

For the competent person

## Installation instructions



# VRT 350f

VRT 350f

**GB, IE**

## **Legal information**

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## 1 Notes on the documentation

### 1.1 Symbols and signs used

#### Symbols

The following symbols may appear:

	Warning symbol
	Information symbol
	Symbol for a required action.
	Symbol for the result of an action.

### 1.2 Observing other applicable documents

- ▶ During installation, you must observe all the installation instructions for the assemblies and components of the system.

These installation instructions are enclosed with the various system parts and supplementary components.

- ▶ Furthermore, observe all operating instructions enclosed with components of the system.

### 1.3 Document storage

#### Document handover

- ▶ Pass these instructions and all other applicable documents and, if necessary, any required tools to the system operator.

#### Availability of documents

The system operator is responsible for storing the documents so that they are available when required.

### 1.4 Applicability of the instructions

These instructions apply for the following only:

#### Article number

Great Britain	0020124482
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## 2 Safety

### 2 Safety

#### 2.1 Required personnel qualifications

This manual is intended for persons with the following qualifications.

##### 2.1.1 Authorised competent person

The installation, assembly and removal, start-up, maintenance, repair and decommissioning of Vaillant products and accessories must only be carried out by authorised competent persons.



#### Note

Each competent person is qualified for specific activities on the basis of their training. They must only work on units if they have the required qualification.

When working on the units, the competent persons must observe all applicable directives, standards, laws and other regulations.

#### 2.2 General safety information

##### 2.2.1 Installation by skilled tradesmen only

The unit must be installed by a qualified, skilled tradesman, who is responsible for compliance with the applicable requirements, regulations and directives.

- ▶ Read through these installation instructions carefully.
- ▶ Carry out the activities that are described in these installation instructions.
- ▶ During the installation, observe the following safety instructions and regulations.

##### 2.2.2 Risk of death from live connections

When working in the electronics box of the boiler, there is a risk of death from electric shock. Continuous voltage is present on the mains connection terminals, even if the main switch is turned off.

- ▶ Switch the main switch off before working on the electronics box of the boiler.
- ▶ Disconnect the boiler from the power mains by disconnecting the mains plug or by de-energising the boiler via a partition with a contact opening of at least 3 mm (e. g. fuses or power switches).
- ▶ Check that the boiler is de-energised.
- ▶ Secure the power supply against being switched on again.



- ▶ Open the electronics box only when the boiler is disconnected from the power supply.

### 2.2.3 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.

### 2.2.4 Material damage due to unsuitable installation room

If you are installing the controller in a moist environment, the electronics may be damaged by moisture.

- ▶ The controller should only be installed in dry rooms.

### 2.2.5 Danger due to error functions

- ▶ Ensure that the heating system is in a technically perfect condition.
- ▶ Ensure that no safety or monitoring devices have been removed, bridged or disabled.
- ▶ Immediately rectify any faults and damage that may affect safety.

- ▶ Install the controller in a location where it is not covered by furniture, curtains, or other objects.
- ▶ If thermostatic control is activated, advise the operator that, in the room where the controller is mounted, all the radiator valves must be fully open.
- ▶ Do not use the unit's free terminals as supports for other wiring.
- ▶ At lengths of over 10 m, 230 V supply cables must be laid separately from sensor or bus lines.

## 2.3 CE label



CE labelling shows that, based on the type overview, the appliances comply with the basic requirements of the following directives:

- Electromagnetic compatibility directive (Council Directive 2004/108/EC)
- Low voltage directive (Council Directive 2006/95/EC)

## 2.4 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.



## 2 Safety



The controller controls a heating installation with a Vaillant heat generator with eBUS interface in a way that is room-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.

Operation is permissible with the following components and accessories:

- Domestic hot water cylinder (conventional)

### **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 Identification plate

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

The identification plate contains the following information:

Information on the identification plate	Meaning
Serial number	For identification
VRT XXX	Unit designation
V	Operating voltage
mA	Current consumption
CE label	Unit complies with European standards and directives
Waste container	Proper disposal of the unit

### 3.2 Scope of delivery

Quantity	Component
1	Control
1	Radio receiver unit
1	Wall-mounting base for radio receiver unit
1	Wall-mounting base for controller

Quantity	Component
2	Fastening material (2 screws and 2 wall plugs)
1	Battery set (4 x AA)
1	3-way pin header connector
1	Operating instructions
1	Installation instructions

## 4 Installation

You can either install the radio receiver unit within the boiler or install it separately on a wall in the living area.

You must fit the radio controller on a wall in the living area.

### 4.1 Fitting the radio receiver unit in the boiler



#### Note

When fitting the radio receiver unit in the boiler's electronics box, follow the instructions for fitting a radio receiver unit that are given in the boiler's installation instructions.

1. Switch off the boiler.
2. Disconnect the power supply to the boiler.

## 4 Installation

3. Disconnect the boiler from the power mains by pulling out the mains plug or de-energising the boiler using a partition with a contact opening of at least 3 mm.
4. Secure the power supply against being switched on again.
5. Check that there is no voltage in the boiler.
6. If necessary, open the front panel on the boiler.
7. Remove the operator control screen from the boiler for the controller module.
8. Carefully lever the radio receiver unit from the wall-mounting base.

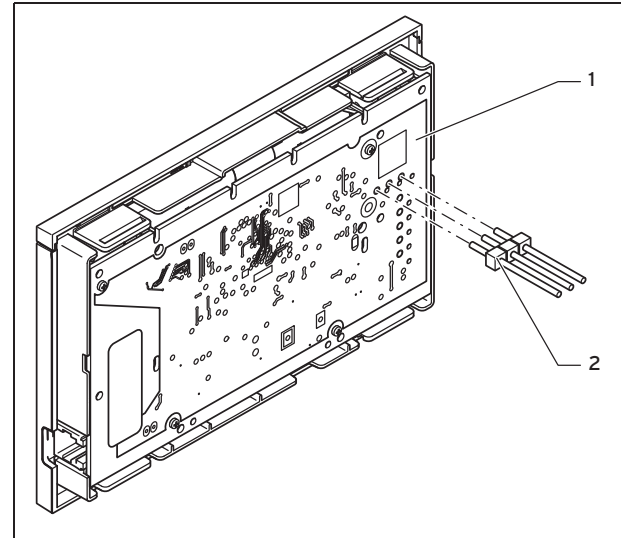
### 9. Alternatives 1 / 2

**Conditions:** Vertical plug connections with pins in the electronics box

- ▶ If required, remove the 3-way pin header.
- ▶ Carefully press the radio receiver unit into the connection in the electronics box.

### 9. Alternatives 2 / 2

**Conditions:** Horizontal plug connections with no pins on the electronics box



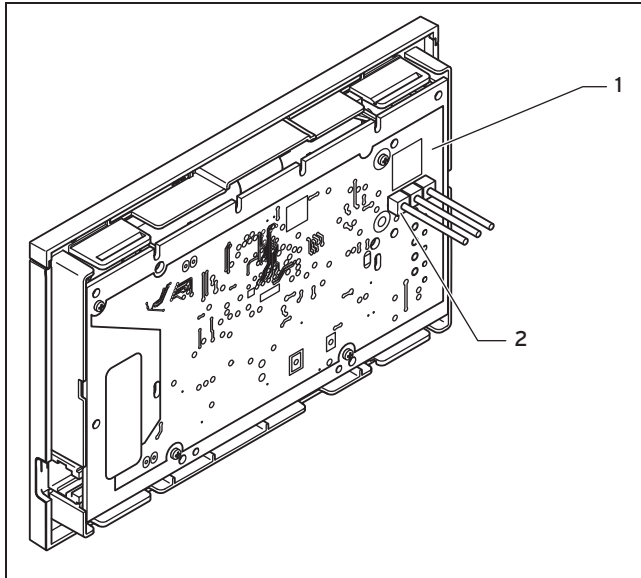
1 Controller PCB

2 3-pin header

- ▶ Connect the 3-way pin header supplied with the controller with the short ends in the 3 horizontal openings on the radio receiver unit PCB.
  - ▶ Carefully press the radio receiver unit with the pin header connector into the connection in the electronics box.
10. Switch on the power supply to the boiler.

11. Bring the boiler into operation.
12. If necessary, close the front panel of the boiler.

## 4.2 Fit the radio receiver unit in the living room



- 1 Controller PCB                      2 3-pin pin header connector

1. Check that the 3-way pin header is connected to the controller PCB.

The 3-way pin header is connected to the controller PCB.

► Remove the 3-way pin header.

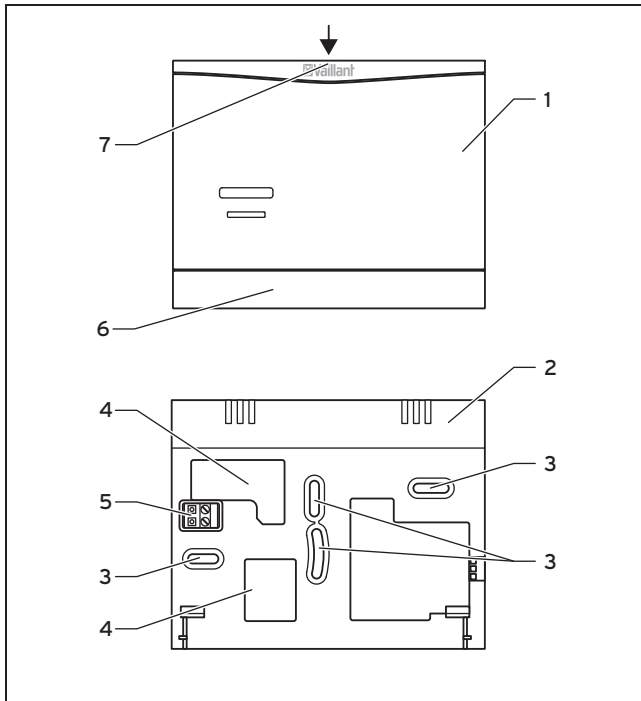
2. Fit the radio receiver unit on an interior wall of the main living room in such a way that ensures that there are no problems with the RF connection between the controller and the radio receiver unit.



### Note

Wall-mounting the radio receiver unit is only necessary if its position needs to be optimised after start-up in order to ensure a good RF connection with the controller.

## 4 Installation



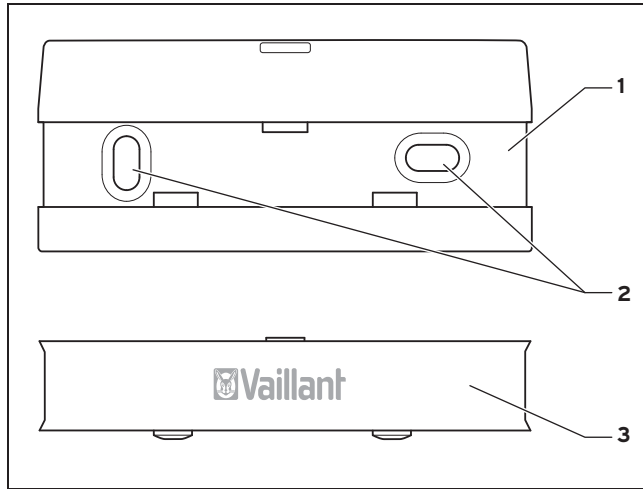
- |   |                            |   |   |
|---|----------------------------|---|---|
| 1 | Radio receiver unit        | 5 | Pin header with terminals for the eBUS line |
| 2 | Wall-mounting base         | 6 | Wall-mounting base cover                    |
| 3 | Mounting holes             | 7 | Slot for screwdriver                        |
| 4 | Openings for cable ducting |   |   |

3. Insert a screwdriver into the slot **(7)** on the wall-mounting base **(2)**.
4. Carefully lever the radio receiver unit **(1)** from the wall-mounting base **(2)**.
5. Mark the position on the wall. Take the eBUS line cable routing into account when doing so.
6. Drill two holes in line with the mounting holes **(3)**.
  - Diameter of mounting hole: 6 mm
7. Route the eBUS line through one of the cable ducts **(4)**.
8. Insert the wall plugs supplied.
9. Use the screws supplied to secure the wall-mounting base.
10. Connect the eBUS line to the terminal block. (→ Page 14)
11. Carefully insert the radio receiver unit in the wall-mounting base. Ensure that the pin header **(5)** on the wall-mounting base fits into the radio receiver unit connector provided.
12. Carefully press the radio receiver unit into the wall-mounting base until the locking tabs on the radio receiver unit are heard to click into place.

### 4.3 Fitting the radio controller

1. Fit the controller on an interior wall of the main living room in such a way that ensures that there are no problems with the RF connection between the controller and the radio receiver unit.

– Height: ≈ 1.5 m

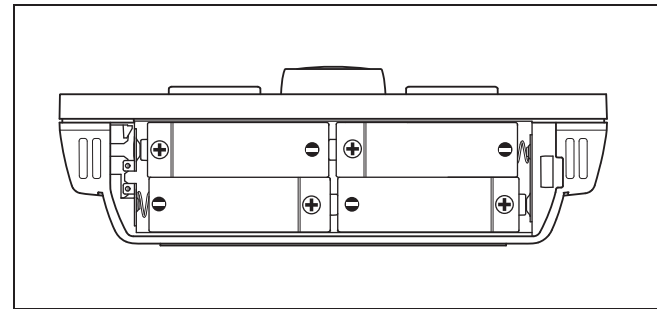


- |                      |                                      |
|----------------------|--------------------------------------|
| 1 Wall-mounting base | 3 Wall-mounting base finishing panel |
| 2 Mounting holes     |                                      |

2. Remove the wall-mounting base from the rear of the controller by pulling the base downwards.
3. Remove the finishing panel from the wall-mounting base by pulling the top edge of the panel away from the wall-mounting base with your fingers.
4. Mark the position on the wall.
5. Drill two holes in line with the mounting holes **(2)**.

– Diameter of mounting hole: 6 mm

6. Insert the rawl plugs supplied.
7. Fix the wall-mounting base **(1)** to the wall using the screws supplied.
8. Locate the two bottom lugs of the finishing panel **(3)** in the holes in the wall-mounting base.
9. Press the top edge of the finishing panel into the wall-mounting base until it clicks into position.



10. Open the battery compartment on the underside of the controller.
11. Remove the two plastic strips between the batteries and the contacts.
12. Check that the battery poles are the right way round.
13. Close the battery compartment.
14. Hook the controller onto the wall-mounting base.
15. Press the controller down onto the wall-mounting base until it audibly clicks into position.
16. Check the quality of the RF connection.

## 5 Electrical installation

### 5 Electrical installation

When connecting the eBUS line, there is no need to pay attention to the polarity. If the two connections are switched around, communication is not affected.

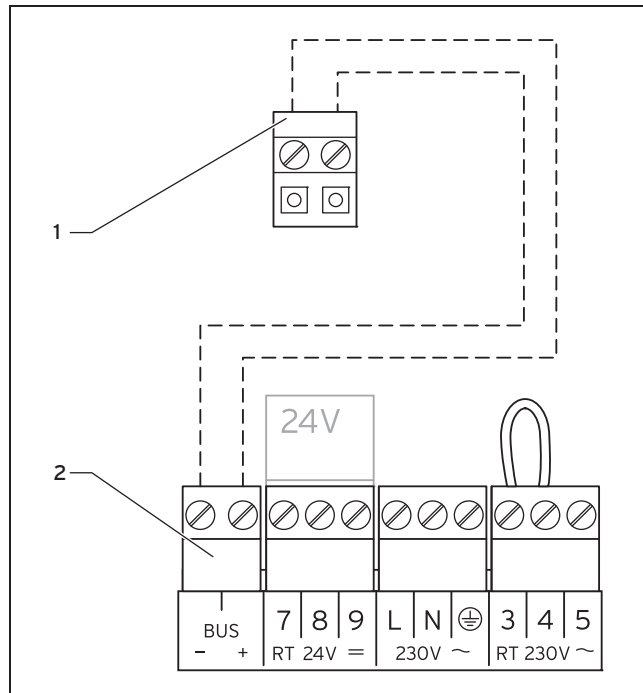
#### 5.1 Radio receiver unit fitted in the boiler

If you fit the radio receiver unit in the boiler, the electrical connections are made by contact between the controller's pin header connector and the mating connection on the boiler. Wiring up the radio receiver unit is only required if you have mounted it on a wall.

#### 5.2 Connecting the radio receiver unit installed in the living room

##### 5.2.1 Connecting the radio receiver unit to the boiler with a "3-4-5 Terminal"

1. Switch off the boiler.
2. Disconnect the power supply to the boiler.
3. Disconnect the boiler from the power mains by pulling out the mains plug or de-energising the boiler using a partition with a contact opening of at least 3 mm.
4. Secure the power supply to the boiler against being switched back on again.
5. Check that there is no voltage in the boiler.

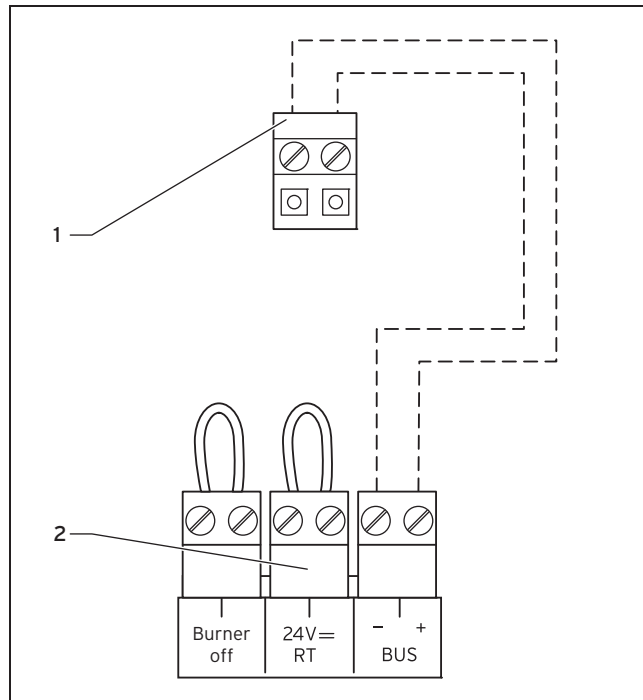


- 1 Radio receiver unit terminal block
- 2 Boiler terminal strip
6. Check whether the bridge is installed between terminals 3 and 4 on the PCB of the electronics box and, if required, install the bridge between terminals 3 and 4.
7. Connect the eBUS line to the terminal block (1) in the wall-mounting base of the radio receiver unit.

8. Connect the eBUS line to the terminal block of the boiler (2).

## 5.2.2 Connecting the radio receiver unit to a boiler with a "24V=RT terminal"

1. Switch off the boiler.
2. Disconnect the power supply to the boiler.
3. Disconnect the boiler from the power mains by pulling out the mains plug or de-energising the boiler using a partition with a contact opening of at least 3 mm.
4. Secure the power supply to the boiler against being switched back on again.
5. Check that there is no voltage in the boiler.



1 Radio receiver unit terminal block

2 Boiler terminal strip

6. Check whether the bridge is installed between the 24 V=RT terminals on the PCB of the electronics box and, if required, install the bridge between the 24 V=RT terminals.

## 6 Start-up

7. Connect the eBUS line to the terminal block **(1)** in the wall-mounting base of the radio receiver unit.
8. Connect the eBUS line to the terminal block of the boiler **(2)**.

settings options for the installer level are described in the Access level for the competent person (→ Page 19).

## 6 Start-up

When you start the controller for the first time after electrical installation or after replacement, the installation assistant starts automatically. You can use the installation assistant to make the main settings for the heating installation.



### Note

To be able use the controller to set the temperature for the hot water generation and heating circuit, you must set the maximum value for the temperatures on the boiler.

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You can use the installation assistant to make the main settings for the heating installation.

The operating concept, an operation example, and the menu structure are all contained in the operating instructions of the controller.

All settings that you have made using the installation assistant can be changed again at a later time via the access level for the system operator **Installer level**. The read-out and



## 6.1 Overview of installation assistant set-up options

Setting	Values		Increment, select	Default setting	Setting
	Min.	Max.			
Language			Languages available for selection	English	
Control strategy			Two point, analogue	Two point	
Route adjustment <sup>1)</sup>	-5	+5	1	0	
Cylinder			Active, Inactive	Active	

1) Appears only if the value **Analogue** is set for the control strategy.

## 7 Operating

### **7 Operating**

The controller has two operating levels, the access level for the operator and the access levels for the competent person.

The setting and read-out options for the operator, the operating concept and an operating example are described in the operating instructions for the controller.

## 7.1 Installer level overview

You can use the left-hand selection button **Menu** and the list entry **Installer level** to access the setting and read-out options.

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
<b>Installer level</b> →						
<b>Enter code</b>	000	999		1	000	
<b>Installer level</b> → <b>Service information</b> → <b>Enter contact details</b> →						
<b>Installer</b>	1	11	Figures	A to Z, 0 to 9, Space		
<b>Phone number</b>	1	12	Numbers	0 to 9, Space, Hyphen		
<b>Installer level</b> → <b>Service information</b> → <b>Service date</b> →						
<b>Next service on</b>			Date			
<b>Installer level</b> → <b>System configuration</b> →						
<b>System</b>						
* If there is no fault, then the status is <b>OK</b> . If there is a fault, <b>Fault</b> appears here and you can read the fault message in the "Fault messages" section.						
1) Appears only if the value <b>Analogue</b> is set for the control type.						

## 7 Operating

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
<b>Status</b>	Current value*					
<b>Water pressure</b>	Current value		bar			
<b>Domestic hot water</b>	Current value		°C			
<b>Control modules</b>	Displaying			Software version		
<b>Heat generator</b>						
<b>Status</b>	Current value			Off, Heating, DHW		
<b>VF1</b>	Current value					
<b>HEATING 1</b>						
<b>Auto day temp to</b>	Current value		hr:min			
<b>Day temperature</b>	5	30	°C	0,5	20	
<b>Set-back temp.</b>	5	30	°C	0,5	15	
<b>Flow temp. target.</b>	Current value		°C			
<b>Actual flow temperature</b>	Current value		°C			
<b>Advanced functns</b>	Current function			Cylinder boost, Party, Away	None	
<b>Domestic hot water</b>						
<b>Cylinder</b>	Inactive	Active		Active, Inactive	Active	
<p>* If there is no fault, then the status is <b>OK</b>. If there is a fault, <b>Fault</b> appears here and you can read the fault message in the "Fault messages" section.</p> <p>1) Appears only if the value <b>Analogue</b> is set for the control type.</p>						

Setting level	Values		Unit	Increment, select	Default setting	Setting
	Min.	Max.				
Target cylinder temperature	35	70	°C	1	60	
Actual cylinder temperature	Current value		°C			
<b>System</b>						
Control strategy	Current value			2-point, analogue	2-point	
Plug adjustment <sup>1)</sup>	-5	+5		1	0	
<b>RF connection</b>						
Controller	0	10		1		
Teach-in	On	Off		On, Off	Off	
<b>Installer level → Change code →</b>						
New code	000	999		1	000	
<p>* If there is no fault, then the status is <b>OK</b>. If there is a fault, <b>Fault</b> appears here and you can read the fault message in the "Fault messages" section.</p> <p>1) Appears only if the value <b>Analogue</b> is set for the control type.</p>						

# 8 Operating and display functions

## 8 Operating and display functions

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

The square brackets contain the level of detail to which the function belongs.

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

### 8.1 Service information

#### 8.1.1 Entering contact details

**Menu** → **Installer level** → **Service information** → **Enter contact data**

- You can enter your contact details (company name and phone number) in the controller.
- As soon as the date of the next service appointment is reached, the operator can view these contact details in the display of the controller.

#### 8.1.2 Entering the service date

**Menu** → **Installer level** → **Service information** → **Service date**

- In the controller, you can save a date (day, month, year) for the next regular service.

When the date for the next service date is reached, the message **Service heater 1** is displayed in the basic display of the controller.

If a service date is saved in the heater, the message **Service heater 1** appears on the heater when this date is reached.

The message is switched off if:

- the date is in the future.
- the initial date 01.01.2011 is set.



#### Note

To find out which service date to enter, refer to the instructions for your heater unit.

---

### 8.2 System configuration: System

#### 8.2.1 Reading the system status

**Menu** → **Installer level** → **System configuration** [**System --**] → **Status**

- This function allows you to read the status of the heating system. If there is no fault, the message "**OK**" appears here. If there is a fault, the status "**Fault**" is displayed. If you press the right selector button the list of error messages (→ Page 27) is displayed.

## 8.2.2 Reading the water pressure of the heating system

**Menu** → **Installer level** → **System configuration** [**System --**] → **Water pressure**

- This function allows you to read the water pressure of the heating system.

## 8.2.3 Reading the hot water generation status

**Menu** → **Installer level** → **System configuration** [**System --**] → **Domestic hot water**

- You can use this function to read the hot water generation status (**Charged, Not charged**).

## 8.2.4 Reading the software version

**Menu** → **Installer level** → **System configuration** [**System --**] → **Control modules**

- You can use this function to read the software version of the display, the heat generator and the radio receiver unit.

## 8.2.5 Setting the control type

**Menu** → **Installer level** → **System configuration** [**System --**] → **Control type**

- Select this function to set the type of room temperature control:
  - Two-point corresponds to an On/Off control system
  - Analogue corresponds to a modulating control system

## 8.2.6 Setting the distance adjustment

**Menu** → **Installer level** → **System configuration** [**System --**] → **Distance adjustment**

- This function allows you to optimally adjust the switching behaviour of the controller to the room size or the radiator layout:
  - Positive values: slower controller switching behaviour
  - Negative values: faster controller switching behaviour

The **Distance adjustment** function is only available if you have set **Analogue** under the **Control strategy** function

## 8.3 System configuration: Heat generator

### 8.3.1 Reading the status of the heater

**Menu** → **Installer level** → **System configuration** [**Heater 1 - ---**] → **Status**

- This function allows you to read the current status of the heater (boiler). **Off, Heating** (heating mode), **hot water generation**.

## 8 Operating and display functions

### 8.3.2 Reading the value of temperature sensor VF1

Menu → Installer level → System configuration [Heater 1 ----] → VF1

- This function allows you to read the current value of temperature sensor VF1.

## 8.4 System configuration: Heating circuit

### 8.4.1 Reading the end of the current time period

Menu → Installer level → System configuration [HEATING 1 ----] → Auto day temp until

- With this function, you can stipulate whether or not a set time period is active for the **Automatic** mode and how much of the period is still remaining. To do this, the controller must be in "**Automatic mode**". The information is specified in hr:min.

### 8.4.2 Setting the day temperature

Menu → Installer level → System configuration [HEATING 1 ----] → Day temperature

- This function allows you to set the desired day temperature for the heating circuit.

### 8.4.3 Setting the set-back temperature

Menu → Installer level → System configuration [HEATING 1 ----] → Set-back temperature

- This function allows you to set the desired set-back temperature for the heating circuit.

The set-back temperature is the temperature to which the heating is to be reduced at times of low heat demand (e.g. overnight).

### 8.4.4 Reading the target flow temperature

Menu → Installer level → System configuration [HEATING 1 ----] → Flow temp. target

- You use this function to read the target flow temperature for the heating circuit.

### 8.4.5 Reading the current flow temperature

Menu → Installer level → System configuration [HEATING 1 ----] → Flow temp. current

- You use this function to read the current flow temperature for the heating circuit.



## 8.4.6 Reading the status of advanced functions

**Menu** → **Installer level** → **System configuration [HEATING 1 ----]** → **Advanced functions**

- With this function, you can define whether a special operating mode (advanced function), such as **Party function** etc. is currently active for a heating circuit.

## 8.5 System configuration: Domestic hot water circuit

### 8.5.1 Activating the cylinder

**Menu** → **Installer level** → **System configuration [Domestic hot water ----]** → **Cylinder**

- Select this function to specify whether a cylinder is connected:

Active: Cylinder connected

Inactive: No cylinder connected

### 8.5.2 Setting the target temperature for domestic hot water cylinder (desired hot water temperature)

**Menu** → **Installer level** → **System configuration [Domestic hot water ----]** → **Cylinder temp. target**

- This function allows you to define the set target temperature for a connected domestic hot water cylinder (**de-**

**sired hot water temperature**). Set the set target temperature on the controller in such a way that the heat demand of the operator is covered.

The temperature for the domestic hot water cylinder must be set to the maximum value in the boiler.

### 8.5.3 Reading the current temperature of the domestic hot water cylinder

**Menu** → **Installer level** → **System configuration [Domestic hot water ----]** → **Cyl. temp. current**

- You can use this function to read the measured cylinder temperature.

## 8.6 RF connection system configuration

### 8.6.1 Checking radio communication between controller and radio receiver unit

**Menu** → **Installer level** → **System configuration [RF connection ----]** → **Controller**

- The quality of the RF connection is indicated by a number on a scale of 0 to 10.

0: No reception

1: Poor quality

10: Excellent quality

The display of the quality is updated if there is a change.

## 8 Operating and display functions

You should change the location of the controller or radio receiver unit if the quality rating is below 3. The range of radio transmission inside buildings greatly depends on the local conditions (e.g. design and structure of the building). Consequently, an indoor range of 25 m cannot always be guaranteed. Outside of enclosed spaces (outdoors), the range is more than 100 m.

### 8.6.2 Commissioning a replacement radio controller (teach-in)

**Menu** → **Installer level** → **System configuration [RF connection ----]** → **Teach-in**

- You can use this function to start up the new controller after you have replaced a defective controller.

### 8.7 Changing the code for Installer level

**Menu** → **Installer level** → **Change code**

- This function allows you to change the access code for the "**Installer level**" operating level.

If the code is no longer available, you must reset the controller to the factory setting in order to obtain access to Installer level again.

## 9 Troubleshooting

### 9.1 Error messages

If a fault occurs in the heating system, an error message will appear in the controller display instead of the basic display. You can access the basic display again by pressing function key "**Back**".

You can also read all current error messages under the following menu point:

**Menu** → **Information** → **System status** → **Status** [Fault]

- If there is a fault, the status "**Fault**" is displayed. In this case, the right-hand selector button has the function **Display**. Press the right-hand selector button to display a list of fault messages.



#### Note

Not all error messages in the list appear automatically on the display.

Display	Meaning	Connected devices	Cause
<b>Heat generator fault 1</b>	Heat generator fault 1	Heat generator 1	See instructions, heat generator 1
<b>0 Communication fault heat generator</b>	Connection fault, heat generator 1	Heat generator 1	Cable defective, plug connection not correct
<b>No RF connection</b>	Fault, RF connection between radio controller and radio receiver unit	Radio controller Radio receiver unit	Installation site unsuitable, controller defective, radio receiver unit defective
<b>Change batteries</b>	Radio controller fault	Radio controller	Batteries in radio controller almost out of power

# 9 Troubleshooting

## 9.2 Faults

Fault	Cause	Remedy
Display is dark	Unit fault	<ul style="list-style-type: none"><li>- The power is switched off/on at the heater</li><li>- Check the power supply for the heater</li></ul>
No changes in the display via the rotary knob	Unit fault	<ul style="list-style-type: none"><li>- The power is switched off/on at the heater</li></ul>
No changes in the display via the selector buttons	Unit fault	<ul style="list-style-type: none"><li>- The power is switched off/on at the heater</li></ul>

## 10 Replacing components

### 10.1 Recording radio controller settings

1. Before replacing the radio receiver unit and/or the radio controller, make a note of all the settings on the radio controller.
2. Scroll through all display pages on the radio controller and note down all manually configurable values (e.g. target room temperature, programmed time period).



#### Note

When you replace the radio receiver unit and/or the radio controller, the user-specific settings will be partially or completely lost.

### 10.2 Replacing the radio receiver unit

- ▶ Before you start, make a note of all the settings on the radio controller.

#### 10.2.1 Removing from the wall

1. Insert a screwdriver into the slot on the wall-mounting base.
2. Carefully lever the radio receiver unit from the wall-mounting base.
3. Dispose of the faulty radio receiver unit correctly.

#### 10.2.2 Removing from the boiler

1. If necessary, open the front panel on the boiler.
2. Carefully remove the radio receiver unit from the boiler electronics box.
3. If necessary, close the front panel on the boiler.
4. Dispose of the faulty radio receiver unit correctly.

#### 10.2.3 Fitting the radio receiver unit

1. Fit the radio receiver unit on the wall. (→ Page 11)
2. Fit the radio receiver unit in the boiler. (→ Page 9)

### 10.3 Replacing the radio controller

#### 10.3.1 Removing from the wall

1. Pull the radio controller upwards and off the wall-mounting base .
2. Remove the batteries.
3. Dispose of the batteries and the radio controller correctly.

#### 10.3.2 Fitting the radio controller

1. Insert four new batteries of the same type in the controller.

# 11 Decommissioning

2. Use only new batteries of the type AlkalineAA/LR6 battery 1.5 V.
3. Check that the battery poles are the right way round.
4. Hook the controller onto the wall-mounting base.
5. Press the controller down onto the wall-mounting base until it audibly clicks into position.

## 10.3.3 Radio receiver unit: Activating teach-in

1. Press the Teach-in button to restart the teaching process.
  - ◁ The green LED will start flashing.
2. Activate teach-in for the radio controller. (→ Page 30)



### Note

The teaching-in process is automatically terminated after approximately 15 minutes. If, in these 15 minutes, the radio controller was not activated, there is no connection between the radio controller and radio receiver unit.

## 10.3.4 Radio controller: Activating teach-in

1. On the controller, select **Menu Installer level System configuration [RF connection ----] Teach-in**
2. Set the parameter **Teach-in** to **ON**.

- ◁ As soon as radio signals are transmitted between the components, the parameter **Teach-in** is automatically reset to **OFF**. That can take less than a second in some cases.



### Note

If the figure **0** or **--** is displayed, repeat the teach-in process for the radio controller. Make sure that the Teach-in function has been activated on the Radio receiver unit: Activating teach-in (→ Page 30).

## 10.3.5 Radio controller: Restoring recorded settings

- ▶ Reinststate all the settings noted down at the start.

# 11 Decommissioning

## 11.1 Removing the radio receiver unit

1. If you want to remove the radio receiver unit, first shut down the heating installation.
2. To do this, follow the instructions for decommissioning in the boiler instructions.
3. Disconnect the power supply to the boiler.

4. Disconnect the boiler from the power mains by pulling out the mains plug or de-energising the boiler using a partition with a contact opening of at least 3 mm.
5. Secure the power supply to the boiler against being switched back on again.
6. Check that there is no voltage in the boiler.

## 11.1.1 Removing from the wall

1. Insert a screwdriver into the slot on the wall-mounting base.
2. Carefully lever the radio receiver unit from the wall-mounting base.
3. Disconnect the eBUS line from the pin header connector in the wall-mounting base of the radio receiver unit and from the terminal block on the boiler.
4. Unscrew the wall-mounting base from the wall.

## 11.1.2 Removing from the boiler

1. If necessary, open the front panel on the boiler.
2. Carefully remove the radio receiver unit from the boiler electronics box.
3. If necessary, close the front panel on the boiler.

## 11.2 Removing the radio controller

1. Remove the radio controller from the wall. (→ Page 29)
2. Remove the finishing panel from the wall-mounting base by pulling the top edge of the panel away from the wall-mounting base with your fingers.
3. Unscrew the wall-mounting base from the wall.

## 11.3 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.

## 12 Customer service

### **Packaging**

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

## **12 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:  
0330 100 3461









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