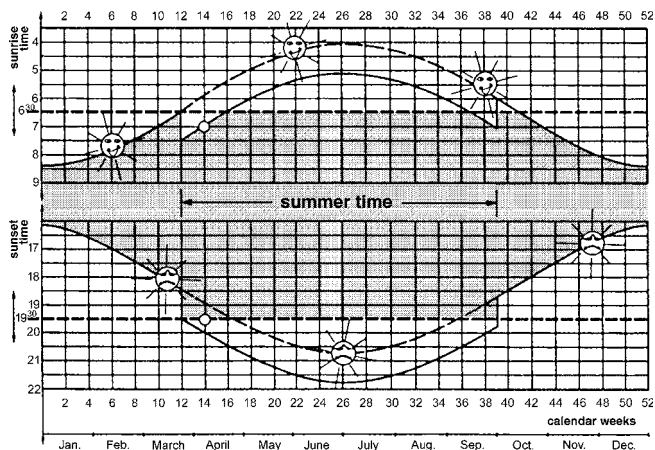
Keep the set button pressed and press the **day** button until the display indicates "00" in order to deactivate the Astro function.

**NOTE:**

In order to obtain optimum performance of the Astro function, the geographical location of your residence must be set by means of the DIP switches (see tables on page 58 and 59).

## Astro function / Run time correction Special functions

Below the switching sequence is presented in the course of an entire year under consideration of summer/winter time, at an up time preset at 6:30 and a down time preset at 19:30. These times relate to 10° of eastern longitude and 50° of northern latitude which corresponds to the geographical location of the city of Würzburg. Setting DIP switch 6 to "ON" will delay the down time of the roller shutter by 30 minutes.



**Run time correction:**

DIP 6	Correction
OFF	no delay
ON	down command 30 minutes delayed

## Special functions Astro function - Germany

DIP 2	DIP 3	DIP 4	DIP 5	Area
OFF	OFF	OFF	OFF	Schleswig-Holstein, Northern Lower-Saxony
OFF	OFF	OFF	ON	Mecklenburg-Vorpommern
OFF	OFF	ON	OFF	North-Rhine Westphalia, Southern Lower-Saxony
OFF	OFF	ON	ON	Brandenburg, Saxony-Anhalt
OFF	ON	OFF	OFF	Rhineland-Palatinate, Saarland, Hesse
OFF	ON	OFF	ON	Saxony, Thuringia
OFF	ON	ON	OFF	Baden-Württemberg
OFF	ON	ON	ON	Bavaria

ON  S1  S2  S3  S4  S5  
 OFF      = Manufacturer's default setting:  
 Schleswig-Holstein,  
 Northern Lower-Saxony

**Astro function - Europe****Special functions**

DIP 2	DIP 3	DIP 4	DIP 5	Area
ON	OFF	OFF	OFF	Scandinavia
ON	OFF	OFF	ON	Great Britain
ON	OFF	ON	OFF	Northern France, Benelux
ON	OFF	ON	O-N	Germany
ON	ON	OFF	OFF	Southern France
ON	ON	OFF	ON	Switzerland, Austria, Northern Italy
ON	ON	ON	OFF	Spain
ON	ON	ON	ON	Southern Italy, Sicily, Corsica, Sardinia

**Special functions****Reverse function**

After the roller shutter has moved down automatically at the programmed time, the reverse function causes the roller shutter to shortly move up airing purposes or to let pets go outside.

The reverse time can be set with DIP switches 7 and 8 and will only be executed at the programmed day, week and sunrise and sunset times during automatic operation. The reverse function can also be executed by pressing the down button during automatic operation.

**IMPORTANT:**

The reverse function is only initiated 2 minutes after the down pulse has been transmitted.

**Setting reverse time:**

DIP 7	DIP 8	Reverse time
OFF	OFF	none
OFF	ON	2 seconds
ON	OFF	4 seconds
ON	ON	10 seconds

The display will indicate the set reverse time with the symbol (u).

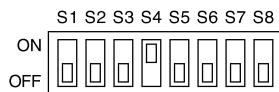
This symbol flashes on the display during execution of the reverse time.

## Example for DIP switch setting Special functions

The table below shows the various setting options.  
The position of S1 determines whether day or week function was selected.

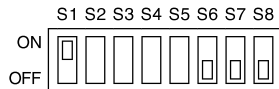
Preset default setting:      **Day function** (S1 = OFF)  
                                 **No Astro correction time** (S6 = OFF)  
                                 **No reverse function** (S7 and S8 = OFF)

### Day



Example of the DIP switch position for North-Rhine Westphalia.  
For other states, please see pages 58 and 59.

### Week



DIP switches S2 – S5 do not have any function for this setting.  
For DIP switch S6, see page 57, for S7 and S8 see page 60.

## G/S functions

## General

Your roller shutter control features two additional useful functions:

1. Broken glass indicator (**G**)  
The function “broken glass indicator” is only activated in the automatic mode.
2. Sun protection (**S**)  
The function “sun protection” can only be operated in the automatic mode within the previously programmed up and down times.



### NOTE:

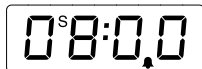
Standard length of the lux sensor cable	– 2,0 m
Standard length of the broken glass sensor cable	– 1,0 m

Cables of up to 10 m length can be delivered for both functions.

## Functional description broken glass sensor G/S functions

In case of broken glass, the roller shutter will move down without delay.

The display will now indicate the broken glass symbol (🚨):



The previously programmed up time will no longer be considered, i.e. the roller shutter does not move up at the programmed up time because of safety reasons. Simply press the **up** button in order to resume the normal operation. The broken glass symbol in the display goes off and the roller shutter moves up or down at the programmed up and down times.

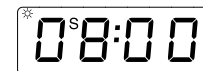
**Annotation:** A broken glass signal is released as soon as the broken glass sensor detects a massive shock or broken glass within the sensing range. The sensing range amounts to approx. 1 square meter (please refer to the picture on page 71). Therefore, several broken glass sensors and a distributor box should be installed on larger windows.

## G/S functions Functional description sun protection

When the lux sensor is exposed to sun rays, the sun symbol will flash in the display. After the sensor measures 1 minute of continuous sunshine, the roller shutter moves as far down to cover the lux sensor. In order to clear the sun sensor for further monitoring, the roller shutter then moves a few inches up. We call this roller shutter position “shade position”.

The display indicates the current light intensity with the corresponding symbols (☀️):

(Example: strong light intensity)



If the lux sensor cannot detect any sun rays over a continuous period of 16 minutes, the roller shutter will move up again. During this delay time, the sun symbol will keep flashing in the display. The sensor signals are checked on a regular basis and the position of the roller shutter position will be corrected accordingly in the course of a sunny day.



### IMPORTANT:

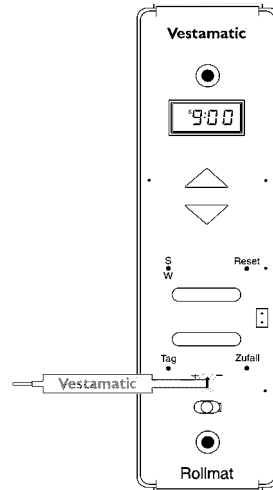
The lux sensor is only activated in between the up and down times. If the present time does not lie within these times, the display will indicate a moon symbol.

Remove the lux sensor, if you do not need to use the sun protection function for an extended period of time.

## Setting the response (sun intensity) G/S functions

Set the response to the sun intensity with the potentiometer and the delivered adjustment tool. Carefully pull to remove the cover cap of the roller shutter control.

- + (⊘) The roller shutter moves down at a low sun intensity (approx. 12 kLux).
- + (⊕) The roller shutter moves down at a medium sun intensity (approx. 17 kLux).
- + (⊙) The roller shutter moves down at a high sun intensity (approx. 22 kLux).



Sun down delay: 1 minute  
Sun up delay: 16 minutes

## Trouble shooting

**The roller shutter does not move up and down automatically.**

- Is the power supply connected?  
(The display flashes in case of power failure)
- Is the selector switch set to automatic **(A)**?
- Check, if the programmed up and down times are still stored in the memory by shortly tapping the **up** or **down** button in the automatic mode.
- Is there a broken glass signal present?  
(The display will indicate the broken glass sensor symbol)



**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 VDE standards (in particular DIN VDE 0100/0700), your local power company's regulations and the current accident prevention regulations.
- Connect the control in accordance with the wiring diagram.

**Installation and basic settings:**

1. Switch off the power supply.
2. Remove the band winder from the band winder case.
3. Set the DIP switches to the desired function (see pages 57 to 61).
4. Connect the control according to the wiring diagram (see page 70).
5. Install the control in the band winder case.
6. Set the selector switch to manual mode (**H**), i.e. push it to the right all the way to the stop.
7. Switch on the power supply and press the **reset** button.
8. Check, if the direction of the motor rotation corresponds with the direction buttons. If not, exchange terminal 6 with terminal 7.



**IMPORTANT!**

Parallel control of several roller shutter drive motors can only be implemented by means of isolating relays or group control devices.

In case of power failure, the display contrast will fade which does **not** indicate that the battery is empty.

For extra large band winder cases, we recommend to use our intermediate plate, article-no. 01201500

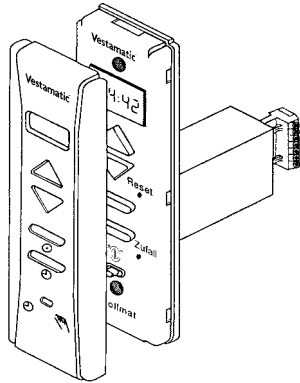
For the sun function, the following accessories are available:


- Lux sensor LS 1 GS, cable length 1 m, article-no. 01130120
- Lux sensor LS 2 GS, cable length 2 m, article-no. 01130220
- Lux sensor LS 3 GS, cable length 3 m, article-no. 01130320
- Lux sensor LS 5 GS, cable length 5 m, article-no. 01130520

For control via two drives, we recommend our isolating relays:

- MC TR 2A, article-no. 01054120
- MC TR 2S, article-no. 01054220
- MC TR 2S FMT, article-no. 01054230
- MC TR 2S /MR, article-no. 01054520

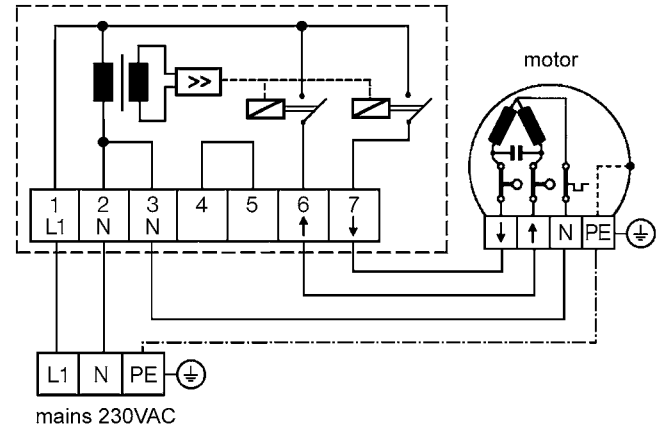
## Installation instructions/Technical data Installation

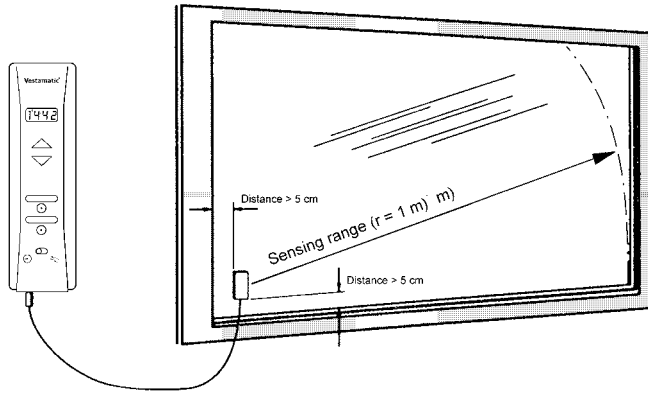


Power supply:	230V AC
Impulse voltage withstand level:	2.5 kV
Rated power:	approx. 2 W
Output:	230V AC, 50 Hz
Maximum load:	250V AC, 5A, $\cos \varphi \cong 0.8$ ind.
Switching time:	120 seconds
Software class:	A
Operating temperature:	0 °C (32 °F) to 40 °C (104 °F)
IP class:	IP 40
Degree of contamination:	2
Conformity:	

All technical data is subject to change!

## Installation Wiring diagram





The additional function “broken glass sensor” requires an extra broken glass sensor for each roller shutter control (for larger or separated window panes). The installation of the lux sensor is described below.

1. Push the selector switch all the way to the right until it clicks to set the **manual control to (H)**.
2. Mix binder and hardener of the two-component adhesive thoroughly in a 1 : 1 ratio.

3. Apply the adhesive to the side of the broken glass sensor that is marked with a black bar.

**IMPORTANT:**

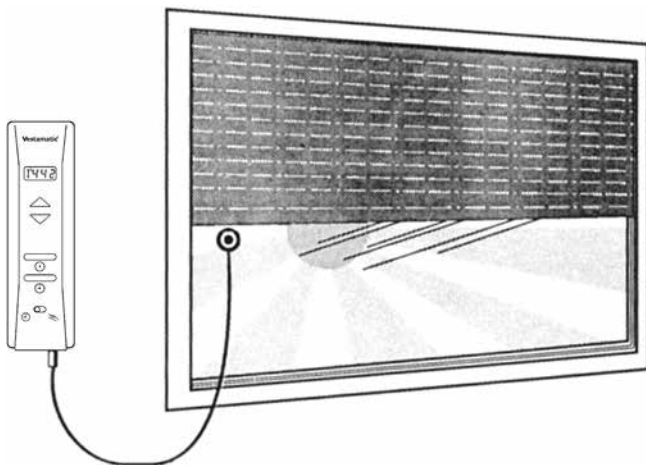
Make sure to keep the adhesive areas clean and oil-free.

4. Place broken glass sensor carefully onto to the window pane and make sure to clear the window frame by minimum 2 inches. Attach the broken glass sensor with adhesive tape and ensure that it is located perpendicular, with the cable going off to the bottom (please refer to the picture on page 71).
5. Plug the jack of the broken glass sensor into the **left-hand socket** of the roller shutter control.
6. Push the selector switch all the way to the left until it clicks to set the automatic control to **(A)**.
7. Functional test:  
Take a coin and tap the broken glass sensor with it in order to simulate breaking glass. The roller shutter will now move down and the display will indicate the broken glass symbol. Press the **up** button to stop the roller shutter and delete the broken glass signal.

Remove the adhesive tape after the adhesive has hardened. Please check the instructions on the adhesive packaging for the processing and hardening times.

The additional function “sun protection” requires an extra lux sensor for each roller shutter control. The installation of the lux sensor is described below.

1. Plug the lux sensor jack into the **right-hand socket** of the roller shutter control.
2. Attach the lux sensor on the desired area of the window.
3. Push the selector switch all the way to the left until it clicks to set the automatic control to **(A)**.



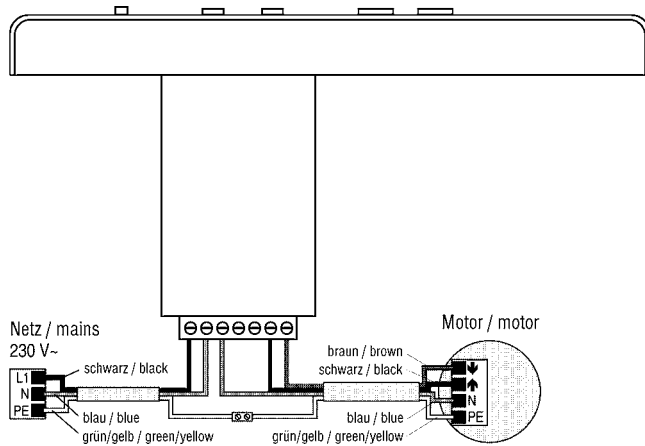
After completing the installation, activate the quick run function in order to check the additional function “sun protection” by pressing the **time** and **day** button simultaneously for 3 seconds (this will make the time run 60 times faster). That way you can check the entire functional sequence within a short amount of time.

Example of a test run:

1. Check whether you are within the range of the programmed up and down times.
2. Press the **time** and **day** button simultaneously for 3 seconds.
3. Expose the lux sensor to light until the sun symbol flashes. After approx. 1 second the shutter moves to the shade position. Remove the light source. The sun symbol in the display will flash again. After 16 seconds, the roller shutter will move up again.
4. Press the **time** and **day** button shortly after the test run is completed.
5. Set the current time as described on page 48.

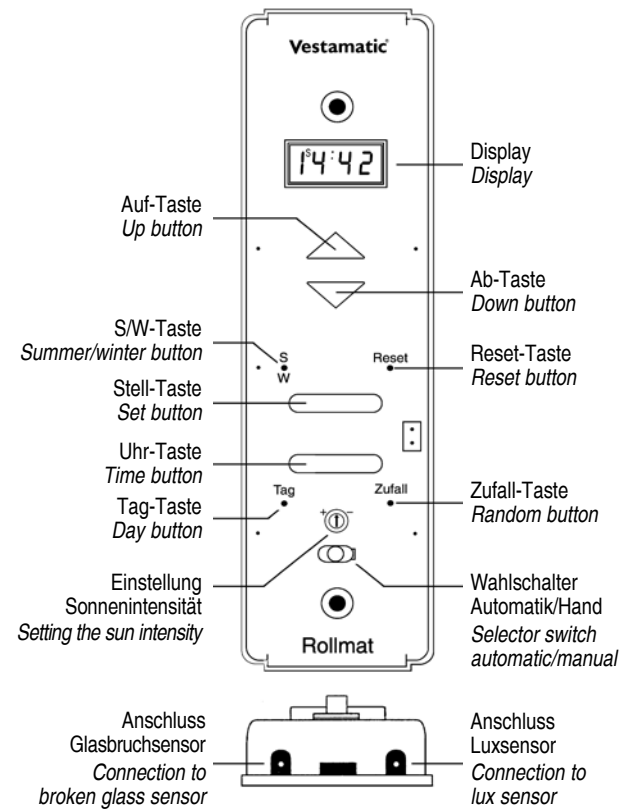
## Anschlussbild/Wiring diagram

### Rollmat Plus G/S



## Übersicht Bedienungselemente/Overview operating elements

### Rollmat Plus G/S



## Entsorgung / Disposal of waste



### **Die Entsorgung von Elektrogeräten und Batterien über den Hausmüll ist verboten.**

Das nebenstehende Symbol (durchgestrichene Mülltonne nach WEEE Anhang IV) weist auf die getrennte Rücknahme elektrischer und elektronischer Geräte in den EU-Ländern hin. Werfen Sie das Gerät oder die Batterie nicht in den Hausmüll, informieren Sie sich über Rückgabemöglichkeiten in Ihrem Gebiet und nutzen Sie zur Entsorgung das Rückgabesystem.

### **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.

Druckfehler, Irrtümer und Änderungen vorbehalten!

Printing errors and details are subject to change without notification.



### **Vestamatic GmbH**

Dohrweg 27  
D-41066 Mönchengladbach  
info@vestamatic.com  
www.vestamatic.com