For the operator

Operating instructions

VRT 350f

VRT 350f

GB, IE

Legal information

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Contents

1 Notes on the documentation

1.1 Symbols and signs used

Symbols

The following symbols may appear:

	Warning symbol (→ Page 5)
	Information symbol
▶	Symbol for a required action.
◁	Symbol for the result of an action.

1.2 Observing other applicable documents

- ▶ You must observe all instructions for use that are enclosed with other components of your system.

1.3 Document storage

- ▶ Store the enclosed operating instructions and all other applicable documents in such a way that they are available whenever required and for any subsequent operators of the system.

1.4 Applicability of the instructions

These instructions apply for the following only:

Article number

Great Britain	0020124482

2 Safety

2.1 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 signs 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

2.2 Required personnel qualifications

These instructions are aimed at those who are able to operate a heating installation but do not have any special technical knowledge or experience.

2.2.1 Instructed operator (Operator)

Definition:

Instructed operator	The operator is charged with operation and maintenance of the unit. He/she must ensure compliance with maintenance intervals. He/she does not require any special technical knowledge or experience. The operator must have been instructed in the following topics by the authorised skilled tradesman. – General safety information – Function and location of safety devices on the system – Operation of the unit – Energy-saving operation – Maintenance operations

2.3 General safety information

2.3.1 Installation only by a skilled tradesman

Installation of the unit can be only carried out by an approved, skilled tradesman. This skilled tradesman is also responsible for proper installation and start-up.

2.3.2 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.

2.3.3 Danger caused by a malfunction

- ► Ensure that air can circulate freely around the controller, and that the controller is not covered by furniture, curtains or other objects.
- ► Ensure that all radiator valves in the room where the controller is fitted 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 rectified immediately.

2.3.4 Frost damage caused by switching the appliance 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 mains power.
- ► Leave the heating installation main switch in the "1" position.

2.3.5 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.

2.4 CE label

CE The CE label documents that the controller complies with the fundamental requirements of the relevant directives.

2.5 Intended use

State-of-the-art

The controller is a state-of-the-art unit manufactured in accordance with recognised safety regulations.

Even so, in the event of inappropriate or non-intended use, damage to the appliance and other property may arise.

The controller controls a heating installation with Vaillant heat generators with eBUS interface in a way that is room-temperature-controlled and time-dependent.

The controller can control the hot water generation from a connected DHW cylinder.

You should only remove the controller temporarily from the wall-mounting base, e.g. to adjust the settings. Apart from that, you should always operate it in conjunction with the wall-mounting base.

Improper use

Any other use, or use beyond that specified, shall be considered improper use. Any direct commercial or industrial use is also deemed to be improper. The manufacturer/supplier is not liable for any resulting damage. The user alone bears the risk.

Improper use of any kind is prohibited.

Other applicable documents

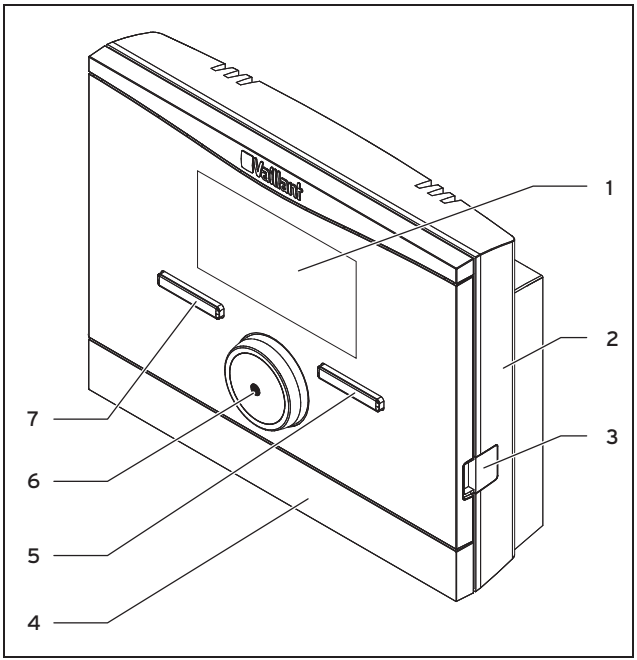
Intended use includes the following:

- observance of accompanying operating, installation and servicing instructions for the Vaillant product as well as for other parts and components of the system
- compliance with all inspection and maintenance conditions listed in the instructions.

3 Overview of the equipment

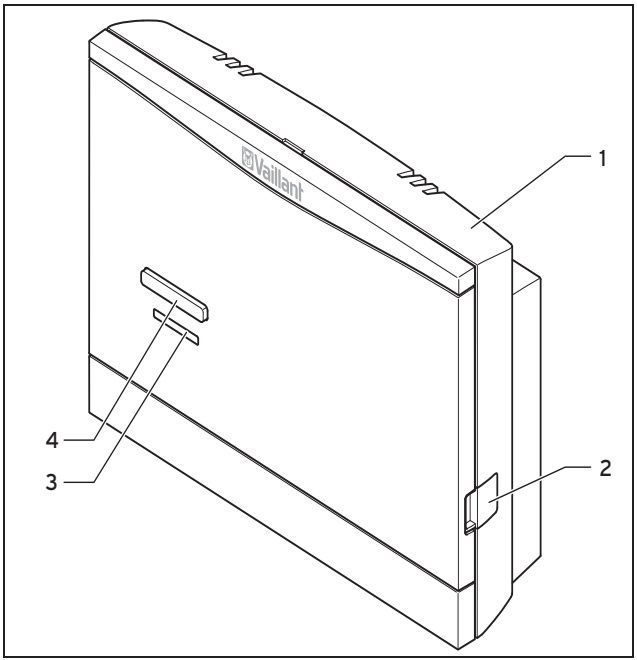
3.1 Unit design

Radio controller



1 Display
2 Wall-mounting base
3 Diagnostics socket
4 Wall-mounting base cover
5 Right-hand selection button
6 Rotary knob
7 Left-hand selection button

Radio receiver unit



1 Wall-mounting base
2 Diagnostics socket
3 LED
4 Teach-in button

3.2 Identification plate

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

3.3 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.

3.4 Control function

The controller controls the Vaillant heating system and hot water generation of a connected domestic hot water cylinder.

3.4.1 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.

3.4.2 Hot water generation

You can use the controller to set the temperature and time for the hot water generation. The heater 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.

3.5 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.

4 Operating

4.1 Operating structure

4.1.1 Access level for the operator

Through the access level for the operator, you access important information and set-up options which do not require any special prior knowledge. Via a menu structure, you can access configurable or read-only values.

4.1.2 Access level for the skilled tradesman

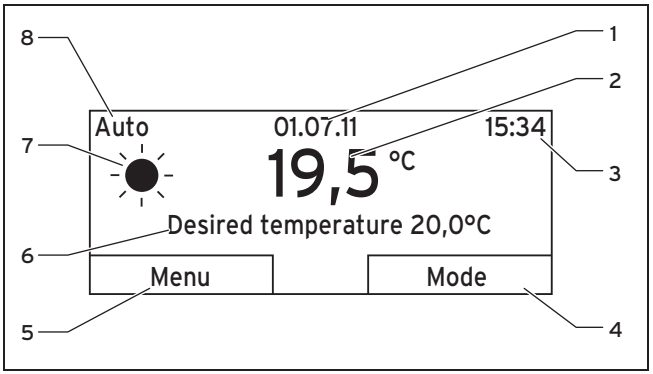
The skilled tradesman will set further values for the heating installation via the access level for the skilled tradesman.

The settings may only be made by someone with specialist knowledge; this level is therefore code-protected.

4.1.3 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.

4.1.4 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 controller is battery-powered. To save power and thus extend the working life of the batteries, the display is normally switched off. If you press one of the selection buttons or turn the rotary knob, the backlighting 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 is switched on are the settings changed.

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

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

4.1.4.1 Symbols for the heating mode in the Auto operating mode

Symbol	Meaning
☀	Heating mode within a set time period (comfort mode)
☾	Heating mode outside a set time period (set-back mode)

4.1.4.2 Soft key function

Both selector buttons have a soft key function. The current functions of the selector 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 of the left-hand selection button may differ.

– the current function of the right-hand selector button may differ.

If, for example, you press the left function key, the current function of the left function key switches from **Menu** to **Back**.

4.1.4.3 Menu

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

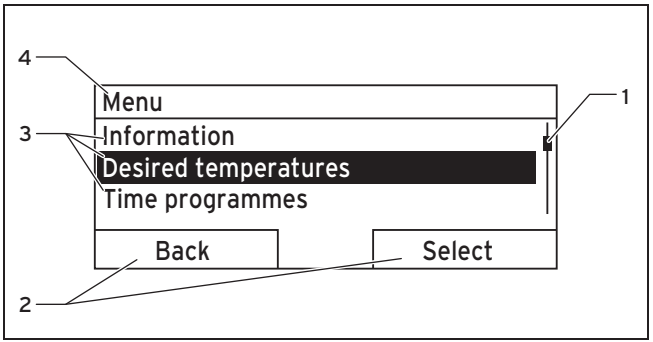
4.1.4.4 Mode

If you press the right-hand selector button, **Operating mode**, you access the settings under **Operating mode** directly from the basic display. This is a quick way to modify the of **HEATING 1**.

4.1.4.5 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.

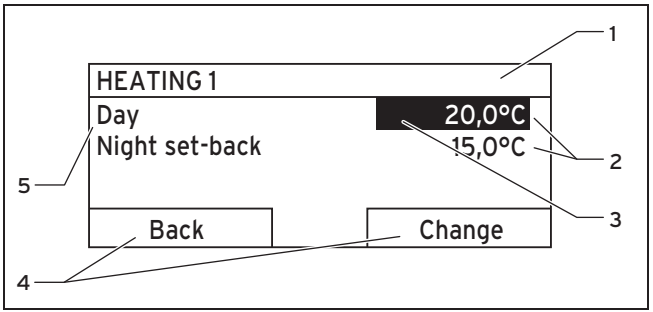
4.1.5 Selection level



1 Scroll bar
2 Current functions of the right and left-hand selection buttons (soft key functions)
3 Selection level list entries
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.

4.1.6 Setting level



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

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

Note
The controller 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 figures.

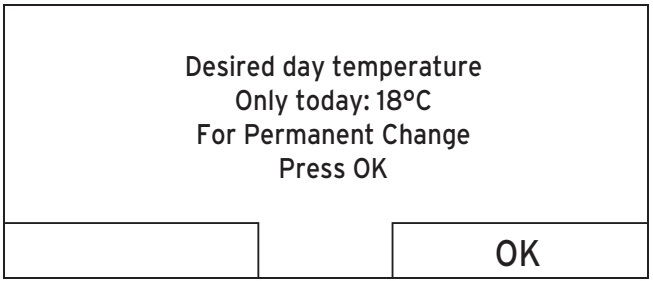
4.2 Operating concept

The controller is operated using two selection buttons and a rotary knob (→ Page 9).

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 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 wish to change the **Desired day temperature** for only 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.

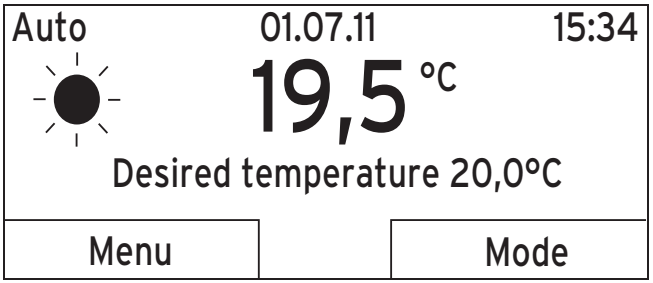
◁ The display switches back to the basic display after 12 seconds. The set desired temperature applies only until the end of the active time period of the current day.

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**.

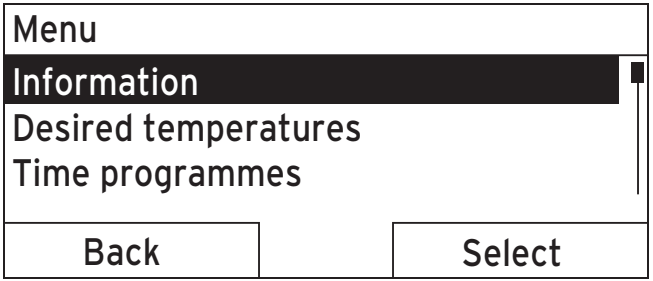
◁ The display switches to the basic display. The new desired day temperature is applied permanently.

4.2.2 Operating example, changing the date

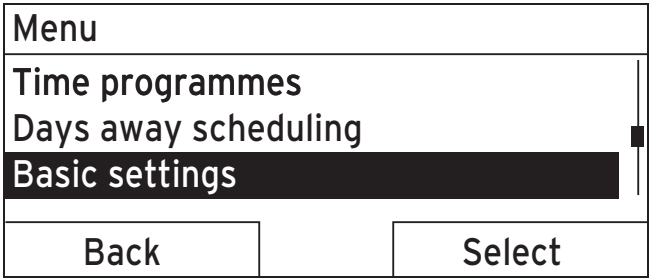


1. If the display does not show the basic display, press the left-hand selection button, **Back**, until the basic display appears again.
2. Press the left-hand selection button, **Menu**.

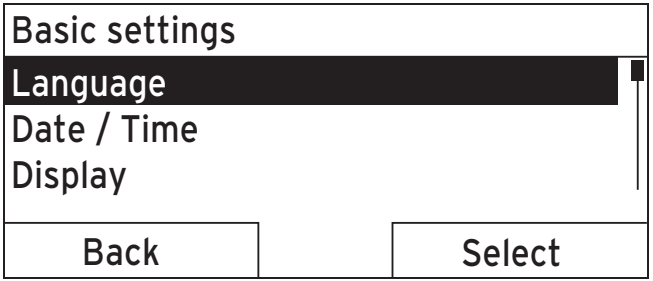
◁ The controller is now in selection level 1. The left-hand selection button now has the function **Back** (to go back to the previous level), the right-hand selection button has the function **Select** (to select the highlighted menu option).



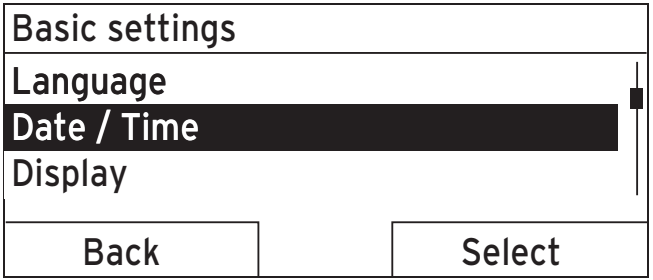
3. Turn the rotary knob until the **Basic settings** list entry is highlighted.



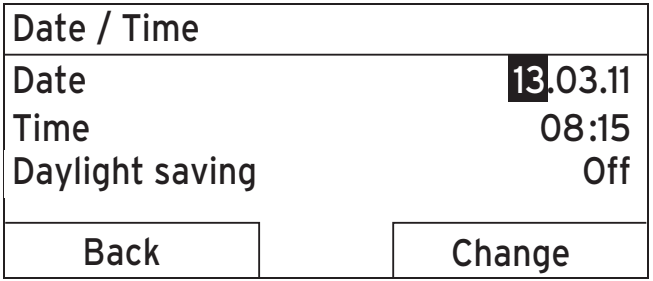
4. Press the right-hand selection button, **Select**.
   - ◁ The controller is now in selection level 2.



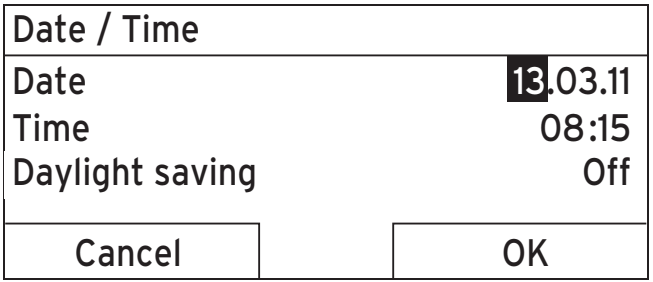
5. Turn the rotary knob until the **Date/Time** list entry is highlighted.



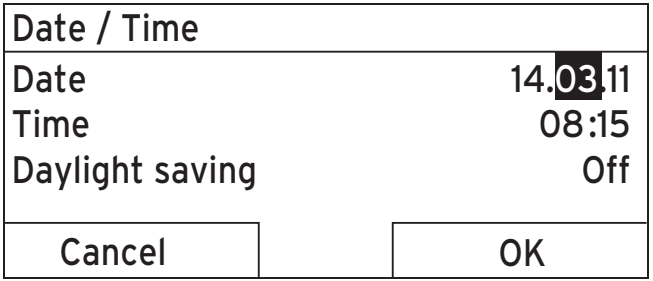
6. Press the right-hand selection button, **Select**.
   - ◁ The controller is now in the **Date** setting level. The value for the day is highlighted. The left-hand selection button now has the function **Back** (to go back to the previous level), the right-hand selection button has the function **Change**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



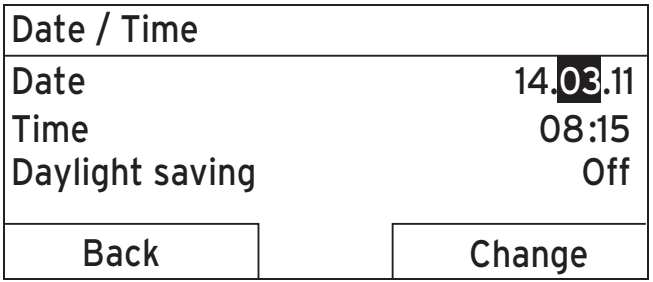
7. Press the right-hand selection button, **Change**.
   - ◁ The highlighted value starts to flash; you can now change the value by turning the rotary knob.
   - ◁ The left-hand selection button now has the function **Cancel** (the change); the right-hand selection button has the function **OK** (to confirm the change).



8. Turn the rotary knob to change the value.



9. Press the right-hand selection button, **OK**, to confirm the change.
   - ◁ The controller has stored the changed date.



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 selector button **Back** repeatedly to revert back to the previous level and to access the basic display from selection level 1.

4.3 Overview of setting and read-out options

4.3.1 Overview of operating modes

The activated operating mode is shown in the top left of the basic display.

The right-hand selector button can be used to navigate from the basic display directly to the settings under **Operating mode**.

If you have activated an advanced function, the display shows the advanced function.

Mode	Setting	Factory reset	Setting
Current mode			
Auto	Automatic mode	Active	
Summer	Summer mode	Not active	
Day	Comfort mode	Not active	
Night set-back	Set-back mode	Not active	
System OFF (Frost protection)	System OFF (Frost protection active)	Not active	
Advanced function			
Cylinder boost	Active, Not active	Not active	
Party function	Active, Not active	Not active	
1 day away from home	Active, Not active	Not active	

4.3.2 Overview of operating levels

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Information → System status →						
System						
Status	Current value					
Water pressure	Current value		bar			
Domestic hot water	Current value			Charged, charging		
HEATING 1						
Day temperature	Current value		°C	0,5	20	
	5	30				
Set-back temp.	Current value		°C	0,5	15	
	5	30				
Auto day temp to	Current value		hr:min			
away from	Current value		dd.mm.yy			
away to	Current value		dd.mm.yy			
Information → Contact details →						
Installer phone number	Current values					
Information → Serial number →						
Appliance number	Permanent value					

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Desired temperatures → HEATING 1 →						
Day **Night set-back**	5	30	°C	0,5	20 15	
Desired temperatures → Domestic hot water →						
Domestic hot water	35	70	°C	1	60	
Time programmes → HEATING 1 →						
Individual days and blocks				Mo, Tu, We, Th, Fr, Sa, Su and Mo - Fr, Sa - Su, Mo - Su	Mo - Fr: 06:00-22:00 Sa: 07:30-23:30 Su: 07:30-22:00	
Time period 1: Start - End **Time period 2: Start - End** **Time period 3: Start - End**	00:00	24:00	hr:min	10 min		
Time programmes → Domestic hot water →						
Individual days and blocks				Mo, Tu, We, Th, Fr, Sa, Su and Mo - Fr, Sa - Su, Mo - Su	Mo to Fr: 05:30-22:00 Sa: 07:00-23:30 Su: 07.00-22.00	
Time period 1: Start - End **Time period 2: Start - End** **Time period 3: Start - End**	00:00	24:00	hr:min	10 min		
Days away scheduling →						

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Start	01.01.00	31.12.99	dd.mm.yy	Day.Month.Year	01.01.10	
End	01.01.00	31.12.99	dd.mm.yy	Day.Month.Year	01.01.10	
Temperature	Frost protection or 5	30	°C	0,5	Frost protection	
Basic settings → Language →						
				Selectable language	English	
Basic settings → Date/Time →						
Date	01.01.00	31.12.99	dd.mm.yy	Day.Month.Year	01.01.10	
Time	00:00	24:00	hr:min	10 min	00:00	
Daylight saving				Off, Auto	Off	
Basic settings → Display →						
Display contrast	01	15		1	8	
Basic settings → Offset →						
Room temperature	-3,0	3,0	K	0,5	0,0	
Basic settings → Set heating circuit name →						

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
HEATING 1	1	10	Letter, number	A to Z, 0 to 9, space	HEATING 1	
Basic settings → Factory reset (reset) →						
Time programmes				Yes, No	No	
Everything				Yes, No	No	
Installer level →						
Enter code	000	999		1	000	

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 → 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 **Set-back 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 errors have occurred, the value **OK** is shown next to **Status**. If a service is required or an error has occurred, the value **Fault** is shown next to **Status**. In this case, the right-hand selector button has the function **Display**. If you press the right-hand selector button **Display**, the list of status messages is shown in the display.

5.1.3 Read skilled tradesman contact details

Menu → Information → Contact details

– If the skilled tradesman 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 controller, 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 Hot water generation

Danger!

Risk of being scalded by hot water.

There is a danger of scalding at the 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.

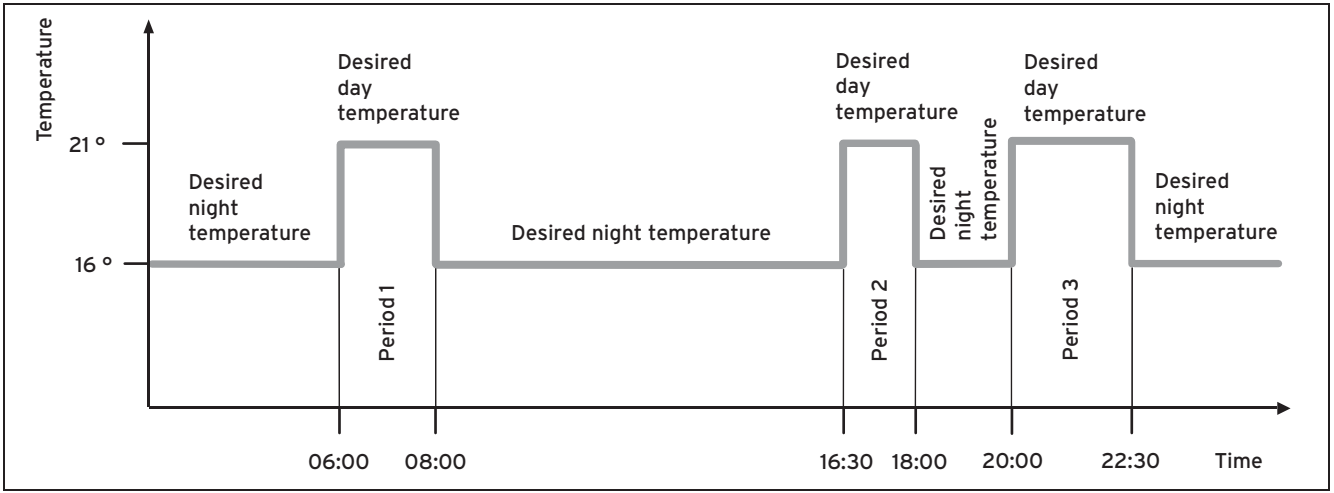
Menu → Desired temperatures → Domestic hot water

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

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

5.2.2 Setting timer 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 temperature **Day**: 21 °C

Desired temperature **Night**: 16 °C

Time period 1: 06.00 - 08.00

Time period 2: 16.30 - 18.00

Time period 3: 20.00 - 22.30

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).

Monday

Time period 1: 06.00 - 07.30

Saturday

Time period 1: 07.30 - 10.00

Time period 2: 12.00 - 23.30

Monday - Friday

Period 1: 06:30 - 08:00

Period 2: 12:00 - 13:00

Period 3: 17:00 - 22:00

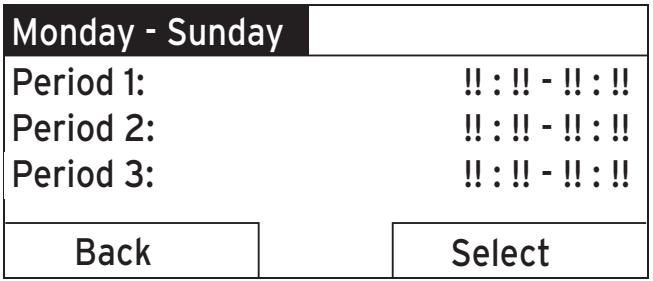
Saturday - Sunday

Period 1: 08:00 - 22:00

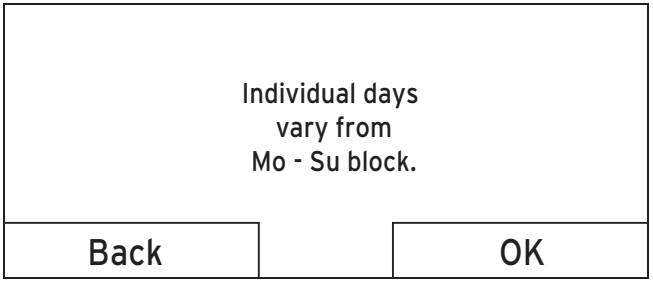
5.2.2.3 Setting time programmes quickly

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



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 times in the block with **!!**.



If you press the right-hand selection button **Select**, a message appears on the display which informs you about different 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 31). 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 set-back 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 hot water generation

Menu → Timer programs → Hot water circuit

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

The timer programs are only effective for hot water generation in the **Automatic mode** and **Summer mode** operating modes.

In each set time period, the desired **Hot water circuit** temperature that you set in the **Desired temperatures** function applies. If, during the time period, the cylinder temperature drops by 5 °C below the desired **Hot water circuit** value, the domestic hot water cylinder is heated back up to the desired **Hot water circuit** temperature (recharged). At the end of a time period, the controller switches the 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 **Hot water 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

– With this function, you can 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 system returns to the pre-set mode.

5.2.4 Language selection

Note
During installation, the skilled tradesman 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 controller 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 controller display and can no longer operate the controller.

▶ 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 Set a language that you understand

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. Then rotate the control knob anticlockwise until the second list entry above the dotted line is highlighted.
5. Press the right-hand selection button twice.
6. Turn the control knob (to the right or left) until you find a language 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 controller 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 controller 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.

Note

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

5.2.8 Setting the 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 Changing heating circuit naming

Menu → Basic settings → Change heating circuit naming

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

5.2.11 Resetting to factory setting

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

Menu → Basic settings → Factory reset → Time programmes

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

While the controller is resetting the timer program 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 skilled tradesman. It may be the case that it is no longer possible to operate the heating installation after this.

► Arrange for the skilled tradesman to reset all settings to factory settings.

Menu → Basic settings → Factory reset → Everything

– While the controller 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 skilled tradesman may operate.

5.2.12 Installer level

The Installer level is reserved for the skilled tradesman and is therefore protected by an access code. At this operating level, the skilled tradesman 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

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 DHW cylinder at the preset temperature. Outside the 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 **Hot water 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 activated.

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

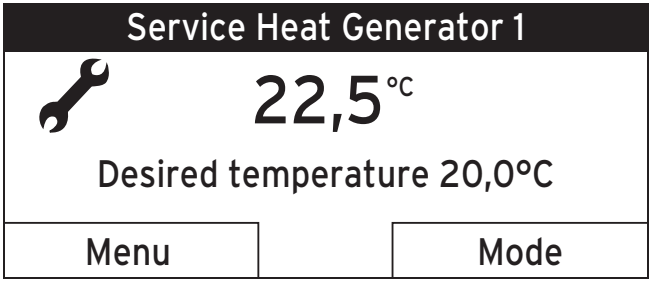
If a service is required, the controller displays a service message in the display.

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 skilled tradesman. 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

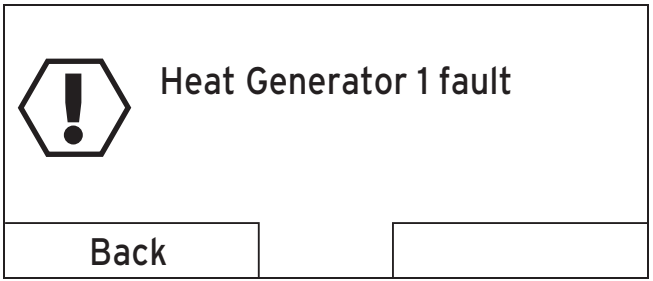
If a fault occurs in the heating installation, the controller displays a fault message in the display.

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 observe these fault messages could lead to material damage or failure of the heating installation.

► If the controller displays a fault message, inform a skilled tradesman.



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 Service and troubleshooting

6.1 Cleaning the controller

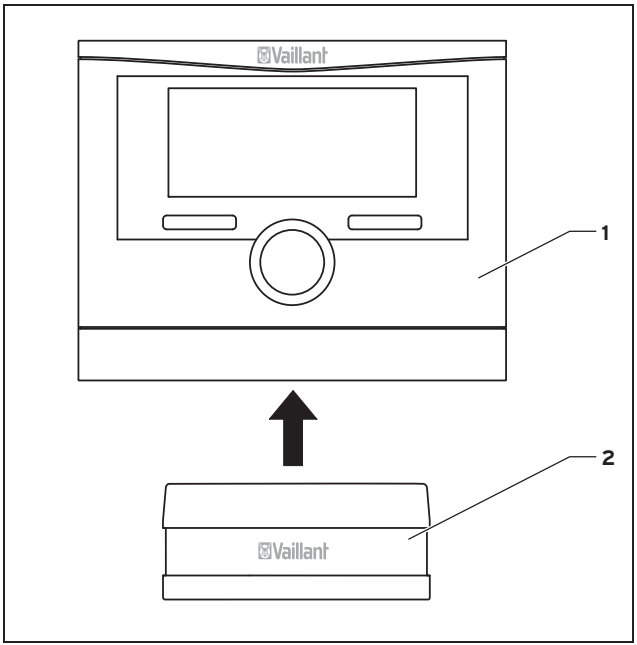
1. Clean the casing of the controller with a damp cloth.
2. Never use scouring or cleaning agents which could damage the operator control elements or the display.

6.2 Detecting and rectifying faults

Fault	Cause	Remedy
Change batteries	Battery in radio controller almost out of power	Replace the batteries.
Display is dark	Battery is empty	Replace the batteries.

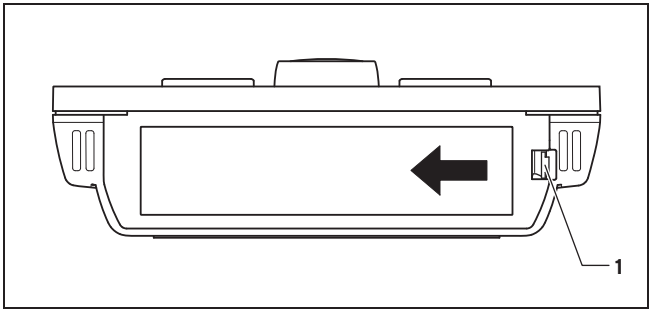
Fault	Cause	Remedy
Display is dark	Appliance fault	– Switch off the mains switch on the heat generator for approx. 1 minute and then switch it on again – If the fault is still present, inform the competent person
No changes in the display via the rotary knob		
No changes in the display via the selection buttons		

6.3 Changing batteries



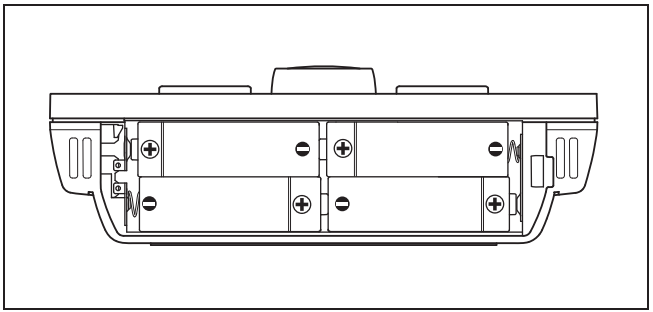
1 Control 2 Wall-mounting base

1. Pull the controller **(1)** upwards and off the wall-mounting base **(2)**.



1 Battery compartment catch

2. Open the battery compartment on the underside of the controller by lifting the cover using the battery compartment catch **(1)**.
3. Remove the cover.



4. Make sure the battery poles are the right way round.
5. Insert four new batteries of the same type in the controller.
   – Alkaline AA/LR6 battery 1.5 V
6. Close the battery compartment.
7. Hook the controller back onto the wall-mounting base.
8. Press the controller down onto the wall-mounting base until it audibly clicks into position.
9. Dispose of the old batteries correctly.

7 Decommissioning

7.1 Replacing the controller

If the controller of the heating system needs to be replaced, the heating system must be shut down.

This work should be conducted by a skilled tradesman.

7.2 Recycling and disposal

The controller and the associated transport packaging consists largely of recyclable materials.

Appliance

If your Vaillant unit is identified with this symbol, it does not belong with your household waste at the end of its useful life.

- ► Instead, take the unit and batteries to a collection point for recycling electrical and electronic devices.
- ► For more information on where to take your used batteries and electrical and electronic devices, contact your town or district authorities, waste disposal company, or the competent person who installed the unit, or the business that sold you the batteries.

Packaging

Leave the disposal of the transport packaging to the approved heating specialist company that installed the appliance.

8 Guarantee and customer service

8.1 Warranty

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 (0870 6060 777).

8.2 Customer service

To ensure regular servicing, it is strongly recommended that arrangements are made for a Maintenance Agreement.

Please contact Vaillant Service Solutions for further details: +44 80 70 606 07 77

9 Technical data

9.1 Control

Description	Value
Power supply voltage Umax	4 x 1.5 V (AA)
Battery working life (alkaline)	≈ 1.5 y
Level of protection	IP 20
Protection class	III
Max. permissible ambient temperature	50 °C
Transmission frequency	868 MHz
Transmission power	< 10 mW
Range outdoors	> 100 m
Range indoors	≈ 25 m
Height	115 mm
Width	147 mm
Depth	50 mm

9.2 Radio receiver unit

Description	Value
Power supply voltage Umax	24 V
Current consumption	< 60 mA
Level of protection	IP 20
Protection class	III
Max. permissible ambient temperature	50 °C
Transmission frequency	868 MHz
Transmission power	< 10 mW
Range outdoors	> 100 m
Range indoors	≈ 25 m
Height	115 mm
Width	147 mm
Depth	50 mm

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