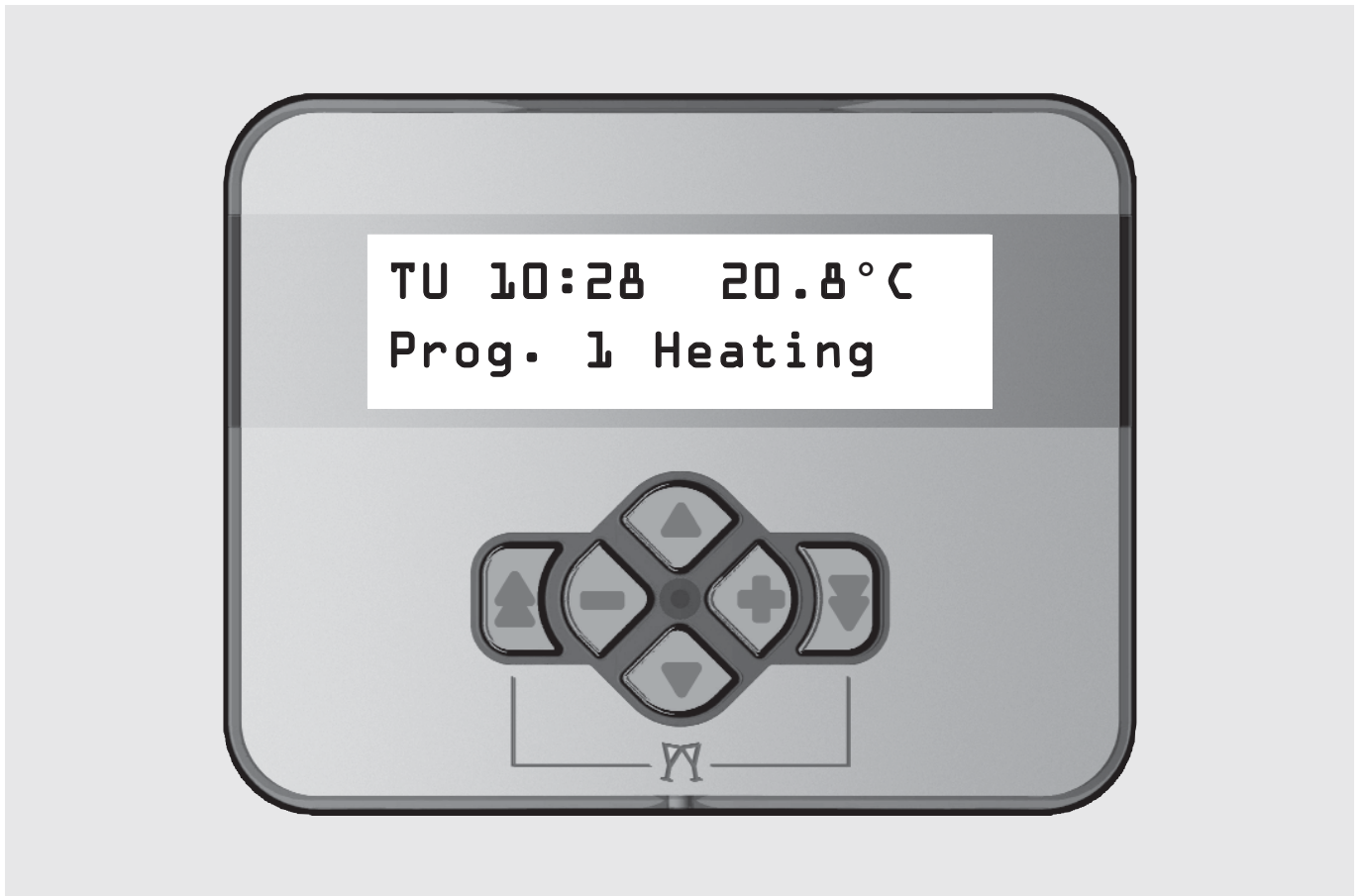


The Paradigma Heating Controller

SystaComfort



Operating instructions

For system operators

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Contact

In the event of faults, or for enquiries, maintenance and repairs, please consult your Paradigma heating engineers

Paradigma heating engineers:

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1. About this document

1.1 Purpose of this document

This document tells you about the SystaComfort heating controller. It contains information concerning:

- Safety
- Design and functioning
- Operating the heating controller
- Operation and displays
- Troubleshooting
- Maintenance and cleaning

1.2 Target group for this document

These operating instructions are intended for the operator of the heating system.

1.3 Symbols used in this document



Danger!

Potential hazard to people.



Caution!

Potential damage to property.



Note

Information about special features.

1.4 Applicability

These operating instructions apply for the Paradigma SystaComfort heating controller from software version 1.32 07/08.

2. For your safety



Danger!

Please pay attention to safety information in order to avoid the risk of injury or death and damage to property and equipment. Please read these operating instructions carefully.



Danger!

The unit must only be opened, and installation and commissioning carried out, by qualified electricians!

The applicable regulations must be observed!

Improper work carried out on electrical devices may result in danger of electrocution.

2.1 Intended use

The SystaComfort heating controller may only be used to control heating systems with Paradigma Modula II or ModuVario gas condensing boilers, Paradigma Pelletti pellet boiler or a single-phase oil or gas boiler. The SystaComfort heating controller may be used alone or in conjunction with the Paradigma SystaSolar or SystaSolar Aqua solar controllers.

Any other use is considered improper use. In the event of any such improper use and/or if modifications are made to the device, including in connection with fitting and installation, all guarantees are voided.

☞ This device complies with the following European Directives:

- Directive 73/23/EEC on low voltage
- Directive 89/336/EEC – Electromagnetic Compatibility (EMC), including amendments up to 93/66/EEC

2.2 General safety information



Caution!

- **The initial setup of the heating system and adjustments to the heating controller for the heating system (system data settings) should be carried out by the person who installed the system or by an appointed, appropriately trained person (installation engineer). After initial setup, the installation engineer must instruct the system operator in how to operate the heating controller and the heating system.**
- **Ensure that ambient temperatures are between 0 °C and 40 °C. Protect the unit from moisture, liquids and permanently high humidity. Adverse ambient conditions may result in damage to the heating controller.**
- **Repairs to the unit must be carried out by the manufacturer. Only original Paradigma replacement parts and components may be used.**

3. Functions of the SystaComfort heating controller

3.1 Operation

The SystaComfort heating controller has a menu-driven user interface that is operated via the operating unit: In systems with two heating circuits, both heating circuits can be set via an operating unit. You can also control the second heating circuit via a separate operating unit.

The room temperature setting, the operating mode and the party function can be set via separate buttons without entering the menu structure.

If the SystaSolar or SystaSolar Aqua is connected to the heating controller via a bus line, the collector temperature, the output and the yield of the solar energy system can be displayed on the operating unit.

3.2 Heating circuit

The heating controller can be regulated based on the external temperature or the room temperature. Combined operation - based on the external temperature during the day and on the room temperature at night – can also be used.

If the measured room temperature is to affect the controller of the heating circuit, the operating unit must be installed in a suitable room.

Three week time programs can be set for the heating circuit. Selecting operating mode Auto(matic) Program 1, Auto(matic) Program 2 or Auto(matic) Program 3 determines which of these three week time programs is active. This allows the heating times to be adapted to changing working hours, public holidays or holidays.

3.3 Heating the drinking water

A week time program can be set for water heating. Alternatively, water can be heated in parallel to the active heating time program.

If water heating is disabled, water can be heated immediately as needed.

The heating controller compares the measured hot water temperature (sensor TWO) with the current target value. If the hot water temperature drops more than the set switching difference below the target value, the hot water is heated by boiler until the temperature exceeds the target value again.

3.4 Circulation

The SystaComfort heating controller can also control the circulation pump. This can be done via the adjustable week time program for the circulation. Or the circulation pump is activated via a button e.g. in the bathroom and kitchen for an adjustable run-down period.

To decrease power consumption via circulation, the circulation pump stops when the circulation line has been heated sufficiently (measured at sensor TZR).

3.5 Controlling the boiler

The SystaComfort heating controller activates and deactivates the boiler on demand. With Paradigma gas condensing boilers, the boiler output is adapted to the current water requirement to prevent the boiler stopping and starting continuously.

3.6 Charging the fresh water, combined or buffer storage tank

Systems with OPTIMA or TITAN storage tanks or a buffer storage tank are charged and emptied with stratification. This reduces the frequency of activation of the boiler and thus reduces the power consumption and emission of harmful substances when the boiler starts.

4. Operating the SystaComfort heating controller

4.1 Initial setup by installation engineer

The initial setup of the heating system and adjustments to the heating controller for the heating system should be carried out by the person who installed the system or by an appointed, appropriately trained person. In order to ensure smooth handling of any claims resulting from liability for defects, always keep a record of work carried out in separate setup and maintenance logs, in conjunction with the installation engineer.

4.2 Instructions from installation engineer

Ensure that the installation engineer instructs you in how to operate the heating controller and the heating system and that you have received the appropriate instructions and documents accompanying the product.

4.3 Normal operation

Once the installation engineer has correctly set up the heating system, no special action is required by the operator. The system works automatically.

Settings are only required to adapt the system to the requirements of the operator:

- Setting the operating mode (e.g. party, continuous lowering)
- Entering a holiday period
- Changing the required room temperatures and the heating time programs
- Changing the required hot drinking water temperatures and the water heating time programs
- Changing the time program for circulation.

4.4 Operation when away for extended periods

During extended absences, you can either set the **continuous lowering** mode or enter a corresponding **holiday period**.

The heating circuit then enters lowering mode, water heating and circulation are disabled.



Note

In systems with two heating circuits, the continuous lowering mode must be set or the holiday period must be entered for both heating circuits if the entire heating system is to be switched to lowering mode.

4.5 Shutting down the heating system

Do not disconnect the heating system if you do not require it for extended periods - set the operating mode of the heating circuit(s) to **Off**.

This guarantees that your system and the building are protected against frost damage and that the pumps and the mixers do not jam due to extended periods of standstill.

4.6 What to do if a fault occurs

Faults in Paradigma gas condensing or pellet boilers and – if a SystaSolar solar controller or SystaSolar Aqua are connected to the heating controller via a bus line – the solar energy system are displayed on the heating controller.

You can query the fault code of the boiler or solar energy system in the Query fault code sub-menu (see the Faults chapter).

Contact your installation engineer and inform them of the fault in the boiler or the solar energy system stating the fault code.

Faults in single-phase oil or gas boilers are not shown on the operating unit of the heating controller.

4.7 Maintenance display

The installation engineer can set the time for the next maintenance of the heating system on the heating controller.

When this deadline is reached, the “Service boiler” message tells you that the boiler requires maintenance.

Make a maintenance appointment with your installation engineer.

Regular maintenance of the heating system increases the reliability of the system and decreases the power consumption, and as a result, the power costs!

This message does not indicate a fault.

5. Heating controller operation and display

5.1 Default display

```
Tu 12:15 20.8°C  
Prog. 1 Heating
```

Unless you are changing settings or viewing readings, the default display appears on the heating controller's display unit. It displays the weekday and the current time, the room temperature measured by the operating unit or the external temperature and the current operating mode (e.g. heating time program 1, heating).

Message displays for Paradigma Pelletti pellet boiler with comfort ash extraction

```
ash empty  
Prog. 1 Heating
```

If the ash container of the Paradigma pellet boiler Pelletti is almost completely full, then the first line of the default display shows the message "ash empty".

If the ash container is full, then the message "ash full" appears. The pellet boiler continues running but the motor for the ash extraction turns off.

Please empty the pellet boiler's ash container (see the operating instructions for your pellet boiler). These messages only appear on Paradigma pellet boilers with comfort ash extraction.

Display of a fault

```
Sensor fault  
Prog. 1 Heating
```

If a fault occurs, the first line displays the message **Boiler fault, Solar fault** or **Sensor fault**. Please contact your installation engineer when a fault occurs. You can see the fault code in the **Query fault code** submenu.

```
Solar fault  
Prog. 1 Heating
```

The fault in the solar energy system is only displayed if the SystsSolar or SystsSolar Aqua is connected to the heating controller via the bus line.

```
Boiler fault  
Prog. 1 Heating
```

Boiler faults are only transferred from connected Paradigma gas condensing or pellet boilers.

Display for active floor screed heating program

```
TV 35°C Day 1  
Dry floor
```

While the floor heating system is heating the screed, the measured forward flow temperature and the current day of the heating program set are shown in the display.

Display for disabled keys

```
Keys locked  
Press + and -
```

If the keys are disabled (see Key lock and display chapter) the following appears in the display. Press the ⊕ and ⊖ keys at the same time to release the key lock. The key lock is activated again 15 min after the last key is pressed.

Maintenance display

```
Service boiler  
01234 56789
```

If the heating system requires maintenance the following message appears every ten minutes to show that a service is due and also provides the telephone number of your installation engineer. Please contact your installation engineer.



Note!

Temperature display in the default display

The menu structure allows you to set whether the external temperature or the room temperature is displayed in the default display (See Key lock and display chapter).

Systems with two heating circuits

Systems with two heating circuits can be controlled by a single operating unit. If this is the case, you can set whether the standard display is to refer to the first or the second heating circuit (See Key lock and display chapter). Dependent upon which heating circuit the default display refers to, the second line of the default display alternates between the display of the operating mode and the text "1. Heating circrt." or "2. Heating circrt.". The functions described below for changing the required room temperature, changing the operating mode and party function then also refer to this heating circuit. If there is an operating unit for each of the two heating circuits, the default display and these functions always refer to the respective heating circuit.

Heating controller operation and display

The following functions are available in the default display regardless of the menu structure:

5.2 Changing the required room temperature

Change room temp.
by -0.5K

The room temperature can be raised or lowered 4 degrees using the ⊕ or ⊖ keys.

5.3 Setting the required operating mode

Operating mode
Auto Program 1

You can change the operating mode using the △ and ▽ buttons.

You can select from the following operating modes:

- **Auto(matic) Program 1, 2 or 3**
Heating mode or lowering in accordance with the heating time program set (1, 2 or 3); drinking water heating and circulation pump in accordance with the respective time program.
- **Continuous heating**
Room temperature target value = heating, drinking water heating and circulation pump in accordance with the time program.
- **Continuous comfort**
Room temperature target value = comfort, drinking water heating and circulation pump in accordance with the time program.
- **Continuous lowering**
Room temperature target value = lowering, drinking water heating and circulation pump are disabled.
- **Summer**
Heating off, drinking water heating and circulation pump in accordance with the the respective time program.
- **Continuous off**
Heating, drinking water heating and circulation are disabled. Frost protection is guaranteed.
- **Party**
The room temperature target value = heating and the hot water target value = normal until the next switching point and the circulation pump is enabled.

5.4 Party function

Operating mode
Party On

Press the ▽ and △ keys at the same time to activate the party function. The heating system is activated until the next set heating time program, water heating and the circulation pump are enabled.

Press ▽ and △ again or set another operating mode to cancel the party function.

5.5 Chimney sweep function

How to activate the chimney sweep function:

Chimney sweep
On

Press the △ and ▽ buttons at the same time in the default display.

The display at left appears and the chimney sweep function is active for 30 min. The boiler starts.







Tu 09:18 20.8°C
Chimney sweep

The “Chimney sweep” operating mode appears in the default display.


Press △ and ▽ again or set another operating mode to cancel the chimney sweep function.

6. Menu structure





The heating controller has a menu-driven user interface that is operated via 6 buttons:

-  Go down one menu level
-  Go up one menu level
-   Scroll through the current menu level
-   Change setting






 **Note**
Settings that can be changed flash on the display.

Standard display Use the  button to change from the default display to the main menu.



Main menu Scroll up or down in the main menu using the  and  buttons.
Select a submenu using the  button.
Press the  button to return to the default display.




Submenu Press the  or  buttons to select items (settings) in the submenu.
Press the  or  buttons to change settings.
Press the  button to return to the main menu.





6.1 Overview of main menu


The main menu is described briefly below. An overview of all menus and settings that are accessible to the operator is provided in the Menu system overview chapter.

Depending on the structure of the heating system, some of the submenus described below may not be displayed.

Query Temperatures  **Query temperatures**
Display of the measured temperatures and the target values of the heating circuit(s), water heating and circulation.

Query solar data  **Query solar data**
Display of the solar output, the daily and the overall yield of the solar energy system.
Only available if a SystaSolar or SystaSolar Aqua solar controller is connected to the heating controller via the bus line.

System data 1. Heating circ.  **System data of first heating circuit**
Sets the operating mode, the required room temperatures, the heating time programs and the holiday program for the first heating circuit.

2. Heating circ. configuration  **Set second heating circuit**
Sets the operating mode, the required room temperatures, the heating time programs and the holiday program for the second heating circuit.
Only available in systems with two heating circuits and an operating unit for both heating circuits.

Menu system overview

Hot water configuration ▾	<p>Set hot water</p> <p>Starts immediate water heating, sets the required temperatures for the hot drinking water and the water heating time program.</p>
Circulation configuration ▾	<p>Set circulation</p> <p>Sets the time program for circulation. Only available in systems with hot water circulation.</p>
Query meter ▾	<p>Querying the meter</p> <p>Queries the running time and the number of times the boiler started.</p>
Time and date configuration ▾	<p>Setting the time and date</p> <p>Setting the date and time. The date and time are preserved even after the controller power supply is switched off.</p>
Keypad lock and display ▾	<p>Key lock and display</p> <p>Disables operation as childproofing. Selecting the default display.</p>

The following main menus are reserved for the installation engineer:

System data 1.Heating circ. ▾	<p>Set system data for the first heating circuit</p> <p>Sets the system data for the first heating circuit to adapt the heating controller to the heating circuit and the building.</p>
System data 2.Heating circ. ▾	<p>Set system data for second heating circuit</p> <p>Sets the system data for the second heating circuit to adapt the heating controller to the second heating circuit and the building.</p>
System data Boiler/buffer ▾	<p>Set system data for buffer tank/boiler</p> <p>Sets the system data for controlling the boiler and charging the buffer storage tank.</p>
System data Circulation ▾	<p>Set system data for circulation</p> <p>Sets the system data for controlling the circulation pump.</p>
Monitoring program ▾	<p>Monitoring program</p> <p>This menu allows the installation engineer to view the operating status of the outputs (pumps, mixers, diverter valves) and activate them manually for test purposes.</p>
Query fault code ▾	<p>Query faults</p> <p>View the fault code of a fault that has occurred.</p>

6.2 Viewing temperatures

The temperature readings measured by the connected sensors and the target values calculated by the heating controller can be viewed in the **Query Temperatures** menu.

Depending on the structure of the heating system, some of the displays listed here may not be shown.

If any sensors are faulty or not connected, the display will show --- instead of the temperature value.

Query Temperatures ▾	<p>Starting from the default display, press the ▾ button to go into the main menu. The Query Temperatures menu item appears. Press the ▾ button to access the Query Temperatures submenu. You can now query the measured temperatures and target values calculated using the △ and ▾ buttons.</p>
----------------------	---

The following submenu items are displayed sequentially:

Outside temp. TA -2.0 °C	Measured external temperature (TA sensor on the outside wall of the building).
Room temperature 20.3 °C	Room temperature measured by the sensor integrated in the operating unit.
Room temperature Target 20.5 °C	Current target value for the room temperature.
Room temp. HK2 Target 20.0 °C	Current target value for the second heating circuit. Only available in systems with two heating circuits.
Hot water temp. TWO 48.6 °C	Temperature in the upper range of the hot drinking water storage tank or of the fresh water or combined storage tank (TWO sensor).
Hot water temp. Target 50.0 °C	Current target value for hot drinking water storage tank or for the upper section of the fresh water or combined storage tank.
Supply temp heat circuit TV 45.8 °C	Temperature of the forward flow of the heating circuit (TV sensor in the heating circuit assembly on the pipeline to the radiators). Only available for a heating circuit with a mixer.
Supply temp. Target 45.1 °C	Current target value of the forward flow temperature of the heating circuit.
Return temp. TR 31.2 °C	Temperature of the return flow of the heating circuit (TR sensor in the heating circuit assembly on the pipeline from the radiators).
Supply heating circuit 2 37.2 °C	Temperature of the forward flow of the second heating circuit (TV sensor in the heating circuit assembly on the pipeline to the radiators). Only available in systems with two heating circuits.
Supply temp. HC2 Target 37.6 °C	Current target value of the forward flow temperature of the second heating circuit. Only available in systems with two heating circuits.
Return heating circuit 2 37.2 °C	Temperature of the return flow of the second heating circuit (TR sensor in the heating circuit assembly on the pipeline from the radiators). Only available in systems with two heating circuits.
Buffer temp. top TPO 60.1 °C	Temperature in the central section of the fresh water or combined storage tank or the temperature of the boiler forward flow of the single-phase oil or gas boiler in systems without fresh water or combined storage tanks (TPO sensor). Only available for systems with a fresh water or combined storage tank or with a single-phase boiler.
T buffer bottom TPU 43.7 °C	Temperature in the central section of the fresh water or combined storage tank (TPU sensor). Only available in systems with a fresh water or combined storage tank.
Circulation TZR 45.2 °C	Temperature of the return flow of the circulation system (TZR sensor). Only available if the TZR sensor is connected.
Circulation Button Off	Status of the circulation sensor switch input. Only available if the TZR sensor is connected.

Menu system overview

6.3 Querying solar data

Query solar data ▾

Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the **Query solar data** menu item appears. Press the ▾ button to access the **Query solar data** submenu. You can now view the solar data using the △ and ▾ buttons.

Only available if a SystaSolar or SystaSolar Aqua solar controller is connected to the heating controller via the bus line.

The following submenu items are displayed sequentially:

Collector
TSA 90.3 °C

Collector temperature (sensor TSA in the collector).

Solar output
3 kW

Instantaneous power of the solar energy system, calculated from the temperature difference between collector exit and collector entry and the volume flow through the solar energy system.

Daily Yield
15 kWh

Daily energy volume supplied by the solar energy system. Resets to zero at midnight.

Solar Yield
1525 kWh

Amount of energy supplied by the solar energy system since initial setup or since the last time the solar yield was reset.

6.4 Setting the first heating circuit

Setting the operating mode, the required room temperatures, the heating time programs and the holiday time for heating circuit 1:

System data
1. Heating circ. ▾

Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the **1. Heating circ. configuration** menu item appears. Press the ▾ button to access the **1. Heating circ. configuration** submenu. You can now use the △ and ▾ keys to open individual menu items, check the settings and change them using the ⊕ and ⊖ keys.

The following submenu items are displayed sequentially:

Operating mode
Auto Program 1

Setting the operating mode for the heating circuit, water heating and circulation. You can select from the following operating settings:

- **Auto(matic) Program 1, 2 or 3**
Heating mode or lowering in accordance with the heating time program set (1, 2 or 3); drinking water heating and circulation pump in accordance with the respective time program.
- **Continuous heating**
Room temperature target value = heating, drinking water heating and circulation pump in accordance with the time program.
- **Continuous comfort**
Room temperature target value = comfort, drinking water heating and circulation pump in accordance with the time program.
- **Continuous lowering**
Room temperature target value = lowering, drinking water heating and circulation pump are disabled.
- **Summer**
Heating off, drinking water heating and circulation pump in accordance with the the respective time program.
- **Continuous off**
Heating, drinking water heating and circulation are disabled.
- **Party**
The room temperature target value = heating and the hot water target value = normal until the next switching point and the circulation pump is enabled.

Room temperature Heating 20.0°C	Required room temperature for heating mode.
Room temperature Comfort 22.0°C	Required room temperature for raised operation of the heating system (comfort operation).
Room temperature Reduce 15.0°C	Required room temperature for lowered operation of the heating system (lowering operation).
Heating program configuration ▾	Setting the week time programs for the heating circuit. Press ▾ to open the menu for setting the time programs (see the Setting the heating time program chapter).
Vacation period configuration ▾	Setting the holiday time. The heating circuit then enters lowering mode and water heating and circulation are disabled during the period entered here. Press ▾ to open the menu for setting the holiday time programs (see the Setting holiday time chapter).
Heating program Set to default ▾	You can reset the heating time programs to the factory setting in the submenu. Press ▾ to open the menu for resetting the heating time programs (see the Resetting the heating time program chapter).

6.5 Setting the heating time program

You can set three week time programs for the heating circuit in accordance with your requirements. You can activate one of these three time programs by selecting Auto(matic) Program 1, 2 or 3. This allows you to adapt the heating times simply to changing working hours.

How to set the heating time programs:

1. Heating circ. configuration ▾	Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the 1. Heating circ. configuration menu item appears. Press the ▾ button to access the 1. Heating circ. configuration submenu.
Heating program configuration ▾	Scroll through this menu using the ▾ button until the Heating program configuration menu item appears. Press the ▾ button to access the Heating program configuration submenu.
Select program Program 1	Select the heating time program to be set using the ⊕ or ⊖ buttons. Use the ▾ button to access the weekday settings .
P1:Select day(s) MoTuWeThFr	The selected program (P1, P2 or P3) and the selected weekdays are displayed. You can now select blocks of days or single days using the ⊕ or ⊖ keys. Days with the same time program are automatically grouped into blocks. If you want to change the time program for one day of a weekly block, select the day and change the time program for that day. The day is then removed from the daily block.
MoTuWeThFr 1 Time: 06:00	Use the ▾ button to access the time of the first switching point. The switching point number is displayed at the top right of the screen. You can change the time of the switching point using the ⊕ and ⊖ buttons.
MoTuWeThFr 1 06:00 Heating	Use the ▾ button to access the level of the first switching point. You can change the level of the switching point using the ⊕ and ⊖ buttons. Available levels are Heating , Comfort and Reduce (lowering). You can also set a delete level. The switching point is deleted from the time program.

Menu system overview

```
MoTuWeThFr 2
Time:      22:00
```

Press ∇ to access the second switching point for the selected days. You can set the **time** of the switching point using the \oplus and \ominus buttons.

```
MoTuWeThFr 2
22:00      Reduce
```

Press ∇ to scroll to the level of the second switching point. You can change the **level of the switching point** using the \oplus and \ominus buttons.

Press ∇ to scroll to the **next switching point**.

```
MoTuWeTh 3
Time:      -:-:-
```

An **empty switching point** is displayed after the last switching point set.

If you want to enter a **new switching point**, set the time and the level of the new switching point as described above. The switching points entered are automatically sorted in chronological order.

Max. 8 switching points can be set per day or per daily block.

```
P1:Select day(s)
MoTuWeThFr
```

Press ∇ to return from an empty switching point to the weekday setting. You can also press \triangle to scroll back through the switching points to set the weekdays.

```
P1:Select day(s)
SaSu
```

Set the next day block or the next day using the \oplus or \ominus buttons.

```
SaSu 1
Time: 07:00
```

Press ∇ to access the first switching point for the day or day block. Set the switching points for this day or day block as described above.

```
Accept program?
Yes  $\triangle$ 
```

When you have entered the switching points for all days or day blocks, press \triangle to exit time program entry. You are prompted to **save the changes** to the program. If you want to reject the changes, press \ominus to select No . If not, leave it set to Yes.

```
Heating program
configuration  $\nabla$ 
```

Press \triangle to return to the Heating time program menu item. If you want to set more heating time programs, press the ∇ button to access the **Heating program configuration** submenu again.

```
Select program
Program 2
```

Select the corresponding heating time program using the \oplus or \ominus buttons (e.g. Program 2).

```
P2:Select day(s)
MoTuWeThFr
```

Set the switching points for this time program as described above. The number of the selected heating time program (e.g. P2) is shown at the top left of the display.

You can then change the third heating time program as described above.

Example 1

You want to change the heating start time for **Monday – Friday to 5:30 am** for heating program 1:

<div style="border: 1px solid black; padding: 2px;"> 1. Heating circ. configuration ▾ </div>	<p>Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the 1. Heating circ. configuration menu item appears. Press the ▾ button to access the 1. Heating circ. configuration submenu.</p>
<div style="border: 1px solid black; padding: 2px;"> Heating program configuration ▾ </div>	<p>Scroll through this menu using the ▾ button until the Heating program configuration menu item appears. Press the ▾ button to access the Heating program configuration submenu.</p>
<div style="border: 1px solid black; padding: 2px;"> Select program Program 1 </div>	<p>Heating time program 1 is already selected. Use the ▾ button to access the weekday settings.</p>
<div style="border: 1px solid black; padding: 2px;"> P1:Select day(s) MoTuWeThFr </div>	<p>The Monday - Friday week block is already selected.</p>
<div style="border: 1px solid black; padding: 2px;"> MoTuWeThFr ▾ Time: 05:30 </div>	<p>Use the ▾ button to access the time of the first switching point. Use the ⊖ button to change the time of the first switching point to 05:30.</p>
<div style="border: 1px solid black; padding: 2px;"> Accept program? Yes ⬆ </div>	<p>Press ⬆ to exit time program entry. Press ⬆ to confirm the changes made to the time program.</p>

Example 2

You want to change the heating start time for **Wednesday only to 6:30 am** for heating program 2:

<div style="border: 1px solid black; padding: 2px;"> 1. Heating circ. configuration ▾ </div>	<p>Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the 1. Heating circ. configuration menu item appears. Press the ▾ button to access the 1. Heating circ. configuration submenu.</p>
<div style="border: 1px solid black; padding: 2px;"> Heating program configuration ▾ </div>	<p>Scroll through this menu using the ▾ button until the Heating program configuration menu item appears. Press the ▾ button to access the Heating program configuration submenu.</p>
<div style="border: 1px solid black; padding: 2px;"> Select program Program 2 </div>	<p>Press the ⊕ button to access heating time program 2. Use the ▾ button to access the weekday settings.</p>
<div style="border: 1px solid black; padding: 2px;"> P2:Select day(s) We </div>	<p>Press ⊕ to select Wednesday (We).</p>
<div style="border: 1px solid black; padding: 2px;"> MoTuWeThFr ▾ Time: 06:30 </div>	<p>Use the ▾ button to access the time of the first switching point. Use the ⊕ button to change the time of the first switching point to 06:30.</p>
<div style="border: 1px solid black; padding: 2px;"> Accept program? Yes ⬆ </div>	<p>Press ⬆ to exit time program entry. Press ⬆ to confirm the changes made to the time program.</p>

Menu system overview

Example 3

You want to enter an increased room temperature (comfort) for all weekdays at 6:00 pm in heating program 3:

<pre>1. Heating circ. configuration ▾</pre>	<p>Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the 1. Heating circ. configuration menu item appears. Press the ▾ button to access the 1. Heating circ. configuration submenu.</p>
<pre>Heating program configuration ▾</pre>	<p>Scroll through this menu using the ▾ button until the Heating program configuration menu item appears. Press the ▾ button to access the Heating program configuration submenu.</p>
<pre>Select program Program 3</pre>	<p>Press the ⊕ button to access heating time program 3. Use the ▾ button to access the weekday settings.</p>
<pre>P3:Select day(s) MoTuWeTh</pre>	<p>The Monday - Thursday week block is already selected.</p>
<pre>MoTuWeTh 3 Time: --:--</pre>	<p>Press ▾ to scroll to an empty switching point.</p>
<pre>MoTuWeTh 3 Time: 18:00</pre>	<p>Enter a new switching point by pressing ⊕ to set the time of the empty switching point to 18:00.</p>
<pre>MoTuWeTh 3 18:00 Comfort</pre>	<p>Use the ▾ button to access the level of the new switching point. Press the ⊕ button to set the Comfort level.</p>
<pre>MoTuWeTh 4 Time: --:--</pre>	<p>Press ▾ to scroll to the next empty switching point.</p>
<pre>P3:Select day(s) SaSu</pre>	<p>Use the ▾ button to access the weekday setting. Set the week block to Saturday-Sunday (SaSu) using the ⊕ button.</p>
<pre>SaSu 3 Time: --:--</pre>	<p>Press ▾ again to scroll to an empty switching point.</p>
<pre>SaSu 3 Time: 18:00</pre>	<p>Enter a new switching point for this week block by pressing ⊕ to set the time of the empty switching point to 18:00.</p>
<pre>SaSu 3 18:00 Comfort</pre>	<p>Use the ▾ button to access the level of the new switching point. Press the ⊖ button to set the Comfort level.</p>
<pre>SaSu 4 Time: --:--</pre>	<p>Press ▾ to scroll to the next empty switching point.</p>
<pre>P3:Select day(s) Fr</pre>	<p>Use the ▾ button to access the weekday setting. Press the ⊕ button to set the day to Friday (Fr). Set the new switching point for Friday as described above.</p>
<pre>Accept program? Yes ⬆</pre>	<p>Press ⬆ to exit time program entry. Press ⬆ to confirm the changes made to the time program.</p>

6.6 Setting holiday time

You can set the beginning (first day of holidays after departure) and the end (last day of holidays before arrival) of the holiday period on the heating controller.

During this holiday period, the heating circuit enters lowering mode, water heating and circulation are disabled and the Vacation operating mode is displayed.

After the end of the holiday period set, the operating mode is reset to the mode originally set.

In systems with two heating circuits and a separate operating unit for the second heating circuit, water heating and circulation are only disabled during the holiday period if you also disable the second heating circuit via the operating mode or a holiday period setting.

The Vacation operating mode appears in the default display during the holiday period.

You can cancel the **holiday program by setting another operating mode** (e.g. automatic program 1).

How to set the holiday period:

- | | |
|-------------------------------------|--|
| 1. Heating circ.
configuration ▾ | Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the 1. Heating circ. configuration menu item appears. Press the ▾ button to access the 1. Heating circ. configuration submenu. |
| Vacation period
configuration ▾ | Scroll through this menu using the ▾ button until the Vacation period configuration menu item appears. Press the ▾ button to access the Vacation period configuration submenu. |
| Vacation start
Su 26.09.05 | The menu item which allows you to enter the start of the holiday (day after departure) is displayed. Press ⊕ or ⊖ to set the start of the holiday period. |
| Vacation end
Tu 12.10.05 | Press ▾ to scroll on to enter the end of the holiday period (day before the return). Press ⊕ or ⊖ to set the end of the holiday . |
- Press ▲ to return to the Vacation period configuration menu item.

6.7 Resetting heating time programs

All heating time programs can be reset to the factory setting.

How to reset the heating time programs:

- | | |
|-------------------------------------|--|
| 1. Heating circ.
configuration ▾ | Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the 1. Heating circ. configuration menu item appears. Press the ▾ button to access the 1. Heating circ. configuration submenu. |
| Heating program
Set to default ▾ | Use the ▾ button to scroll to the Heating program Set to default menu item. Press the ▾ button to access the submenu for resetting the heating time programs . |
| Select program
Program 1 | Select the heating time program you want to reset to the factory setting using the ⊕ or ⊖ buttons. |
| Set to default
Program 1 No ▾ | Press ▾ to scroll to the next item. You are prompted to confirm that you want to reset the corresponding time program to the standard settings. Press ⊕ to set this to Yes . |

Menu system overview

Heating program
Set to default ▾

Press ▾ to confirm that you want to reset the time program.

You return to the **Heating program Set to default** menu item.

If you leave this set to No or press the ▲ button, the time program is not reset.

If necessary, repeat this process for the other heating time programs.

Heating time program factory settings

Program 1

Mon – Fri	6:00 22:00	Heating Lowering
Sat, Sun	7:00 23:00	Heating Lowering

Program 2

Mon – Thurs	6:00 8:00 15:30 22:00	Heating Lowering Heating Lowering
Fri	6:00 8:00 15:30 23:00	Heating Lowering Heating Lowering
Sat	7:00 23:00	Heating Lowering
Sun	7:00 22:00	Heating Lowering

Program 3

Mon – Thurs	6:00 22:00	Heating Lowering
Fri	6:00 23:00	Heating Lowering
Sat	7:00 23:00	Heating Lowering
Sun	7:00 22:00	Heating Lowering

6.8 Setting the second heating circuit

There are two different ways to make settings for the second heating circuit in systems with two heating circuits.

- If only one operating unit is connected, the settings are made in the **2. Heating circ. configuration** submenu.
- If there is a separate operating unit for the second heating circuit, the settings for this heating circuit can only be made using the second operating unit, in the **Heating circuit configuration** submenu.

How to set the second heating circuit if only one operating unit is connected:

2. Heating circ.
configuration ▾

Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the **2. Heating circ. configuration** menu item appears. Press the ▾ button to access the **2. Heating circ. configuration** submenu. You can now use the ▲ and ▾ keys to open individual menu items, check the settings, and change them using the ⊕ and ⊖ keys.

The procedure is the same as that in the **Heating circuit configuration submenu**.

6.9 Setting hot water

The required hot water temperatures and the hot water time program are set in the Hot water configuration sub-menu. The heat water immediately function is also here.

If your system has two heating circuits and a separate operating unit is connected for the second heating circuit, you can also set the required hot water temperatures and a hot water time program for the second heating circuit. The heating controller then determines the target value for the hot water temperature from the time programs and the required hot water temperatures set.

For example, if the time program is set to disable water heating during the day for the first heating circuit, but a required target temperature of 50°C is preset by the time program for the second heating circuit, the target value for water heating is 50°C.

The default target values of the controller for the hot drinking water are set to 10°C on delivery for the second heating circuit, which means that the water heating is only controlled by the time program of the first heating circuit.

How to set the water heating:

Hot water configuration ▾

Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the **Hot water configuration** menu item appears. Press the ▾ button to access the **Hot water configuration** submenu. You can now use the Δ and ▾ keys to open individual menu items, check the settings, and change them using the ⊕ and ⊖ keys.

The following submenu items are displayed sequentially:

- | |
|-----------------------------|
| Heat up hot water
↓ x No |
|-----------------------------|
- If you set Yes using the ⊕ button, water is heated immediately, even if it is disabled in the time program or the operating mode set. The display changes to No as soon as the hot water reaches the target value.
- | |
|----------------------------------|
| Hot water temp.
Normal 50.0°C |
|----------------------------------|
- Hot drinking water target value
- | |
|-------------------------------------|
| Hot water temp.
Increased 60.0°C |
|-------------------------------------|
- Increased target value for hot drinking water Can be used for times with increased hot water consumption or to heat the storage tank to a higher temperature temporarily to protect against legionella.
- | |
|------------------------------------|
| Hot water prog.
configuration ▾ |
|------------------------------------|
- Setting the week time program for heating water.
Press ▾ to open the menu for setting the time programs (see the Setting the hot water time program chapter).
- | |
|-------------------------------------|
| Hot water prog.
Set to default ▾ |
|-------------------------------------|
- You can reset the hot water time programs to the factory setting in the submenu. Press ▾ to open the menu for resetting the hot water time programs (see the Resetting the hot water time program chapter).
- | |
|---------------------------------|
| Hot water like
heat prog. No |
|---------------------------------|
- If you set Yes here, water is heated in parallel with the current heating time program. This guarantees that hot water is available on time for changing working hours, for example.
The menu items Hot water prog. configuration and Hot water prog. Set to default are then hidden.
- | |
|-----------------------------------|
| Differential gap
Hot water 5 K |
|-----------------------------------|
- This setting indicates how much the temperature of the hot water can drop below the current target value before the boiler starts to heat the water.

Menu system overview

6.10 Setting the hot water time program



You can set the week time program in accordance with your requirements. If your system has two heating circuits and there is a separate operating unit for the second heating circuit, you can set a separate hot water time program for each heating circuit. The heating controller then determines the target value for the hot water temperature from the time programs and the required hot water temperatures set.


How to set the hot water time programs:

- | | |
|---------------------------------|---|
| Hot water configuration ▾ | Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the Hot water configuration menu item appears. Press the ▾ button to access the Hot water configuration submenu. |
| Hot water prog. configuration ▾ | Scroll through this menu using the ▾ button until the Hot water prog. configuration menu item appears. Press the ▾ button to access the Hot water prog. configuration submenu. |
| Select day(s)
MoTuWeThFr | The selected weekdays are shown.
You can now select blocks of days or single days using the ⊕ or ⊖ keys. Days with the same time program are automatically grouped into blocks.
If you want to change the time program for one day of a weekly block, select the day and change the time program for that day. The day is then removed from the daily block. |
| MoTuWeThFr 1
Time: 05:00 | Use the ▾ button to access the time of the first switching point. The switching point number is displayed at the top right of the screen. You can change the time of the switching point using the ⊕ and ⊖ buttons. |
| MoTuWeThFr 1
06:00 Normal | Use the ▾ button to access the level of the first switching point. You can change the level of the switching point using the ⊕ and ⊖ buttons. Available levels are Normal, Increased and Locked . You can also set a delete level. The switching point is deleted from the time program. |
| MoTuWeThFr 2
Time: 22:00 | Press ▾ to access the second switching point for the selected days. You can change the time of the switching point using the ⊕ and ⊖ buttons. |
| MoTuWeThFr 2
22:00 Locked | Press ▾ to scroll to the level of the second switching point. You can change the level of the switching point using the ⊕ and ⊖ buttons. |
| MoTuWeTh 3
Time: --:-- | Press ▾ to scroll to the next switching point .
An empty switching point is displayed after the last switching point set.
If you want to enter a new switching point , set the time and then the level of the new switching point as described above. The switching points entered are automatically sorted in chronological order.
Max. 8 switching points can be set per day or per daily block. |
| Select day(s)
MoTuWeThFr | Press ▾ to return from an empty switching point to the weekday setting.
You can also press △ to scroll back through the switching points to set the weekdays. |
| Select day(s)
SaSu | Set the next day block or the next day using the ⊕ or ⊖ buttons. |
| SaSu 1
Time: 07:00 | Press ▾ to access the first switching point for the day or day block. |

Set the switching points for this day or day block as described on page 19.

Accept program? Yes 
--


When you have entered the switching points for all days or day blocks, press  to exit time program entry. You are prompted to save the **changes** to the program. If you want to reject the changes, press  to select No. If not, leave it set to Yes.




Hot water prog. configuration 
--


Press  to return to the Hot water program configuration menu item.


Example

You want to disable heating of the drinking water storage tank by the boiler for Monday to Friday from 9:00 am to 6:00 pm:

Hot water configuration 
--

Starting from the default display, press the  button to go into the main menu. Scroll through this menu using the  button until the **Hot water configuration** menu item appears. Press the  button to access the **Hot water configuration** submenu.


Hot water prog. configuration 
--

Scroll through this menu using the  button until the **Hot water prog. configuration** menu item appears.


Select day(s) MoTuWeThFr

The weekdays from Monday to Friday are preset.

MoTuWeTh 3 Time: --:--

Press  to scroll to an empty switching point.


MoTuWeThFr 3 Time: 09:00

Enter a new switching point by pressing  to set the time of the empty switching point to 09:00.


MoTuWeThFr 3 09:00 Locked

Use the  button to access the **level** of the new switching point. The Locked level is preset.



MoTuWeThFr 4 Time: --:--

Press  to scroll to an empty switching point.



MoTuWeThFr 4 Time: 18:00

Enter a new switching point by pressing  to set the time of the empty switching point to 18:00.

MoTuWeThFr 4 18:00 Normal

Use the  button to access the **level** of the new switching point. Press the  button to set the Normal level.

Accept program? Yes 
--

Press  to exit time program entry.
Press  to confirm the changes made to the time program.

Menu system overview

6.11 Resetting the hot water time program

The hot water time program can be reset to the factory setting.

How to reset the hot water time program:

Hot water configuration ▾

Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the **Hot water configuration** menu item appears. Press the ▾ button to access the **Hot water configuration** submenu.

Hot water prog. Set to default ▾

Use the ▾ button to scroll to the **Hot water prog.** Set to default menu item. Press the ▾ button to access the submenu **forresetting the hot water time program**.

Set to default No ▾

You are prompted to confirm that you want to reset **the time program to the standard settings**. Press ⊕ to set this to Yes.

Hot water prog. Set to default ▾

Press ▾ to confirm that you want to reset the time program. You return to the Hot water prog. Set to default menu item. If you leave this set to No or press the ▲ button, the time program is not reset.

Hot water time program factory setting

Mon – Fri	5:00	Normal
	22:00	Disabled
Sat, Sun	6:00	Normal
	23:00	Disabled

6.12 Setting circulation

The circulation time program is set in the Circulation configuration submenu.

If your system has two heating circuits and a separate operating unit is connected for the second heating circuit, you can also set a circulation time program for the second heating circuit. The heating controller then determines the disabling and enabling times of the circulation pump control unit from the time programs.

If, for example, the time program disables circulation during the day for the first heating circuit, but enables it for the second heating circuit, the circulation pump is enabled.

On delivery, the controller is set such that the time program disables circulation for the second heating circuit for every day. The circulation is therefore only controlled via the time program of the first heating circuit.

How to set the circulation control:

Circulation configuration ▾

Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the **Circulation configuration** menu item appears. Press the ▾ button to access the **Circulation configuration** submenu. You can now use the ▲ and ▾ keys to open individual menu items, check the settings, and change them using the ⊕ and ⊖ keys.

The following submenu items are displayed sequentially:

Circulation time program ▾

Sets the time program for controlling the circulation pump.

Press ▾ to open the menu for setting the time programs (see the Setting the circulation time program chapter).

Circulation prog. Set to default ▾

You can reset the circulation time program to the factory setting in the submenu. Press ▾ to open the menu **forresetting the circulation time program** (see Resetting the circulation time program chapter).

Circulation like HW prog. No

If you set Yes here, the circulation pump is enabled in **parallel** with the **hot water time program**. The menu items Circulation time program and Circulation prog Set to default are then hidden.

6.13 Setting the circulation time program

You can set the week time program in accordance with your requirements. If your system has two heating circuits and there is a separate operating unit for the second heating circuit, you can set a separate circulation time program for each heating circuit. The heating controller then determines whether the circulation pump is enabled from the two time programs.

How to set the circulation time programs:

Circulation configuration ▾

Starting from the default display, press the ▾ button to go into the main menu. Scroll through this menu using the ▾ button until the **Circulation configuration** menu item appears. Press the ▾ button to access the **Circulation configuration** submenu.

Circulation time program ▾

Scroll through this menu using the ▾ button until the **Circulation time program** menu item appears. Press the ▾ button to access the **Circulation time program** submenu.

Select day(s)
MoTuWeThFr

The selected weekdays are shown.

You can now select **blocks of days** or single **days** using the ⊕ or ⊖ keys. Days with the same time program are automatically grouped into blocks.

If you want to change the time program for one day of a weekly block, select the day and change the time program for that day. The day is then removed from the daily block.

MoTuWeThFr 1
Time: 06:00

Use the ▾ button to access the **time** of the first switching point. The **switching point number** is displayed at the top right of the screen. You can change the time of the switching point using the ⊕ and ⊖ buttons.

MoTuWeThFr 1
06:00 Unlocked

Use the ▾ button to access the **level** of the first switching point. You can change the level of the switching point using the ⊕ and ⊖ buttons. Available levels are **Unlocked** and **Locked**. You can also set a **delete** level. The switching point is deleted from the time program.

MoTuWeThFr 2
Time: 22:00

Press ▾ to access the second switching point for the selected days. You can change the **time** of the switching point using the ⊕ and ⊖ buttons.

MoTuWeThFr 2
22:00 Locked

Press ▾ to scroll to the level of the second switching point. You can change the **level of the switching point** using the ⊕ and ⊖ buttons.

MoTuWeTh 3
Time: --:--

Press ▾ to scroll to the **next switching point**.

An **empty switching point** is displayed after the last switching point set.

If you want to enter a **new switching point**, set the time and then the level of the new switching point as described above. The switching points entered are automatically sorted in chronological order.

Max. 8 switching points can be set per day or per daily block.

Select day(s)
MoTuWeThFr

Press ▾ to return from an empty switching point to the weekday setting.

You can also press △ to scroll back through the switching points to set the weekdays.

Select day(s)
SaSu

Set the next day block or the next day using the ⊕ or ⊖ buttons.

Menu system overview

SaSu
Time: 07:00

Press ∇ to access the first switching point for the day or day block.

Accept program?
Yes \triangle

Set the switching points for this day or day block as described above.

When you have entered the switching points for all days or day blocks, press \triangle to exit time program entry. You are prompted to save the **changes** to the program. If you want to reject the changes, press \ominus to select No . If not, leave it set to Yes.

Circulation time
program ∇

Press \triangle to return to the Circulation time program menu item.

6.14 Resetting the circulation time program

The circulation time program can be reset to the factory setting.

How to reset the circulation time program:

Circulation
configuration ∇

Starting from the default display, press the ∇ button to go into the main menu. Scroll through this menu using the ∇ button until **the Circulation configuration** menu item appears. Press the ∇ button to access **the Circulation configuration** submenu.

Circulation prog
Set to default ∇

Use the ∇ button to scroll to **the Circulation prog Set** to default menu item. Press the ∇ button to access the submenu for resetting the circulation time program.

Set to default
No ∇

You are prompted to confirm that you want **to reset the time program to the standard settings**. Press \oplus to set this to **Yes**. Press ∇ to confirm that you want to **reset the time program**.

Circulation prog
Set to default ∇

You return to the Circulation prog Set to default menu item. If you leave this set to No or press the \triangle button, the time program is not reset.

Circulation time program default settings






Mon – Fri	6:00	Enabled
	8:00	Disabled
	11:00	Enabled
	13:00	Disabled
	18:00	Enabled
	22:00	Disabled
Sat, Sun	7:00	Enabled
	9:00	Disabled
	11:00	Enabled
	13:00	Disabled
	18:00	Enabled
	23:00	Disabled

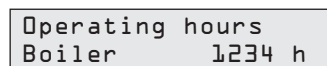
6.15 Querying the meter

The heating controller totals the operating hours of the boiler and counts how often the burner started. You can query both counters here and reset them to zero.

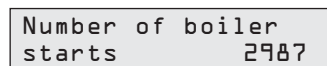
How to query the counters:



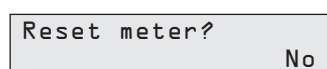
Starting from the default display, press the  button to go into the main menu. Scroll through this menu using the  button until the **Query meter** menu item appears. Press the  button to access the **Query meter** submenu. You can now view the individual menu items using the  and  buttons.



Operating hours of the boiler since commissioning or since the counter was last cleared.



Number of starts of the boiler since commissioning or since the counter was last cleared.



Press the **Yes**  button, both counters are reset to zero.



Note

When the Paradigma Pelletti pellet boiler is used (software version 2.2 of the automatic pellet burner and above), the operating hours and number of burner starts determined by the boiler are transmitted to the heating controller.

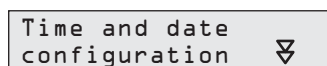
These values can only be deleted at the boiler. The Reset meter? setting is not displayed.








6.16 Setting the time and date

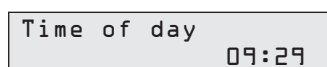
The date and time are set ex works and are preserved even if there is a power failure.

The time is switched to daylight savings time automatically.

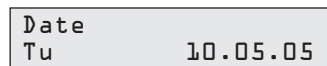
How to set the date and time:



Starting from the default display, press the  button to go into the main menu. Scroll through this menu using the  button until the **Time and date configuration** menu item appears. Press the  button to access the **Time and date configuration** submenu. You can now use the  and  keys to open individual menu items, check the settings, and change them using the  and  keys.



Press the  or  buttons to set the time.





Press the  or  buttons to set the date.

6.17 Key lock and display

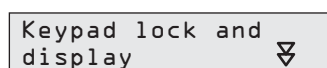
You can disable the controls of the heating controller to prevent children changing the settings, for example.






When the controls are disabled, Keys locked is displayed.

Press the  and  keys at the same time to cancel the key lock. The key lock is activated again 15 min after the last key is pressed.

How to set the key lock:



Starting from the default display, press the  button to go into the main menu. Scroll through this menu using the  button until the **Keypad lock and display** menu item appears. Press the  button to access the **Keypad lock** submenu.

Menu system overview

Keypad lock
activated No

You can activate or deactivate the key lock using the ⊕ and ⊖ buttons.

Standard display
Outside temp.

Scroll through this menu using the ▽ button until the Standard display menu item appears.

The ⊕ or ⊖ buttons allow you to select whether the measured external temperature or the room temperature measured by the operating unit is to be shown in the default display.

Standard display
Heating cir. 1

In systems with two heating circuits but only one operating unit, you can use the following menu item to set whether the default display shows the data for the first or second heating circuit. Functions outside the menu structure (changing room temperature, changing operating mode and party function) also affect the heating circuit selected here (see also the Heating controller operation and display chapter).

6.18 Manual setting, monitoring program

You can run the heating system independently of the connected sensors. The boiler and the connected pumps start. The mixers and, where applicable, the diverter valve between the hot drinking water storage tank and heating must be set to the central setting manually.

Monitoring
program ▽

Starting from the default display, press the ▽ button to go into the main menu. Scroll through this menu using the ▽ button until the **Monitoring program** appears. Press the ▽ button to access the **Monitoring program** submenu.

Operating mode
Manually

Press ⊕ or ⊖ to set the operating mode to **Manually**.





If you press ▽ to scroll on, you can query the status of the components connected to the heating system (pumps, mixer, diverter valve).

7. Faults

The heating controller shows fault messages of the Paradigma gas condensing boiler and – if a SystsSolar solar controller or SystsSolar Aqua are connected to the heating controller via a bus line – the fault messages of the solar controller.

It also detects failures of the external sensor and failures of the TPO sensor in buffer systems. Failures of other sensors are not reported, as the configuration of the heating system is determined via the connected sensors.

If a fault occurs, please contact your installation engineer at the earliest opportunity, stating the fault code.

Query fault code 	Starting from the default display, press the  button to go into the main menu. Scroll through this menu using the  button until the Query fault code menu item appears. Press the  button to access the Query fault code submenu.
Sensor fault --	Fault code 10 indicates a malfunctioning external sensor and fault code 11 indicates a malfunctioning TPO sensor.
Boiler fault 02	The fault code transmitted by the Paradigma boiler is shown (see the documents supplied with the corresponding Paradigma boiler). If there is a communication error between the Paradigma boiler and the heating controller, No OT bus or No LON bus is displayed instead of the fault code. The Paradigma Pelletti pellet boiler with comfort ash extraction displays error code 201 when the ash container is almost completely full and the error code 199 when it is completely full. Please empty the pellet boiler's ash container (see the operating instructions for your pellet boiler).
Solar fault 20	The fault code transmitted by the SystsSolar or SystsSolar Aqua solar controller is displayed (see the documents for the solar controller).

8. Inspection, maintenance and cleaning the heating controller

The heating controller does not require maintenance work.

The sensors and the functions of the connected devices (pumps, diverter valve, mixers) must be checked for proper function as part of the annual maintenance of the boiler by an installation engineer.

Clean the operating unit and the wall housing - if applicable - using standard household cleaning agents (do not use abrasives). Wipe the unit clean using a very slightly damp cloth.

9. Notes on disposal

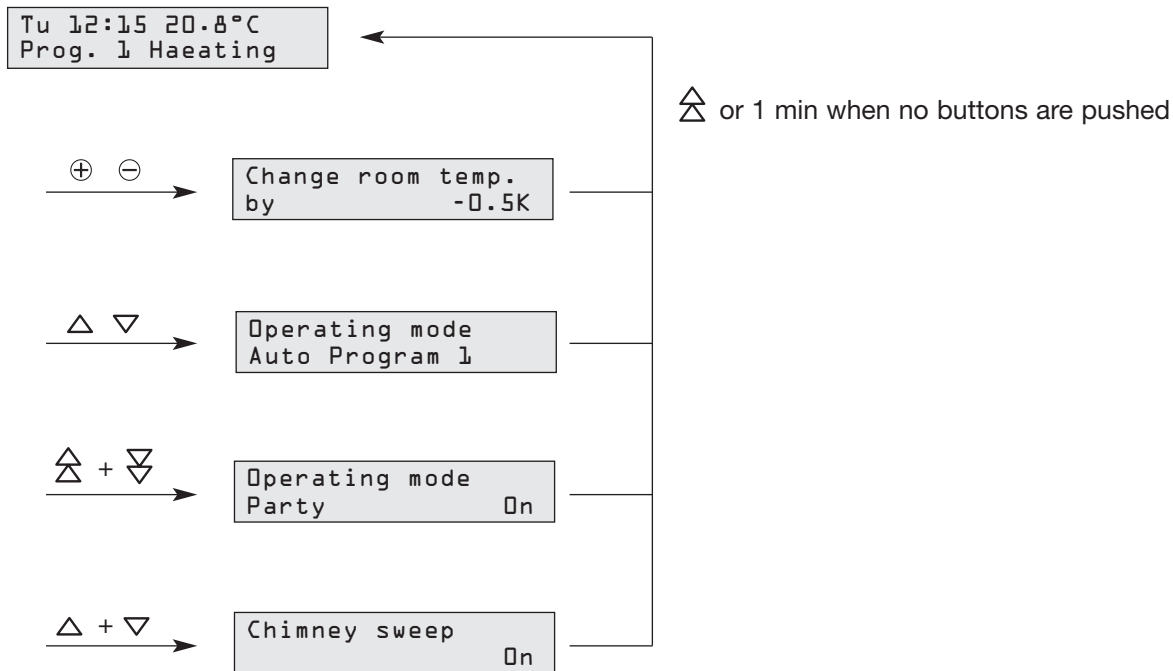
A battery is located on the heating controller's circuit board and is used to back up the clock time setting.

If this battery is replaced, the old battery must be disposed of properly.

Likewise, if the controller or the boiler is disposed of the battery must be removed and disposed of properly.

11. Menu system overview

Default display



Default display for active floor screed heating program

TV 35°C Day 1
Dry floor

Default display for disabled keys

Keys locked
Press + and -

Maintenance display

Service boiler
01234 56789

Display of a fault

Sensor fault
Prog. 1 Heating

Boiler fault
Prog. 1 Heating

Solar fault
Prog. 1 Heating

Message displays for Paradigma Pelletti pellet boiler with comfort ash extraction

ash empty
Prog. 1 Heating

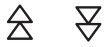
ash full
Prog. 1 Heating

Menu system overview

Menu structure

Default display

Tu 12:15 20.8°C
Prog. 1 Heating



Main menu:

Query Temperatures ▾



Query solar data ▾ *3



Submenus:

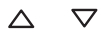
Outside temp.
TA -2.0°C



Room temperature
20.3°C



Room temperature
Target 20.5°C



Hot water temp.
TWO 48.6°C *2



Hot water temp.
Target 50.0°C *2



Supply temp heat
circuit TV 45.8°C *4



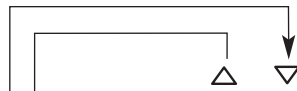
Supply temp.
Target 45.1°C



Return temp.
TR 31.2°C



Supply heating
circuit 2 37.2°C *5



Supply temp. HC2
Target 37.6°C *5



Return heating
circuit 2 37.2°C *5



Buffer temp.
top TPO 60.1°C *6



Buffer temp.
Target 60.6°C *7



T buffer bottom
TPU 43.7°C *7



Circulation
TZR 45.2°C *8



Circulation
Button Off *8

Collector
TSA 90.3°C



Solar output
3 kW

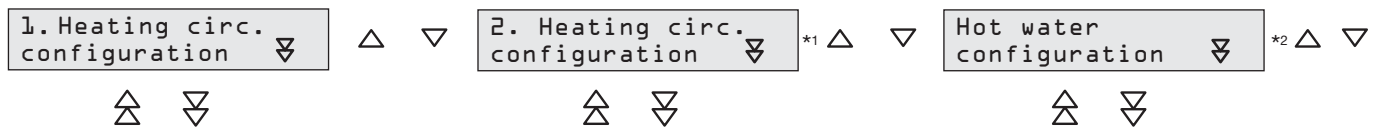


Daily Yield
15 kWh

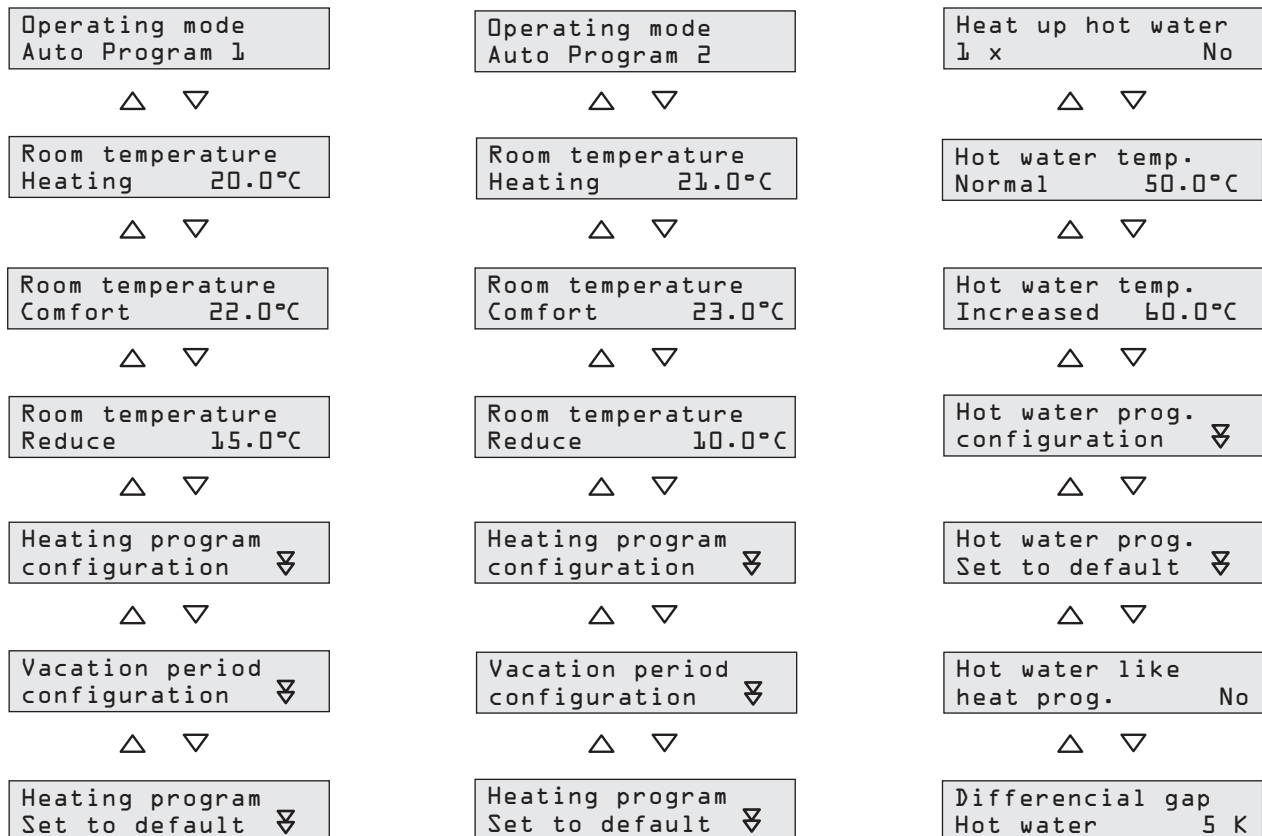


Solar Yield
1525 kWh

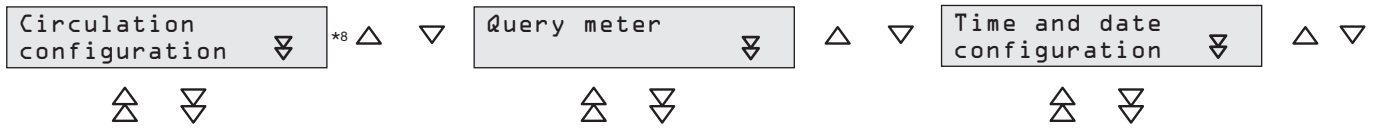
Main menu (continued):



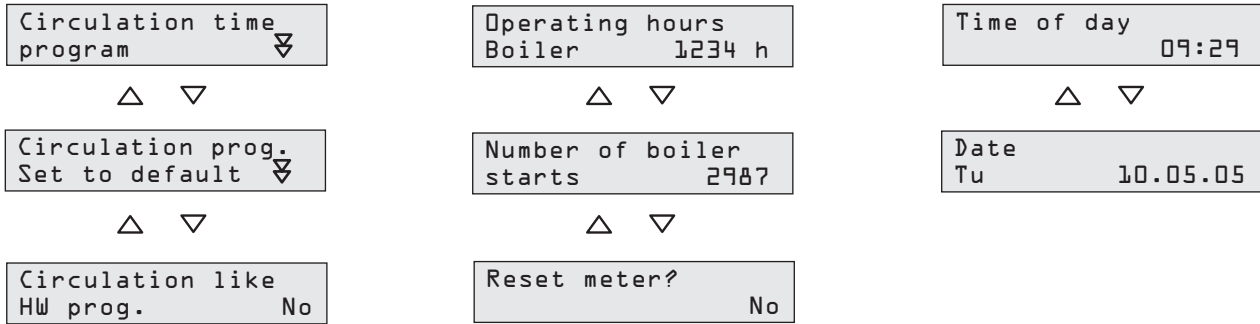
Submenus:



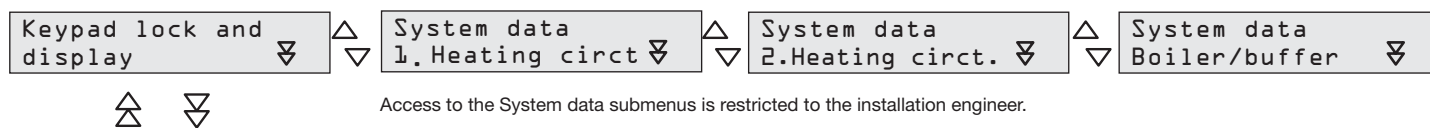
Main menu (continued):



Submenus:



Main menu (continued):



Submenus:

Keypad lock activated No

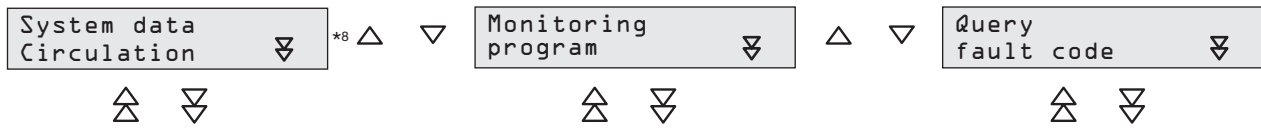


Standard display Outside temp.



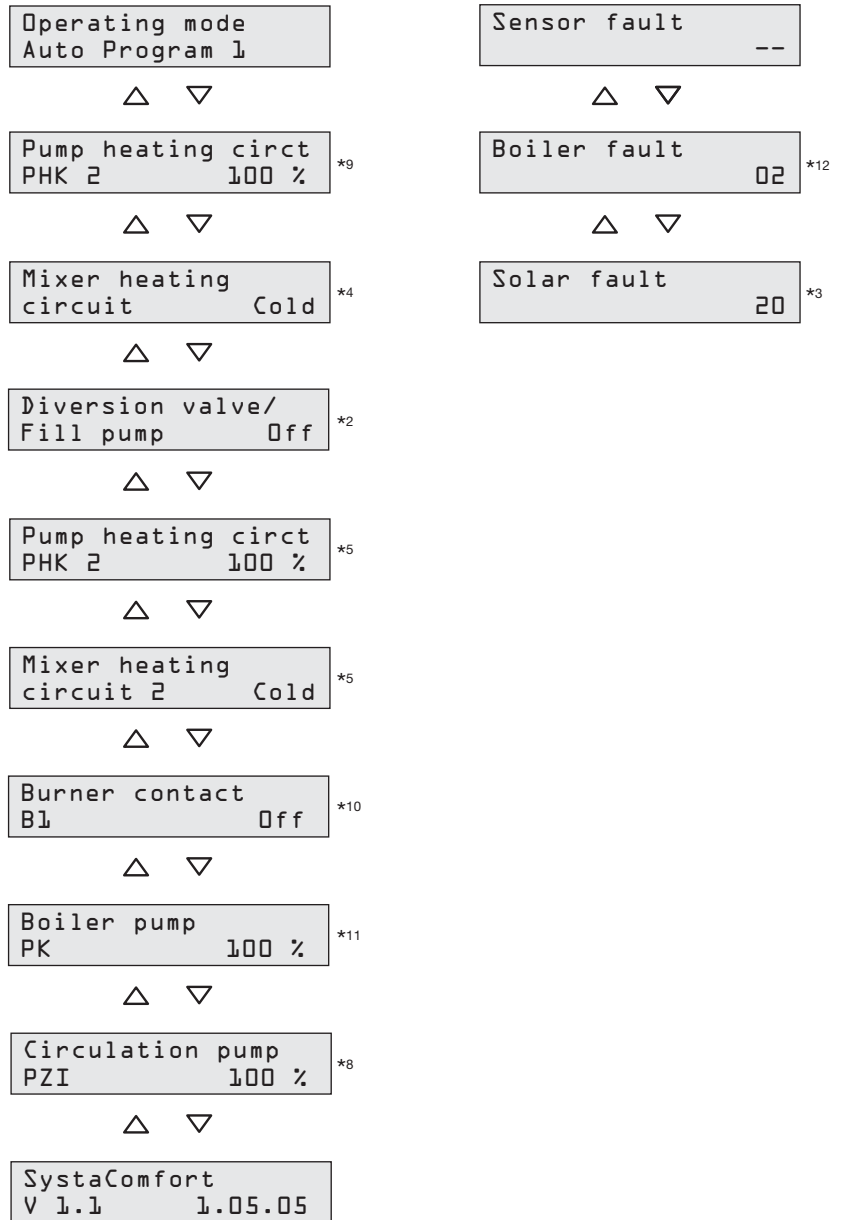
Standard display Heating cir. 1 *1

Main menu (continued):

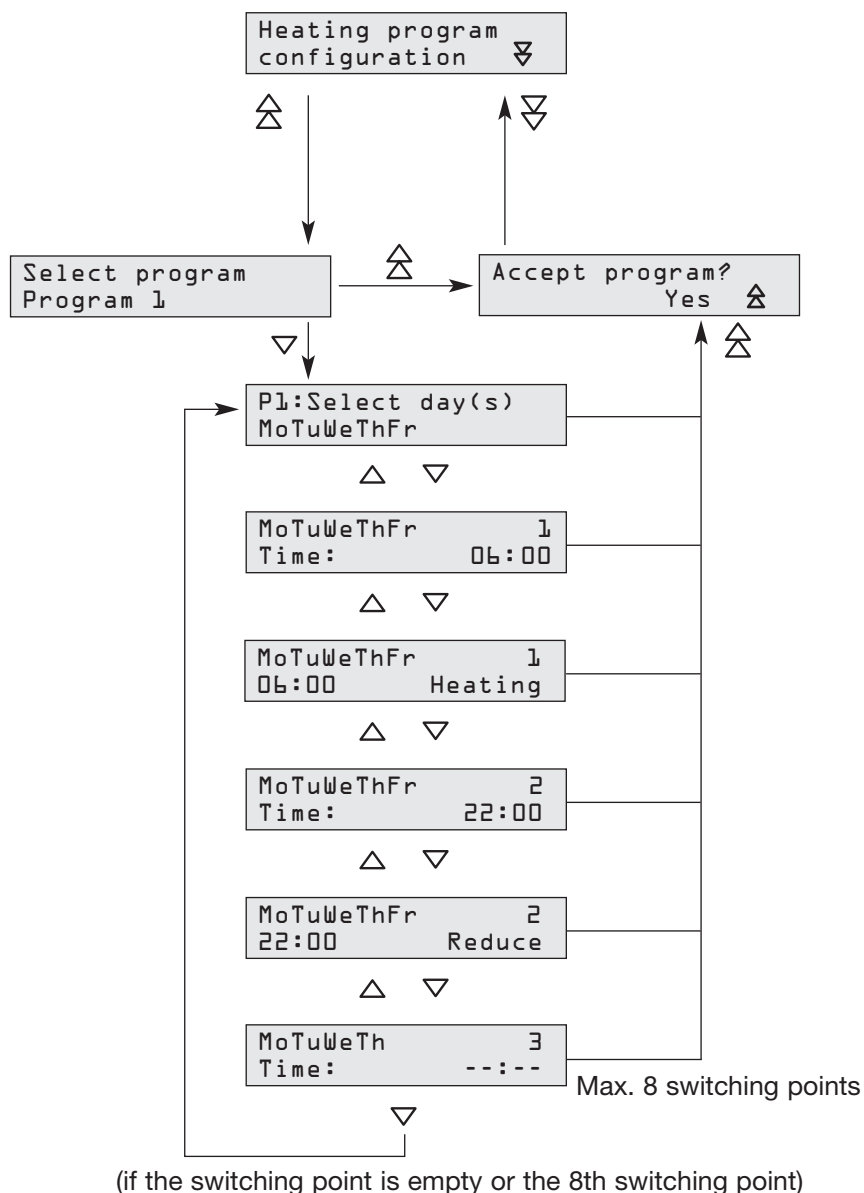


Access to the submenu is restricted to the installation engineer.

Submenus:



Setting the heating time programs

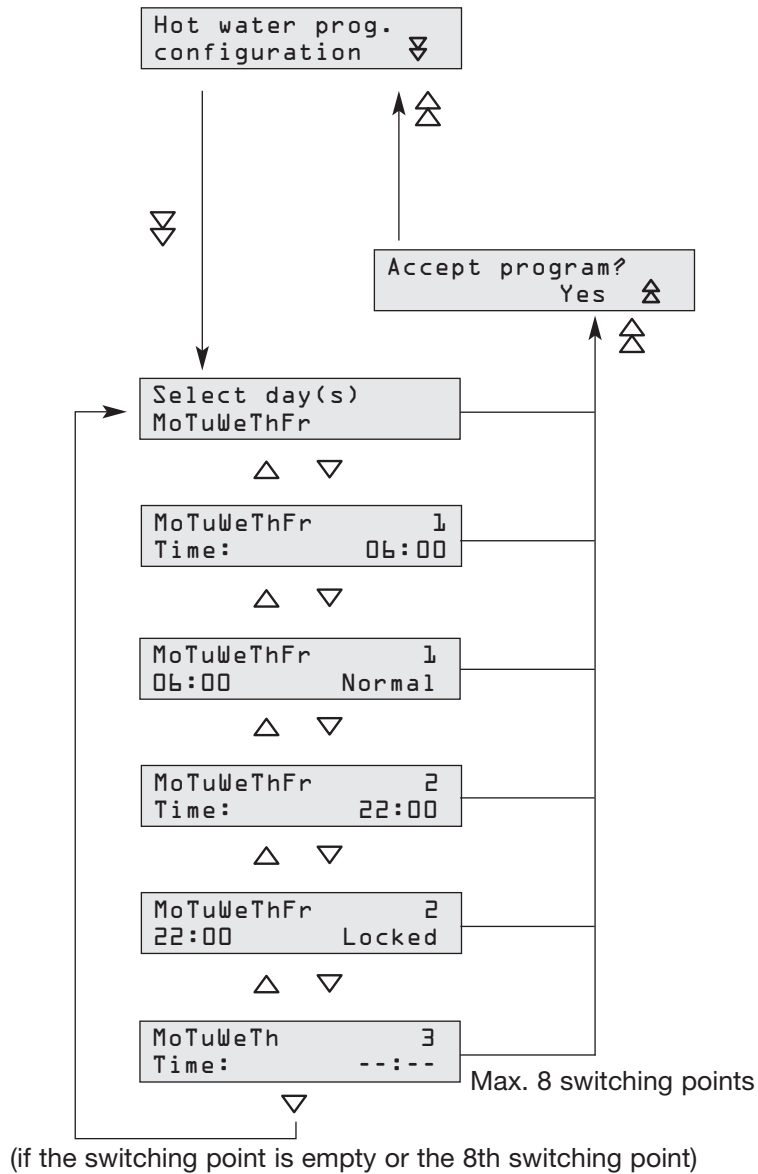


- Available levels: Heating, Comfort, Reduce (lowering), delete
- Delete switching point: Set delete level or set time to --:-- (between 11:45 pm and 00:00)
- Insert switching point: Set the time and level of an empty switching point
- The switching points are automatically sorted in chronological order if the Select day(s) menu item is selected.
- Days with identical switching points are automatically grouped in blocks if the Select day(s) menu item is selected.
- Select day(s) menu item: Display the selected program (P1, P2 or P3)
- Set the time or the level: Display the number of the switching point (1...8)

Set holiday period, reset heating time program to standard settings

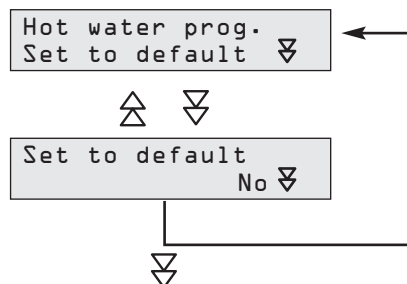


Setting the hot water time program

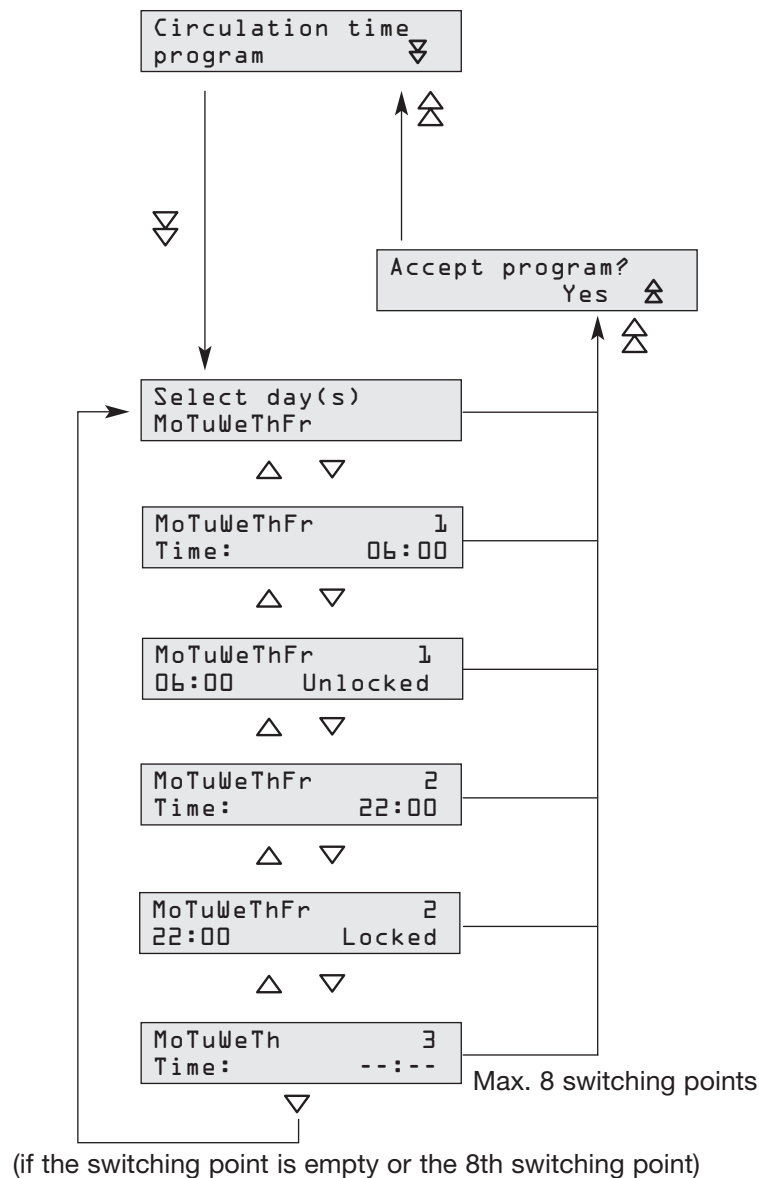


- Available levels: Normal, Increased, Locked, delete
- Delete switching point: Set delete level or set time to --:-- (between 11:45 pm and 00:00)
- Insert switching point: Set the time and level of an empty switching point
- The switching points are automatically sorted in chronological order if the Select day(s) menu item is selected.
- Days with identical switching points are automatically grouped in blocks if the Select day(s) menu item is selected.
- Set the time or the level: Display the number of the switching point (1...8)

Reset hot water time program to standard settings

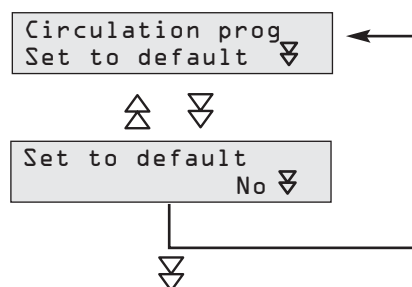


Setting the circulation time program



- Available levels: Unlocked, Locked, delete
- Delete switching point: Set delete level or set time to --:-- (between 11:45 pm and 00:00)
- Insert switching point: Set the time and level of an empty switching point
- The switching points are automatically sorted in chronological order if the Select day(s) menu item is selected.
- Days with identical switching points are automatically grouped in blocks if the Select day(s) menu item is selected.
- Set the time or the level: Display the number of the switching point (1...8)

Reset hot water time program to standard settings



Conditions for display

- *1: For systems with 2 heating circuits but only one operating unit for both heating circuits
- *2: Water heating available
- *3: The solar controller is connected to the heating controller via the bus line
- *4: First heating circuit is mixed⁵: Second heating circuit available
- *6: Fresh water storage tank, combined storage tank or third-party boiler used
- *7: Fresh water storage tank or combined storage tank used
- *8: Circulation available
- *9: Fresh water storage tank or combined storage tank available or first heating circuit mixed or second heating circuit available
- *10: Third-party boiler used (no LON or OpenTherm interface)
- *11: Fresh water storage tank or combined storage tank or (first heating circuit unmixed and no second heating circuit available)
- *12: Paradigma boiler used (LON or OpenTherm interface)

12. What to do if...

... it is too cold in the rooms

- Open the thermostat valves further.
- Increase the required room temperature (see Chapter 5.2).
- Check the operating mode, ensure that it is not set to Off, Summer or Contin. reduce (see Chapter 5.3).
- Check the heating time program, is the correct heating time program active? (Operating mode Auto Program 1, 2 or 3) (see Chapter 5.3 and 6.5).
- Ensure that the boiler is not malfunctioning (see Chapter 8).

... it is too hot in the rooms

- Close the thermostat valves further.
- Decrease the required room temperature (see Chapter 5.2).

... heating is required later than usual

- Use the party function to reactivate the heating system (see Chapter 5.4).

... you require hot water at an unusual time

- Heat the water immediately (see Chapter 6.9).

... the chimney sweep comes

- Activate the chimney sweep function (see Chapter 5.5).

... there is no hot water

- Check the operating mode, ensure that it is not set to Off, Reduce or Contin. reduce (see Chapter 5.3).
- Check the hot water time program. Is water heating enabled? (See Chapter 6.10).
- Ensure that the boiler is not malfunctioning (see Chapter 7).

... the water is too hot

- Check the required hot water temperature (see Chapter 6.9).
- Check the measured hot water temperature (see Chapter 6.2). Contact your installation engineer if the sensor is malfunctioning.

... you want to change the heating times

- Set the heating time programs (see Chapter 6.5).

... you go on holidays

- Enter a holiday period (see Chapter 6.6).

... you want to read the measured temperatures

- Open the Query temperatures submenu (see Chapter 6.2).

... a fault is displayed

- Query the fault code (see Chapter 7) and contact your installation engineer.

... the maintenance reminder is displayed

- Contact your installation engineer and make a service appointment.

Paradigma Energie-
und Umwelttechnik
GmbH & Co. KG

Ettlinger Strasse 30
76307 Karlsbad, Germany

Phone +49 7202 922-0
Fax +49 7202 922-100

info@paradigma.de
www.paradigma.de

