

# VRT 350f



en Operating instructions

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# 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

In the event of inappropriate or improper use, damage to the product and other property may arise.

The product controls a heating installation with a Vaillant heat generator with an eBUS interface in a way that is weather-controlled and time-dependent.

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.

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.

# 1.3.7 Batteries

- Note the battery type, as described in these instructions; see section "Data plate".
- Remove and insert batteries as described in these instructions; see section "Changing the batteries".
- Do not recharge non-rechargeable batteries.
- Remove rechargeable batteries from the product before charging them.
- Do not combine batteries with other battery types.
- Do not combine new and used batteries.
- Insert the batteries, making sure that the poles are the right way round.
- Remove the dead batteries from the product and dispose of them correctly.
- Remove the batteries if you intend to store the product and not use it for an extended period and/or to scrap it.
- Do not short-circuit the connection contacts in the product's battery compartment.

# 1.3.8 Risk of material damage caused by acid

- Remove any dead batteries from the product and dispose of these properly.
- Remove the batteries if you intend to store the product and not use it for an extended period.

# 1.3.9 Danger!

- Risk of burns!
- Risk of electric shock!
- ► For units that are connected to the grid.
- Before installing the unit, carefully read through the installation instructions.
- Before starting up the unit, carefully read through the operating instructions.
- Observe the maintenance regulations in the operating instructions.

## 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 350f

0020124482

## 3 Product description

3.1 Unit design



3

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- 1 Wall-mounting base with bracket
- 2 Display

- Diagnostics socket
- Wall-mounting base cover

- 5 Right-hand selection button
- 7 Left-hand selection button

6 Rotary knob



- 2 Diagnostics socket
- 4 Teach-in 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 a desired temperature for different times of the day and for different days of the week. The temperature sensor measures the room temperature and forwards the values to the controller. At lower room temperatures, the controller switches the heat generator on. Once the room temperature reaches the desired set temperature, the controller switches the heat generator 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.

The controller is powered by batteries. Data transmission between the controller and the radio receiver unit takes place via radio communication. Data transmission between the radio receiver unit and the boiler takes place via an eBUS interface, which also provides the power supply for the radio receiver unit.

Data communication and the power supply for the controller is provided via eBUS interface. The controller can be equipped with the Vaillant diagnostics software and the Vaillant Internet communication system for remote diagnostics 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.

#### 3.3 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 Identification plate

The identification plate is located on the rear panel of the controller casing.

#### 3.5 Serial number

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

#### 3.6 CE marking



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

The manufacturer hereby declares that the type of radio equipment that is described in these instructions complies with Directive 2014/53/EU. The complete text for the EU Declaration of Conformity is available at: http://www.vaillantgroup.com/doc/doc-radio-equipment-directive/.

# 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 ( $\rightarrow$  Page 30)

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



- 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)

- Desired temperature
- Symbol for heating mode in **Auto** mode Mode set for the heating mode

The control is battery-powered. To save power and thus extend the service life of the batteries, the display is normally switched off. If you press one of the selection buttons or turn the rotary knob, the background lighting switches on and the basic display appears. At this point, you have not changed any settings. Only if you press one of the selection buttons or turn the rotary knob when the display or background lighting is switched on are the settings changed.

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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 for the new setting.

The background lighting goes out approx. 10 seconds after the last operation. The display switches off approx. 1 minute after the last operation.

#### 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



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

#### 4.1.5 Setting level



4

1 Current selection level

Values

- Current functions of the right- and left-hand selection buttons
- 3 Selection (current selec- 5 tion)
- Setting level

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



2

#### Note

The control must first retrieve the values from the radio receiver unit. Normally, the retrieval process takes up to two seconds. During that time, the display shows dashes (--) instead of values.

#### 4.2 Operating concept

The control is operated using two selection buttons and a rotary knob ( $\rightarrow$  Page 8).

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.

#### 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.



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



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).

3. Turn the rotary knob until the **Default settings** list entry is highlighted.



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

Basic settings				
Language				
Date/time				
Display				
Deels	Calaat			
Back	Select			

5. Turn the rotary knob until the **Date/Time** list entry is highlighted.

Basic settings				
Language				
Date/time				
Display				
	l			
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).



- 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 <mark>.03.11</mark>
Time	08:15
Daylight saving time	Off
Cancel	ОК

8. Turn the rotary knob to change the value.

Date/time	
Date	14. <mark>03</mark> 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. <mark>03</mark> .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.
- 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.

## 5.1 Information

#### 5.1.1 Reading the system status

#### $Menu \rightarrow Information \rightarrow System \ status$

 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

#### $Menu \rightarrow Information \rightarrow System \ status \rightarrow Status$

 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

#### $Menu \rightarrow Information \rightarrow Contact \ details$

 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

#### $Menu \rightarrow Information \rightarrow Serial \ number$

 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 $\rightarrow$ Desired temperatures $\rightarrow$ 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 $\rightarrow$ Desired temperatures $\rightarrow$ 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 **!!** .



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

#### $Menu \rightarrow Timer \ programs \rightarrow HEATING \ 1$

- The time programmes are only effective in the Automatic mode (→ Page 22). 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 $\rightarrow$ Timer programs $\rightarrow$ 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 $\rightarrow$ Days away from home scheduling $\rightarrow$ 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

# i

#### Note

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

#### $Menu \rightarrow Basic \ settings \rightarrow Language$

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

# Y

#### 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

#### $Menu \rightarrow Basic \ settings \rightarrow Date/Time \rightarrow Date$

 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

#### $\textbf{Menu} \rightarrow \textbf{Basic settings} \rightarrow \textbf{Date}/\textbf{Time} \rightarrow \textbf{Time}$

 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

#### $Menu \rightarrow Basic \ settings \rightarrow Date/Time \rightarrow Day-light \ savings$

- 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.



## 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

#### $Menu \rightarrow Basic \ settings \rightarrow Display \rightarrow Display \ contrast$

 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

#### $Menu \rightarrow Basic \ settings \rightarrow Offset \rightarrow Room \ temperature$

 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

#### $\textbf{Menu} \rightarrow \textbf{Basic settings} \rightarrow \textbf{Change heating circuit naming}$

 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 $\rightarrow$ Basic settings $\rightarrow$ Factory reset $\rightarrow$ 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.

#### $\textbf{Menu} \rightarrow \textbf{Basic settings} \rightarrow \textbf{Factory reset} \rightarrow \textbf{Everything}$

 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 $\rightarrow$ 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 $\rightarrow$ 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 $\rightarrow$ 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 $\rightarrow$ 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 $\rightarrow$ 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.



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.

$\langle \mathbf{I} \rangle$	Heat generator 1 fault
Bac	k

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**  $\rightarrow$  **Information**  $\rightarrow$  **System status**  $\rightarrow$  **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 rectifying faults

Fault	Cause	Remedy
Change batteries	Battery in radio controller almost out of power	Replace the batter- ies.
Display is dark	Battery is empty	Replace the batter- ies.
Display is dark	Appliance fault	<ul> <li>Switch off the mains switch on the heat</li> </ul>
No changes in the display via the rotary knob		generator for approx. 1 minute and then switch it on again
No changes in the display via the se- lection buttons		<ul> <li>If the fault is still present, in- form the com- petent person</li> </ul>

## 7 Care and maintenance

#### 7.1 Caring for the product

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

#### 7.2 Changing batteries



# Danger!

Risk of death caused by unsuitable batteries!

If batteries are replaced with the wrong type of battery, there is a risk of explosion.

- Ensure that you use the correct battery type when replacing batteries.
- Dispose of used batteries in accordance with the instructions in this manual.



1. Remove the control as shown in the figure.



- 2. Insert four new batteries of the same type in the control.
  - Alkaline AA/LR6 battery 1.5 V



- 3. Secure the control as shown in the figure.
- 4. Dispose of the old batteries correctly.

## 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

The competent person who installed your product is responsible for the disposal of the packaging.



If the product is labelled with this mark:

- In this case, do not dispose of the product with the household waste.
- Instead, hand in the product to a collection centre for waste electrical or electronic equipment.

# X

If the product contains batteries that are labelled with this mark, these batteries may contain substances that are hazardous to human health and the environment.

In this case, dispose of the batteries at a collection point for batteries.

## 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 → (Inf	formation $\rightarrow$ S	System statu	s →)	·		
System or System status (System)						
Status (Status)	Current val	ue				
Water pressure (Water pressure)	Current val	ue	bar			
<b>Domestic hot water</b> (Domestic hot water)	c hot Current value			Charging, Not charg. (Heat, Do not heat)		
HEATING 1 (HEATING CIRCUIT 1)			-		1	
Day temperature (Day temperat-	Current val	ue	°C	0.5	20	
ure)	5	30				
Set-back temp. (Set-back temper-	Current value	°C 0.5	0.5	15		
ature)	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 Curre from home until)		ue	dd.mm.yy			
Information → Contact details → (In	oformation →	Contact deta	iils →)			
<b>Installer Phone number</b> (Installer phone number)	Current val	ues				

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.	1			
				1	l	
Information → Serial number → (Inf	ormation $\rightarrow$ S	Serial number	^ →)			
Unit number	Permanent	value				
Desired temperatures → HEATING	1 → (Desired	I temperature	s → HEATING	CIRCUIT 1 →)		
Day (Day)	5	30	°C	0.5	20	
Set-back (Set-back)					15	
Desired temperatures → Domestic	hot water →	(Desired ten	nperatures → D	HW circuit →)		
<b>Domestic hot water</b> (Domestic hot water)	35	70	°C	1	60	
Time programmes $\rightarrow$ HEATING 1 $\rightarrow$	(Time progr	ammes → HE	EATING CIRCU	IT 1 →)		
Individual days and blocks				Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday (Mon, Tue, Wed, Thu, Fri, Sat, Sun) Monday - Sunday, Monday - Sunday, Monday - Sunday (Mon–Sun, Mon–Fri, Sat–Sun)	Monday - Fri- day: 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 Increm	ncrement, select	Default setting S	Setting
	Min.	Max.				
Period 1: Start – End (time period 1: Start – End) Period 2: Start – End (time period	00:00	24:00	hr:min	10 min	Monday - Fri- day: 06:00- 22:00	
2: Start – End)					(Mon to Fri:	
3: Start – End (time period					<b>Saturday</b> : 07:30-23:30 (Sat: 07:30-	
					23:30) Sunday: 07:30- 22:00	
					(Sun: 07:30- 22:00)	
			1	1	1	1
Time programmes → Domestic hot	: <b>water</b> → (Tir	me programn	nes → DHW circ	cuit →)		
Individual days and blocks				Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday	Monday - Fri- day: 05:30- 22:00 (Mon to Fri:	
				(Mon, Tue, Wed, Thu, Fri, Sat, Sun) Monday - Sunday,	05:30-22:00) Saturday: 07:00-23:30	
				Monday - Friday, Sat- urday - Sunday	(Sat: 07:00- 23:30)	
				(Mon–Sun, Mon–Fri, Sat–Sun)	Sunday: 07:00- 22:00	
					(Sun: 07:00- 22:00)	

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.	1			
Period 1: Start – End (time period 1: Start – End) Period 2: Start – End (time period 2: Start – End)	00:00	24:00	hr:min	10 min	Monday - Fri- day: 05:30- 22:00 (Mon to Fri: 05:20 22:00)	
3: Start – End (time period					03:30-22:00) 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	l → (Days awa	ay from hom	e 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	°C	0.5	Frost protection	
	·			·		
Basic settings → Language → (Def	ault settings	→ Language	→)			
				Selectable language	English	
Basic settings → Date/time → (Defa	ault 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.	1			
Time (Time)	00:00	24:00	hr:min	10 min	00:00	
Daylight saving time (Daylight				Auto, Off	Off (Off)	
saving time)				(Auto, Off)		
Basic settings → Display → (Defaul	t settings → [	Display →)				
<b>Display contrast</b> (Display con- trast)	01	15		1	9	
Basic settings → Offset → (Default	settings → Of	fset →)				
Room temperature (Room temperature)	-3.0	3.0	к	0.5	0.0	
				·		
Basic settings → Enter heating cire	cuit name →	(Default sett	ings → Set heat	ing circuit name →)		
HEATING 1 (HEATING CIRCUIT	1	10	Let-	A to Z, 0 to 9, space	HEATING 1	
1)			ter/number		(HEATING CIR- CUIT 1)	
Basic settings → Default setting →	(Default sett	ings → Facto	ry setting (Rese	et) →)		
Time programmes (Time pro-				No, Yes	<b>No</b> (No)	
grammes)				(No, Yes)		
Everything (All)				No, Yes	<b>No</b> (No)	
				(No, Yes)		
<b>Installer level</b> $\rightarrow$ (Installer level $\rightarrow$ )						

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

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