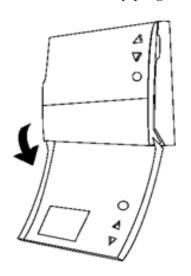
# LK Timer Thermostat SR 310

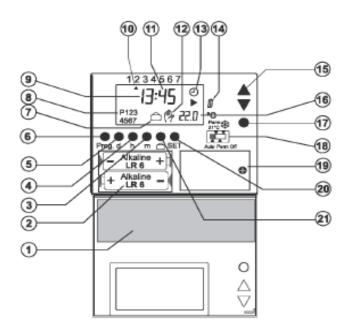
#### DESIGN

The timer thermostat is designed for temperature regulation of e.g. rooms in residential properties and commercial premises etc. The timer thermostat is used in order to achieve different temperature levels during a 24-hour period. These might be a normal comfort temperature by day and a lower temperature at night, for instance.

- 1. Rating label
- 2. Battery location
- 3. Minutes, setting
- 4. Hours, setting
- 5. Weekday, setting
- 6. Read and change time program
- 7. Holiday symbol
- 8. Display basic program P1 ... P6 active
- 9. Display of current time (hour)
- 10. Display of current weekday
- 11. Display of current time (minutes)
- 12. Display change, manual temperature
- 13. Display automatic operation
- 14. Display heating is ON
- 15. Settings buttons
- 16. Temperature display
- 17. Economy button ECO
- 18. Program selector
- 19. Compartment for electrical connection
- 20. Setting of wall temperature equalisation, regulation accuracy, cycle times
- 21. Activation of holiday program







# SAFETY



When fitting or removing the timer thermostat, make sure the electrical supply is switched off. The product must not be installed on a surface that is electrically conductive.

The connection and installation of electrical products must only be performed by a qualified electrician. You must comply with national legislation as well as local safety regulations and instructions

#### INSTALLATION

- Fit the back cover to a wall approximately 1.5 m above the floor, preferably on an inner wall. Make sure air can circulate unhindered around the thermostat.
- Make the electrical connection as shown in the circuit diagram.



# **BATTERY REPLACEMENT**

#### Fitting/replacing batteries

Open the front cover of the timer thermostat. Note the polarity and insert new batteries of the same type (alkaline 1.5 V AA LR6).

Behaviour in the event of discharged batteries The display flashes for a few days. The timer will then stop. The relay contact will close and the heating will then be constantly on.

#### Recommendation

Check the batteries every now and then. Leaking batteries may damage the product.

# STARTING THE THERMOSTAT FOR THE FIRST TIME

Remove the battery securing device consisting of a strip of plastic tape.

• Press and hold the RES button for about a second.

# Setting the day of the week:

- Press and hold button **d**.
- Set the day of the week using the ▲/▼ buttons.

#### Set the current time:

- Press and hold button h.
- Set the hours using ▲/▼.
- Press and hold button m.
- Set the minutes using the A / V buttons.
- Release the buttons.

#### **PROGRAM SETTINGS**

• Press the Prog button repeatedly.

The six different programs will be displayed in succession.

	Time	Mon	Tue	Wed	Thurs	Fri	Sat	Sun	Temp.
Prog 1	6.00	0	0	0	0	0	0	0	21°C
Prog 2	22.00	0	0	0	0	0	0	0	18°C
Prog 3	6.00	0	0	0	0	0			21°C
Prog 4	22.00	0	0	0	0	0			18°C
Prog 5	8.00						0	0	21°C
Prog 6	23.30						0	0	18°C

#### SELECT A PROGRAM

 Press the Prog button repeatedly as needed until the desired basic program P1– P6 is displayed.

**Note:** If programs P1 and P2 are combined with programs P5 and P6, time overlap may occur.



If switchover times P1/P2 and P5/P6 are not changed, the daily times for P1/P2 will also apply on Saturdays and Sundays, see the table above.

# Activation of programs

• Press the SET button until e.g. P1 is permanently displayed.

#### Deactivation of programs

- Press the SET button until e.g. P1 flashes.
- Save by pressing the Prog button.
- Press the Prog button until SET appears in the timer display.
- Then press the SET button to store the program.

#### CHANGE A PROGRAM

 Press the Prog button repeatedly until the desired program P1– P6 is displayed.

## Change days

- To set the time period press and hold button
   d
- Change days of the week using the buttons (see table).

#### Change time for heat reduction

- To set the time period press and hold button h or m.

#### Change the temperature

- Change the temperature using the buttons.
- Save with the Prog button.
- Press the Prog button until SET appears in the display.
- Then press the SET button to save the program.

For your information, you cannot activate more than 6 programs.

# MANUAL TEMPERATURE SETTING IN AUTOMATIC OPERATION

In automatic operation, a manual temperature change can be performed temporarily. The setting is active until the next program event P1–P6. The setting range is between 5 and 39 °C.

#### Manual change of temperature

 Set the desired temperature using the buttons.

#### **ECO PROGRAM**

During the period between 1 hour (ECO 1) and 8 hours (ECO 8), a fixed temperature of 16 °C can be selected. The display shows the remaining ECO period. When the ECO period has come to an end, the thermostat returns to automatic operation in line with the program.

## Setting an ECO program

Press the ECO button repeatedly to set the desired program (ECO 1– ECO 8). E.g. ECO 6 will give 6 hours of temperature reduction to 16 °C.

#### Terminate the ECO program

Press and hold the button for approximately two seconds.

#### PROGRAM SELECTOR



Auto = The thermostat operates based on the selected heating program.

Manual temperature change is possible.



Perm 21 °C = The thermostat holds the temperature constant at 21 °C. Manual temperature change is not possible.



Perm Off = The thermostat is switched off.

Manual temperature change is not possible.



Perm Frost = Frost protection +5 °C Manual temperature change is not possible.



### HOLIDAY PROGRAM

It is possible to select a so-called holiday program. In the holiday program you set the number of days for which you want a reduced temperature plus the temperature level. The program starts and ends at midnight.

• Press button briefly.

In how many days is the holiday program to start?

- To set the number of days, press and hold button **d**.
- Set the number of days using the buttons.

How long is the holiday program to be active?

- To set the number of days, press and hold button **d**.
- Set the number of days using the buttons.

What temperature do you want during the holiday program?

- Set the desired temperature using the buttons.
- Save using the SET button.

Display of an activated function is performed using the symbol.

• In the display 00:14 is displayed, for instance, i.e. the number of days remaining. The program is terminated at midnight.

Cancel the holiday program before it has terminated

• Press and hold button for two seconds. This cancels the program.

#### RESET

On a reset the thermostat returns to its factory settings. Any data that has been changed and saved will be deleted. Any data that has been changed and stored will return to the factory settings. After a reset, the time must be set; see the section: Starting the thermostat for the first time. If no time is set after a reset, the thermostat will keep the temperature constant at 21 °C. The timer will stop and wait for input.

### **CALIBRATION**

<u>Note</u>. The adjustments below should be carried out in consultation with an installer/expert adviser

The timer thermostat has been calibrated before leaving the factory. If the thermostat's location turns out to be unfavourable, e.g. on a cold outer wall, it may be necessary to recalibrate the thermostat.

# Correction for temperature deviation

A temperature deviation can be calibrated/corrected in a range from -3 °C to +3 °C. Example: The temperature difference between measured and checked temperature is +2 °C. Correct the thermostat by -2 °C.

#### Correction in automatic operation

- Press and hold the SET button and the button for approximately two seconds.
- Continue to hold the SET button.
- Correct the temperature using the buttons.
- Save the correction by releasing the SET button and pressing SET again.

#### **SETTING OF REGULATION ACCURACY**

Regulation accuracy can be adjusted to  $\pm 0.5$  K or  $\pm 1$  K. The factory setting is  $\pm 1$  K.

Adjustment of accuracy during automatic operation.

- Press and hold the SET and **h** button for approximately two seconds.
- Release the **h** button (keep holding SET).
- Change the set value using the **h** button.
- Release the **h** button and save using the SET button.

## **TECHNICAL DATA**

Control type

Regulation accuracy
Temperature range
Battery type
Change-over contact,
volt-free
Safety class

RS Type 1 according to EN 60730-2-9  $\pm 0.5$  K or  $\pm 1$  K (selectable) 0 °C-  $\pm 55$  °C 2 x alkaline AA 1.5 V LR 6

2 (1) A 250 V~ min. 1 mA, 5 V DC Class II according to EN 60730-1 surface mounted IP 20 according to EN 60529

336 00

Protection Class LK Art no.

