# Radiator thermostat A8

#### **Function**

With the Radiator Thermostat model A8, you can conveniently regulate the room temperature. Thanks to pre-programmed or individually tailored heating and cooling phases the desired temperature can be comfortably adjusted. The device moves a valve to control the flow of heat to the radiator. The radiator thermostat fits to all common radiator valve and is easy to mount-without having to drain any water or intervene in the heating system. The additional boost function enables quick, short-term radiator heating by opening the valve for 5 minutes. This immediately bring a comfortable warmth to the room. This programmable radiator thermostat is used to control the conventional radiator valves.

 Only operate the device in inside rooms and avoid the influence of moisture, dust and sunlight or external heat radiation.

 Using the radiator thermostat for any purpose other than that described in this operating manual does not fall within the scope of intended use and shall invalidate any warranty or liability. The device is not a toy; do not allow children to play with it.

 Do not open the device: it does not contain any components that need to be serviced by user.

 In the event of an error, please return it to our service department.

A - Union nut for fitting on the heating valve

B - 87 segments LCD display

C - Operation buttons

D - Battery Cover

E - 2x1.5 V LR6/Mignon/AA inside



# Install batteries

To install or replace the batteries, please proceed as follows:

 Press the battery compartment cover on both side with your fingers and remove the cover by pushing it downwards.

 Insert 2 new LR6 (mignon/AA) batteries in the battery compartment, making sure they are the right way round.

· Reattach the battery compartment cover and latch it into place.

The service life of new alkaline batteries is approximately 3 years. A battery symbol ( ) on the display indicates that the batteries need to replaced. After removing the empty batteries, wait approx 1 minute before inserting the new ones.

This device does not support operation with rechargeable batteries. Never recharge standard batteries. Doing so will present a risk of explosion. Do not throw the batteries into a fire. Do not short-circuit batteries.

# Installation on the radiator

The radiator thermostat is easy to install and can be done without draining heating water or intervening in the heating system. No special tools are required, nor does the heating have to be switched off. The union nut attached to the radiator thermostat can be used universally and without accessories for valves of the most popular manufacturers with a thread size of M30 x 1.5 mm. By means of the adapter in the delivery, the device can be installed on the radiator valve of type Danfoss RA.

The provided adapter is required for installation on Danfoss

The provided adapter is required for installation on Danfoss valves. The Danfoss valve bodies have elongated notches around their circumference, which also ensure that the adapter is properly seated when it snaps on.

• If required, place the provided support ring into the flange before mounting the radiator thermostat.

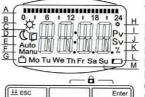
• During installation, please ensure that the pings inside the adapter are lined up with the notches on the valve. Ensure that the adapter is properly clipped on.

• Take care during installation that you do not trap your fingers between the two halves of adapter!

The first time you install the thermostat A8, it will automatically do an action, valve stroke identification, which does not require manual intervention.

- 1. Open the battery cover, install the battery, and display the version  $\ \mbox{\bf ABD}\ \mbox{\bf I}$
- 2. The stem automatically retreats to its maximum position, LCD display  $\,$  INS
- 3. Connect the A8 to the valve, tighten the joint nut and press any key.
- 4. The thermostat automatically matches the valve stroke, LCD display 用洞
- 5. The matching completes the normal working state.

# **Operation and Display**



DOWN button

- A Bar chart of programmed heating phases
- B Comfort temperature, factory set 21°C
- C Open-window function
- D Eco temperature, factory set 17°C
- E Auto mode
- F Manual mode
- G Holiday function
- H Display of temperature, time and date, menu options, functions
- I Measuring temperature value
   J Setting temperature value
- K Stroke percent index
- L Low battery symbol
- M Week day

In normal operation:

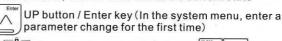
Boost Heat

Mode

Menu

- Click on the selection of the run mode
- Double-click: check the time
- · Click 3 continuously: check the setting temperature
- · Click 4 continuously: check valve stroke
- Press 3 seconds to enter the system menu

In the system menu, click is the switching of system parameters. In other states, double-click to exit the current state



Child safeguard

opering lock



# Working mode

The radiator thermostat has three work mode: automatic ( Auto ) and manual ( Manu ) and holiday ( ). In normal operation, you can press Mode/Menu button to select the work mode. From automatic to manual to holiday mode to automatic, cyclic replacement. If you want to maintain a fixed temperature for a certain period, e.g. during your holidays or a party, the holiday function can be used.

Press the Mode/Menu button repeatedly, until the suitcase

symbol (rianlge) appears in the display. Using the **UP** or **DOWN** button to change the time and confirm by press the **Mode/Menu** button. Then set the end date and confirm by press the **Mode/Menu** button. Then set the temperature and confirm by press the **Mode/Menu** button and the display will flash to confirm.

The set temperature will remain until the set end time.
 Afterwards, the radiator thermostat will switch back to auto mode.

### **Boost function**

The boost function makes use of human sensations of heat. When activating the boost function, the heating valve is immediately opened to 80% for 5 minutes (factory setting). The heating of a room takes longer than 5 minutes, but the heat given off by the radiator can be felt immediately. For example, you arrive home earlier than usual or you need some extra heat in the morning in the bathroom, the boost function will help you to heat the room up quickly.

• In normal operation, press the Mode/Menu and Down button at the same time, the remaining time for the function will be counted down in seconds, display B300 to B000.

 After 5 minutes have elapsed, the actuator changes to the mode which was previously active (Auto/Manu) with the previously set temperature.

• The function can be deactivated prematurely at any time by click **Mode/Menu** button to exit.

 The boost function will not have an immediate effect if the radiator is covered of concealed (e.g. by sofa). The open-window function is deactivated while the boost function is active.

## Child safeguard/opering lock

The operation of the device can be locked.

 In normal operation, to activate/deactivate the operating lock, press the UP and Down button at the same time



- · After it has been activated, LOC appears in the display.
- To deactivate the operating lock, press both buttons again.

#### Calcification protection

To prevent calcification of the valve, the thermostat performs a rust removal operation at 12:00 every Saturday. During the period of rust removal, **CAL** appears in the display.

## System Menu

System menu is used to set system parameters. Press the Mode/Menu button for last 3 seconds, PRD appears in the display. This means you enter the system menu. Press the UP button for enter a parameter change for the first time and press the Mode/Menu button for goto next system parameter. System parameter sequence:

PPD - Week program

IĤT - Set system year/month/day/hour/minute

PD5 - Display of valve position

RER - Open-window function

IDF - Set calibration temperature

RES - Restoring the factory settings

## Setting the week program data

In the week program, for each weekday up to 6 heating phases can be set separately. The programming is carried out for the selected days, whereby temperature setting have to be set for the entire period between 00:00 and 23:59.

 Press the Mode/Menu button for last 3 seconds, it will display PRD. Confirm by pressing the UP button and enter to setting.

 IAY appears in the display, you can use UP and DOWN button to select a single day of the week, all weekdays, the weekend or the entire week.

Confirm by press the Mode/Menu button and setting time.

• The first switching time point is displayed 06:00, this can be changed by **UP** or **DOWN**. The heating times are also displayed as bars. Confirm by press the **Mode/Menu** button and you can set the temperature which is desired from your set time. Confirm by press the **Mode/Menu** button and setting next time. You can adjust this individually. Finally set the temperature which should prevail from the selected time.

 You can repeat this procedure until all the other desired temperatures for the time period from 00:00 to 23:59 have been stored.

 In AUTO mode, the temperature can be changed at any time using the UP or DOWN button. The modified temperature will then remain the same until the next point at which the program changes.

# Week program: Example

For each day of the week up to 6 heating phases with individual temperature settings can be saved with the radiator thermostat. Bars for switching time periods for every second time interval are shown in the display. In this example, bars are displayed only for the intervals 06:00 to 08:00 and 11:00 to 12:00 and 17:00 to 23:00. For all weekdays alike are saved as factory setting:

from 06:00 08:00 21.0°C to from 08:00 to 11:00 17.0°C from 11:00 12:00 21.0°C 200 to from 12:00 17:00 17.0°C to 10°C from 17:00 23:00 21.0°C to from 23:00 06:00 17.0°C 0:00 6:00 12:00 18:00 23:59

#### Set system year/month/day/hour/minute



 2018 appears in the display. You can press UP or DOWN button to change the year.

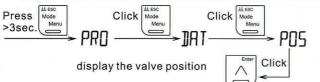
Press the Mode/Menu button and month number ----.01
appears in the display. You can press UP or DOWN button to
change the month.

 Press the Mode/Menu button and day number 01.01 appears in the display. You can press UP or DOWN button to change the day.

• Press the Mode/Menu button and hour 12.--- appears in the display. You can press UP or DOWN button to change the hour.

 Press the Mode/Menu button and minute 12.00 appears in the display. You can press UP or DOWN button to change the minute.

# Display of valve position



#### Open-window function

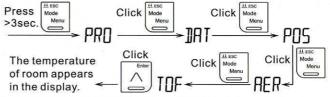
With a rapidly reducing temperature, the radiator thermostat automatically detects that a room is being ventilated. In order to save heating costs, the temperature is then regulated down for a certain period of time (15 minutes, set at the factory). Whilst this function is active, the open-window symbol ([]) appears on the display.

Press | HESC | Mode | Menu | M

The temperature can be set with UP or DOWN button and press the **Mode/Menu** button enter set the time. You can select **OFF** to turn off the open-window function.

### Calibration temperature

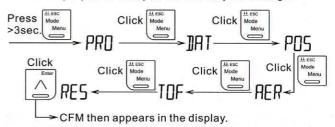
At the temperature is measured on the radiator, the temperature distribution can vary throughout a room. To adjust this, a temperature offset of  $\pm 5^{\circ}\text{C}$  can be set. If a nominal temperature of e.g.  $20^{\circ}\text{C}$  is set but the room presents with only  $18^{\circ}\text{C}$  and the calibration value  $-2^{\circ}\text{C}$  needs to be set.



You can set temperature by **UP** or **DOWN** button and after 3 seconds it display the corrected temperature value.
-1.0°C is factory set.

## Restoring the factory settings

The factory setting of the radiator thermostat can be restored manually. If you do this, you will lose all your settings.



## Technical characteristics

Supply voltage: 2 x 1.5 V LR6/Mignon/AA

Current consumption: 100 mA (max.)
Battery life: 3 years (typ.)
Degree of protection: lp20

Ambient temperature: 0 to 50°C

Surface temperature: 90°C (at the radiator)

Connection: M30 x 1.5 mm Linear travel: 4.3 mm

Weight: 180 g (incl. batteries)

### **Dimensions**



