





1. Information about this manual

Please read this manual completely and carefully before starting to use the device. Especially observe the safety and handling instructions. Keep the manual for later consultation.

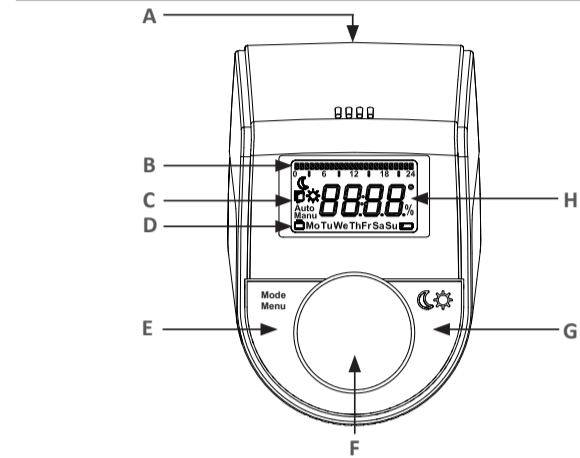
Symbols used:

- Attention! This indicates a hazard. Note. This section contains important additional information.

2. Package contents

1x Radiator Thermostat Model Q, 1x mounting ring, 3x adapters Danfoss (RA, RAV and RAVL), 2x spigot extension, 1x nut M4, 1x cylinder head screw M4 x 12, 2x 1.5 V mignon/LR6/AA batteries, 2x operating manual

3. Operation and display



- A Snap-on fastening for installation on the radiator valve
B Bar chart of programmed heating phases
C Eco/comfort temperature, open-window function, manual mode, auto mode
D Holiday function, week day, empty battery symbol
E Mode/Menu button: Switch between auto mode, manu mode and holiday function
F Control wheel: Change settings, e.g. temperature, activate the boost function
G Eco button: Switch between eco and comfort temperature
H Display of temperature, time and date, menu options, functions

4. Function and intended use

With the Radiator Thermostat Model Q 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 may only be operated within residential buildings.

5. Safety instructions

- The device is not a toy; do not allow children to play with it. Do not leave packaging material lying around, as it can be dangerous in the hands of a child. Do not open the device: it does not contain any components that need to be serviced by the user. We do not assume any liability for damage to property or personal injury caused by improper use...

6. Disposal instructions

Do not dispose of the device with regular domestic waste! Electronic equipment must be disposed of at local collection points for waste electronic equipment in compliance with the Waste Electrical and Electronic Equipment Directive.

7. Replacing batteries

- In the initial state, the batteries are already inserted. Simply remove the insulation strip to activate the device. To replace the batteries, please proceed as follows: Remove the battery compartment cover by pressing the battery compartment cover on both sides with your fingers...

- The battery symbol on the display indicates that the batteries need to be replaced. After removing the empty batteries, wait approx. 1 minute before inserting the new ones. Never recharge standard batteries. Doing so will present a risk of explosion.

8. Set date and time

After inserting the batteries, the date and time is automatically requested after display of the firmware version number and short motor run ("INS"). Set the year, month, day, hour and minute with the control wheel (F) and confirm by pressing the control wheel briefly.

- You can adjust the time and date in the menu under "dAt".

- The motor moves the control pin backwards during the setting of date and time. If "Ins" and the rotating activity symbol are displayed, the motor still reverses. When only "InS" is shown in the display, the radiator thermostat can be installed on the valve.

9. Removal of the existing thermostat

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 snap-on fastening of the radiator thermostat can be used universally and with the adapter VA80 for valves of the most popular manufacturers with a thread size of M30 x 1.5 mm.

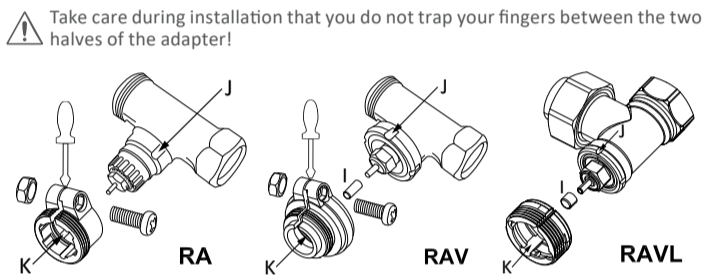
10. Adapters for Danfoss valves

The provided adapters (RA, RAV and RAVL) can be used for installation on Danfoss valves. The arrangement of the suitable adapter ring for the appropriate valve can be found in the following figures. The RA and RAV adapters have been manufactured with pre-tension in order to provide a better seat.

The spigot extension (I) must be fitted to the valve pin of RAV valves prior to installation.

The adapter RAVL does not have to be screwed. Fit the short spigot extension (I) on the valve pin before installation. You can simply break off the spigot extension connected to the adapter.

- The Danfoss valve bodies have elongated notches (J) around their circumference, which also ensure that the adapter is properly seated when it snaps on. During installation, please ensure that the pins inside the adapter (K) are lined up with the notches (J) on the valve.



11. Mounting and adapting run

After the batteries have been inserted the motor reserves. Meanwhile, the date, "InS" and the activity symbol are displayed. As soon as "InS" is displayed without the activity symbol, the radiator thermostat can be installed.

- Screw the supplied mounting ring (L) on the valve of the radiator (1). Place the radiator thermostat straight on the mounting ring using the snap-on connector (2).

It is now that the radiator thermostat performs an adapting run. "AdA" and the activity symbol are displayed; during this time, operation is not possible. The adapting run can be cancelled by pressing the control wheel briefly.

- If the adapting run has been initiated prior to mounting, please press the control wheel briefly and the motor reserves to the "InS" position. If an error message (F1, F2, F3) is displayed, the motor similarly travels back to the "InS" position.

12. Removal

To remove the radiator thermostat from the radiator valve, please proceed as follows: Remove the battery compartment cover by pressing the battery compartment cover on both sides with your fingers and remove the cover by pushing it downwards. Press the unlock button (with the lock symbol) (1). The catch of the snap-on connector is opened and the radiator thermostat detaches from the valve (2).

13. Setting the week program

In the week program, for each weekday up to 6 heating phases (13 change settings) can be set separately. The programming is carried out for the selected days, whereby temperature settings have to be set for the entire period between 00:00 and 23:59h.

- In auto mode, the temperature can be changed at any time using the control wheel. The modified temperature will then remain the same until the next point at which the program changes. Afterwards, the defined week program is activated again.

14. Boost function

When activating the boost function, the heating valve is opened to 80 % for 5 minutes. The heating of a room takes longer than 5 minutes, but the heat given off by the radiator can be felt immediately. If, for example, you arrive home earlier than usual, the boost function will help you to heat the room up quickly.

- The boost function will not have an immediate effect if the radiator is covered or concealed. The open-window function is deactivated while the boost function is active.

15. Setting the holiday function

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. Briefly press the Mode/Menu button repeatedly, until the suitcase symbol appears in the display. Change the time until which the temperature shall remain with the control wheel and confirm by pressing the control wheel briefly.

16. Comfort and reduction temperature

The comfort and reduction temperature button makes switching between comfort and reduction temperature very easy. The factory setting for the comfort temperature is 21.0 °C and the reduction temperature 17.0 °C. They can be adjusted as follows: Press and hold the comfort/eco button for at least 3 seconds. The sun symbol and the currently stored comfort temperature appear in the display.

17. Child safeguard/operating lock

The operation of the device can be locked. To activate/deactivate the operating lock, briefly press the Mode/Menu and button at the same time. After it has been successfully activated, "LOC" appears in the display.

18. Activate heating pause (battery saving)

Battery life can be prolonged by switching the heating off in summer and opening the valve completely. The calcification protection continues to run. To activate the heating pause, proceed as follows: Turn the control wheel in manu mode (manu) to the right until "On" appears in the display. To end it, exit the manu mode (manu) or turn the control wheel to the left.

19. Set frost protection mode

If a room is not to be heated, the valve can be closed. Turn the control wheel in manu mode (manu) to the left until "OFF" appears in the display. The valve is only opened if there is a risk of frost. The calcification protection continues to run. To end it, exit the manu mode (manu) or turn the control wheel to the right.

20. Display of valve position

You can request the current position of the valve. To do this, proceed as follows: Press the Mode/Menu button for at least 3 seconds. Select the menu item "POS" with the control wheel. Confirm by pressing the control wheel briefly. The display will show the current position of the valve drive in percent.

21. Switch between summer and winter time

An automatic switching between summer and winter time can be activated and deactivated. The switching is activated in the factory settings. Press the Mode/Menu button for at least 3 seconds. Select the menu item "dSt" with the control wheel. Confirm by pressing the control wheel briefly. Set the option "on" to activate automatic switching or set the option "off" to deactivate automatic switching with the control wheel. Confirm by pressing the control wheel briefly.

22. Open-window function

With a rapidly reducing temperature, the radiator thermostat detects that a room is being ventilated. In order so save heating costs, the temperature is reduced for 15 minutes. Whilst this function is active, the open-window symbol appears on the display. Press the Mode/Menu button for at least 3 seconds. Select the menu item "Aer" with the control wheel and confirm by pressing the control wheel briefly. Set the temperature and time using the control wheel. The function can be deactivated by selecting "0" for the time.

23. Set offset temperature

As the temperature is measured on the radiator, the temperature distribution can vary throughout a room. To adjust this, a temperature offset of ±3.5 °C can be set. If a nominal temperature of e.g. 20.0 °C is set but the room presents with only 18.0 °C, an offset of -2.0 °C needs to be set. Press the Mode/Menu button for at least 3 seconds. Select the menu item "toF" with the control wheel and confirm by pressing the control wheel briefly. Use the control wheel to adjust the required offset temperature. Confirm by pressing the control wheel briefly.

24. Restore factory settings

The factory settings of the radiator thermostat can be restored manually. If you do this, you will lose all your settings. Press the Mode/Menu button for at least 3 seconds. Select the menu item "rES" with the control wheel and confirm by pressing the control wheel briefly. "CNf" then appears in the display. Confirm by pressing the control wheel briefly to restore the factory settings. The device will perform a restart.

25. Troubleshooting and maintenance

Table with 3 columns: Error codes, Problem, Solution. Rows include Battery symbol (low), F1 (Valve drive sluggish), F2 (Actuating range too wide), F3 (Adjustment range too small).

- The radiator thermostat performs a routine descaling run every Saturday at 12:00 to protect against calcification of the valve. During this "CAL" appears in the display.

- Use a dry linen cloth to clean the device. If the device is particularly dirty, you can slightly dampen the cloth to clean it. Do not use any detergents containing solvents for cleaning purposes. Make sure that no moisture will ingress into the housing.

26. Technical Data

Device short description: CC-RT-Q
Supply voltage: 2x 1.5 V LR6/mignon/AA
Current consumption: 100 mA max.
Battery life: 3 years (typ.)
Degree of protection: IP20
Degree of pollution: 2
Ambient temperature: 0 to 50 °C
Surface temperature: 90 °C (at the radiator)
LCD: 73 segments
Connection: M30 x 1.5 mm
Method of operation: Type 1
Linear travel: 4.3 mm
Dimensions (W x H x D): 54 x 72 x 76 mm
Weight: 147 g (including batteries)



Subject to technical changes.