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

Vaillant

Contents

Contents

1 Safety

1.1 Action-related warnings

Classification of action-related warnings

The action-related warnings are classified in accordance with the severity of the possible danger using the following warning 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 commercial or industrial use is also deemed to be improper.

Caution.

Improper use of any kind is prohibited.

1.3 General safety information

1.3.1 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.

▸ 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 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).

1.3.6 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 seals on components.
▸ Do not make any changes:
  – The product itself
  – to the gas, air, water and electricity supplies
  – to the entire flue gas installation
  – to the entire condensate drain system
  – to the expansion relief valve
  – to the drain pipework
  – to constructional conditions that may affect the operational reliability of the product

1.3.7 Risk of poisoning caused by insufficient combustion air supply

Conditions: Open-flued operation

▸ Ensure that there is a sufficient combustion air supply.

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

1.3.9 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.

1.3.10 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, 0010024212
VC 216/5-7 (N-DE) ecoTEC exclusive	0010014919, 0010024213
VC 246/5-7 (N-DE) ecoTEC exclusive	0010022159, 0010024216
VC 276/5-7 (N-DE) ecoTEC exclusive	0010014922, 0010024214
VC 326/5-7 (N-DE/DK) ecoTEC exclusive	0010014924, 0010024215
VCW 266/5-7 (N-DE) ecoTEC exclusive	0010017094, 0010024217

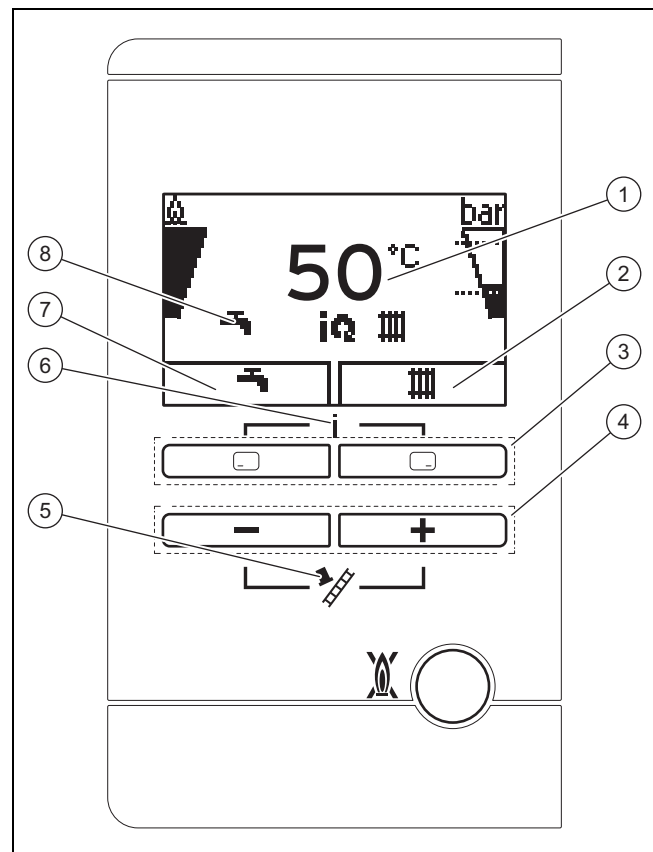## 3 Product description

3.1 Product design
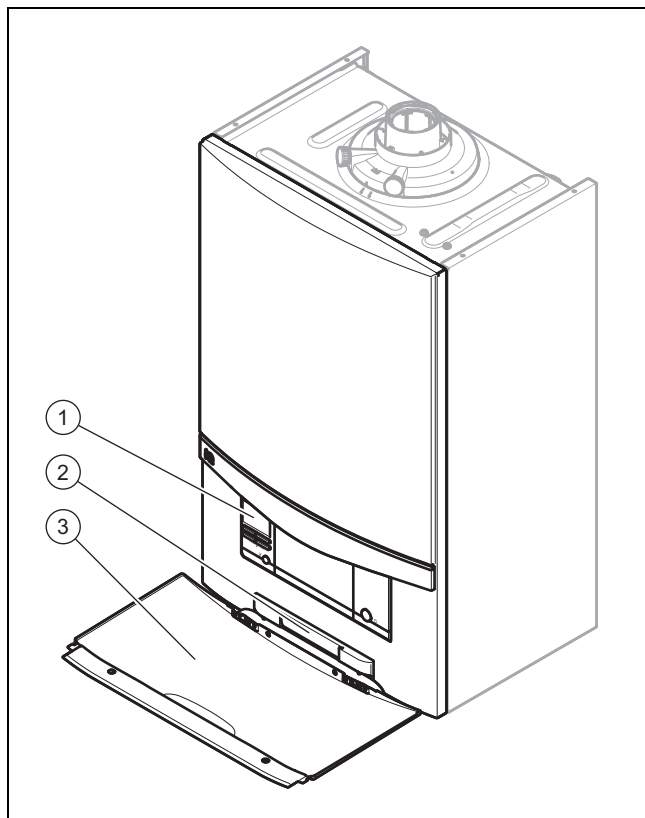
1	Control elements	3	Front flap
2	Plate with serial number on the rear		

3.2 Control elements
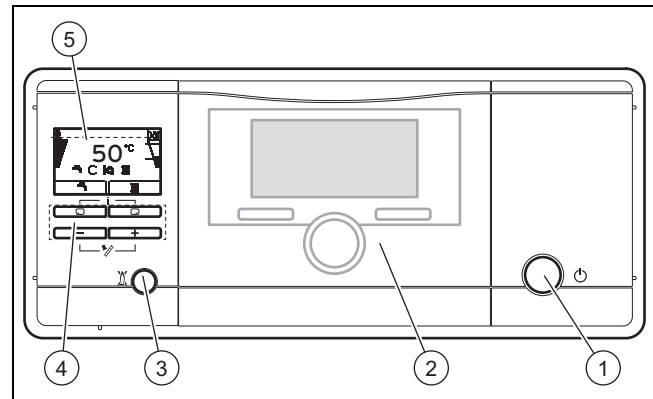
1	On/off button	3	**Reset** ⬚ button
2	Built-in controller (accessory)	4	Operating buttons
		5	Display

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
		5	Maximum output operation (for chimney sweeps only)
2	Current assignment of the right-hand selection button	6	Access to the menu for additional information
3	Left- and right-hand selection buttons ▭ ▭	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	
bar	Current filling pressure of the heating system The dashed lines show the permitted range.	– Permanently on: Filling pressure in the permitted range. – Flashing: Filling pressure outside the permitted range.
	Hot water generation active	– Permanently on: Draw-off mode before burner is on – Flashing: Burner on in draw-off mode
	Heating mode active	– Permanently on: Heating mode heat requirement – Flashing: Burner on in heating mode
iQ	Green iQ mode active	– Permanently on: Energy-saving mode active
	Maintenance required	Information on maintenance message in the "Live Monitor".
	Summer mode active 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).
 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 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
$T_{max.}$	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
 xxxxxxyyyyyyyyyyzzzzzzzzzzzz	Bar code with serial number, 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
⬚	– Setting the hot water temperature – Cancelling the activation of an operating mode – Cancelling a change to a set value – Going one selection level higher
⬚	– Setting the heating flow temperature – Reading the system pressure – Activating the comfort mode – Activating the operating mode – Confirm setting – Going one selection level lower
⬚ + ⬚ at the same time	– Calling up the menu
⊟ or ⊞	– Reducing or increasing the set value – Scrolling through menu entries

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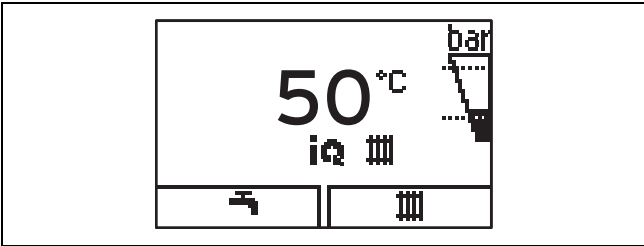
The basic display shows the current condition of the product. If you press a selection button, the activated function is displayed in the display.

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

| 1 | Scroll bar | 3 | Selection level list entries |
| 2 | Current assignment of the ⬚ and ⬚ buttons. | 4 | Name of the selection level |

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

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.

4.5 Mobile operation

Conditions: Heating installation with **VRC 700** control, product with Internet gateway
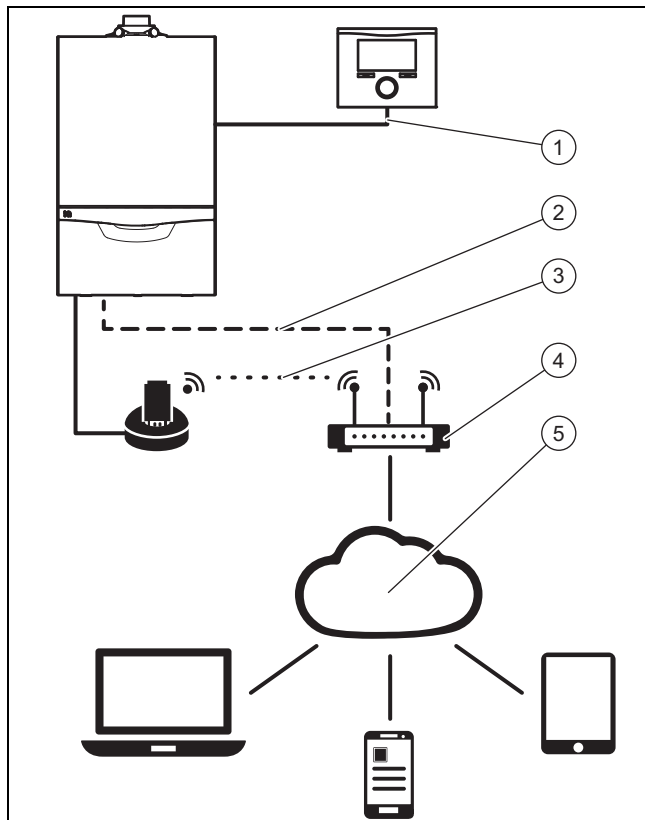
1	eBUS cable	4	Ethernet- or Wireless LAN-compatible DSL- (Digital Subscriber Line) or cable router
2	Network cable		
3	Wireless LAN connection	5	Vaillant server

If the product is equipped with an Internet gateway, there is a product identification sticker in the form of a Data Matrix code on the back of the front flap.

The Internet gateway is used for connection to a broadband Internet connection as a prerequisite for mobile operation via a smartphone or tablet. The Internet gateway always establishes the connection towards the **Vaillant** server. External access to the Internet gateway is not possible. Mobile use of functions of the connected controller is possible via the Internet gateway.

During installation, the competent person either established the Internet connection via the local network using network cables or set it up via wireless LAN (WLAN).

Conditions: Product identification sticker present

▶ Download the App for mobile operation from Google play™ or the App Store™.

> **i** **Note**
> Search term **Vaillant**

▶ Proceed as described below.

Conditions: Connection to the local network via network cables

▶ On the operator control panel for the heat generator, navigate to the **comDIALOG** menu item (relates to the integrated Internet gateway) and check whether the status of the Internet gateway is **Online**.
  – **Menu → Information → comDIALOG**
  ▽ If the status is not **Online**, adjust your router configuration if required and repeat the check.
  ◁ Status is **Online**.
▶ Launch the app and follow the instructions contained in it.

Conditions: Connection to the local network via WLAN

▶ Launch the app and follow the instructions contained in it.
▶ Switch the heat generator off and on again.

> **i** **Note**
> After switching on the product, the WLAN USB stick at the Internet gateway is initialised and switched to Ad-hoc-Pairing mode for 10 minutes.

▶ Firstly, connect to the Internet gateway for the heat generator via WLAN Ad-hoc-Pairing and then connect the Internet gateway to the local network infrastructure.

> **i** **Note**
> If you cannot establish an Ad-Hoc-Pairing with the Internet gateway within 60 seconds, repeat the procedure after switching the heat generator on and off again.

▶ If you change the password for WLAN access to the local network, repeat this procedure, too.
▶ On the operator control panel for the heat generator, navigate to the **comDIALOG** menu item and check whether the status of the Internet gateway is **Online**.
  – **Menu → Information → comDIALOG**
  ▽ If the status is not **Online**, adjust your router configuration if required and repeat the check.
  ◁ Status is **Online**.
▶ Follow the further instructions in the App.

Conditions: Product identification sticker not present

Mobile operation is only possible via an external Internet gateway, which must be purchased separately as an accessory.

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.
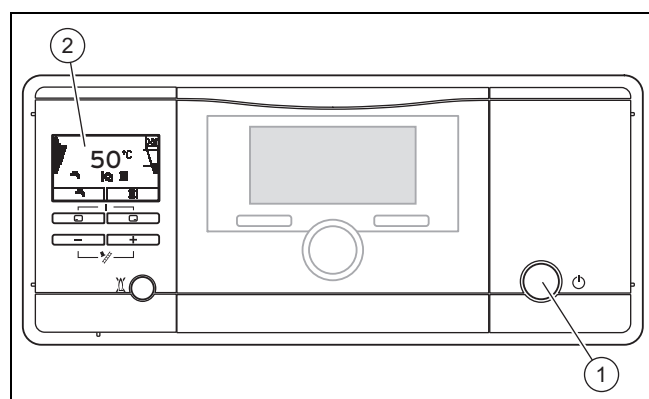3. Open the service valves in the heating installation's flow and return.

Conditions: Product with integrated hot water generation

▶ Open the cold water stop valve.

4.8 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/m³

▶ 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

> **i** **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 ⬜ (▶ 🚰 Ḉ).

◁ **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 "Ḉ" symbol appears on the basic display. When you have deactivated Comfort mode, the "Ḉ" 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.

> **i** **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 ⬜.

4 Operation

▶ 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 **iQ** symbol will appear on the basic display. If you have deactivated **Green iQ** mode, the **iQ** symbol will disappear from the basic display.

4.15 Guaranteeing the correct filling pressure of the heating installation

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.

1 / 2

System pressure: 0.1 … 0.2 MPa (1.0 … 2.0 bar)

The filling pressure is in the intended pressure range.

2 / 2

Filling pressure: < 0.08 MPa (< 0.80 bar)

▶ Fill the heating installation. (→ Page 10)

   ◁ 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

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.

ℹ️ **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 13)
▶ 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 14)

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. Garantiearbeiten 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

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: – No hot water – 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 **Heating off** 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. Low water pressure in the heating installation (fault message: **F.22**).	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: F.**28**).	Press the reset button for one second. The product makes another attempt to ignite the flame. If you have been unable to eliminate the ignition fault after three reset attempts, consult a competent person.

Appendix

Fault	Cause	Measure
Product does not start up: – No hot water – Heating remains cold	There is a fault in the flue gas route (fault message: **F.36/F.37**): – The symbols XXXXX are shown in the display. – 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		
S.00	**Heating: No heat demand**	Heating: No heat demand
S.01	**Heating mode: Fan start-up**	Heating mode: Fan start-up
S.02	**Heating mode: Pump pre-run**	Heating mode: Pump pre-run
S.03	**Heating mode: Ignition**	Heating mode: Ignition
S.04	**Heating mode: Burner on**	Heating mode: Burner on
S.05	**Heating mode: Pump/fan overrun**	Heating mode: Pump/fan overrun
S.06	**Heating mode: Fan overrun**	Heating mode: Fan overrun
S.07	**Heating mode: Pump overrun**	Heating mode: Pump overrun
S.08	**Heating mode: Anti-cycling time**	Heating mode: Remaining anti-cycling time
S.09	**Heating mode: Measuring program**	Heating mode: Measuring program
DHW mode		
S.10	**DHW demand**	Hot water requirement via flow sensor
S.11	**DHW mode: Fan start-up**	DHW mode: Fan start-up
S.13	**DHW mode: Ignition**	DHW mode: Ignition
S.14	**DHW mode: Burner on**	DHW mode: Burner on
S.15	**DHW mode: Pump/fan overrun**	DHW mode: Pump/fan overrun
S.16	**DHW mode: Fan overrun**	DHW mode: Fan overrun
S.17	**DHW mode: Pump overrun**	DHW mode: Pump overrun
S.19	**DHW mode: Measuring program**	DHW mode: Measuring program
Comfort mode, warm start or hot water handling mode with **actoSTOR**		
S.20	**DHW demand**	DHW demand
S.21	**DHW mode: Fan start-up**	DHW mode: Fan start-up
S.22	**DHW mode: Pump pre-run**	DHW mode: Pump pre-run
S.23	**DHW mode: Ignition**	DHW mode: Ignition
S.24	**DHW mode: Burner on**	DHW mode: Burner on
S.25	**DHW mode: Pump/fan overrun**	DHW mode: Pump/fan overrun
S.26	**DHW mode: Fan overrun**	DHW mode: Fan overrun
S.27	**DHW mode: Pump overrun**	DHW mode: Pump overrun
S.28	**DHW anti-cycling time**	Hot water burner anti-cycling time
S.29	**DHW mode: Measuring program**	DHW mode: Measuring program
Others		
S.30	**No heat demand: Controller**	Room thermostat (RT) is blocking heating mode
S.31	**No heat demand: Summer mode**	Summer mode active or no heat requirement from eBUS controller
S.32	**Waiting time deviation: Fan speed**	Waiting period because of fan speed deviation
S.33	**Waiting time: Air monitor**	Waiting period: Air pressure sensor/switch reports that the pressure signal is too low
S.34	**Heating mode: Frost protection**	Frost protection mode active

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)

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