User manual
By the way...
Do you already know about PROGmatic programming sticks? You can programme SPARmatic comet by hand or you can use the comfortable PROGmatic-Bluetooth-programming stick to copy your personally specified heating and economy times onto all your EUROTronic energy-saving radiator thermostats at your home which have a programming port in a matter of seconds. Detailed information and the "PROGmatic Programming sticks can be found on: www.eurotronic.org

Please read the user manual before you place the thermostat. Keep the documents for later questions and provide them if you pass on the thermostat to other persons.

Scope of delivery
1 SPARmatic comet energy saving radiator thermostat
1 User manual
1 Connector
3 Adapters (Danfoss RA, Danfoss RAV, Danfoss RAVL)

Application as directed
By purchasing the SPARmatic comet energysaving radiator thermostat you own a programmable radiator thermostat which can be used for temperature regulations in enclosed rooms and therefore, it can contribute to the reduction of heating energy. – Please use the thermostat only for this purpose. The EUROTronic programming port is intended only for our EUROTronic programming stick. Never connect other devices with the programming port!

Display and control elements
1 Heating times
2 Child lock active
3 Battery low
4.a Travel function active
4.b Comfort temperature active
4.c Economy temperature active
4.d Window/freeze protection function active
4.e AUTO or MANO mode active
4.f Button MENU OK – leads to the main menu (starting from regular display), within the menu one keypress leads to the previous level
4.b Button OK – confirmation of setting
4.c Button – timer function
4. Selector wheel

Set up menu
By pressing [MANO] you will arrive at the set up menu. Please choose one of the items with the selector wheel. With [MANO] you can select one menu item and with the selection wheel they can be adjusted. The button [OK] confirms the setting. The button [MANO] leads to the previous level.

MODE to select the mode
AUTO = automatic mode
MANU = manual mode

PROG setting of time programme
TEMP setting of comfort and economy temperature
ZET setting of date and time
FENS window function
RES reset of the device to factory preset
NADP starting of a new adaptation to adjust the valve travel function
INST installation function (Please only attach the controller to the coupling ring in this position)
OFFS adaptation of temperature to the room situation
STBY standby function
VERS version
DST Daylight saving time

Inserting / replacing batteries
Remove the battery lid by pressing the battery lid upwards (1) at the highlighted point and then taking it out (2).

Then insert the batteries as represented in the appliance. Do not use accumulators! Ensure that the polarity is correct! Never recharge batteries, danger of explosion! Do not short circuit batteries! Do not disassemble batteries! Take low batteries out of the device immediately.
Keep batteries away from extreme warming – danger of leakage! Do not apply used and new batteries together. If needed, clean the battery and the contacts before using them. Keep the batteries away from children. When getting in touch with battery acid instantly irrigate the affected parts with clear water and call a doctor.

Setting date and time
After inserting the batteries for the first time the date will flash on the display. Now, date and time can be set.
Set date with the selector wheel. Conﬁrm with [OK]
Set month with the selector wheel. Conﬁrm with [OK]
Set day with the selector wheel. Conﬁrm with [OK]
Set hour with the selector wheel. Conﬁrm with [OK]
Set minute with the selector wheel. Conﬁrm with [OK]
That’s it.

On the display [RE] will be shown. Now, the motor will completely move to the installation position in order to make the installation easier. As soon as SPARmatic comet is ready for installation [INST] will be shown on the display.

➔ Economy times: any time selected in the menu. Now please do not press any other buttons! Plug device for coupling ring.
➔ Mounting.

You can also set date and time via the menu item [E] later on. But in case of that, SPARmatic comet does not move to the installation position.

➔ In case of replacing batteries, the stored time setting will be shown on the display.

Mounting
SPARmatic comet can be quickly and easily mounted on all common valves (see adapter table). It can be installed without grime and water spots because the heating circuit is not interrupted.

➔ Any other buttons! Plug device for coupling ring.
➔ Mounting.

ATTENTION: It must be possible to insert SPARmatic comet without applying force, ensure that the appliance is in the [INST] or [E] position.

➔ In case of a later installation, please switch in the menu to [INST] before you install the device. Hereafter the installation is facilitated. Only mount it in this position.

Dismounting
➔ To remove SPARmatic comet remove this at the E (with the wheel turn on the highest temperature of over 28°C to E[t] position), wait for a short period and then press on the unlocking device to detach the quick-release catch. Then pull the SPARmatic comet from the valve.

Adaptation
Initial installation: Press the button [MANO] until [RE] appears on the display so that SPARmatic comet will be able to start its adaptation. The device will adapt itself to the stroke of your valve body. To do this the valve will now be opened and closed several times to store the end points. In some cases this process can take a few minutes. After successful adapta-

➔ Should adaptation become necessary again, e.g. if your radiator does not cool down at all in the [E] Position, please press in the menu the button [RE] until adaptation starts again.
➔ If the mistake [E] is shown on the display place SPAR-
matic comet onto the radiator valve and then take the batteries out for a short time in order to execute a reset.

Basic operating modes
MANU-Modus
In the MANU-mode SPARmatic comet adjusts to the manually specified set temperature.

AUTO-Modus
In the AUTO-mode SPARmatic comet changes between to tempera-

➔ Heating times: Heating with comfort temperature (factory preset 21°C) (factory preset 18°C)
➔ Economy times: heating and economy times can be speciﬁed via the adjustable time programme. It is possible to set 8 switch points (4 heating and 4 economy times) per day at the most. SPARmatic comet has the following factory preset:

Heating time:
➔ Heating with comfort temperature (factory preset: 1st heating time at 07:00)

Economy time:
➔ Lowering to economy temperature (factory preset: 1st economy time at 22:00)

Setting heating and economy times
With SPARmatic comet it is possible to set 4 heating and 4 economy times per day – one for each day or one for a block of several days. T1 to T6 represent the weekdays from Monday to Sunday. Additionally, the corresponding days are shown as abbreviation below the menu bar on the display.

Block construction:
→ T1–5 = same programme from Monday to Friday
→ T1–6 = same programme from Monday to Saturday
→ T1–7 = same programme from Monday to Sunday
➔ For non-programmed days the factory preset remains active.

Setting of an individual programme:
Press [MANO]. Select the menu item [MANO] with the selector wheel. Press [OK] for Monday is shown on the display. Select day/block with the selector wheel. Conﬁrm with [OK].

→ Set the beginning of the 1st heating time (symbol [t]) with the selector wheel. Conﬁrm with [OK]. Set the beginning of the 1st economy time (symbol [f]) with the selector wheel. Conﬁrm with [OK].

➔ If you do not want to set a further heating/economy time conﬁrm with [OK].
➔ The next day for programming is shown on the display.
➔ If you do not want to enter a further day, leave the menu with [OK]. If the temperature is shown on the display the programme is ﬁnished. Within the blocks you can also overwrite single days with differing times.

Setting comfort and economy temperature
Press [MANO]. Select the menu item [MANO] with the selector wheel. Conﬁrm with [OK]. Set comfort temperature with the selector wheel. Conﬁrm with [OK].

Area 1: 6°C, frost protection function is active
Area 2: valve is completely open

➔ By the way: Maximum energy saving can be obtained with an economy temperature which is about 5°C below the comfort temperature.

Manual operation
With the selector wheel an adaptation of the room temperature is possible at any time. In the AUTO-mode it remains active until the next switch point is reached. Now, the usual programme becomes active again.
Further functions
Timer function
The timer function is selected with the timer button \( \text{[T]} \).
With this function a user-defined temperature for a program-

+ matic period can be entered. This can be very useful in case of a party, for example. Press \( \text{[T]} \). First, the time for which the programme has been deactivated is shown. Confirm with \( \text{[C]} \). Now, the desired temperature can be set. Confirm with \( \text{[C]} \) in the selected period it is not possible to change the temperature manual, the wheel is locked. Press Menu and unlock it.

Offset
If the perceived temperature significantly differs from the set thermostat temperature a temperature set up can be execut-
ed. Press \( \text{[R]} \) Select the menu item \( \text{[L]} \) with the selector wheel. Confirm with \( \text{[C]} \). The degree setting \( \text{[L]} \) will not flash on the display. Now, set up the desired adaptation for the temperature (from - 5 up to + 5°C) with the selector wheel. Confirm your entry with \( \text{[C]} \). The temperature display does not change!

Window function
If you open a window and consequently the temperature drops signifi cantly, SPARmatic comet will automatically close the heating valve in order to save energy. The display will show \( \text{[R]} \). Afterwards, SPARmatic comet will resume normal operation. For the set up select \( \text{[R]} \) in the menu. Confirm with \( \text{[C]} \). First, the sensibility is selected with the selector wheel \( \text{[H]} \) = high sensibility, \( \text{[D]} \) = medium sensibility (factory preset), \( \text{[L]} \) = low sensibility. Confirm with \( \text{[C]} \). Now, you enter the time (10 min. to 50 min) for which the valve should remain closed. Confirm with \( \text{[C]} \).

Travel function
For the time you are away you can select an individual tem-

+ erature. After this period the originally defined programme becomes active again. Press \( \text{[R]} \) Select the menu item \( \text{[L]} \) with the selector wheel. Confirm with \( \text{[C]} \) Set the time and confirm with \( \text{[C]} \). The time programmed so far appears on the display. Now set the temperature and confirm with \( \text{[C]} \). The time appears on the display. With \( \text{[L]} \) the function can be deactivated.

Child lock
You can lock SPARmatic comet to protect the device from unauthorized activation. Press the buttons \( \text{[T]} \) and \( \text{[C]} \) at the same time for about 2 seconds until the signal \( \text{[V]} \) appears on the display in order to lock the device. By using this button combination again the symbol disappears and you release the lock.

Heating pause – Closing the SPARmatic comet
Press \( \text{[R]} \) Select the menu item \( \text{[G]} \) with the selector wheel. Confirm with \( \text{[C]} \) Select \( \text{[R]} \) and confirm with \( \text{[C]} \). Set the temperature on the display to \( \text{[R]} \). The valve is now closed and will work without a time pro-

+ gramme. The calcification protection function remains active once a week. After the heating pause you switch the device in the AUTO-mode and the personally set programme will be executed again.

Daylight saving time
Press \( \text{[R]} \) Select with the selector wheel. Confirm with the \( \text{[L]} \) button and select \( \text{[L]} \) with the selector wheel. SPARmatic comet switches automatically from summer to winter time.

LCD standby indicator
Press \( \text{[R]} \) Select the menu item \( \text{[G]} \) with the selector wheel. Confirm with the \( \text{[R]} \) button and select \( \text{[R]} \) with the selector wheel. After about 30 seconds, the LCD indicator switches into standby mode. By pressing any button, the display will be activated again. (by removing the battery, standby mode will be reselected). Increases the battery life time.

Going back to factory preset/All reset
Press \( \text{[R]} \) Select the menu item \( \text{[G]} \) with the selector wheel. Confirm with \( \text{[C]} \) The symbol \( \text{[G]} \) flashes, confirm with \( \text{[C]} \). SPARmatic comet is reset again. Now, proceed as described for the initial operation.

Freeze protection and calcification protection function are active automatically:

Freeze protection function
If the temperature drops below 6°C, SPARmatic comet opens the valve until the temperature again rises above 6°C. This prevents the radiators from freezing.

Calcification protection function
To prevent radiator valves from calcifying SPARmatic comet is submitted to a calcification protection programme once a week on Friday mornings.

Cleaning and used devices
Cleaning
To clean the SPARmatic comet use only a dry or lightly wet cloth. Avoid chemical solvent – it can probably damage the device.

Used devices
Do not throw old devices and packaging into the household waste. They can be recycled. You receive further information at your local government.

Adapter
Heimiler, Junkers Landys+Gyr, MNG, Honeywell, Braukmann threadmeasure dimension of M 30x1,5
Danfoss RAV (accompanying pin must be plugged on the valve tapped)
Danfoss RA

Please remove all the connection pieces of the plastic adapters before you use one of the attached adapters!

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Declarition of Conformity
The Declaration of Conformity is provided at:
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