WIRED CE   In order to fully explore available functions of ROYAL S timer please take a moment and read this manual before using the device.
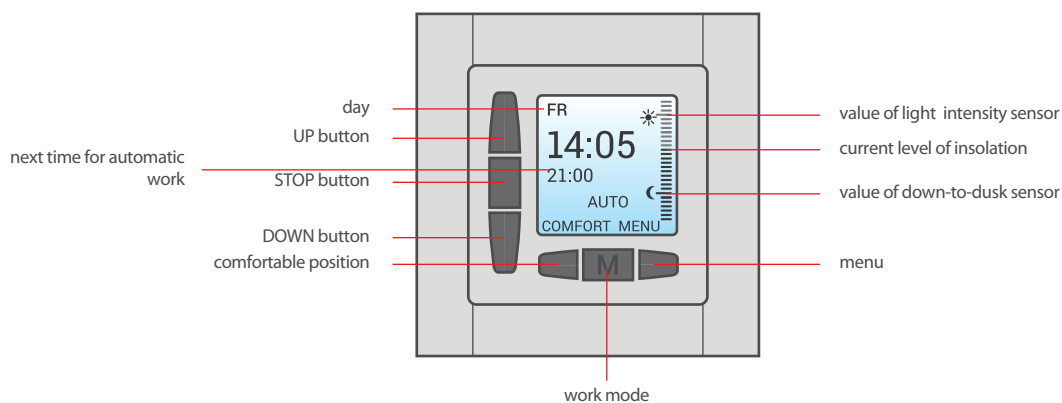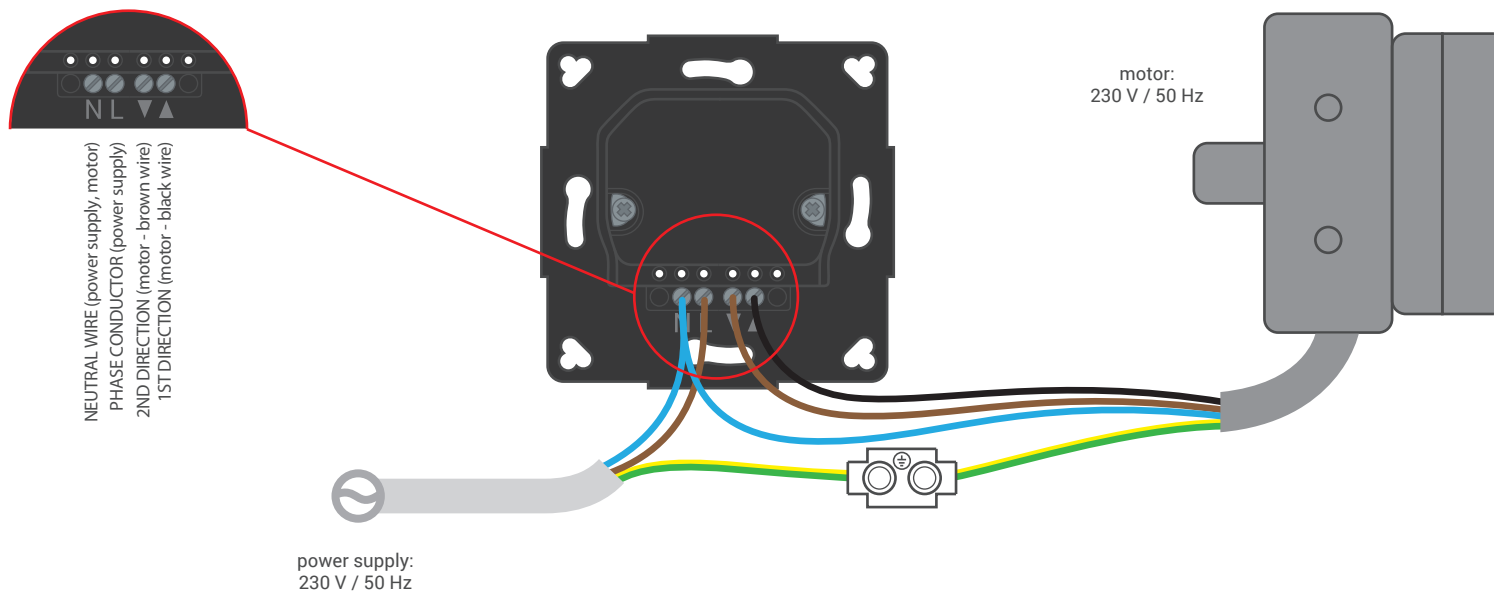
1. General information

1. Control:
can control single motor

2. Power supply:
230 V / 50 Hz

3. Output voltage:
230 V / 50 Hz

4. Output power:
400 W

5. Dimensions:
80 x 80 x 50 mm

6. Operating temperature:
from 0°C to 45°C

7. Protection degree:
IP 40

8. Time of settings beeing saved in case of power shortage:
to 78 hours

9. Traveling time:
from 0 s to 180 s

10. Light intensity sensor range:
Sun function: 5 - 7 kLux
Dusk function: 1 -500 kLux

Single-channel ROYAL-S timer (ROYAL-S_1T)

2. Detailed description

day
UP button
next time for automatic work
STOP button
DOWN button
comfortable position

FR
14:05
21:00
AUTO
COMFORT MENU
M

value of light intensity sensor
current level of insolation
value of down-to-dusk sensor
menu

work mode

NEUTRAL WIRE (power supply, motor)
PHASE CONDUCTOR (power supply)
2ND DIRECTION (motor – brown wire)
1ST DIRECTION (motor – black wire)

motor:
230 V / 50 Hz

power supply:
230 V / 50 Hz

Installation of the tubular motor should be performed by specialists with 1kV or higher SEP-certified electrician's licence (SEP - Association of Polish Electrical Engineers) or equal license.
2. The device is designed for mounting in places where it will not be exposed to direct weather conditions.
3.Timer should be installed in accordance with all provisions of regional law and professional standards.
4. All cables connecting power receiver with electric source should be protected from overload and short-circuits effects with devices automatically disconnecting power.
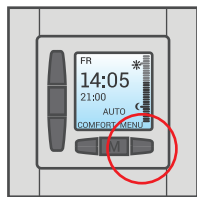5. Device should be powered with a separate source and protected only with a fast-blow fuse (never slow-blow fuse). Creating electrical system using inadequate fuse may result in loosing rights under the provisions of warranty
6. When connecting device to power
source with cables with adequate cross-section should be used. Long-lasting output load capacity table should be the ground for choosing adequate cables.

4. Language settings

MENU ROYAL S timer can be displayed in one of two languages: English or German. The default language is German, to change to English, follow these steps:
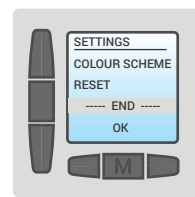

Press MENU button for about 3 seconds.

Use the UP or DOWN buttons to select EINSTELLUNGEN (SETTINGS) then SPRAHE (LANGUAGE). Confirm your choice OK button (WORK MODE button).

Use the UP and DOWN buttons to change the language. Confirm your choice OK button (WORK MODE button).
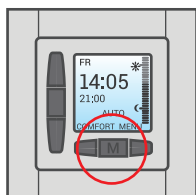
To return to the main MENU, use the UP or DOWN buttons, chose END and confirm with the OK button. We can also exit the MENU by holding down the MENU button for about 3 seconds.
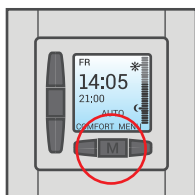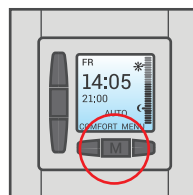
5. Changing work mode

1. Manual mode (MAN symbol will dispaly): normal work mode without time control function and light intensity sensor.
2. Automatic mode (AUTO symbol will dispaly): normal work mode with time control function and light intensity sensor.
3. Random mode (HOLIDAY symbol will dispaly): function of the light intensity sensor and time control with a random delay between 1-30 minutes.

Press and hold WORK MODE button for about 3 seconds to set the manual mode.

Press and hold WORK MODE button for about 3 seconds to set the automatic mode.

Press and hold WORK MODE button for about 3 seconds to set the random mode.

Pressing the button again, switches operating modes.

6. Activating impulse mode

When impulse mode is activated, single push of UP or DOWN button forces motor to make single part of a full turn, and when UP or DOWN button is being held for 1 seconds it will force motor to run constantly.
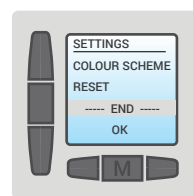
Press and hold MENU button for about 3 seconds.

Use the UP or DOWN buttons to select SETTINGS then INCHING MODE. Confirm your choice OK button (WORK MODE button).

Use the UP or DOWN buttons to to ON or OFF impulse mode. Confirm your choice OK button.

To return to the main MENU, use the UP or DOWN buttons, chose END and confirm with the OK button. We can also exit the MENU by holding down the MENU button for about 3 seconds.
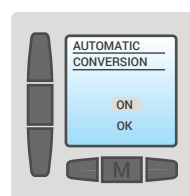
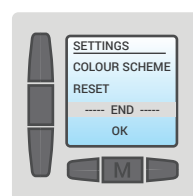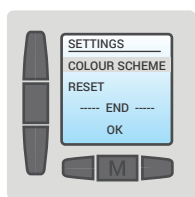## 7. Automatic switching from summer to winter time

Press and hold MENU button for about 3 seconds.

Use the UP or DOWN buttons to select SETTINGS then SU/WINTERTIME. Confirm your choice OK button (WORK MODE button).

Use the UP or DOWN buttons to to ON or OFF automatic time change. Confirm your choice OK button.

To return to the main MENU, use the UP or DOWN buttons, chose END and confirm with the OK button. We can also exit the MENU by holding down the MENU button for about 3 seconds.
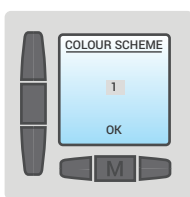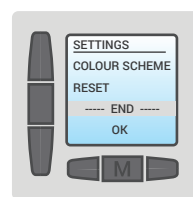
8. Changing display colour

Press and hold MENU button for about 3 seconds.

Use the UP or DOWN buttons to select SETTINGS then COLOUR SCHEME. Confirm your choice OK button (WORK MODE button).
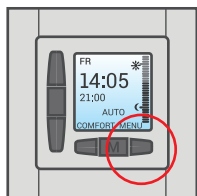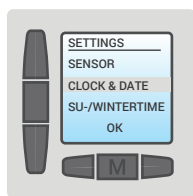
Use the UP or DOWN buttons to change display colour. Confirm your choice OK button.

To return to the main MENU, use the UP or DOWN buttons, chose END and confirm with the OK button. We can also exit the MENU by holding down the MENU button for about 3 seconds.
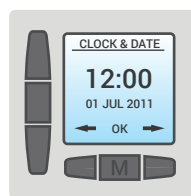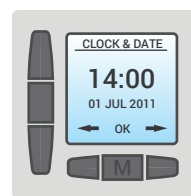
9. Setting current time

Press and hold MENU button
for about 3 seconds.

Use the UP or DOWN buttons to select
SETTINGS then CLOCK & DATE.
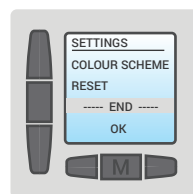Confirm your choice OK button
(WORK MODE button).

Use the UP,DOWN and LEFT, RIGHT
buttons to choose the parameters to
change. Confirm your choice OK button.
the selected parameter flashes.

Use the UP and DOWN buttons to choose
the desired value. Confirm your choice
OK button.

To confirm the set time and date, use the
UP or DOWN buttons on the display,
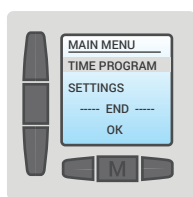select OK and press the
WORK MODE button.

To return to the main MENU, use the
UP or DOWN buttons, chose END and
confirm with the OK button. We can also
exit the MENU by holding down the
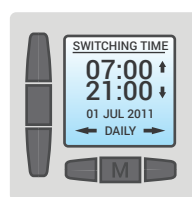MENU button for about 3 seconds.
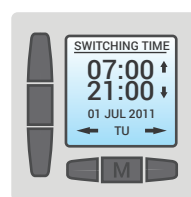
Changing automatic opening and closing time

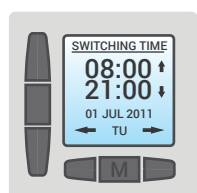Press and hold MENU button
for about 3 seconds.

Use the UP or DOWN buttons to select
TIME PROGRAM. Confirm your choice
OK button (WORK MODE button).

Use the LEFT or RIGHT buttons to select
the automatic working time on a given
day of the week (MO,TU,WE) or for the
whole week (DAILY).

Use the UP,DOWN and LEFT, RIGHT
buttons to choose the parameters to
change. Confirm your choice OK button.
the selected parameter flashes.

Use the UP and DOWN buttons to choose
the desired value. Confirm your choice
OK button.

After setting all the times, use the UP or
DOWN buttons to select the day of the
week. By pressing LEFT or RIGHT, select
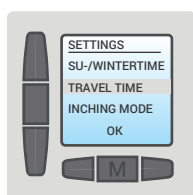"LEAVE TIME PROGRAM?" And confirm
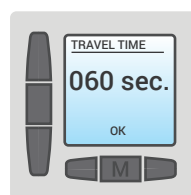with OK.

11. Motor travel time

Motor travel time is the time when the roller shutter is fully open or closed. The value of the motor traveling time is set from 0 to 180 seconds. A well-set time is needed to calculate the comfortable position.
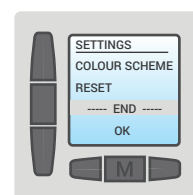
Press and hold MENU button
for about 3 seconds.

Use the UP or DOWN buttons to select
SETTINGS then TRAVEL TIME.
Confirm your choice OK button
(WORK MODE button).

Use the UP or DOWN buttons to set
motor operation time. Confirm setting
with the OK button.

To return to the main MENU, use the
UP or DOWN buttons, chose END and
confirm with the OK button. We can also
exit the MENU by holding down the
MENU button for about 3 seconds.

4

12. Ventilation function

1. The ventilation function works in the following cases:
A) After closing the horizontals blind or roller shutter by pressing the DOWN button, automatic closing at the programmed hour or after the down-to-dusk sensor has been activated.
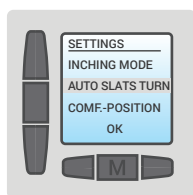B) After reaching the comfortable position by pressing the COMFORT button or after activating the sun sensor.
2. After closing the horizontal blinds or roller shutter and after reaching the comfort position, the motor run upwards, which allows unsealing of the roller shutter armor or rotation of the horizontal blind slats. The upward movement time is set from 0.0 s to 5.0 s (0.0 s - off).
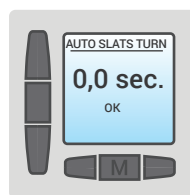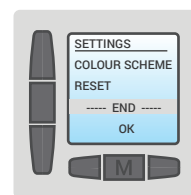3. The ventilation function does not work if the motor is stopped manually.

Press and hold MENU button for about 3 seconds.	Use the UP or DOWN buttons to select SETTINGS then AUTO SLATS TURN. Confirm your choice OK button (WORK MODE button).	Use the UP or DOWN buttons to set the time of motor motion. Confirm setting with the OK button.	To return to the main MENU, use the UP or DOWN buttons, chose END and confirm with the OK button. We can also exit the MENU by holding down the MENU button for about 3 seconds.

13. Comfortable position

1. Comfortable position is the set value for closing the roller shutter expressed in percent. We can set the closing value of the roller shutter from 10% to 90%.
2. The roller shutter will move into the comfortable position after pressing the COMFORT button on the timer or after the sun sensor has been activated.
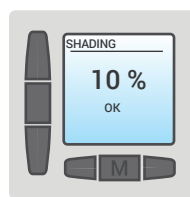3. For correct operation of the comfortable position it is necessary to correctly set the working time of the motor.
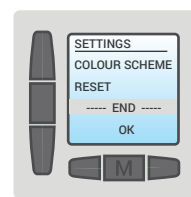
Press and hold MENU button for about 3 seconds.	Use the UP or DOWN buttons to select SETTINGS then COMF.POSITION. Confirm your choice OK button (WORK MODE button).	Use the UP or DOWN buttons to set the percent of closing roller shutter. Confirm setting with the OK button.	To return to the main MENU, use the UP or DOWN buttons, chose END and confirm with the OK button. We can also exit the MENU by holding down the MENU button for about 3 seconds.

14. Light intensity sensor

1. A light intensity sensor can be connected to the ROYAL S timer. The sensor is connected at the bottom of the control panel and placed in the bottom part of the window.
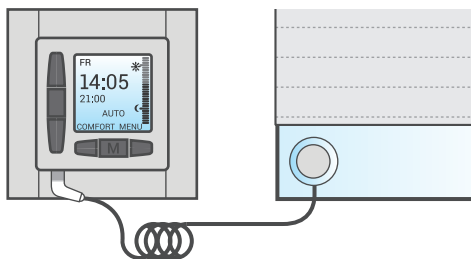2. After connecting, the timer will automatically detect the sensor. The scale of light intensity will appear on the display, and the SENSOR option will appear in the MENU.
3. We can activate or deactivate the function of the sun and dusk-to-down independently.
4. The sun and dusk-to-down functions only work in automatic (AUTO) or random (HOLIDAY) mode.
5. The light intensity sensor will be turned off if there is a downward movement throughout the travel motor time.
6. The light intensity sensor will be activated if there is an upward movement throughout the travel motor time.

Light intensity function:

If the measured level of sunshine is greater than the set value marked with the sun symbol, the symbol begins to flash. If this condition persists for 10 minutes, the sun symbol stops flashing and the roller shutter moves into a comfortable position.
If the light intensity falls below the set value, the sun symbol starts flashing. If this condition persists for 10 minutes, the symbol stops flashing and the roller shutter opens.
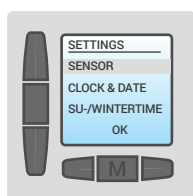
Down-to-dusk function:

If the measured level of sunshine is smaller than the set value marked with the moon symbol, the symbol begins to flash. If this condition persists for 10 minutes, the moon symbol stops flashing and the roller shutter closes.
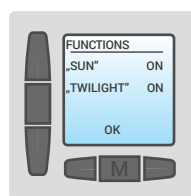
15. Setting the parameters of the light intensity sensor
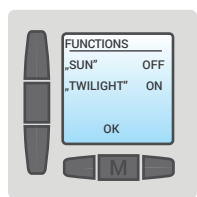
Press and hold MENU button for about 3 seconds.

Use the UP or DOWN buttons to select SETTINGS then SENSOR. Confirm your choice OK button (WORK MODE button).
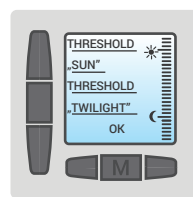
Use the UP or DOWN buttons to choose the parameters to change. Confirm your choice OK button. the selected parameter flashes.
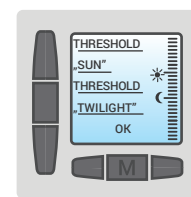
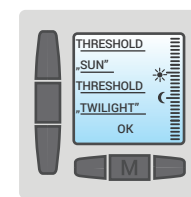Use the UP or DOWN buttons to ON or OFF function. Confirm your choice OK button.

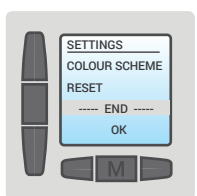Use the UP or DOWN buttons to choose OK and go to the next settings. Confirm your choice OK button.

Use the UP or DOWN buttons to choose the parameters to change. Confirm your choice OK button. the selected parameter flashes.

Use the UP or DOWN buttons to set the value of parameters. Confirm your choice OK button.
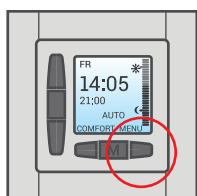
Use the UP or DOWN buttons to choose OK. Confirm your choice OK button.

To return to the main MENU, use the UP or DOWN buttons, chose END and confirm with the OK button. We can also exit the MENU by holding down the MENU button for about 3 seconds.

16. Return to factory settings

Press and hold MENU button for about 3 seconds.

Use the UP or DOWN buttons to select SETTINGS then RESET. Confirm your choice OK button (WORK MODE button).

Use the UP or DOWN buttons to choose option. Confirm your choice OK button (WORK MODE button).
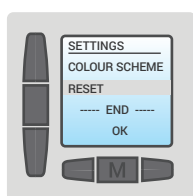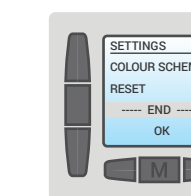
To return to the main MENU, use the UP or DOWN buttons, chose END and confirm with the OK button. We can also exit the MENU by holding down the MENU button for about 3 seconds.

(!) After restoring the factory settings, the parameters take the following values:

1. Work mode	manually	7. Ventilation function	0 s (OFF)
2. Automatic opening time hour	07:00	8. Comfortable position	10 %
3. Automatic closing time hour	21:00	9. Set value of light intensity sensor	about 30 kLux
4. Current time	12:00, 01 July 2011	10. Set value of dusk-to-down sensor	about 4 Lux
5. Travel time	60 s	11. Language	german
6. Impulse mode	OFF	12. Automatic switching from summer to winter time	ON