Vaillant

VRT 350

Operating instructions

Contents

1 Safety

1.1 Action-related warnings

Classification of action-related warnings

The action-related warnings are classified in accordance with the severity of the possible danger using the following warning symbols and signal words:

Warning symbols and signal words

Danger!
Imminent danger to life or risk of severe personal injury

Danger!
Risk of death from electric shock

Warning.
Risk of minor personal injury

Caution.
Risk of material or environmental damage

1.2 Intended use

There is a risk of injury or death to the user or others, or of damage to the product and other property in the event of improper use or use for which it is not intended.

The product is intended for controlling a heating installation with heat generators from the same manufacturer via the eBUS interface and the domestic hot water generation for a connected domestic hot water cylinder.

Intended use includes the following:

– observance of the operating instructions included for the product and any other installation components
– compliance with all inspection and maintenance conditions listed in the instructions.

This product can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the product in a safe way

and understand the hazards involved. Children must not play with the product. Cleaning and user maintenance work must not be carried out by children unless they are supervised.

Any other use that is not specified in these instructions, or use beyond that specified in this document, shall be considered improper use. Any direct commercial or industrial use is also deemed to be improper.

Caution.

Improper use of any kind is prohibited.

1.3 General safety information

1.3.1 Danger caused by improper operation

Improper operation may present a danger to you and others, and cause material damage.

▸ Carefully read the enclosed instructions and all other applicable documents, particularly the "Safety" section and the warnings.

▸ Only carry out the activities for which instructions are provided in these operating instructions.

1.3.2 Risk of scalding from hot water

There is a risk of scalding at the hot water draw-off points if the set target temperature is greater than 60 °C. Young children and elderly persons are particularly at risk, even at lower temperatures.

▸ Select a moderate target temperature.

1.3.3 Danger caused by a malfunction

▸ Ensure that room air can circulate freely around the control, and that the control is not covered by furniture, curtains or other objects.

▸ Ensure that all radiator valves in the room where the control is installed are fully open.

▸ Only operate the heating installation when it is in a technically perfect condition.

▸ Ensure that any faults and damage that may negatively affect safety are eliminated immediately.

1.3.4 Risk of material damage caused by frost

▸ Ensure that the heating installation always remains in operation during freezing conditions and that all rooms are sufficiently heated.
▸ If you cannot ensure the operation, have a competent person drain the heating installation.

1.3.5 Frost damage caused by switching the unit off

If you switch off the heating installation, parts of the heating installation may be damaged by frost.

▸ Do not disconnect the heat generator from the power grid.
▸ Leave the heating installation main switch in the "1" position.

1.3.6 Frost damage caused by excessively low room temperature

If the room temperature is set too low in individual rooms, sections of the heating installation might be damaged by frost.

▸ If you are absent during a frosty spell, ensure that the heating installation remains in operation and the rooms are warmed adequately.
▸ Please note the frost protection function.

2 Notes on the documentation

2.1 Observing other applicable documents

▶ Always observe all operating instructions enclosed with the installation components.

2.2 Storing documents

▶ Store these instructions and all other applicable documents for further use.

2.3 Validity of the instructions

These instructions apply only to:

Product article number

VRT 350	0020124475

3 Product description

3.1 Unit design
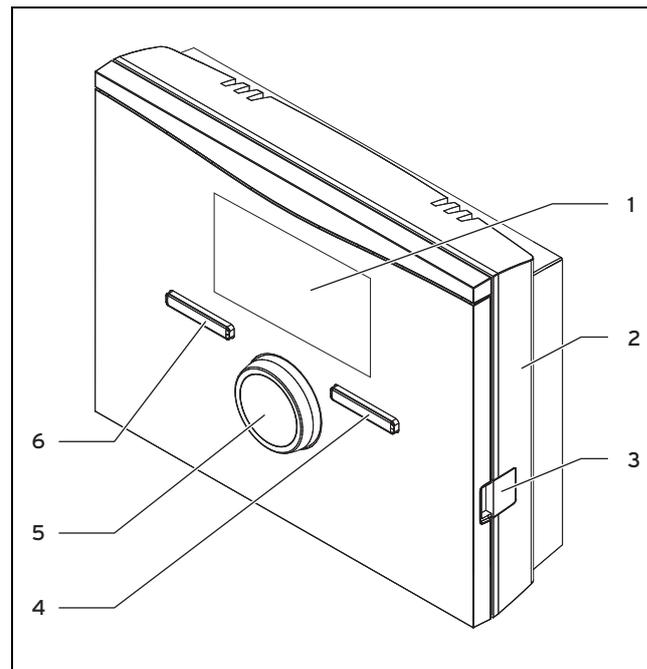
1	Display	4	Right selector button
2	Wall base	5	Rotary knob
3	Diagnosis socket	6	Left selector button

3.2 Control function

The control controls the **Vaillant** heating installation and domestic hot water generation of a connected domestic hot water cylinder.

If the control is installed in a living room, you can operate the heating installation and domestic hot water generation from a living room.

3.2.1 Heating installation

The controller is a room-temperature-controlled controller and must be installed in the living room. You can use the controller to set the desired temperature for different times of the day and for different days of the week. The temperature sensor measures the room temperature and sends the values to the controller. At lower room temperatures, the controller switches the heater on. Once the room temperature reaches the desired set temperature, the controller switches the heater off. The controller therefore reacts to the fluctuations of the room temperature and constantly controls the room temperature to the temperature that you have set.

Data exchange and power supply on the controller are via an eBUS interface. The controller can be equipped with the Vaillant diagnosis software and the Vaillant Internet communication system for remote diagnosis and remote settings.

3.2.2 Domestic hot water generation

You can use the control to set the temperature and time for domestic hot water generation. The heat generator heats the water in the domestic hot water cylinder until it reaches the set temperature. You can set a time period during which hot water should be available in the domestic hot water cylinder.

3.2.3 VR 66 Control Centre

If a **VR 66** Control Centre is connected, you can control two independent heating circuits with just one **VRT 350** controller; e.g. one heating circuit is in the single-occupancy house and the second heating circuit is in a guest apartment in this building. In this case, one controller is always the main controller (Zone 1) and the other controller is the auxiliary controller (Zone 2). For Zone 1, which is controlled via the main controller, all of the functions are available to you. For Zone 2, you can use the auxiliary controller to set the desired temperature for different times of the day and different days of the week.

3.3 Frost protection function

The frost protection function protects the heating system and apartment from frost damage.

The frost protection function monitors the room temperature. If the room temperature

– falls below 5 °C, the controller switches the heater on and controls the system to a target room temperature of 5 °C.
– exceeds 5 °C, the heater is switched off but the room temperature monitoring remains active.

3.4 Data plate

The data plate is located inside the control and is not accessible from the outside.

3.5 Serial number

The 10-digit article number can be found in the serial number. You can view the serial number under **Menu → Information Serial number**. The article number is found in the second line of the serial number.

3.6 CE marking

$\mathsf{C}\,\mathsf{E}$

The CE marking shows that the products comply with the basic requirements of the applicable directives as stated on the declaration of conformity.

The declaration of conformity can be viewed at the manufacturer's site.

4 Operation

4.1 Operating structure

4.1.1 Adjustment and display levels

The product has two adjustment and display levels.

The end user level contains information and setting options that you require as the end user.

Overview of operating levels (→ Page 26)

The installer level is reserved for the competent person. It is protected by a code. Only competent persons may change any settings in the installer level.

4.1.2 Menu structure design

The menu structure of the controller is split into three levels. There are two selection levels and one setting level. From the basic display, you can access selection level 1 and, from there, you can access the menu structure for one level up or down. The setting level is accessed from the lowest selection level.

4.1.3 Basic display
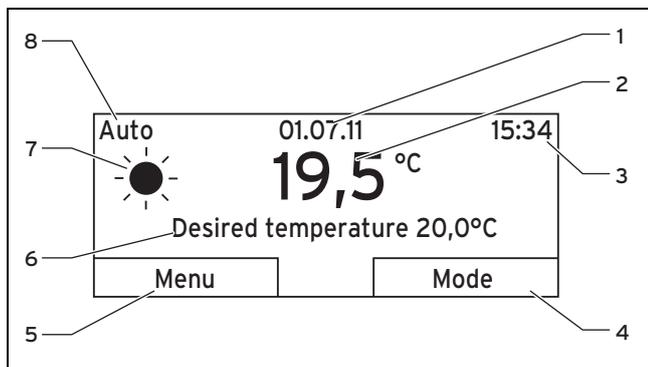
1	Date
2	Current room temperature
3	Time
4	Current function of the right-hand selector button (soft key function)
5	Current function of the left-hand selector button (soft key function)
6	Desired temperature
7	Symbol for heating mode in **Auto** mode
8	Mode set for the heating mode

The basic display shows the current settings and values of the heating installation. If you make a setting on the control, the display on the screen switches from the basic display to the display with the new setting.

The basic display appears when you

– press the left-hand selection button and thus exit selection level 1.

– do not operate the control for more than 5 minutes.

4.1.3.1 Symbols for the Auto operating mode

Symbol	Meaning
☀	Day mode: Within a set time period
☾	Night mode: Outside a set time period

4.1.3.2 Soft key function

Both selection buttons have a soft key function. The current functions of the selection buttons are displayed in the bottom display line. Depending on the selection level selected in the menu structure, the list entry or the value, the current function for the left- and right-hand selection buttons may be different.

If, for instance, you press the left-hand function button, the current function of the left function button switches from **Menu** to **Back**.

4.1.3.3 Menu

If you press the left-hand selection button, **Menu**, you switch from the basic display to selection level 1 of the menu structure.

4.1.3.4 Operating mode

If you press the right-hand selection button, **Operating mode**, you access the settings directly from the basic display under **Operating mode**.

4.1.3.5 Desired temperature

Depending on the operating mode, the desired temperature may be greyed out on the basic display. This is the case, for example, in **Summer mode**. As heating is not operational in **Summer mode**, and therefore the heating circuit is off, there is no desired temperature.

4.1.4 Selection level
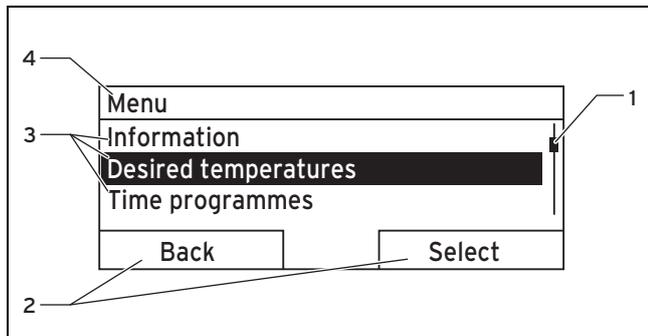
| 1 | Scroll bar | 3 | Selection level list entries |
| 2 | Current functions of the right- and left-hand selection buttons | 4 | Current function or selection level |

Through the selection levels, you navigate to the setting level in which you wish to read or change settings.

4.1.5 Setting level
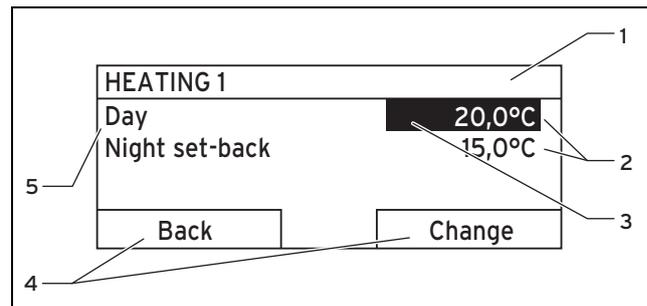
1	Current selection level	4	Current functions of the right- and left-hand selection buttons
2	Values		
3	Selection (current selection)	5	Setting level

In the setting level, you can select the values you want to read or change.

4.2 Operating concept

The control is operated using two selection buttons and a rotary knob.

The display shows a highlighted selection level, a setting level or a highlighted value with white font on a black background. A flashing, highlighted value means that you can change the value.

If you do not operate the control during a period of more than 5 minutes, the basic display appears again.

4.2.1   Example: Operation in the basic display

From the basic display, you can change the **Desired day temperature** directly for the current day by turning the rotary knob.

```
┌─────────────────────────────────────┐
│                                       │
│        Desired day temperature        │
│          Only today: 18°C             │
│         For permanent change          │
│             Press OK                  │
│                                       │
├─────────────────────┬─────────────────┤
│                     │      OK         │
└─────────────────────┴─────────────────┘
```
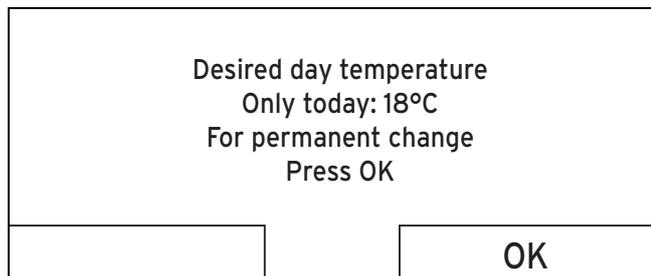
In the display, a request appears asking if you want to change the **Desired day temperature** for the current day or on a permanent basis.

4.2.1.1 To change the Desired day temperature for the current day only

▶ Turn the rotary knob to set the desired temperature.
  ◁ The display switches back to the basic display after 12 seconds. The set desired temperature applies only until the end of the active time period of the current day.

4.2.1.2 Changing the Desired day temperature permanently

1. Turn the rotary knob to set the desired temperature.
2. Press the right-hand selection button, **OK**.
   ◁ The display switches to the basic display. The new desired day temperature is applied permanently.

4.2.2   Operating example, changing the date

```
┌─────────────────────────────────────┐
│ Auto        01.07.11          15:34   │
│   ☀                                   │
│         19,5 °C                       │
│     Desired temperature 20,0°C        │
├─────────────────────┬─────────────────┤
│      Menu           │      Mode        │
└─────────────────────┴─────────────────┘
```
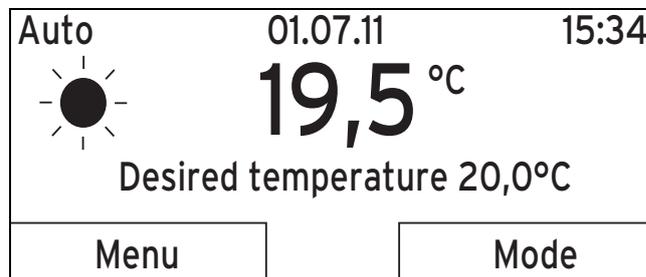
1. If the display does not show the basic display, press the left-hand selection button, **Back**, until the basic display appears again.
2. Press the left-hand selection button, **Menu**.
   ◁ The control is now in selection level 1. The left-hand selection button now has the function **Back** (to the previous selection level), the right-hand selection button has the function **Select** (to the next selection level).

Menu	
Information	
Desired temperatures	
Time programmes	
Back	Select
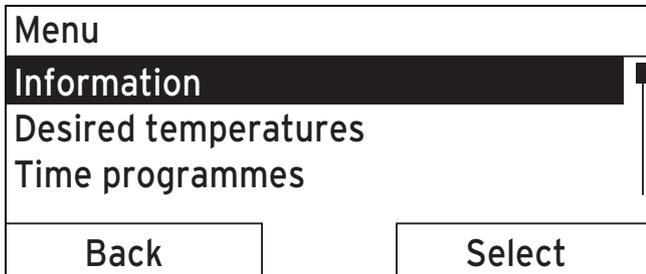
3. Turn the rotary knob until the **Default settings** list entry is highlighted.

Menu	
Time programmes	
Days away scheduling	
Basic settings	
Back	Select

4. Press the right-hand selection button, **Select**.
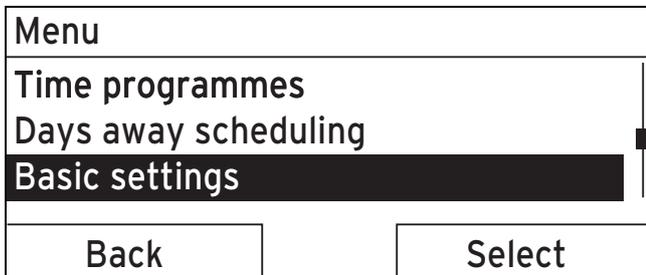   ◁ The control is now in selection level 2.

Basic settings	
Language	
Date/time	
Display	
Back	Select
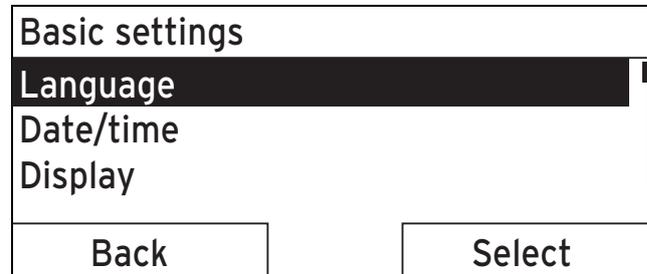
5. Turn the rotary knob until the **Date/Time** list entry is highlighted.

Basic settings	
Language	
Date/time	
Display	
Back	Select
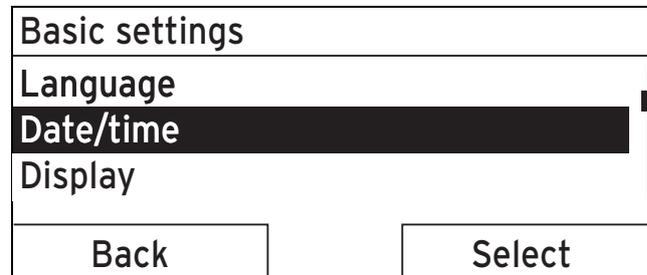
6. Press the right-hand selection button, **Select**.
   ◁ The control is now in the **Date** setting level. The value for the day is highlighted. The left-hand selection button now has the function **Back** (to go back to the previous selection level), the right-hand selection button has the function **Change** (the value).

```
┌─────────────────────────────────┐
│ Date/time                       │
├─────────────────────────────────┤
│ Date                   13.03.11 │
│ Time                     08:15  │
│ Daylight saving time        Off │
│                                 │
├──────────────┬──────────────────┤
│    Back      │     Change       │
└──────────────┴──────────────────┘
```

7. Press the right-hand selection button, **Change**.

    ◁ The highlighted value starts to flash; you can now change the value by turning the rotary knob.

    ◁ The left-hand selection button now has the function **Cancel** (the change); the right-hand selection button has the function **OK** (to confirm the change).

```
┌─────────────────────────────────┐
│ Date/time                       │
├─────────────────────────────────┤
│ Date                   13.03.11 │
│ Time                     08:15  │
│ Daylight saving time        Off │
│                                 │
├──────────────┬──────────────────┤
│   Cancel     │       OK         │
└──────────────┴──────────────────┘
```

8. Turn the rotary knob to change the value.

```
┌─────────────────────────────────┐
│ Date/time                       │
├─────────────────────────────────┤
│ Date                   14.03.11 │
│ Time                     08:15  │
│ Daylight saving time        Off │
│                                 │
├──────────────┬──────────────────┤
│   Cancel     │       OK         │
└──────────────┴──────────────────┘
```

9. Press the right-hand selection button, **OK**, to confirm the change.

    ◁ The control has stored the changed date.

```
┌─────────────────────────────────┐
│ Date/time                       │
├─────────────────────────────────┤
│ Date                   14.03.11 │
│ Time                     08:15  │
│ Daylight saving time        Off │
│                                 │
├──────────────┬──────────────────┤
│    Back      │     Change       │
└──────────────┴──────────────────┘
```

10. If the highlighted value that is flashing is correct, press the right-hand selection button **OK** again.

    ◁ The left-hand selection button now has the function **Back**.

11. Press the left-hand selection button **Back** repeatedly to revert back to the previous selection level and to access the basic display from selection level 1.

5 Operating and display functions

The path details given at the start of each function description indicate how you reach this function in the menu structure.

You can use the left-hand selection button **Menu** to set the operating and display functions.

You can find which functions are available for zone 2 via the auxiliary control in the "Overview of operating levels" table or in the menu tree overview.

5.1 Information

5.1.1 Reading the system status

Menu → Information → System status

– Under **System status,** you can read a list containing the current values for the system: status, water pressure, hot water generation and the current values for **HEATING 1**.

There is also information under **System status**

– regarding the active time period (**Auto day temp until**),
– regarding exceptions in the timer programs that you may have set using the **Days away from home** function.

Only the desired temperatures for **Day temperature** and **Setback temperature** can also be set directly under **System status**. All other values are set in other places in the menu structure, as described in the following sections.

5.1.2 Reading the list of status messages

Menu → Information → System status → Status

– If no service is required and no faults have occurred, the value **OK** is shown next to **Status**. If a service is required or an error has occurred, the value **Not OK** is shown next to **Status**. In this case, the right-hand selection button has the function **Display**. If you press the right-hand selection button **Display**, the list of status messages is shown in the display.

5.1.3 Read competent person contact details

Menu → Information → Contact details

– If the competent person entered their company name and telephone number during the installation, you can read this data under **Contact details**.

5.1.4 Reading the serial number and article number

Menu → Information → Serial number

– **Serial number** shows the serial number of the control, which the competent person may require you to tell him. The article number is found in the second line of the serial number.

5.2 Settings

5.2.1 Setting desired temperatures

This function is used to set the desired temperatures for **HEATING 1** and hot water generation.

5.2.1.1 Heating circuit

⚠️ **Caution.**
Risk of damage due to frost.

If rooms are not adequately heated, this may cause damage to the building and to the heating installation.

▶ If you are absent during a frosty spell, ensure that the heating installation remains in operation and provides adequate frost protection.

Menu → Desired temperatures → HEATING 1

– You can set two different desired temperatures for the heating circuit.

– The desired **day temperature** is the temperature you wish to have in the rooms during the day or when you are at home (Comfort mode).

– The desired **night temperature** is the temperature that you wish to have in the rooms during the night or when you are away from home (Set-back mode).

5.2.1.2 Domestic hot water generation

⚠️ **Danger!**
Risk of scalding caused by hot water.

There is a risk of scalding at the domestic hot water draw-off points if the temperatures are greater than 60 °C. Young children and elderly persons are particularly at risk, even at lower temperatures.

▶ Select the temperature so that nobody is at risk.

Menu → Desired temperatures → Domestic hot water

– You can only use the control's functions and setting options for domestic hot water generation if a domestic hot water cylinder is connected to the heating installation.

You can set the desired **DHW circuit** temperature for the domestic hot water circuit.

5.2.2 Setting time programmes

5.2.2.1 Showing time periods for one day
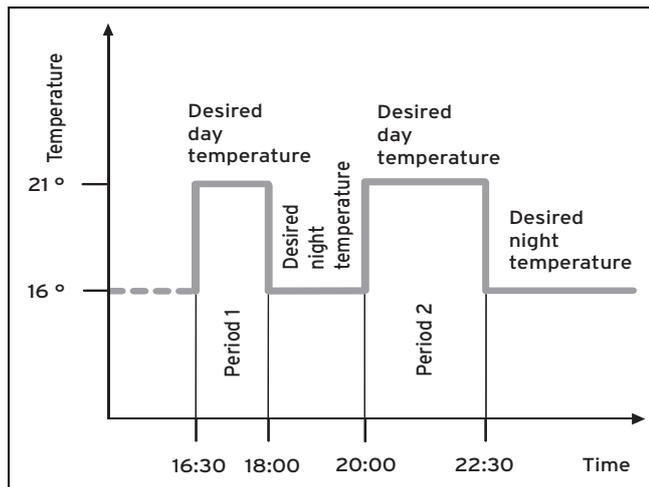
The **Time programmes** function can be used to set the time period for the heating circuit and hot water generation.

If you have not set any time periods, the controller uses the time periods set in the factory settings.

5.2.2.2 Setting time periods for days and blocks

For each day and block, you can set up to three time periods.

The time periods set for a day have priority over the time periods set for a block.

Desired **Day** temperature: 21 °C

Desired **Night** temperature: 16 °C

Time period 1: 16.30 – 18.00

Time period 2: 20.00 – 22.30

Within the time periods, the control brings the room temperature to the set desired **Day** temperature (day mode).

Outside the time period, the control brings the room temperature to the set desired **Night** temperature (night mode).

5.2.2.3 Setting time programmes quickly

If, for example, you require a different time period for just one working day in the week, first set the times for the entire block **Monday – Friday**". Then set the different time period for the working day.

5.2.2.4 Displaying and changing different times in the block

```
┌─────────────────────────────────────────┐
│ Monday - Sunday                           │
├─────────────────────────────────────────┤
│ Period 1:              !! : !! - !! : !!  │
│ Period 2:              !! : !! - !! : !!  │
│ Period 3:              !! : !! - !! : !!  │
├───────────────────┬───────────────────────┤
│      Back         │       Select          │
└───────────────────┴───────────────────────┘
```

If you view a block in the display and have defined a different period for a day in this block, then the display indicates the different time periods in the block with **!!** .

```
┌─────────────────────────────────────────┐
│                                           │
│         Individual dates vary from        │
│        the selected time programme        │
│                 Mo-Su.                    │
│                                           │
├───────────────────┬───────────────────────┤
│      Back         │        OK             │
└───────────────────┴───────────────────────┘
```

If you press the right-hand selection button **Select**, a message appears on the display which informs you about different time periods. You do not need to adjust the times.

The set times for the block marked with **!!** can be viewed and changed if you press the right-hand selection button **OK** in the display.

5.2.2.5 For the heating circuit

Menu → Timer programs → HEATING 1

– The time programmes are only effective in the **Automatic mode** (→ Page 21). The desired temperature that you set in the **Desired temperatures** function applies in each set time period. Within the time period, the controller switches to Comfort mode and the heating circuit heats the connected rooms up to the desired **day temperature**. Outside this time period, the controller switches to the setback mode and the heating circuit heats the connected rooms to the desired **set-back temperature**.

Set the time period for the heating circuit so that each time period:

– starts approx. 30 minutes before the time at which the rooms should reach the desired **day temperature**.
– ends approx. 30 minutes before the time at which the rooms should reach the desired **set-back temperature**.

5.2.2.6 For domestic hot water generation

Menu → Timer programs → Hot water circuit

– You can only use the control's functions and setting options for domestic hot water generation if a domestic hot water cylinder is connected to the heating installation.

For domestic hot water generation, the time programmes are only effective in **Automatic mode**.

In each time period set, the desired **DHW circuit** temperature applies. At the end of a time period, the control switches the domestic hot water generation off until the start of the next time period.

Set the time periods for hot water generation so that each time period:

– starts approx. 30 minutes before the time at which the water in the domestic hot water cylinder should have reached the desired **DHW circuit** temperature.

– ends approx. 30 minutes before the time at which you no longer need any hot water.

5.2.3 Days away from home scheduling

Menu → Days away from home scheduling → HEATING 1

– You can use this function to set a period with a start and end date and a temperature for days during which you are away from home. Thus, you do not need to change time periods for which you have set, for example, no reduction of the desired temperature over the course of the day.

Frost protection is activated.

While the **Days away from home scheduling** function is activated, it has priority over the set operating mode. At the end of the specified period, or if you cancel the function, the heating installation returns to the pre-set mode.

5.2.4 Select language

> **Note**
>
> During installation, the competent person sets the desired language. All functions are displayed in the set language.

Menu → Basic settings → Language

– If the language of e.g. a service technician differs from the set language, you can change the language using this function.

> **Caution.**
>
> **It may not be possible to operate the control if the wrong language is selected.**
>
> If you select a language that you do not understand, you can no longer read the text in the control display and can no longer operate the control.
>
> ▶ Only select a language that you understand.

However, if the text in the display should appear in a language that you do not understand, you can set a different language.

5.2.4.1 Setting your language

1. Press the left-hand selection button repeatedly until the basic display appears.
2. Press the left-hand selection button again.
3. Rotate the rotary knob clockwise until the dotted line appears.
4. Turn the rotary knob anti-clockwise until the second list entry above the dotted line is highlighted.
5. Press the right-hand selection button twice.
6. Turn the rotary knob until you find a language that you understand.
7. Press the right-hand selection button.

5.2.5 Setting the date

Menu → Basic settings → Date/Time → Date

– Select this function to set the current date. All control functions that contain a date relate to the set date.

5.2.6 Setting the time

Menu → Basic settings → Date/Time → Time

– Select this function to set the current time. All control functions that contain a time relate to the set time.

5.2.7 Changing over to daylight saving time

Menu → Basic settings → Date/Time → Day-light savings

– You can use this function to set whether the controller automatically changes over to daylight saving time, or whether you want to do this manually.
– **Auto**: The controller automatically changes over to daylight saving time.
– **Off**: You have to change over to daylight saving time manually.

i	**Note**
	Daylight saving time means Central European summer time: Start = last Sunday in March, End = last Sunday in October.

5.2.8 Set display contrast

Menu → Basic settings → Display → Display contrast

– You can set the display contrast in relation to the brightness of the surroundings, to ensure that the display is clearly legible.

5.2.9 Setting the offset room temperature

Menu → Basic settings → Offset → Room temperature

– A thermometer is integrated in the controller for measuring the room temperature. If you have another thermometer in the same room and compare the values with each other, the temperature values may constantly differ from each other.

Example

One room thermometer constantly shows a temperature that is one degree higher than the current room temperature on the controller display. With the **Room temperature** function, you can offset the temperature difference in the controller display by setting a correction value of +1 K (1 K corresponds to 1 °C). K (Kelvin) is a unit for the temperature difference. Inputting a correction value affects the room temperature compensator.

5.2.10 Enter the heating circuit name

Menu → Basic settings → Change heating circuit naming

– You can now modify the factory-set heating circuit names as you wish. The name is limited to 10 characters.

5.2.11 Reset to factory settings

You can reset the settings for the **Time programmes** or for **Everything** to the factory setting.

Menu → Basic settings → Factory reset → Time programmes

– With **Time programmes**, you reset all the settings you have made in the **Time programmes** function to the default setting. All other settings that include times, such as **Date/Time**, are not affected.

While the control is resetting the time programme settings to the default settings, **In process** is shown on the display. The basic display is then displayed.

⚠️ **Caution.**
Risk of a malfunction.

The **Everything** function restores all settings to the factory settings, including those set by the competent person. It may be the case that it is no longer possible to operate the heating installation after this.

▶ Arrange for the competent person to reset all settings to factory settings.

Menu → Basic settings → Factory reset → Everything

– While the control is resetting the settings to the factory settings, **in process** is shown on the display. Then the installation assistant appears in the display, which only the competent person may operate.

5.2.12 Installer level

The Installer level is reserved for the competent person and is therefore protected by an access code. At this operating level, the competent person can make the necessary settings.

5.3 Operating modes

Use the right-hand selector button, **Operating mode** to set the mode directly.

The path details given at the start of each mode description indicate how you reach this mode in the menu structure.

5.3.1 Operating modes for the heating circuit

5.3.1.1 Automatic mode

Operating mode → Automatic mode

– The automatic mode controls the heating circuit in accordance with the set desired temperature and the set time periods.

Within the time periods, the controller brings the room temperature to the set desired **Day** temperature (Comfort mode).

Outside the time period, the controller brings the room temperature to the set desired **Set-back** temperature (Set-back mode).

5.3.1.2 Summer mode

Operating mode → Summer mode

– The heating function is switched off for the heating circuit and the frost protection function is active.

The hot water generation controls the controller in accordance with the time period that has been set for this purpose.

5.3.1.3 Comfort mode

Operating mode → Comfort mode

– The **Comfort mode** operating mode brings the heating circuit to the set desired **day temperature**, without taking account of a time period.

5.3.1.4 Set-back mode

Operating mode → Set-back mode

– The **Set-back mode** operating mode controls the heating circuit to the set desired **Set-back** temperature, without taking time periods into consideration.

5.3.1.5 System OFF (Frost protection active)

Operating mode → System OFF

– The heating function is switched off. The frost protection function is activated.

5.3.2 Modes for hot water production

The operating mode for hot water generation corresponds to the heating circuit operating mode that has been set. You cannot set a different operating mode.

5.3.2.1 Automatic mode

The automatic mode controls the hot water generation in accordance with the set desired temperature for **Hot water circuit** and the set time periods. In the **Timer programs** function, you have set time periods for hot water generation. If you have not set any time periods, the controller uses the time period set in the factory settings for hot water generation.

Within the time period, hot water generation is switched on and maintains the hot water in the domestic hot water cylinder at the preset temperature. Outside the time period, hot water generation is switched off.

5.3.2.2 Summer mode

The summer mode controls the hot water generation in accordance with the set desired temperature for **Hot water circuit** and the set time periods. In the **Timer programs** function, you have set time periods for hot water generation. If you have not set any time periods, the controller uses the time period set in the factory settings for hot water generation.

Within the time period, hot water generation is switched on and maintains the hot water in the DHW cylinder at the preset temperature. Outside the period, hot water generation is switched off.

5.3.2.3 Comfort mode

The comfort mode controls the hot water generation in accordance with the set desired temperature for **DHW circuit** without taking time periods into account.

5.3.2.4 Set-back mode

Hot water generation is switched off and the Frost protection function is active.

5.3.2.5 System off

Hot water generation is switched off and the Frost protection function is active.

5.4 Special operating modes

The advanced functions can be activated directly from any mode using the right-hand selector button **Operating mode**.

The path details given at the start of each advanced function description indicate how you can access this advanced function in the menu structure.

5.4.1 Cylinder boost

Operating mode → Cylinder boost

– If you have switched off hot water generation or require hot water outside a time period, activate the **Cylinder boost** advanced function. The advanced function heats the water in the domestic hot water cylinder once, until the set desired **Hot water circuit** temperature is reached

or until you cancel the advanced function early. The heating system will then return to the pre-set mode.

5.4.2   Party

Operating mode → Party function

–   If you want to switch on the heating circuit and hot water generation temporarily, e.g. during a party, activate the advanced function **Party**.

This means you do not need to change the settings on the heating system for short periods of time. The advanced function brings the room temperature to the set desired **Day** temperature, in accordance with the set time periods.

If the display shows **Party function active**, you can use the rotary knob to set the desired **Day** temperature for the heating circuit.

The advanced function is deactivated when the next time period is reached or if you cancel the advanced function early. The heating system will then return to the pre-set mode.

5.4.3   1 day away from home

Operating mode → 1 Day away from home

–   If you are only away from home for one day, e.g. for a day trip, activate the **1 Day away from home** advanced function. This means you do not need to change the time periods that you have set by increasing the room temperature during the day, for example. This advanced function brings the room temperature to the desired **Set-back** temperature.

Hot water generation is switched off and frost protection is activated.

If the display shows **1 Day away from home active**, you can use the rotary knob to set the desired **Set-back** temperature for the heating circuit.

The advanced function is automatically deactivated after 24:00 hours or if you cancel the advanced function first. The heating system will then return to the pre-set mode.

5.5   Messages

5.5.1   Service message

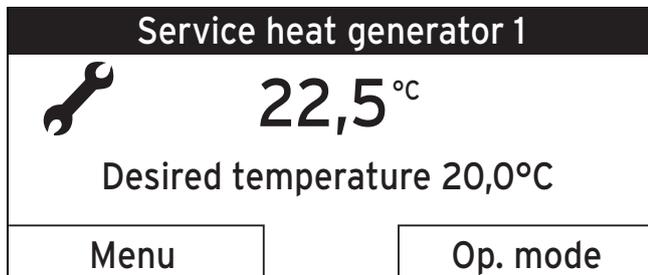If a service is required, the controller displays a service message in the display.

⚠ **Caution.**
Risk of damage to the heating installation due to failure to perform maintenance work.

A service message indicates that the heating installation must be serviced by the competent person. Failure to observe these service messages could lead to material damage or failure of the heating installation.

▶   If the controller displays a service message, inform a skilled tradesman.

```
┌─────────────────────────────────────┐
│        Service heat generator 1       │
├─────────────────────────────────────┤
│  🔧          22,5 °C                  │
│                                       │
│      Desired temperature 20,0°C       │
├──────────────┬──────────────────────┤
│    Menu      │       Op. mode        │
└──────────────┴──────────────────────┘
```

The following service messages may appear:

– **Service heat generator 1**
– **Service** (of the heating installation)

5.5.2 Fault message

If a fault occurs in the heating installation, the controller displays a fault message in the display.

⚠ **Caution.**

Risk of damage to the heating installation due to failure to perform troubleshooting work.

A fault message indicates that the skilled tradesman must perform troubleshooting or repair work on the heating installation. Failure to take notice of these fault messages may lead to material damage or a breakdown of the heating system.

▶ If the control displays a fault message, inform a competent person.

```
┌─────────────────────────────────────┐
│                                       │
│   ⚠      Heat generator 1 fault       │
│                                       │
├──────────────┬──────────────────────┤
│    Back      │                       │
└──────────────┴──────────────────────┘
```
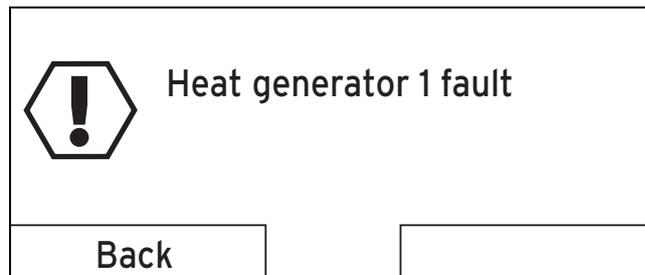
If the controller shows a fault message in the display instead of the basic display and you press the left-hand selection button **Back** then the basic display appears again.

You can also read current fault messages under **Menu → Information → System status → Status**. As soon as a fault message for the heating installation appears, the **Status** setting level will display **Fault**. In this case, the right-hand function key has the function **Display**.

6 Troubleshooting

6.1 Detecting and eliminating faults

Fault	Cause	Troubleshooting
Display is dark	Appliance fault	– Switch off the mains switch on all heat generators for approx. 1 minute and then switch them on again
No changes in the display when the rotary knob is turned		
No changes in the display when the selection buttons are pressed		– If the fault is still present, inform the competent person

7 Care and maintenance

7.1 Caring for the product

▶ Clean the casing with a damp cloth and a little solvent-free soap.
▶ Do not use sprays, scouring agents, detergents, solvents or cleaning agents that contain chlorine.

8 Decommissioning

8.1 Replacing the control

If the control for the heating installation needs to be replaced, the heating installation must be decommissioned.

▶ This work should be carried out by a competent person.

8.2 Recycling and disposal

▶ Observe the recycling and disposal information in the installation instructions.

9 Guarantee and customer service

9.1 Guarantee

We only grant a Vaillant manufacturers warranty if a suitably qualified engineer has installed the system in accordance with Vaillant instructions. The system owner will be granted a warranty in accordance with the Vaillant terms and conditions. All requests for work during the guarantee period must be made to Vaillant Service Solutions.

9.2 Customer service

For contact details for our customer service department, you can write to the address that is provided on the back page, or you can visit www.vaillant.co.uk.

Appendix

A Overview of operating levels

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Information → System status → (Information → System status →)						
System or System status (System)						
Status (Status)	Current value					
Water pressure (Water pressure)	Current value		bar			
Domestic hot water (Domestic hot water)	Current value			Charging, Not charg. (Heat, Do not heat)		
HEATING 1 (HEATING CIRCUIT 1)						
Day temperature (Day temperature)	Current value		℃	0.5	20	
	5	30				
Set-back temp. (Set-back temperature)	Current value		℃	0.5	15	
	5	30				
Auto day temp. until (Auto day temp. until)	Current value		hr:min			
Away from home from (Away from home from)	Current value		dd.mm.yy			
Away from home until (Away from home until)	Current value		dd.mm.yy			
Information → Contact details → (Information → Contact details →)						
Installer Phone number (Installer phone number)	Current values					

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Information → Serial number → (Information → Serial number →)						
Unit number	Permanent value					
Desired temperatures → HEATING 1 → (Desired temperatures → HEATING CIRCUIT 1 →)						
Day (Day) **Set-back** (Set-back)	5	30	℃	0.5	20 15	
Desired temperatures → Domestic hot water → (Desired temperatures → DHW circuit →)						
Domestic hot water (Domestic hot water)	35	70	℃	1	60	
Time programmes → HEATING 1 → (Time programmes → HEATING CIRCUIT 1 →)						
Individual days and blocks				**Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday**, **Sunday** (Mon, Tue, Wed, Thu, Fri, Sat, Sun) **Monday - Sunday**, **Monday - Friday**, **Saturday - Sunday** (Mon–Sun, Mon–Fri, Sat–Sun)	**Monday - Friday**: 06:00-22:00 (Mon to Fri: 06:00-22:00) **Saturday**: 07:30-23:30 (Sat: 07:30-23:30) **Sunday**: 07:30-22:00 (Sun: 07:30-22:00)	

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Period 1: Start – End (time period 1: Start – End) **Period 2:** Start – End (time period 2: Start – End) **Period 3:** Start – End (time period 3: Start – End)	00:00	24:00	hr:min	10 min	**Monday - Friday**: 06:00-22:00 (Mon to Fri: 06:00-22:00) **Saturday**: 07:30-23:30 (Sat: 07:30-23:30) **Sunday**: 07:30-22:00 (Sun: 07:30-22:00)	
Time programmes → Domestic hot water → (Time programmes → DHW circuit →)						
Individual days and blocks				**Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday**, **Sunday** (Mon, Tue, Wed, Thu, Fri, Sat, Sun) **Monday - Sunday**, **Monday - Friday**, **Saturday - Sunday** (Mon–Sun, Mon–Fri, Sat–Sun)	**Monday - Friday**: 05:30-22:00 (Mon to Fri: 05:30-22:00) **Saturday**: 07:00-23:30 (Sat: 07:00-23:30) **Sunday**: 07:00-22:00 (Sun: 07:00-22:00)	

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Period 1: Start – End (time period 1: Start – End) **Period 2:** Start – End (time period 2: Start – End) **Period 3:** Start – End (time period 3: Start – End)	00:00	24:00	hr:min	10 min	**Monday - Friday**: 05:30-22:00 (Mon to Fri: 05:30-22:00) **Saturday**: 07:00-23:30 (Sat: 07:00-23:30) **Sunday**: 07:00-22:00 (Sun: 07:00-22:00)	
Days away from home scheduling → (Days away from home scheduling →)						
Start (Start)	01.01.00	31.12.99	dd.mm.yy	Day.Month.Year	01.01.10	
End (End)	01.01.00	31.12.99	dd.mm.yy	Day.Month.Year	01.01.10	
Temperature (Temperature)	Frost protection or 5	30	℃	0.5	Frost protection	
Basic settings → **Language** → (Default settings → Language →)						
				Selectable language	English	
Basic settings → **Date/time** → (Default settings → Date/Time →)						
Date (Date)	01.01.00	31.12.99	dd.mm.yy	Day.Month.Year	01.01.10	

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Time (Time)	00:00	24:00	hr:min	10 min	00:00	
Daylight saving time (Daylight saving time)				**Auto**, **Off** (Auto, Off)	**Off** (Off)	
Basic settings → Display → (Default settings → Display →)						
Display contrast (Display contrast)	01	15		1	9	
Basic settings → Offset → (Default settings → Offset →)						
Room temperature (Room temperature)	-3.0	3.0	K	0.5	0.0	
Basic settings → Enter heating circuit name → (Default settings → Set heating circuit name →)						
HEATING 1 (HEATING CIRCUIT 1)	1	10	Letter/number	A to Z, 0 to 9, space	**HEATING 1** (HEATING CIRCUIT 1)	
Basic settings → Default setting → (Default settings → Factory setting (Reset) →)						
Time programmes (Time programmes)				**No**, **Yes** (No, Yes)	**No** (No)	
Everything (All)				**No**, **Yes** (No, Yes)	**No** (No)	
Installer level → (Installer level →)						

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Enter code (Enter code)	000	999		1	000	

B   Technical data

B.1   Control

Designation	Value
Operating voltage Umax	24 V
Power consumption	< 50 mA
Supply line cross-section	0.75 to 1.5 mm²
IP rating	IP 20
Protection class	III
Maximum permissible environ-mental temperature	60 ℃
Rated surge voltage	330 V
Pollution degree	2
Mode of operation	Type 1
Height	97 mm
Width	147 mm
Depth	50 mm

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