

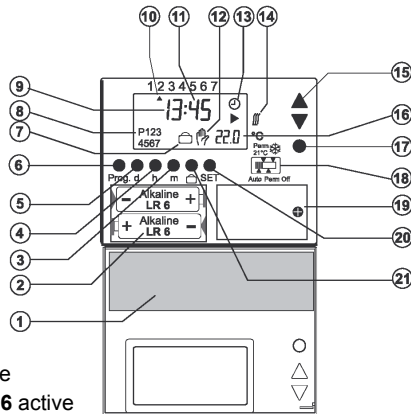
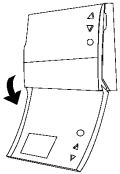
User instructions

Clock Thermostat
SR 310/3

1.0 Specified Use

Application:

The clock thermostat is designed for temperature control of residential and business areas, but not for areas with severe dirt generation (assembly bays). For example during office hours heating is controlled at normal temperature and at the end of office hours at a reduced temperature (energy saving program). The beginning and end of the normal and energy saving temperature can be freely programmed.



- 1 Type label
- 2 Battery compartment
- 3 Setting minutes
- 4 Setting hours
- 5 Setting weekday
- 6 Interrogate/change program
- 7 Symbol holiday program active
- 8 Display basic program P1 .. P6 active
- 9 Display of actual time (hour)
- 10 Display of actual weekday
- 11 Display of actual time (minute)
- 12 Display manual temperature change
- 13 Display automatic operation
- 14 Display heating is ON
- 15 Adjustment keys
- 16 Temperature display
- 17 Economy key ECO
- 18 Program selection switch
- 19 Compartment for electrical connection
- 20 Setting wall levelling, control accuracy, cycle times
- 21 Activating holiday program

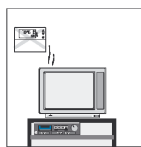
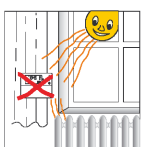
2.0 Safety

Make sure when installing and dismantling the clock thermostat that the electrical supply is switched off. The product may not be installed on a conductive background.

The connection and installation of electrical products may be effected only by a qualified electrician. If clock thermostats are used in a system with other products, care must be taken to ensure that the whole system does not cause radio interference. National regulations and prevailing safety instructions are to be observed. Interference with and changes to the product will result in the loss of the guarantee.

3.0 Installation

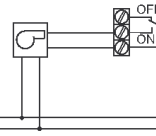
- Fix the back-plate to the wall approx. 1,5 m above the floor, if possible on an interior wall, around which air can circulate without hindrance.
- Connect the back-plate according to the corresponding connection diagram.



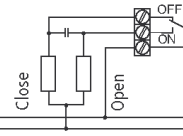
5.



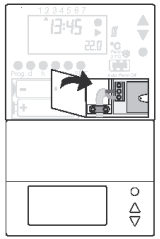
e.g.: Control via circulation pump, warm air and storage heating



Control via the oil-/ gas furnace relay



The connecting leads must conform to national regulations



4.0 Loading/changing battery (alkaline type LR 6)

- Loading battery:**
1. Open the front cover of the clock thermostat.
 2. Note the polarity and insert new batteries of the same type.
 3. Close the front cover of the clock thermostat.

Recommendation: Check the batteries from time to time, leaking batteries damage your product.

Changing batteries: The program is retained without batteries for a few minutes.

1. Remove the used batteries.
2. Dispose of the used batteries in an environmentally friendly way.
3. Use only new **alkaline LR6** cells of the same type.

Behaviour with run-down batteries:

The display flashes at this point for a few days. Then the clock stops. The relay condition is ON. The heating is permanent ON.

5.0 First time of use

Remove the insulating tape from the battery case.

Press the key **RES.** for approx 1 sec.

Set actual weekday:

Hold the key **d** firmly.

Set the actual weekday with the keys **▲ / ▼**.

Set actual time:

Hold the key **h** firmly.

Set the hour of the actual time with the keys **▲ / ▼**.

Hold the key **m** firmly.

Set the minutes of the actual time with the keys **▲ / ▼**.

Release the keys.


6.0 Interrogate basic program

Press the key **Prog** repeatedly.

The 6 selectable basic programs will be displayed one after another.

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

7.0 Select basic program

 If necessary, press **Prog** key repeatedly, until the desired basic program **P1 .. P6** is displayed.


Note: If programs **P1** and **P2** are mixed with programs **P5** and **P6**, time overlapping can occur.

If the switching times of **P1/P2** and **P5/P6** are not changed, the daily times of **P1/P2** are effective, even on Saturday and Sunday, see table.

Activating program:

 Press **SET** key. Display e.g. **P1** is static.

Not activating program:


 Press **SET** key. Display e.g. **P1** flashes.

 Store by pressing the **Prog** key.


 Press **Prog** key until **SET** appears in the clock display.

Now press **SET** key in order to store the program.


8.0 Change basic program

 If necessary, press **Prog** key repeatedly, until the desired basic program **P1 .. P6** is displayed.

Change days:


 For the setting period hold the key **d** firmly.
Change the weekdays with the keys **▲ / ▼** (see table).

Change heating-/set-back time:

 For the setting period hold the key **h** or **m** firmly.
Select the desired heating time with the keys **▲ / ▼**.

Change temperature:

 Change the temperature with the keys **▲ / ▼**.

 Store with **Prog** key.

 Press **Prog** key until **SET** appears in the clock display.

Now press the **SET** key in order to store the program.


Info: You can activate a maximum of all **6** basic programmes.

9.0 Manual temperature change in automatic operation

Operation:

In automatic mode, an individual temperature change can be set between 5 °C .. 39 °C. This setting is active until the next heating time **P1 .. P6**. After that the product is controlled according to the time and temperature specification.

Change the temperature setting:

 Set the desired temperature with the keys **▲ / ▼**.
Afterwards release the key.

10.0 ECO program

Operation:

For a period between 1 hour (ECO 1) and 8 hours (ECO 8), a fixed set temperature of 16° C can be selected. The residual ECO time is displayed. If the ECO program has expired, the product controls again in accordance with the programmed time and temperature specification.

Setting in the automatic mode:

Press repeatedly the **ECO** key to set the desired program (ECO 1 ... ECO 8).

E.g. ECO 6 = 6 hours set-back to 16 °C.

Terminate ECO program:

Hold the **ECO** key firmly for approx. 2 secs.

11.0 Program selection switch



Auto = product controls according to the stored heating program.
Manual temperature change possible

Auto

Perm 21 °C = the product controls permanently at 21 °C.
Manual temperature change is not possible.



Perm Off

Perm Off = The product is switched off.
Manual temperature change is not possible.



= Permanent frost protection +5 °C.
Manual temperature change is not possible.




Subject to modification

12.0 Holiday program


For the duration of a holiday program the clock thermostat controls at a selectable set-back temperature. Beginning and end of the program is at midnight.

 Press the  key briefly.


In how many days is the holiday program to start?

 For the setting period hold the key **d** firmly.
Set the period of the holiday program with the keys **▲ / ▼**.


How long shall the holiday program last?

 For the setting period hold the key **d** firmly.
Set the duration of the holiday program with the keys **▲ / ▼**.

Which temperature is to be controlled during the holiday program?

 Set the desired temperature with the keys **▲ / ▼**.
Store with **SET** key.

Display holiday active: Symbol appears

 In the clock display appears e.g. 00:14, i. e. the duration of the holiday program is 14 days and ends at midnight.

Cancel holiday program prematurely:

 Hold the  key firmly for 2 secs.

13.0 RESET/ total deletion

The changed and stored data revert to the basic setting. Even after a RESET, the clock thermostat retains the captive basic program. See table: section 6.0.

If no time is set, the product controls at constant 21 °C.

The clock stops and waits for input.

Recommendation: Adjustment with the help of an expert

14.0 Adjustment of the wall alignment

The clock thermostat is adjusted in the factory. If, as a result of its installation location e. g. cold cement wall, an adjustment is necessary, the temperature deviation can be corrected.

Correcting temperature deviation:

You can correct the temperature deviation in the range from - 3 °C and +3 °C.

Example: Temperature difference between measured and controlled temperature is +2 °C. **Correction:** -2 °C.

Adjustment from automatic mode:

- Hold the **SET** and key **▲** firmly for approx. 2 secs.
- For the setting period hold the key **SET**.
- Set the value to be corrected with the keys **▲ / ▼**.
- Store the changed value with the **SET** key.

15.0 Setting of the control accuracy

Operation:

The control accuracy can be adjusted to ±0.5 or ±1 K. The basic setting is ±1 K.

Adjustment from the automatic mode:

- Hold the **SET** key and **h** for approx. 2 secs. firmly.
- Release only the key **h**.
- Change the set value with the key **h**.
- Release the key and store with **SET** key.

16.0 Technical data

Control type	RS Typ 1 in accordance with EN 60730-2-9
Control	hysteresis
Control accuracy	±0.5 K or ±1K
Permitted ambient temperature	0 °C ... + 55 °C
Battery operation	2 x alkaline LR 6
Contact rating	2 (1) A 250 V~ min. 1 mA, 5 V DC
Protection class	II according to EN 60730-1 in flush-fitting
Enclosure type	IP 20 according to EN 60529