


 Art.-no.:
01813504

Shutter control for manual or automatic control of electric shutters.

Installation and Operating Instructions

Short description

- Compatible with popular switch ranges
- Easy Operation using arrow buttons and display
- Week/day program
- Astro function
- Random function
- Sun function, option of connecting lux sensor

Installation



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.

Safety precautions



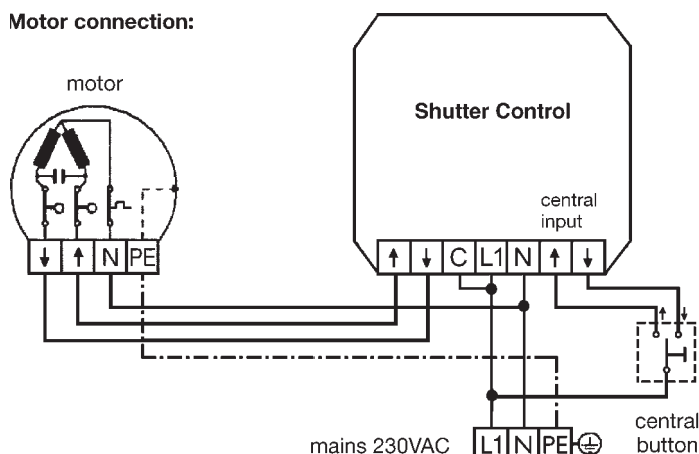
- Contact a professional electrician to install the control system, because the control system requires a power supply of 230VAC, 50 Hz.
- Check the control system for signs of mechanical damage after unpacking. If you notice any shipping damage, do not start up the control system and notify your supplier 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.
- 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.

Notes for professional electricians

1. In any case ensure that safety regulations according to DIN VDE 0105 are applied.
2. Connect the power supply in accordance with the wiring diagram.
3. Fit the power supply into a deep flush box and fix in place.
4. Fit the frame cover.
5. Fit the operating device into the power pack by applying gentle pressure to the frame cover.
6. Switch on the power supply.
7. Check the sunshade direction by using the "Up" and "Down" buttons.

Wiring diagram

Motor connection:



ATTENTION!

Parallel control of more than one drive motors can only be implemented by means of isolating relays and group control devices.

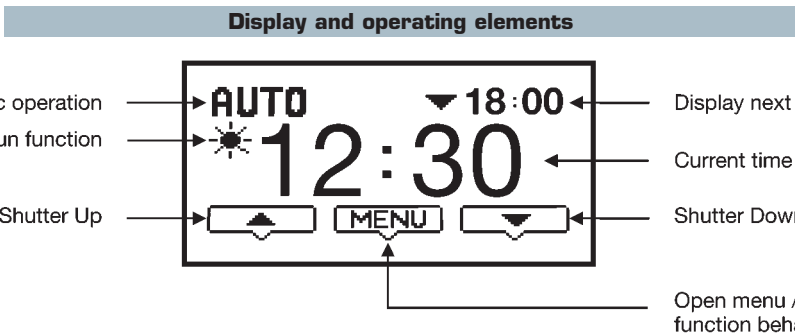


Note concerning the central input!

While an up or down command (activated using the central button) is being performed, you cannot perform a stop or up/down command using the control system. Central input is performed in manual and automatic mode.

Technical data

Power supply:	230VAC, 50 Hz
Impulse voltage withstand level:	2.5 kV
Rated power:	< 0.5 W
Output (Up/Down):	230VAC, 50 Hz
Maximum load:	250VAC, 3A, $\cos \varphi \cong 0.8$ ind.
Align switching time down:	3–120 seconds
Tilt time:	0–30 seconds
Software class:	A
Operating temperature:	0 °C (32 °F) to +40 °C (104 °F)
IP class:	IP 30
Degree of contamination:	2
Battery:	CR 2032
Dimensions (L x W x H):	50 x 50 x 46 mm (without cover frame)
Colour information:	similar to RAL 9010
Conformity:	



Basic settings

8.1 Manual/automatic operation mode

Once the device has been correctly installed and the power supply switched on, the current time will be displayed on the control display. By default the control system operates in manual operation mode and all automatic functions – like sun- and time-dependent controls – are disabled.

8.2 Switching from manual operation to automatic operation

To activate automatic mode, press the **MENU** button for 3 seconds followed by the **↓** button. The control indicates the change of operating mode by displaying **AUTO ON**. Now press the **↓** button until **EXIT** is displayed. Exit the menu by pressing the **↑** button. The automatic control is activated and the shutters now move up or down at the programmed times. However the shutters can still be raised or lowered outside of the programmed times by pressing the **up** or **down** button. To stop the shutters moving up or down, simply press the **STOP** button.

You can switch operating modes at any time. To revert to manual mode, proceed as described above and switch off the automatic function.

Manufacturer's default setting

Time and date are factory preset. The following settings are also preset but may be adapted to your own personal requirements as necessary.

Automatic functions "AUTO":	Off
Function „SUN“:	Off
Function „RANDOM“:	Off
Function „ASTRO“:	Off
Function „TIMER 1“:	On
Function „TIMER 2“:	Off
Setting „LANGUAGE“:	German
Setting „LOCATION“ Postal Code:	34117
Setting „CORRECTION“ Up:	0 minutes
Setting „CORRECTION“ Down:	0 minutes
Setting „MOTOR“ Runtime:	120 seconds
Setting „MOTOR“ Tilt Time:	0.0 seconds
Setting „MOTOR“ Inching Mode:	Off
Setting „KEYLOCK“:	Off

Installing the lux sensor

For the sun function, one lux sensor is required per control system. Only 1 lux sensor may be connected. The sensor cable must not be extended. Install the sun sensor as follows.

1. Remove the operating device from the power supply.
2. Plug the lux sensor connector into the socket on the front of the power pack.
3. Gently press the operating device back into the power supply.
4. Attach the lux sensor at the desired location on the window pane.
5. Switch on the sun function.
6. Switch the control system to automatic mode.

Power failure / Replacing the Battery

In the event of a power failure, the control is equipped with several years' reserve power. As soon as the mains power fails, the display will start to flash and after 5 minutes it will switch itself off. This does not mean that the battery is flat! When the mains power returns, the control system will display the correct time. If an up or down command is pending during the power failure, this command will be automatically carried out when the mains power returns. If, after a power failure, the control system no longer displays the correct time or date you probably need to change the battery.

In this case, proceed as follows:


- Hold the display frame and gently remove the operating device from the power supply. You will find a CR 2032-type battery in the back of the operating device.
- Remove this battery and replace it with a battery of the same type (make sure you insert the battery correctly).
- Now plug the operating device into the power pack.

To set the time, proceed as described in the "Programming menu – Settings, time" section.

i IMPORTANT!
Your personal settings are stored electronically and will not be lost when you replace the battery.

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 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.

Programming details

The control system features a wide range of functions which can be set to meet your individual requirements.

Press and hold the **MENU button for 3 seconds to go to the programming menu.**

There are two ways to set 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 **↑** and **↓** buttons. Return to the previous menu by pressing **BACK**. Press **EXIT** to exit the programming menu immediately. Any programming changes are saved automatically and immediately. If no buttons are pressed for over 3 minutes in the programming menu, the programming menu will close automatically.

i IMPORTANT!
If an up or down command is being performed, it must first be interrupted by pressing the **STOP** button to call up the menu.

Programming menu – Functions
Function „SUN“

IMPORTANT!

- The lux sensor only operates in automatic mode within the programmed up and down times.
- Any manual or time-related down command will switch the sun function off. This will be displayed by the ☾ symbol.
- Any completed manual or time-related up command will switch the sun function on.

When connected to a lux sensor, the control system automatically lowers the shutter according to sun intensity. The sensor is attached to the window pane using the suction pad and constantly monitors sun intensity. The monitored sun intensity is displayed by the sun and cloud symbols. If there is no sun, the cloud symbol ☁ will be displayed. If the set threshold value for the sun is exceeded, the sun symbol ☀ will be displayed. The sun symbol flashes for 1 minute to indicate the sun response delay and the cloud symbol flashes for 16 minutes to indicate the sun reset delay.

To set sensitivity proceed as follows:

If you wish the shutter to be lowered during periods of low sun intensity, select the “**Minimum**” setting. If you only require shading during periods of high sun intensity, select the “**Maximum**” setting.

Function “RANDOM”

The random generator causes the shutters to move up or down with a deviation of up to +/- 30 minutes from the previously programmed times. This “irregular” raising and lowering of the shutter will give the impression that the house is occupied and offers extra security when you are absent for long periods.

Function “ASTRO”

The astro function takes into account the sunrise and sunset times of your residence’s geographical position and automatically adjusts Timer 1’s up/down times.


INFO!

- If Timer 1’s programmed up time is set **before** sunrise, the shutters will open **at sunrise**.
- If Timer 1’s programmed up time is set **after** sunrise, the shutters will open **at the programmed up time**.
- If Timer 1’s programmed down time is set **after** sunset, the shutters will be lowered **at sunset**.
- If Timer 1’s programmed down time is set **before** sunset, the shutters will be lowered **at the programmed time**.

Function “TIMER 1”

In this menu, an up and down time can be programmed in blocks for *Monday to Friday and Saturday and Sunday*. To disable an up/down command, enter a time between 23:00:00 and 00:00. The display will show **OFF**.


IMPORTANT!

If an up/down command is disabled (OFF setting), no up/down commands will be performed and no corrections will be carried out by the astro function.

Function “TIMER 2”

In this menu you can program the up and down times for *each day of the week*. To disable an up/down command, enter a time between 23:00 and 00:00. The display will show **OFF**.

Programming menu – Settings
Setting “LANGUAGE”

Select German or English here.

Setting “LOCATION”

In this menu you can enter your place of residence using the postcode (Germany only) or the relevant coordinates (longitude and latitude).

Setting “CORRECTION”

Using the astro function, you can also adjust corrected up/down times by +/- 90 minutes. The time correction can be set individually for the up time and for the down time.

Setting “TIME”

The time, date and time zone can be set in this menu.

■ TIME OF DAY

Use the or buttons to first set the hours and then the minutes. Confirm your settings by pressing the button.

■ DATE

First set the year and then use the or buttons to set the date. Press and hold one of the two buttons to scroll through the available values. The two left digits show the day and the two right digits show the month. Confirm your settings by pressing the button.

■ TIME ZONE

Set your time zone here (UTC – Coordinated Universal Time); + 1 for Germany.

Setting “MOTOR”

Run time, tilt time and inching mode can be set in this menu.

■ RUNTIME

The menu option “Setting the motor run time” enables you to set the motor run time individually, for example to allow the shutters to be lowered to a required position.


INFO!

The set motor run time only applies to the down command!

■ TILT TIME

The tilting function ensures that after the shutters have been lowered at a programmed time, they then move up again for a short time. This is to allow for ventilation or even partial opening of the shutters.

■ INCHING MODE

If this function is activated, an inching operation of up to 2 seconds is enabled which is operated by pressing the up or down button. If one of the buttons is pressed and held for longer than 2 seconds, the shutter will move up/down to the respective end position.

Setting “KEYLOCK”

An automatic keylock can be activated in this menu. The keylock will be activated 180 seconds after the last button is pressed. The keylock is released again by pressing the button for 3 seconds.

Setting “RESET”

Your customised settings and the time and date will be lost when the device is reset to the default settings, and the default time settings will be reloaded. To carry out this process, follow the instructions on the display.

Programming menu - Structure

Menu options "FUNCTIONS":

Menu options "SETTINGS":

Press and hold button for 3 seconds		OFF ON	press to continue to FUNCTIONS
Setting options:			Open FUNCTIONS menu block press
SUN		MAXIMAL STRONG MIDDLE LOW MINIMAL OFF	}
press to continue RANDOM			
RANDOM		OFF ON	
press to continue ASTRO			
ASTRO		OFF ON	
press to continue TIMER 1			
TIMER 1			press to continue
Days in a block: MO-FR + SA-SO		OFF ON	
press to continue MO-FR			
press to continue SA-SO			press to continue UP DOWN
press to continue straight to TIMER 2			press to continue UP DOWN
TIMER 2			press to continue
One day at a time: MO, DI, MI, ... SO		OFF ON	
press to continue INDIVIDUAL			
			press to continue UP (e.g. MONDAY) DOWN (e.g. MONDAY) NEXT DAY PREV DAY

Press and hold button for 3 seconds		OFF ON	press to continue to SETTINGS
Setting options:			Open SETTINGS menu block press
LANGUAGE		DEUTSCH ENGLISH	}
press to continue LOCATION			
LOCATION			press to continue POSTAL CODE COORDINATES LONGITUDE LATITUDEN
press to continue CORRECTION			
CORRECTION			press to continue UP DOWN
press to continue TIME			
TIME			press to continue TIME OF DAY DATE TIME ZONE
press to continue MOTOR			
MOTOR			press to continue RUNTIME TILT TIME INCHING MODE
press to continue KEYSLOCK			
KEYSLOCK		OFF ON	
press to continue RESET			
RESET			press to continue NO YES

Guide to buttons:

Button	Function	Button	Function
	Menu option upwards		Menu option downwards
	Programming procedure follows		Drop-down menu follows
	Switch function on		Switch function off
	Increase value		Decrease value
BACK	Exit programming level	EXIT	End programming and exit menu