

## Operating instructions



### ecoTEC exclusive

VC 156/5-7 (N-DE)

VC 216/5-7 (N-DE)

VC 246/5-7 (N-DE)

VC 276/5-7 (N-DE)

VC 326/5-7 (N-DE/DK)

VCW 266/5-7 (N-DE)

DE

#### Publisher/manufacturer

##### Vaillant GmbH

Berghauser Str. 40 ■ D-42859 Remscheid  
Tel. +49 21 91 18-0 ■ Fax +49 21 91 18-2810  
info@vaillant.de ■ www.vaillant.de





**Ihr Online-Fachhändler für:**



# Vaillant

- Kostenlose und individuelle Beratung
- Hochwertige Produkte
- Kostenloser und schneller Versand

- TOP Bewertungen
- Exzellerter Kundenservice
- Über 20 Jahre Erfahrung



**E-Mail: [info@unidomo.de](mailto:info@unidomo.de) | Tel.: 04621 - 30 60 89 0 | [www.unidomo.de](http://www.unidomo.de)**

# Contents

## Contents

|           |                                                                       |           |
|-----------|-----------------------------------------------------------------------|-----------|
| <b>1</b>  | <b>Safety .....</b>                                                   | <b>3</b>  |
| 1.1       | Action-related warnings .....                                         | 3         |
| 1.2       | Intended use .....                                                    | 3         |
| 1.3       | General safety information .....                                      | 3         |
| <b>2</b>  | <b>Notes on the documentation .....</b>                               | <b>5</b>  |
| 2.1       | Observing other applicable documents .....                            | 5         |
| 2.2       | Storing documents .....                                               | 5         |
| 2.3       | Applicability of the instructions .....                               | 5         |
| <b>3</b>  | <b>Product description .....</b>                                      | <b>5</b>  |
| 3.1       | Product design .....                                                  | 5         |
| 3.2       | Control elements .....                                                | 5         |
| 3.3       | Operator control panel .....                                          | 5         |
| 3.4       | Displayed symbols .....                                               | 6         |
| 3.5       | Information on the identification plate .....                         | 6         |
| 3.6       | Serial number .....                                                   | 6         |
| 3.7       | CE label .....                                                        | 6         |
| 3.8       | DVGW mark .....                                                       | 6         |
| <b>4</b>  | <b>Operation .....</b>                                                | <b>7</b>  |
| 4.1       | Operating concept .....                                               | 7         |
| 4.2       | Basic display .....                                                   | 7         |
| 4.3       | Menu display .....                                                    | 7         |
| 4.4       | Operating levels .....                                                | 7         |
| 4.5       | Mobile operation .....                                                | 7         |
| 4.6       | Cabinet-type casing .....                                             | 7         |
| 4.7       | Opening the isolator devices .....                                    | 7         |
| 4.8       | Starting up the product .....                                         | 8         |
| 4.9       | Switching on the product .....                                        | 8         |
| 4.10      | Setting the language .....                                            | 8         |
| 4.11      | Setting the hot water temperature .....                               | 8         |
| 4.12      | Switching Comfort mode on and off .....                               | 8         |
| 4.13      | Setting the heating flow temperature .....                            | 8         |
| 4.14      | Switching <b>Green iQ</b> mode on and off .....                       | 8         |
| 4.15      | Guaranteeing the correct filling pressure of the heating system ..... | 9         |
| 4.16      | Switching off the product's functions .....                           | 9         |
| 4.17      | Protecting the heating installation against frost .....               | 9         |
| <b>5</b>  | <b>Detecting and rectifying faults .....</b>                          | <b>10</b> |
| <b>6</b>  | <b>Calling up (Live monitor) status codes .....</b>                   | <b>10</b> |
| <b>7</b>  | <b>Care and maintenance .....</b>                                     | <b>10</b> |
| 7.1       | Maintenance .....                                                     | 10        |
| 7.2       | Caring for the product .....                                          | 10        |
| 7.3       | Reading maintenance messages .....                                    | 10        |
| 7.4       | Checking the condensate drain pipework and tundish .....              | 10        |
| <b>8</b>  | <b>Decommissioning .....</b>                                          | <b>10</b> |
| 8.1       | Temporarily decommissioning the product .....                         | 10        |
| 8.2       | Permanently decommissioning the product .....                         | 10        |
| <b>9</b>  | <b>Recycling and disposal .....</b>                                   | <b>10</b> |
| <b>10</b> | <b>Guarantee and customer service .....</b>                           | <b>11</b> |
| 10.1      | Guarantee .....                                                       | 11        |
| 10.2      | Customer service .....                                                | 11        |

|                                          |           |
|------------------------------------------|-----------|
| <b>Appendix .....</b>                    | <b>12</b> |
| <b>A Operator level – overview .....</b> | <b>12</b> |
| <b>B Troubleshooting .....</b>           | <b>12</b> |
| <b>C Status codes – Overview .....</b>   | <b>13</b> |



## 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 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

### 1.2 Intended use

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

The product is intended as a heat generator for closed heating installations and for hot water generation.

Intended use includes the following:

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

This product can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the product in a safe way and understand the hazards involved. Children must not play with the product. Cleaning and user maintenance work must not be carried out by children unless they are supervised.

Any other use that is not specified in these instructions, or use beyond that specified in this

document shall be considered improper use. Any direct use in industrial or commercial processes is also deemed to be improper.

#### **Caution.**

Improper use of any kind is prohibited.

### 1.3 General safety information

#### 1.3.1 Installation by competent persons only

The installation, inspection, maintenance and repair of the product, as well as the gas ratio settings, must only be carried out by a competent person.

#### 1.3.2 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.

#### 1.3.3 Risk of death from escaping gas

What to do if you smell gas in the building:

- ▶ Avoid rooms that smell of gas.
- ▶ If possible, open doors and windows fully and ensure adequate ventilation.
- ▶ Do not use naked flames (e.g. lighters, matches).
- ▶ Do not smoke.
- ▶ Do not use any electrical switches, mains plugs, doorbells, telephones or other communication systems in the building.
- ▶ Close the emergency control valve or the main isolator.
- ▶ If possible, close the gas isolator cock on the product.
- ▶ Warn other occupants in the building by yelling or banging on doors or walls.
- ▶ Leave the building immediately and ensure that others do not enter the building.
- ▶ Alert the police and fire brigade as soon as you are outside the building.



## 1 Safety



- ▶ Use a telephone outside the building to inform the emergency service department of the gas supply company.

### 1.3.4 Risk of death due to blocked or leaking flue pipework

What to do if you smell flue gas in the property:

- ▶ Open all accessible doors and windows fully to provide ventilation.
- ▶ Switch off the product.
- ▶ Inform a competent person.

### 1.3.5 Risk of being burned or scalded by hot parts

Parts of the product become hot during operation.

- ▶ Only touch the product and its parts once they have cooled down.

### 1.3.6 Risk of death due to explosive and flammable materials

- ▶ Do not use the product in storage rooms that contain explosive or flammable substances (such as petrol, paper or paint).

### 1.3.7 Risk of death due to changes to the product or the product environment

- ▶ Never remove, bridge or block the safety devices.
- ▶ Do not tamper with any of the safety devices.
- ▶ Do not damage or remove any tamper-proof seals on components.
- ▶ Do not make any changes:
  - The product itself
  - to the gas, supply air, water and electricity supply lines
  - to the entire flue system
  - to the entire condensate discharge system
  - to the expansion relief valve
  - to the drain pipework
  - to constructional conditions that may affect the operational reliability of the product

### 1.3.8 Risk of poisoning caused by insufficient combustion air supply

**Conditions:** Open-flued operation

- ▶ Ensure that there is a sufficient combustion air supply.

### 1.3.9 Risk of corrosion damage due to unsuitable combustion and room air

Sprays, solvents, chlorinated cleaning agents, paint, adhesives, ammonia compounds, dust or similar substances may lead to corrosion on the product and in the air/flue pipe.

- ▶ Ensure that the combustion air supply is always free of fluorine, chlorine, sulphur, dust, etc.
- ▶ Ensure that no chemical substances are stored at the installation site.

### 1.3.10 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.

### 1.3.11 Risk of injury and material damage due to maintenance and repairs carried out incorrectly or not carried out at all

- ▶ Never attempt to carry out maintenance work or repairs on your product yourself.
- ▶ Faults and damage should be immediately rectified by a competent person.
- ▶ Adhere to the maintenance intervals specified.



## 2 Notes on the documentation

### 2.1 Observing other applicable documents

- You must observe all operating instructions enclosed with the system components.

### 2.2 Storing documents

- Keep this manual and all other applicable documents safe for future use.

### 2.3 Applicability of the instructions

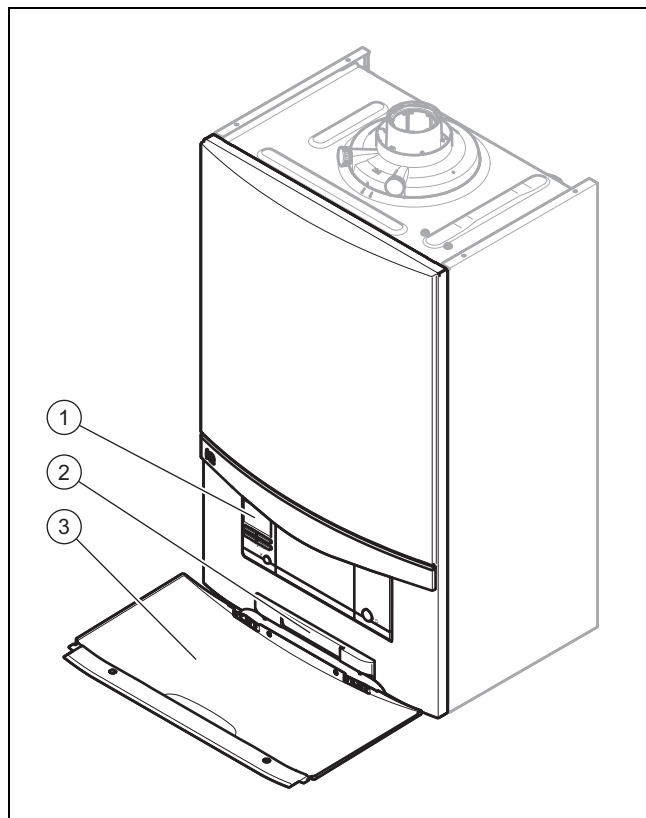
These instructions apply only to:

#### Product article number

|                                       |                           |
|---------------------------------------|---------------------------|
| VC 156/5-7 (N-DE) ecoTEC exclusive    | 0010014917,<br>0010024212 |
| VC 216/5-7 (N-DE) ecoTEC exclusive    | 0010014919,<br>0010024213 |
| VC 246/5-7 (N-DE) ecoTEC exclusive    | 0010022159,<br>0010024216 |
| VC 276/5-7 (N-DE) ecoTEC exclusive    | 0010014922,<br>0010024214 |
| VC 326/5-7 (N-DE/DK) ecoTEC exclusive | 0010014924,<br>0010024215 |
| VCW 266/5-7 (N-DE) ecoTEC exclusive   | 0010017094,<br>0010024217 |

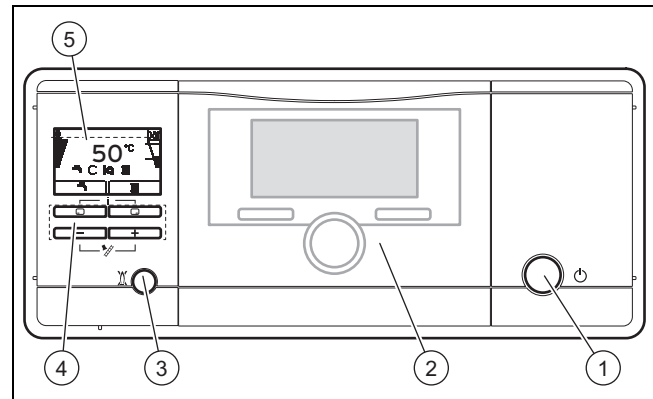
## 3 Product description

### 3.1 Product design



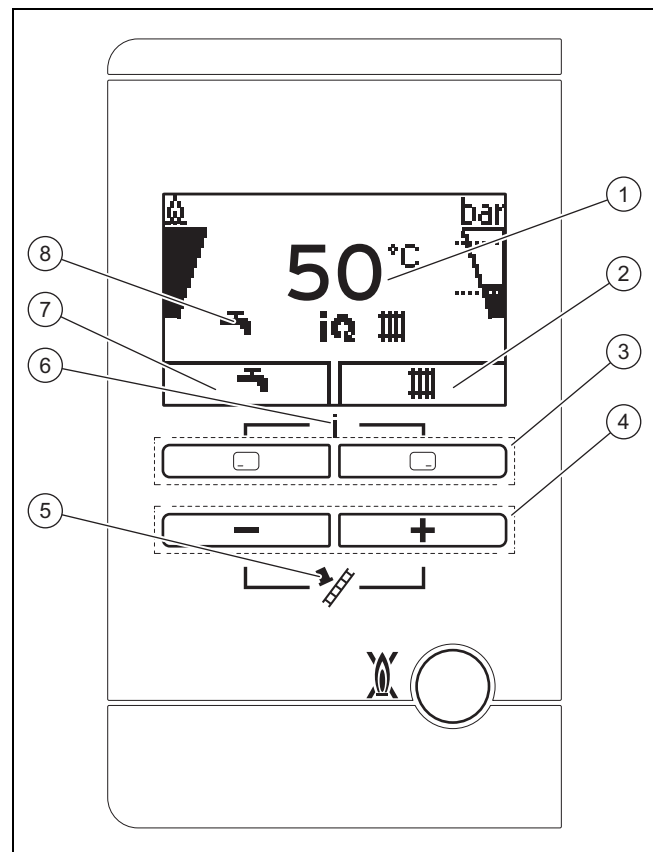
- |                                        |              |
|----------------------------------------|--------------|
| 1 Control elements                     | 3 Front flap |
| 2 Plate with serial number on the rear |              |

### 3.2 Control elements



- |                                   |                     |
|-----------------------------------|---------------------|
| 1 On/off button                   | 3 Reset button      |
| 2 Built-in controller (accessory) | 4 Operating buttons |
|                                   | 5 Display           |

### 3.3 Operator control panel



- |                                                                                                                                        |                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 1 Current heating flow temperature, filling pressure of the heating installation, operating mode, fault code or additional information | 4 - and + button                                       |
| 2 Current assignment of the right-hand selection button                                                                                | 5 Maximum output operation (for chimney sweeps only)   |
| 3 Left- and right-hand selection buttons                                                                                               | 6 Access to the menu for additional information        |
|                                                                                                                                        | 7 Current assignment of the left-hand selection button |
|                                                                                                                                        | 8 Active operating status                              |

The display lights up

- if you switch on the product or

### 3 Product description

- if you press a button while the product is switched on.  
At first, pressing this button does not trigger any other function.

The light goes out after one minute if you do not press any button.

#### 3.4 Displayed symbols

| Symbol                                                                                      | Meaning                                                                                      | Explanation                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            | Burner operating correctly                                                                   | Burner on                                                                                                                                                                       |
|            | Current burner modulation rate                                                               |                                                                                                                                                                                 |
|            | Current filling pressure of the heating system<br>The dashed lines show the permitted range. | <ul style="list-style-type: none"> <li>– Permanently on: Filling pressure in the permitted range.</li> <li>– Flashing: Filling pressure outside the permitted range.</li> </ul> |
|            | Hot water generation active                                                                  | <ul style="list-style-type: none"> <li>– Permanently on: Draw-off mode before burner is on</li> <li>– Flashing: Burner on in draw-off mode</li> </ul>                           |
|           | Heating mode active                                                                          | <ul style="list-style-type: none"> <li>– Permanently on: Heating mode heat requirement</li> <li>– Flashing: Burner on in heating mode</li> </ul>                                |
|          | Green iQ mode active                                                                         | <ul style="list-style-type: none"> <li>– Permanently on: Energy-saving mode active</li> </ul>                                                                                   |
|          | Maintenance required                                                                         | Information on maintenance message in the "Live Monitor".                                                                                                                       |
|          | Summer mode active<br>Heating mode is switched off                                           |                                                                                                                                                                                 |
|          | Burner anti-cycling time is active                                                           | To avoid the need for frequent switching on and off (increases the product's working life).                                                                                     |
| <br>F.XX | Fault in the product                                                                         | Appears instead of the basic display, may be an explanatory plain text display.                                                                                                 |

#### 3.5 Information on the identification plate

The identification plate is mounted on the underside of the product in the factory.

| Information on the identification plate                                             | Meaning                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------|
|  | Read the instructions.                                      |
| VC(W) ...                                                                           | Type designation                                            |
| ..6/5-7                                                                             | Calorific value power/product generation equipment          |
| ecoTEC exclusive                                                                    | Product designation                                         |
| 2N, G20 – G25<br>20 mbar (2 kPa)                                                    | Gas group and gas connection pressure as set at the factory |
| ww/yyyy                                                                             | Date of manufacture: Week/year                              |

| Information on the identification plate                                            | Meaning                                                                    |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Cat.                                                                               | Approved unit categories                                                   |
| Types                                                                              | Approved gas-fired units                                                   |
| PMS                                                                                | Permissible total overpressure                                             |
| T <sub>max.</sub>                                                                  | Max. flow temperature                                                      |
| ED 92/42                                                                           | Current efficiency directive fulfilled with 4* rating                      |
| V Hz                                                                               | Mains voltage and mains frequency                                          |
| W                                                                                  | Max. electrical power consumption                                          |
| IP                                                                                 | Level of protection                                                        |
|   | Heating mode                                                               |
|   | Hot water generation                                                       |
| P                                                                                  | Nominal heat output range                                                  |
| Q                                                                                  | Heat input range                                                           |
|  | Bar code with serial number,<br>7th to 16th digit = product article number |

#### 3.6 Serial number

The serial number is located on a plate behind the front flap. The plate is in a plastic fish plate. You can also display the serial number in the display.

#### 3.7 CE label



The CE label shows that the products comply with the basic requirements of the applicable directives as stated on the identification plate.

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

#### 3.8 DVGW mark



The DVGW mark documents that the products comply with all of the requirements of the DVGW VP 112 (test basis from the German Association for Gas and Water Industry Association for granting the DVGW quality mark) in accordance with the identification plate.

4 Operation

4.1 Operating concept

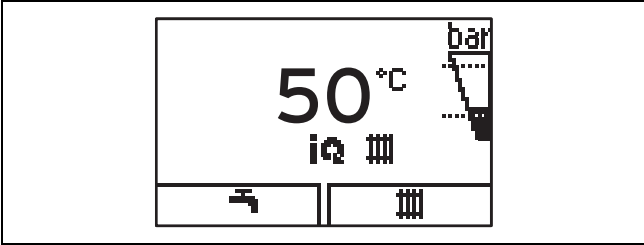
| Operator control element                                                          | Function                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>- Setting the hot water temperature</li><li>- Cancelling the activation of an operating mode</li><li>- Cancelling a change to a set value</li><li>- Going one selection level higher</li></ul>                                           |
|  | <ul style="list-style-type: none"><li>- Setting the heating flow temperature</li><li>- Reading the system pressure</li><li>- Activating the comfort mode</li><li>- Activating the operating mode</li><li>- Confirm setting</li><li>- Going one selection level lower</li></ul> |
| +  at the same time                                                               | <ul style="list-style-type: none"><li>- Calling up the menu</li></ul>                                                                                                                                                                                                          |
| or                                                                                | <ul style="list-style-type: none"><li>- Reducing or increasing the set value</li><li>- Scrolling through menu entries</li></ul>                                                                                                                                                |

The current function of the  and  buttons is shown in the display.

Adjustable values are always displayed as flashing.

You must always confirm a change to a value. Only then is the new setting saved. You can press  to cancel a procedure.

4.2 Basic display



The basic display shows the current condition of the product. If you press a selection button, the activated function is displayed in the display.

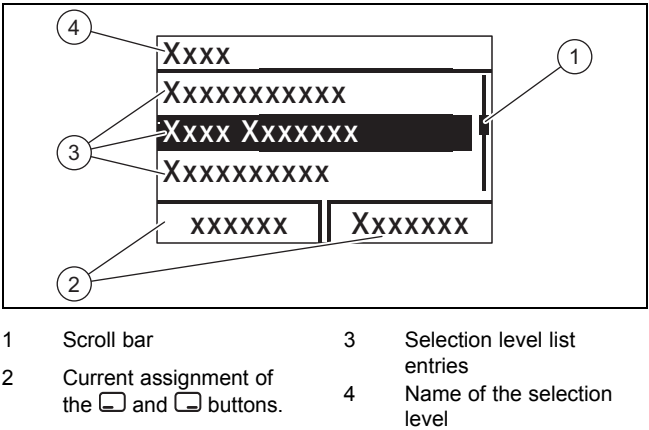
The functions that are available depend on whether a controller is connected to the product.

You can switch back to the basic display by:

- Pressing  to exit the selection levels
- Not pressing any button for longer than 15 minutes.

If there is an error message present, the basic displays switches to the error message.

4.3 Menu display



You can find an overview of the menu structure in the appendix.

Operator level – overview (→ Page 12)

4.4 Operating levels

The product has two operating levels.

The operating level for the operator shows information and offers set-up options that do not require any special prior knowledge.

The operating level for the competent person is protected by a code.

Operator level – overview (→ Page 12)

4.5 Mobile operation

The product is equipped with a communication unit for connecting to the Internet.

For mobile operation of the product, use the operating instructions that are enclosed with the communication unit.

4.6 Cabinet-type casing

Enclosing the product in cabinet-type casing requires compliance with the applicable design instructions.

If you require cabinet-type casing for your product, consult a heating specialist company. Never, under any circumstances, enclose the product yourself.

4.7 Opening the isolator devices

1. Ask the competent person who installed the product to explain to you where these isolator devices are located and how to handle them.
2. Open the gas isolator cock fully.
3. Open the service valves in the heating installation's flow and return.

**Conditions:** Product with integrated hot water generation

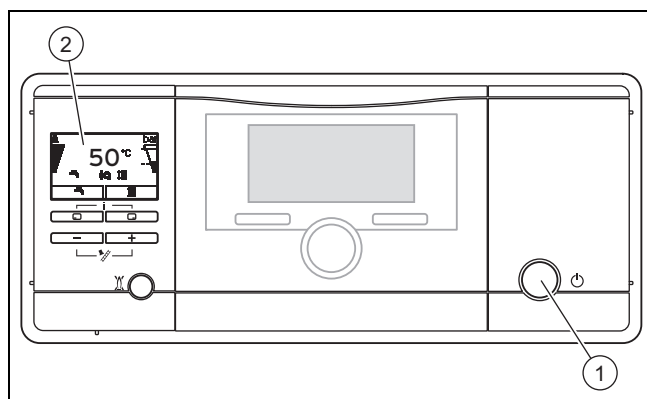
- Open the cold water stop valve.

## 4 Operation

### 4.8 Starting up the product

- ▶ Only start up the product once the casing has been completely closed.

### 4.9 Switching on the product



- ▶ Press the on/off button (1).
  - ◁ The "Basic display" (→ Page 7) (2) appears on the display.

### 4.10 Setting the language

1. Press and hold and at the same time.
2. Also briefly press .
3. Press and hold and until the display shows the language setting.
4. Select the required language by pressing or .
5. Confirm by pressing .
6. Once you have set the correct language, press again to confirm this.

### 4.11 Setting the hot water temperature

**Conditions:** Water hardness: > 3.57 mol/m<sup>3</sup>

- ▶ Have a competent person take appropriate measures to protect against Legionella.
  - ▶ Set the hot water temperature to a maximum of 50 °C.
1. Press .
  - ◁ The set hot water temperature flashes in the display.

**Conditions:** No controller connected

- ▶ Change the hot water temperature by pressing or .
- ▶ Confirm by pressing .

**Conditions:** Controller connected

- ▶ Use to set the maximum possible hot water temperature on the product.
- ▶ Confirm by pressing .
- ▶ Set the required hot water temperature on the controller (→ Controller operating instructions).

### 4.12 Switching Comfort mode on and off



#### Note

Comfort mode immediately supplies hot water at the required temperature, without you having to wait for the water to heat up.

1. Press .
2. Press .
- ◁ **Comfort on** or **Comfort off** are shown flashing in the display.
3. Activate or deactivate Comfort mode by pressing or respectively.
4. Press to confirm this change.
  - ◁ When you have activated Comfort mode, the symbol appears on the basic display. When you have deactivated Comfort mode, the symbol goes out on the basic display.

### 4.13 Setting the heating flow temperature

1. Press .
- ◁ The target value of the heating flow temperature appears on the display.



#### Note

The competent person may have adjusted the maximum possible temperature.

**Conditions:** No controller connected

- ▶ Use or to set the required heating flow temperature.
- ▶ Confirm by pressing .

**Conditions:** Controller connected

- ▶ Set the maximum possible heating flow temperature on the product.
- ▶ Confirm by pressing .
- ▶ Set the required heating flow temperature on the controller (→ Controller operating instructions).

### 4.14 Switching Green iQ mode on and off



#### Note

**Green iQ** mode is an energy-saving operating mode. If this mode is activated, the product operates in the heating and cylinder charging mode in such a way that the maximum benefits associated with condensing technology are achieved.

1. Press and at the same time.
  - ◁ The menu is called up.
2. Navigate to the **Green iQ** menu item and press .
- **Menu → Basic settings → Green iQ**
3. Press or to activate or deactivate **Green iQ** mode respectively.
  - ◁ **Mode on** or **Mode off** will flash on the display.
4. Confirm by pressing .
- ◁ If you have activated **Green iQ** mode, the symbol will appear on the basic display. If you have deactiv-

ated **Green iQ** mode, the **iQ** symbol will disappear from the basic display.

## 4.15 Guaranteeing the correct filling pressure of the heating system

### 4.15.1 Checking the filling pressure of the heating installation



#### Note

To ensure that the heating installation operates smoothly, the filling pressure when the heating installation is cold must be between 0.1 MPa and 0.2 MPa (1.0 bar and 2.0 bar) or lie between the two dashed lines in the bar graph display.

If the heating installation extends over several storeys, a higher filling pressure may be required for the heating installation. Ask a competent person for details.

If the filling pressure in the heating installation falls below 0.05 MPa (0.5 bar), then the product switches off. The display alternates between the fault message **F.22** and the current filling pressure.

In addition, the  symbol appears after approx. one minute.

1. Press  twice.
  - ◁ The current filling pressure (**1**) is shown in the display, along with the permissible filling pressure range.

2. Check the filling pressure in the display.

#### Result 1:

System pressure: 0.1 ... 0.2 MPa (1.0 ... 2.0 bar)  
The filling pressure is in the intended pressure range.

#### Result 2:

Filling pressure: < 0.08 MPa (< 0.80 bar)

- Fill the heating installation. (→ Page 9)
  - ◁ If you have topped up the installation with sufficient heating water, the display automatically disappears after 20 seconds.

### 4.15.2 Filling the heating installation



#### Caution.

**Risk of material damage due to heating water that is extremely calciferous or corrosive or contaminated by chemicals.**

Unsuitable tap water damages the seals and diaphragms, blocks components in the product and heating installation through which the water flows and causes noise.

- Only fill the heating installation with suitable heating water.

1. Ask a competent person where the filling cock is located.
2. Connect the filling tap to a heating water supply in the way you were told by the competent person.
3. Open all radiator valves (thermostatic radiator valves) of the heating installation.
4. Open the heating water supply.
5. Turn the filling cock on slowly and allow water to flow in until the required filling pressure has been reached.
6. Close the heating water supply.
7. Purge all radiators.
8. Check the filling pressure in the display.
9. Top up with more water if necessary.
10. Close the filling cock.
11. Go back to the Basic display (→ Page 7).

## 4.16 Switching off the product's functions

### 4.16.1 Switching off hot water generation

**Applicability:** Product with hot water generation through external domestic hot water cylinder

1. To switch off cylinder charging without switching off heating mode, press  ().
  - ◁ The set hot water temperature flashes in the display.
2. Use the  button to set the hot water temperature to **Cylinder charging off**.
3. Confirm by pressing .
  - ◁ Cylinder charging is switched off.
  - ◁ Only the frost protection function for the cylinder remains active.

### 4.16.2 Switching off heating mode (Summer mode)

1. To switch off heating mode without switching off hot water generation, press  ().
  - ◁ The value of the heating flow temperature appears in the display.
2. Use the  button to set the heating flow temperature to **Heating off**.
3. Confirm by pressing .
  - ◁ Heating mode is switched off
  - ◁ The  symbol appears in the display.

## 4.17 Protecting the heating installation against frost

### 4.17.1 Frost protection function



#### Caution.

**Risk of material damage due to frost.**

The frost protection function cannot guarantee flow through the entire heating installation, which means that parts of the heating installation may freeze and therefore become damaged.

- During a period of frost, ensure that the heating installation remains in operation and that all rooms are sufficiently heated, even when you are away.

## 5 Detecting and rectifying faults



### Note

To keep the frost protection devices active, you should switch your product on and off using the controller, if one is provided.

If the heating flow temperature falls below 5 °C when the on/off button is on, the product comes into operation and heats the circulating water to approx. 30 °C on both the heating side and the hot water side (if available).

### 4.17.2 Draining the heating installation

Another way to protect the heating installation and the product from frost for very long switch-off times is to drain them completely.

- Consult a competent person about this.

## 5 Detecting and rectifying faults

- If faults occur, proceed in accordance with the table in the appendix.  
Troubleshooting (→ Page 12)
- If you are unable to eliminate the faults using the specified measures, if fault messages (**F.xx**) are displayed, or if the product does not function correctly, contact a competent person.

## 6 Calling up (Live monitor) status codes

1. Press  and  at the same time.  
◀ The menu is called up.
  2. Navigate to **Menu** → **Live monitor** and confirm by pressing .
- Status codes – Overview (→ Page 13)

## 7 Care and maintenance

### 7.1 Maintenance

An annual inspection and biennial maintenance of the product carried out by a competent person is a prerequisite for ensuring that the product is permanently ready and safe for operation, reliable, and has a long service life. The inspection may require maintenance to be carried out earlier, depending on the results.

### 7.2 Caring for the product

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

### 7.3 Reading maintenance messages

If the  symbol is shown in the display, the product requires maintenance work. The product is not in fault mode; it continues to operate.

- Consult a competent person.
- If the water pressure is flashing at the same time, simply add more heating water.

### 7.4 Checking the condensate drain pipework and tundish

The condensate drain pipework and tundish must always be penetrable.

- Regularly check the condensate drain pipework and tundish for faults and, particularly, for blockages.

You must not be able to see or feel any obstructions in the condensate drain pipework and tundish.

- If you notice a fault, have it rectified by a competent person.

## 8 Decommissioning

### 8.1 Temporarily decommissioning the product



#### Caution.

#### Risk of material damage due to frost.

The frost protection and monitoring devices are only active while the product is connected to the power mains and switched on via the on/off button, and when the gas isolator cock is open.

- Temporarily decommission the product only if no frost is expected.

1. Switch off the product using the on/off button.  
◀ The display goes out.
2. When decommissioning the product for an extended period (e.g. holiday), also close the gas isolator cock.

### 8.2 Permanently decommissioning the product

- Have a competent person permanently decommission the product.

## 9 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.



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.

## 10 Guarantee and customer service

### 10.1 Guarantee

Herstellergarantie gewähren wir nur bei Installation durch einen anerkannten Fachhandwerksbetrieb.

Dem Eigentümer des Geräts räumen wir diese Herstellergarantie entsprechend den Vaillant Garantiebedingungen ein. Garantiewerke werden grundsätzlich nur von unserem Kundendienst ausgeführt. Wir können Ihnen daher etwaige Kosten, die Ihnen bei der Durchführung von Arbeiten an dem Gerät während der Garantiezeit entstehen, nur dann erstatten, falls wir Ihnen einen entsprechenden Auftrag erteilt haben und es sich um einen Garantiefall handelt.

### 10.2 Customer service

Auftragsannahme Vaillant Kundendienst: 021 91 5767901

# Appendix

## Appendix

### A Operator level – overview

| Setting level         | Values           |      | Unit | Increment, select                 | Default setting  |
|-----------------------|------------------|------|------|-----------------------------------|------------------|
|                       | Min.             | Max. |      |                                   |                  |
| Water pressure →      |                  |      |      |                                   |                  |
| Water pressure        | Current value    |      | bar  |                                   |                  |
|                       |                  |      |      |                                   |                  |
| Live monitor →        |                  |      |      |                                   |                  |
| Status                | Current value    |      |      |                                   |                  |
|                       |                  |      |      |                                   |                  |
| Information →         |                  |      |      |                                   |                  |
| Contact details       | Phone number     |      |      |                                   |                  |
| Serial number         | Permanent value  |      |      |                                   |                  |
| Display contrast      | Current value    |      |      | 1                                 | 25               |
|                       | 15               | 40   |      |                                   |                  |
| comDIALOG             | Current value    |      |      | No function                       |                  |
|                       |                  |      |      |                                   |                  |
| Basic settings →      |                  |      |      |                                   |                  |
| Language              | Current language |      |      | Languages available for selection | Country-specific |
| Green iQ              | Current value    |      |      | On, Off                           | On               |
| Display contrast      | Current value    |      |      | 1                                 | 25               |
|                       | 15               | 40   |      |                                   |                  |
| Resets →              |                  |      |      |                                   |                  |
| Reset anti-cycl. time | Current value    |      | min  |                                   |                  |

### B Troubleshooting

| Fault                                                                  | Cause                                                                                                                               | Measure                                                                                                                                                                                                              |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product does not start up:<br>– No hot water<br>– Heating remains cold | The gas isolator cock installed on-site and/or the gas isolator cock on the product is closed.                                      | Open both gas isolator cocks.                                                                                                                                                                                        |
|                                                                        | The cold water stop valve is closed.                                                                                                | Open the cold water stop valve.                                                                                                                                                                                      |
|                                                                        | The power supply in the building is disconnected.                                                                                   | Check the fuse in the building. The product switches on automatically when the power is restored.                                                                                                                    |
|                                                                        | The product is switched off.                                                                                                        | Switch on the product (→ "Switching on the product" section).                                                                                                                                                        |
|                                                                        | The heating flow temperature is set too low or to the <b>Heating off</b> position, and/or the hot water temperature is set too low. | Set the heating flow temperature and hot water temperature (→ "Setting the heating flow temperature" section/→ "Setting the hot water temperature" section).                                                         |
|                                                                        | The system pressure is insufficient.<br>Low water pressure in the heating installation (fault message: <b>F.22</b> ).               | Fill the heating installation (→ "Filling the heating installation" section).                                                                                                                                        |
|                                                                        | There is air in the heating installation.                                                                                           | Have your competent person purge the heating installation.                                                                                                                                                           |
|                                                                        | After three unsuccessful attempts to ignite the flame, the product switches to fault mode (fault message: <b>F.28</b> ).            | Press the reset button for one second. The product makes another attempt to ignite the flame.<br><br>If you have been unable to eliminate the ignition fault after three reset attempts, consult a competent person. |

| Fault                                                                  | Cause                                                                                                                                                             | Measure                                                                      |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Product does not start up:<br>– No hot water<br>– Heating remains cold | There is a fault in the flue gas route (fault message: <b>F.36/F.37</b> ):<br>– The symbols XXXXX are shown in the display.<br>– The red LED is lit continuously. | Have your competent person rectify the fault.                                |
| Hot water generation functioning correctly; heating does not start up. | The external controller is not set correctly.                                                                                                                     | Set the external controller correctly (→ Controller operating instructions). |

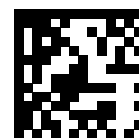
## C Status codes – Overview

| Status code                                                              | Parameter                         | Meaning                                                                                |
|--------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------|
| Heating mode                                                             |                                   |                                                                                        |
| <b>S.00</b>                                                              | Heating: No heat demand           | Heating: No heat demand                                                                |
| <b>S.01</b>                                                              | Heating mode: Fan start-up        | Heating mode: Fan start-up                                                             |
| <b>S.02</b>                                                              | Heating mode: Pump pre-run        | Heating mode: Pump pre-run                                                             |
| <b>S.03</b>                                                              | Heating mode: Ignition            | Heating mode: Ignition                                                                 |
| <b>S.04</b>                                                              | Heating mode: Burner on           | Heating mode: Burner on                                                                |
| <b>S.05</b>                                                              | Heating mode: Pump/fan overrun    | Heating mode: Pump/fan overrun                                                         |
| <b>S.06</b>                                                              | Heating mode: Fan overrun         | Heating mode: Fan overrun                                                              |
| <b>S.07</b>                                                              | Heating mode: Pump overrun        | Heating mode: Pump overrun                                                             |
| <b>S.08</b>                                                              | Heating mode: Anti-cycling time   | Heating mode: Remaining anti-cycling time                                              |
| <b>S.09</b>                                                              | Heating mode: Measuring program   | Heating mode: Measuring program                                                        |
| DHW mode                                                                 |                                   |                                                                                        |
| <b>S.10</b>                                                              | DHW demand                        | Hot water requirement via flow sensor                                                  |
| <b>S.11</b>                                                              | DHW mode: Fan start-up            | DHW mode: Fan start-up                                                                 |
| <b>S.13</b>                                                              | DHW mode: Ignition                | DHW mode: Ignition                                                                     |
| <b>S.14</b>                                                              | DHW mode: Burner on               | DHW mode: Burner on                                                                    |
| <b>S.15</b>                                                              | DHW mode: Pump/fan overrun        | DHW mode: Pump/fan overrun                                                             |
| <b>S.16</b>                                                              | DHW mode: Fan overrun             | DHW mode: Fan overrun                                                                  |
| <b>S.17</b>                                                              | DHW mode: Pump overrun            | DHW mode: Pump overrun                                                                 |
| <b>S.19</b>                                                              | DHW mode: Measuring program       | DHW mode: Measuring program                                                            |
| Comfort mode, warm start or hot water handling mode with <b>actoSTOR</b> |                                   |                                                                                        |
| <b>S.20</b>                                                              | DHW demand                        | DHW demand                                                                             |
| <b>S.21</b>                                                              | DHW mode: Fan start-up            | DHW mode: Fan start-up                                                                 |
| <b>S.22</b>                                                              | DHW mode: Pump pre-run            | DHW mode: Pump pre-run                                                                 |
| <b>S.23</b>                                                              | DHW mode: Ignition                | DHW mode: Ignition                                                                     |
| <b>S.24</b>                                                              | DHW mode: Burner on               | DHW mode: Burner on                                                                    |
| <b>S.25</b>                                                              | DHW mode: Pump/fan overrun        | DHW mode: Pump/fan overrun                                                             |
| <b>S.26</b>                                                              | DHW mode: Fan overrun             | DHW mode: Fan overrun                                                                  |
| <b>S.27</b>                                                              | DHW mode: Pump overrun            | DHW mode: Pump overrun                                                                 |
| <b>S.28</b>                                                              | DHW anti-cycling time             | Hot water burner anti-cycling time                                                     |
| <b>S.29</b>                                                              | DHW mode: Measuring program       | DHW mode: Measuring program                                                            |
| Others                                                                   |                                   |                                                                                        |
| <b>S.30</b>                                                              | No heat demand: Controller        | Room thermostat (RT) is blocking heating mode                                          |
| <b>S.31</b>                                                              | No heat demand: Summer mode       | Summer mode active or no heat requirement from eBUS controller                         |
| <b>S.32</b>                                                              | Waiting time deviation: Fan speed | Waiting period because of fan speed deviation                                          |
| <b>S.33</b>                                                              | Waiting time: Air monitor         | Waiting period: Air pressure sensor/switch reports that the pressure signal is too low |
| <b>S.34</b>                                                              | Heating mode: Frost protection    | Frost protection mode active                                                           |

## Appendix

| Status code | Parameter                                           | Meaning                                                                                                                                                   |
|-------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| S.36        | Target value for ext. controller lower than 20 °C   | Reference setting for continuous controller 7-8-9 or eBUS controller is < 20°C and blocks the heating mode                                                |
| S.37        | Waiting time: Deviation in fan speed                | Waiting time: Fan failure in operation                                                                                                                    |
| S.39        | Contact thermostat triggered                        | "Burner off contact" has responded (e.g. contact thermostat or condensate pump)                                                                           |
| S.40        | Comfort protection active                           | Comfort protection mode is active: Product running with limited heating comfort                                                                           |
| S.41        | Water pressure too high                             | Water pressure > 2.8 bar                                                                                                                                  |
| S.42        | Flue non-return flap closed                         | Flue non-return flap response blocks burner operation (only in conjunction with accessory VR40) or condensate pump defective; heat requirement is blocked |
| S.46        | Comfort protection: Minimum load, loss of flame     | Comfort protection mode, flame loss at minimum load                                                                                                       |
| S.53        | Waiting time: Water shortage                        | Product is within the waiting period of the modulation block/operation block function as a result of low water pressure (flow/return spread too large)    |
| S.54        | Waiting time: Water shortage                        | Product is within the waiting period of the operation blocking function as a result of low water pressure (temperature gradient)                          |
| S.55        | Waiting time: CO sensor                             | Waiting time: CO sensor                                                                                                                                   |
| S.56        | Waiting time: CO limit value exceedance             | Waiting time: CO limit value exceedance                                                                                                                   |
| S.57        | Waiting time: Measuring program                     | Calibration unsuccessful. Waiting period, comfort safety mode                                                                                             |
| S.58        | Burner modulation limitation                        | Modulation limitation due to noise/wind                                                                                                                   |
| S.59        | Waiting time: Water circulation vol.                | Minimum circulation water volume                                                                                                                          |
| S.76        | Service message: Check water pressure               | System pressure too low. Top up water.                                                                                                                    |
| S.85        | Service message: Check water circulation volume     | Service message: Check water circulation volume                                                                                                           |
| S.86        | Service message: Check vortex sensor                | Service message: Check vortex sensor                                                                                                                      |
| S.87        | Service message: Check differential pressure sensor | Service message: Check differential pressure sensor                                                                                                       |
| S.88        | Purging programme is running                        | Purging programme is running                                                                                                                              |
| S.92        | Water circulation volume self-test                  | Water circulation volume self-test                                                                                                                        |
| S.93        | Flue gas measurement not possible                   | Flue gas measurement not possible because not all measuring programs have yet run                                                                         |
| S.96        | Return temperature sensor self-test                 | Return sensor test running, heating demands are blocked.                                                                                                  |
| S.97        | Water pressure sensor self-test                     | Water pressure sensor test running, heating demands are blocked.                                                                                          |
| S.98        | Flow/return temperature sensor self-test            | Flow/return sensor test running, heating demands are blocked.                                                                                             |
| S.99        | Vaillant self-test                                  | Self-test                                                                                                                                                 |
| S.105       | Unit not purged                                     | Unit not purged (D.130 = 0: No bypass valve)                                                                                                              |





0020189874\_04

0020189874\_04 ■ 30.01.2018

### **Supplier**

#### **Vaillant Deutschland GmbH & Co.KG**

Berghauser Str. 40 ■ D-42859 Remscheid

Telefon 021 91 18-0 ■ Telefax 021 91 18-2810

Auftragsannahme Vaillant Kundendienst 021 91 5767901

info@vaillant.de ■ www.vaillant.de

© These instructions, or parts thereof, are protected by copyright and may be reproduced or distributed only with the manufacturer's written consent.

We reserve the right to make technical changes.