

Operating instructions



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VKK 226/4 – VKK 656/4

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Publisher/manufacture

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Contents

Contents

1	Safety	3
1.1	Action-related warnings	3
1.2	Intended use	3
1.3	General safety information	3
2	Notes on the documentation	5
2.1	Observing other applicable documents	5
2.2	Storing documents	5
2.3	Validity of the instructions	5
3	Product description	5
3.1	Design of the product	5
3.2	Opening the front flap	5
3.3	Control elements	5
3.4	Frost protection function	7
3.5	Type designation and serial number	7
3.6	CE label	7
4	Operation	7
4.1	Adjustment and display levels	7
4.2	Starting up the product	7
4.3	Setting the language	8
4.4	Setting the heating flow temperature	8
4.5	Setting the cylinder temperature	9
4.6	Switching off the functions	9
4.7	Status code meanings	10
5	Care and maintenance	10
5.1	Caring for the product	10
5.2	Maintenance	10
5.3	Guaranteeing the correct filling pressure of the heating installation	10
5.4	Checking the condensate discharge pipe and tundish	11
5.5	Carrying out the flue gas analysis	11
6	Troubleshooting	12
6.1	Eliminating faults	12
6.2	Checking the product status	12
7	Decommissioning	12
7.1	Temporarily decommissioning the product	12
7.2	Permanently decommissioning the product	13
8	Recycling and disposal	13
9	Guarantee and customer service	13
9.1	Guarantee	13
9.2	Customer service	13
Appendix	14	
A	Status codes	14
B	Troubleshooting	14



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 products are gas-fired floor-standing condensing boilers and are intended for use in this function as heat generators for closed domestic hot water central heating installations and for central domestic hot water generation.

Intended use includes the following:

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

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 skilled tradesmen 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.

1 Safety



- ▶ 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 a blocked or leaking flue gas pipe

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 supply of combustion air

Conditions: Open-flued operation

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

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.

1.3.11 Risk of structural damage caused by escaping water

Escaping water can cause damage to the building.

- ▶ If there is a possibility of leaks in the pipework, close the service valves immediately.
- ▶ Have any leaks eliminated by your heating specialist company.



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 Validity of the instructions

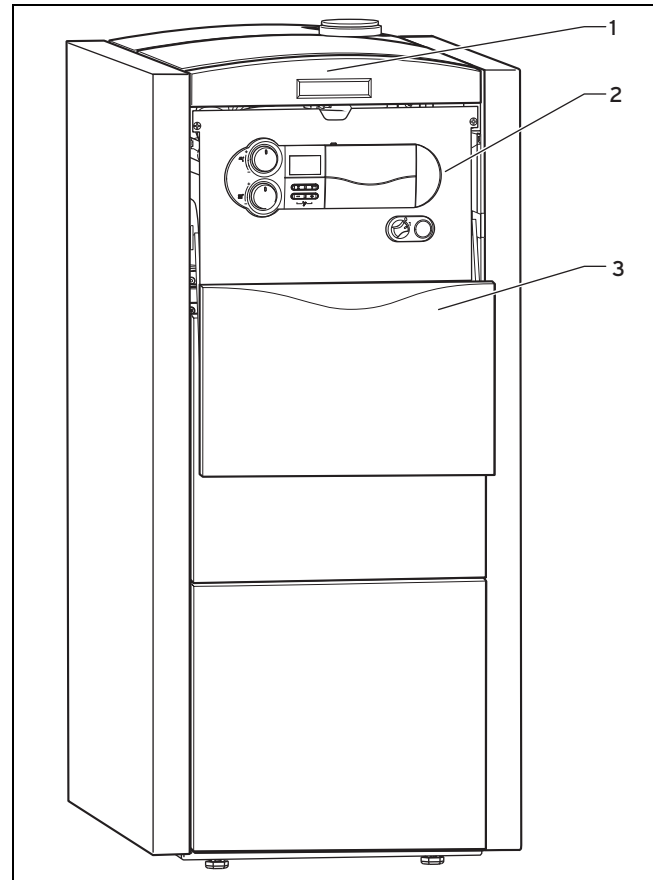
These instructions apply only to:

Product article number

VKK 226/4-H	0010007508
VKK 226/4-L	0010007688
VKK 286/4-H	0010007512
VKK 286/4-L	0010007692
VKK 366/4-H	0010007516
VKK 366/4-L	0010007696
VKK 476/4-H	0010007520
VKK 476/4-L	0010007700
VKK 656/4-H	0010007524
VKK 656/4-L	0010007704

3 Product description

3.1 Design of the product

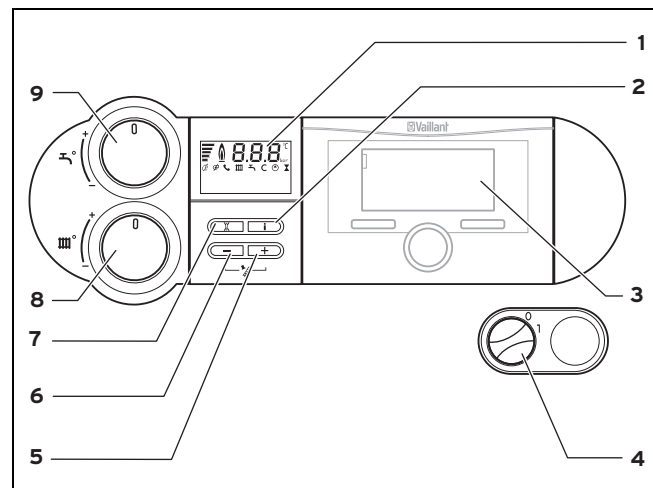


- 1 Panel
- 2 Control elements
- 3 Front flap

3.2 Opening the front flap

- Take hold of the recessed handle in the front flap and lift the panel up slightly.
 - ◁ The front flap automatically swivels downwards and the control panel becomes accessible.

3.3 Control elements



- 1 Display
- 2 i button
- 3 Touch screen
- 4 On/Off button
- 5 Plus button
- 6 Minus button
- 7 Mode button
- 8 Temperature gauge
- 9 Pressure gauge

3 Product description

3	Control (accessory)	7	Reset button
4	Main switch	8	Heating flow temperature rotary knob
5	+ button	9	Cylinder temperature rotary knob
6	- button		

The display shows the current heating flow temperature, the filling pressure of the heating installation, the operating mode or certain additional information.

The **i** button is used to call up status information.

The control, which is available as an accessory, automatically controls the flow temperature depending on the outdoor temperature.

The main switch is used to switch the product on and off.

The **+** button is used to display the cylinder temperature (if the product is equipped with a cylinder temperature sensor).

The **-** button is used to display the filling pressure of the heating installation.

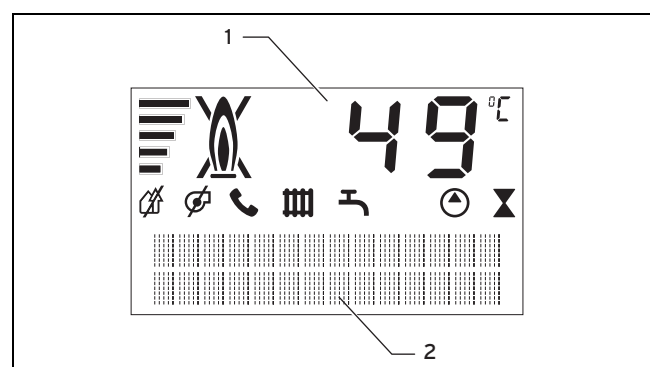
The **Reset** button is used to reset the product in the case of certain faults.

The heating flow temperature rotary knob is used to set the heating flow temperature if no control is connected. If a control is connected, the heating flow temperature rotary knob should be turned clockwise as far as it will go.

The cylinder temperature rotary knob is used to set the cylinder temperature if a domestic hot water cylinder is connected.

If a control is connected, the rotary knob should be turned clockwise as far as it will go. The control then determines the cylinder temperature.

3.3.1 Digital Information and Analysis System (DIA)



- 1 Display showing the current heating flow temperature, the filling pressure in the heating installation, or a status or fault code
- 2 Plain text display

Symbol	Meaning	Explanation
	comDIALOG	The heating flow and domestic hot water temperature are specified via the comDIALOG communications system. The product works at temperatures other than those set at the rotary knob. This operating mode can only be terminated by: <ul style="list-style-type: none"> comDIALOG Changing the temperature at the rotary knobs by more than ± 5 K This operating mode cannot be terminated by: <ul style="list-style-type: none"> Pressing the Reset button. Switching the product off and on again
	Heating mode	<ul style="list-style-type: none"> Symbol permanently on: Product is in heating mode operating mode Symbol flashing: Burner anti-cycling time is active
	Hot water generation	<ul style="list-style-type: none"> Symbol permanently visible: Charging mode for the domestic hot water cylinder is enabled by the control and floor-standing boiler control system Symbol flashes: Domestic hot water cylinder is being heated
	Heating pump operating	
	Solenoid valve is actuated	Gas supply to the burner is open
	Current energy demand	Display of the current burner modulation rate (bar graph display)
	Fault during burner operation	Burner is switched off
	Burner operating correctly	Burner is switched on

3.3.2 Displayed symbols

Symbol	Meaning	Explanation
	Fault in the air/flue gas route	
	Fault in the air/flue gas route	

3.4 Frost protection function

The product is equipped with a frost protection function.

If the heating flow temperature falls below 5 °C when the main switch is on, the product starts up and heats the circulating water to approx. 30 °C.



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.

- ▶ Consult a competent person about this.

3.5 Type designation and serial number

The type designation and the serial number are located on a sticker below the control panel behind the front flap.

The data plate can only be seen by the competent person.

- ▶ Open the front flap. (→ Page 5)
- ▶ Read off the type designation and the serial number from the sticker.

3.6 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.

4 Operation

4.1 Adjustment and display levels

The product has two adjustment and display levels.

The end user level contains information and setting options that you require as the end user.

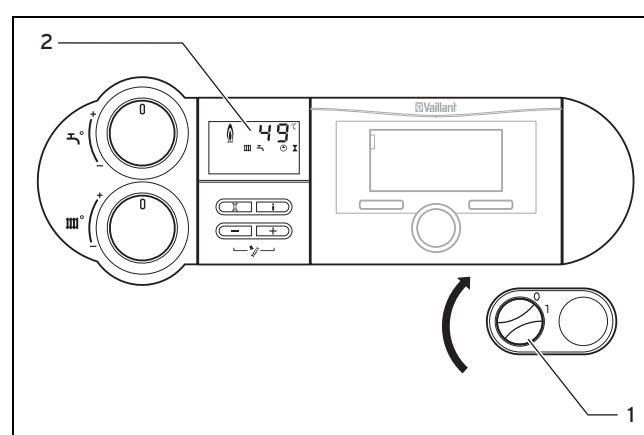
The installer level is reserved for the competent person. It is protected by a code. Only competent persons may change any settings in the installer level.

4.2 Starting up the product

4.2.1 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 stopcock fully.
3. Check that the heating installation flow and return service valves are open, if such service valves are installed.
4. If a domestic hot water cylinder is connected, open the cold-water isolation valve. To check, you can turn on a hot water tap and see whether water is escaping there.

4.2.2 Switching on the product

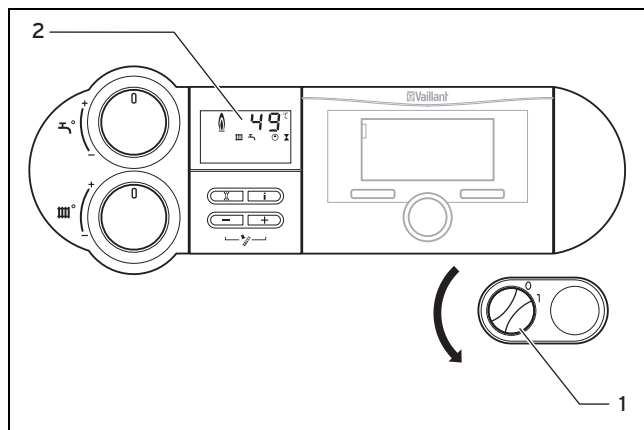


1 Main switch 2 Display

1. Use the main switch (1) to switch on the product.
 - ◁ 1: "ON"
 - ◁ When the main switch is in position 1, the product is switched on and the standard display for the Digital Information and Analysis System is shown in the display. The **function menu** is immediately shown in the display once the product has been switched on. The function menu enables competent persons to control how the individual actuators work. The product returns to normal operating mode after a waiting period of approximately five seconds or if the – button is pressed.
2. Set up your product according to your needs.

4 Operation

4.2.3 Switching off the product



1 Main switch 2 Display

- Use the main switch (1) to switch off the product.

◁ 0: "OFF"



Note

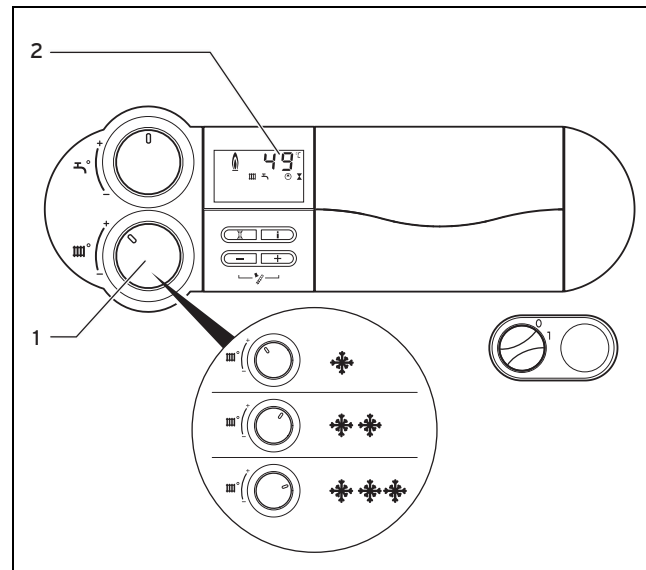
In order for the protection modes, such as frost protection, to remain activated, only activate and deactivate the product using the control (you can find information about this in the relevant operating instructions). If no control is present, block the heating and cylinder charging mode by turning the dial to the anti-clockwise end stop.



Note

To ensure that the control can set temperatures up to the maximum heating flow temperature, the rotary knob for the heating flow temperature should always be set to the clockwise end stop.

Conditions: No control connected



1 Heating flow temperature rotary knob 2 Displaying the current heating flow temperature

- Set the target flow temperature on the rotary knob for the heating flow temperature (1) in accordance with the outdoor temperature.

Position	Meaning	Outdoor temperature
Fully left	Frost protection	
Anti-clockwise (but not at the end stop)	Transition Time	Approx. 10 ... 20 °C
Centre	Moderate cold	Approx. 0 ... 10 °C
Clockwise	Extreme cold	Below 0 °C

- ◁ After turning the rotary knob for the heating flow temperature, the display shows the set target flow temperature (2). After three seconds, this display goes out and the default display reappears (current heating flow temperature).



Note

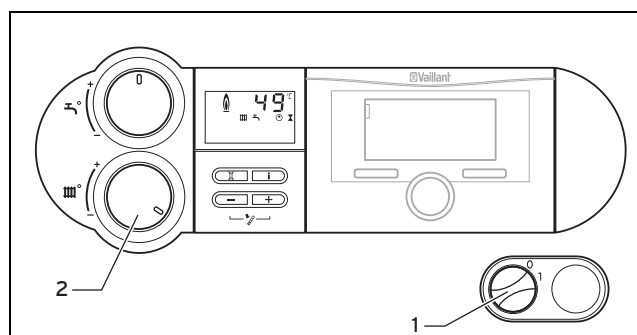
The maximum heating flow temperature is set in the factory at 75 °C. This can be defined by the competent person to be between 40 °C and 85 °C.

4.3 Setting the language

- Contact your competent person so that they can set the correct language for the control panel.

4.4 Setting the heating flow temperature

Conditions: Control connected

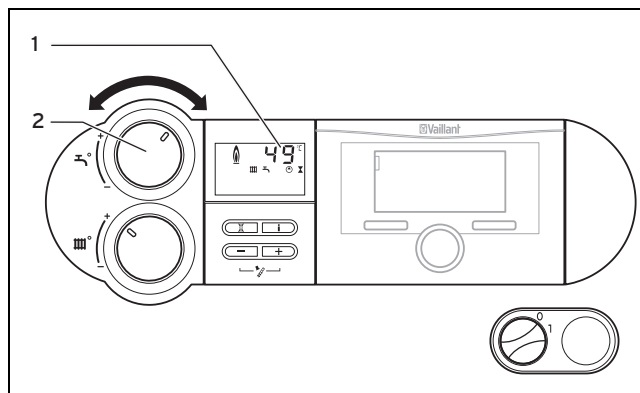


1 Main switch 2 Heating flow temperature rotary knob

- Turn the rotary knob for the heating flow temperature (2) as far as it will go clockwise.
 - ◁ The heating flow temperature is automatically set by the control.

4.5 Setting the cylinder temperature

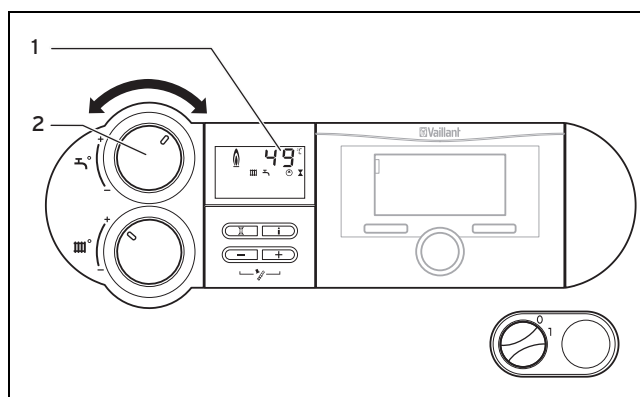
Conditions: Control connected



1 Display
2 Cylinder temperature rotary knob

- ▶ Set the rotary knob for the cylinder temperature (2) as far as it will go clockwise so that the control can work without any faults occurring.
- ▶ Do not set the required cylinder temperature on the rotary knob for the cylinder temperature; set the cylinder temperature on the control instead.

Conditions: No control connected



1 Display
2 Cylinder temperature rotary knob

- ▶ Set the rotary knob for the cylinder temperature (2) to the required cylinder temperature.
Position of the rotary knob for setting the cylinder temperature (→ Page 9)
- ◀ The required temperature is shown in the display (1). After three seconds, this display goes out and the default display reappears (current heating flow temperature).



Note

The maximum cylinder temperature is set in the factory at 65 °C. This can be defined by the competent person to be between 50 °C and 70 °C.



Note

If a cylinder temperature lower than 60 °C is required, we recommend that you regularly use the anti-legionella function via the control.

Position	Meaning	Temperature
Fully left	Minimum cylinder temperature = frost protection	15 °C
Centre	Medium cylinder temperature	≈ 50 °C
Fully right	Maximum cylinder temperature	65 °C

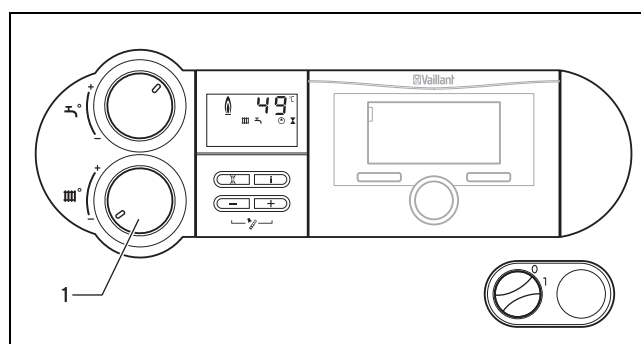
4.6 Switching off the functions

4.6.1 Switching off heating mode



Note

You can completely switch off heating mode in summer without switching off the hot water generation.



1 Rotary knob for setting the heating flow temperature

- ▶ To switch off heating mode, turn the rotary knob for setting the heating flow temperature (1) as far as it will go anti-clockwise. If the product is controlled by a control, use this control to switch off heating mode and leave the rotary knob at the clockwise end stop.



Note

The product's internal frost protection is therefore guaranteed whether there is a control or not.

4.6.2 Switching off cylinder charging mode (using the VRC 630/VRS 620 control)

1. Leave the rotary knob for the cylinder temperature at the clockwise end stop.
2. Switch the cylinder circuit to "OFF" on the control.



Note

If the VRC 450 or VRC 700 control is available, switch cylinder charging mode off in accordance with the section "Switching off cylinder charging mode (without a control) (→ Page 10)".

5 Care and maintenance

4.6.3 Switching off cylinder charging mode (without control)

- ▶ Turn the rotary knob for the cylinder temperature to the anti-clockwise end stop.
 - ◁ Cylinder charging mode is switched off.
 - ◁ The frost protection function is activated for the domestic hot water cylinder.
 - ◁ The display shows the target cylinder temperature of 15 °C for three seconds.
 - 15 °C



Note

The effect of the frost protection function is that, at cylinder temperatures below 10 °C, the domestic hot water generation is switched on until the water in the cylinder has reached 15 °C again.

4.7 Status code meanings

The status codes that are shown in the DIA system's display provide information about the product's current operating status.

If several operating statuses occur at the same time, the applicable status codes are displayed alternately, one after the other. The status code is explained a plain text display in the display.

Status codes (→ Page 14)

5 Care and maintenance

5.1 Caring for the product



Caution.

Risk of material damage caused by unsuitable cleaning agents.

- ▶ Do not use sprays, scouring agents, detergents, solvents or cleaning agents that contain chlorine.

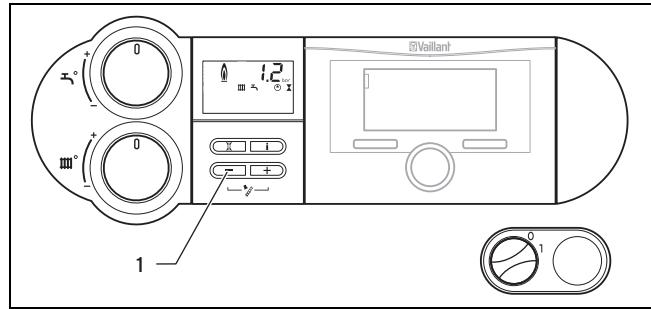
- ▶ Clean the casing with a damp cloth and a little solvent-free soap.

5.2 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 working life. The inspection may require maintenance to be carried out earlier, depending on the results.

5.3 Guaranteeing the correct filling pressure of the heating installation

5.3.1 Checking the system pressure



1 – button

- ▶ Check the heating installation's filling pressure at regular intervals. Briefly press the – button.

- ◁ The display will show the filling pressure for approximately 5 seconds.
- ◁ The filling pressure must be between 0.1 MPa and 0.2 MPa (1.0 and 2.0 bar) when the heating installation is cold in order for the heating installation to operate properly. If the pressure is lower, you must add heating water before starting up.



Note

You can permanently switch between the temperature or pressure display in the display by pressing and holding the – button for approximately five seconds.



Note

To avoid operating the heating installation with an insufficient water volume and to prevent potential subsequent damage, the product is fitted with a pressure sensor. The pressure sensor signals the low pressure level if the level falls below 0.06 MPa (0.6 bar). This is signalled by the system pressure value in the display flashing. If the level falls below 0.03 MPa (0.3 bar), the system displays the fault message and **F.22** alternately, and the burner is blocked. If the system pressure is lower than 0.06 MPa (0.6 bar), fill the heating installation up again as quickly as possible. As soon as the system pressure exceeds 0.06 MPa (0.6 bar), the product starts up without any further measures being required.

If the pressure sensor is defective, the product enters comfort protection mode. The maximum possible flow temperature and the power are limited. The status **S.40** and **F.22** (water deficiency) are displayed alternately.



Note

If the heating installation extends over several floors, a higher system pressure for the heating installation may be necessary. Ask your competent person for details.

5.3.2 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.
- In case of doubt, ask a competent person for details.

1. Ask a competent person where the filling cock is located.
2. Connect the filling cock to a hot 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 hot water supply.
5. Slowly open the filling cock.
6. Fill it with water until the required filling pressure is reached.
7. Close the hot water supply.
8. Purge all radiators.
9. Then check the filling pressure on the display.
10. Top up with more water if necessary.
11. Close the filling cock.

5.4 Checking the condensate discharge pipe and tundish

The condensate discharge pipe and tundish must always be penetrable.

- Regularly check the condensate discharge pipe and tundish for faults and, particularly, for blockages.

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

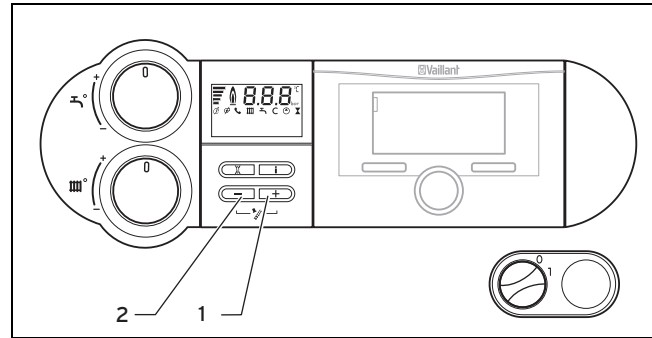
- If you notice a fault, have it eliminated by a competent person.

5.5 Carrying out the flue gas analysis



Note

Measurement and inspection work must only be carried out by the chimney sweep or competent person.



1 + button

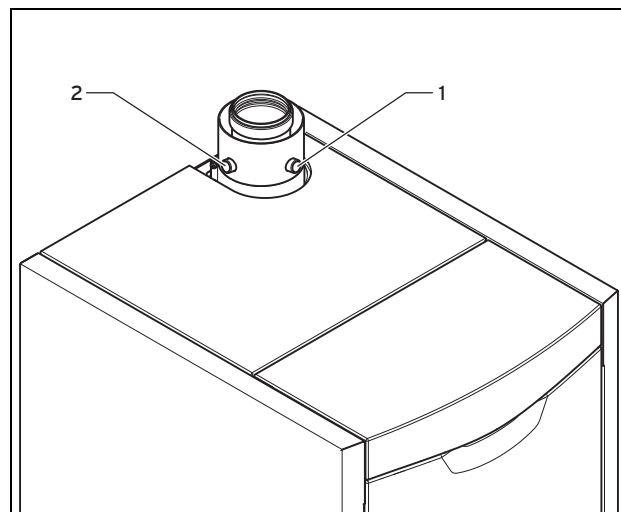
2 - button

1. Switch on the chimney sweep function by pressing the - and + buttons for the DIA system at the same time.
 - ◁ Shown in the display: **S.Fh** = Heating chimney sweep mode; **S.Fb** = Domestic hot water chimney sweep mode
 - ◁ The product now works at maximum load for 15 minutes. If you do not press any buttons for 15 minutes or if a flow temperature of 85 °C is reached, the chimney sweep function is automatically switched off.
2. Take the measurements at the earliest after three minutes of the product operating.

Applicability: VKK 226/4, VKK 286/4, VKK 366/4

- Remove the upper casing (→ Installation instructions).
- Use the test points that are underneath for the measurement (→ Installation instructions).

Applicability: VKK 476/4, VKK 656/4



1 Flue gas test point

2 Fresh air test point

- Use the test points on the adapter for the measurement, as shown.
3. Unscrew the sealing cap from the flue gas test point (1).
 4. Remove the sealing cap from the combustion air test opening (2).
 5. Take the measurements in the flue gas route at the flue gas test point.

6 Troubleshooting


- Immersion depth: ≈ 80 mm
- 6. Take measurements in the air route on the combustion air test opening (2).
 - Immersion depth: ≈ 10 mm
- 7. Switch off the chimney sweep function by pressing the – and + buttons for the DIA system at the same time.
- 8. Screw the sealing cap onto the flue gas test point (1).
- 9. Fit the sealing cap onto the combustion air test opening (2).

Applicability: VKK 226/4, VKK 286/4, VKK 366/4

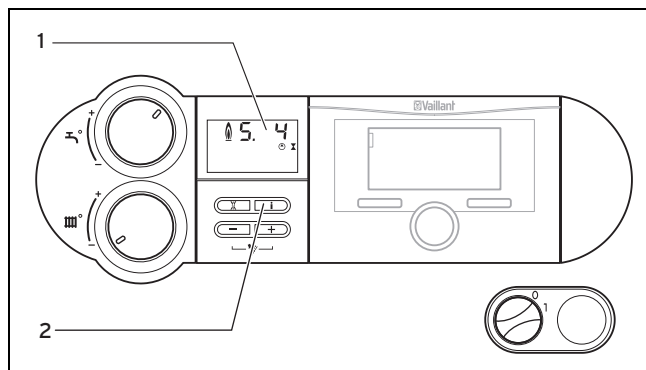
- Install the upper casing (→ Installation instructions).

6 Troubleshooting

6.1 Eliminating faults

- Use the table in the appendix to attempt to eliminate faults.
Troubleshooting (→ Page 14)
- Press  (max. three times) to restart the product.
- If you are unable to eliminate the fault and the fault recurs despite reset attempts, contact an approved heating specialist company.

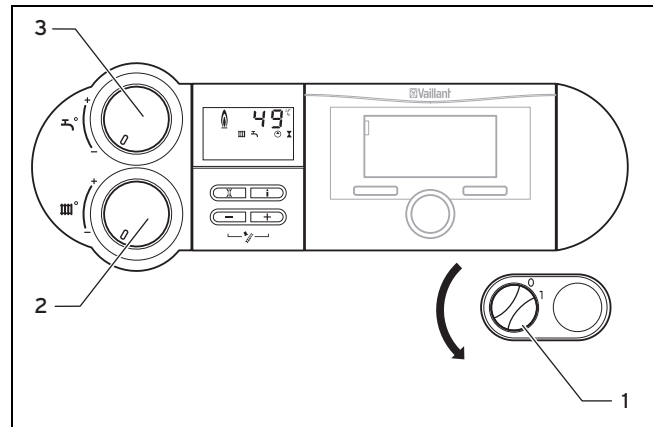
6.2 Checking the product status



- 1 Display 2 i button

1. Call up the product status by pressing the i button.
2. Switch the display back to normal operating mode by pressing the i button.

- If no control is present when a main switch has been switched on, set the rotary knobs for the target heating flow and cylinder values to the anti-clockwise end stop.
- Do not disconnect the product from the power mains when it is in normal mode.
- Leave the main switch in position 1 in normal mode.



- 1 Main switch 3 Cylinder temperature rotary knob
2 Heating flow temperature rotary knob

1. Turn the rotary knob for the cylinder temperature (3) anti-clockwise as far as it will go.
2. Turn the rotary knob for the heating flow temperature (2) anti-clockwise as far as it will go.
3. If the fan continues to run, wait until it stops.
◁ "Fan overrun" is shown in the display.
4. Turn the main switch (1) to position 0.
5. Close the gas stopcock and the cold-water isolation valve.



Note

The isolators are not included in the scope of delivery for your product. They are installed on-site by the competent person. Ask the competent person to explain where the isolators are located and how they are operated.

7 Decommissioning

7.1 Temporarily decommissioning the product



Caution.

Risk of material damage due to frost

The frost protection and monitoring devices are only active while the unit is connected to the power mains, the product is switched on via the main switch and the gas stopcock is open.

- You must use the control if you want to activate and deactivate the product in normal mode.

7.1.1 Draining the heating installation

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

- Consult a competent person about this.

7.2 Permanently decommissioning the product

- ▶ Have a competent person permanently decommission the product.

8 Recycling and disposal

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



If the product is identified with this symbol:

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



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

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

9 Guarantee and customer service

9.1 Guarantee

You can request information on the manufacturer's guarantee from the contact address provided on the back page of this document.

9.2 Customer service

The contact details for our customer service are provided on the back page or on our website.

Appendix

Appendix

A Status codes






Note

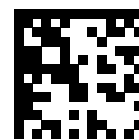
Since the code table is used for various products, some codes may not be visible for the product in question.

Statuscode	Meaning
S.00 Heating: No heat demand	Heating has no heat demand. The burner is off.
S.01 Heating mode: Fan start-up	The fan start-up for heating mode is activated.
S.02 Heating mode: Pump pre-run	The pump prerun for heating mode is activated.
S.03 Heating mode: Ignition	The ignition for heating mode is activated.
S.04 Heating mode: Burner on	The burner for heating mode is activated.
S.06 Heating mode: Fan over-run	The fan overrun for heating mode is activated.
S.07 Heating mode: Pump overrun	The pump overrun for heating mode is activated.
S.08 Heating mode: Anti-cycling time	The anti-cycling time for heating mode is activated.
S.20 DHW demand	The domestic hot water demand is activated.
S.22 DHW mode: Pump pre-run	The pump prerun for domestic hot water mode is activated.
S.24 DHW mode: Burner on	The burner for domestic hot water mode is activated.
S.27 DHW mode: Pump over-run	The pump overrun for domestic hot water mode is activated.
S.31 No heat demand: Summer mode	Summer mode is activated; there is no heat demand. The external control blocks heating mode.
S.34 Heating mode: Frost protection	The frost protection function for heating mode is activated.

B Troubleshooting

Symptom	Possible cause	Measure
No hot water, heating stays cold	No gas	<ol style="list-style-type: none"> 1. Check whether the gas stopcock in the building and the gas stopcock on the product are open. 2. Open one or both of the gas stopcocks.
	Installation isolator is closed	<ol style="list-style-type: none"> 1. Check whether one of the isolators is closed. 2. Ask a competent person whether closed isolators can be opened again.
	No power supply	<ol style="list-style-type: none"> 1. Check whether the power supply to the building and the main switch on the product are switched on. 2. Switch on the power supply to the building and the main switch on the product.
	The display shows S.39 "Contact thermostat activated" (e.g. by the condensate pump or the surface-mounted thermostat in the underfloor circuit)	<ol style="list-style-type: none"> 1. Clean the condensate pump with clean water in accordance with the operating instructions for the condensate pump or contact your approved heating specialist company. 2. Contact an approved heating specialist company.
	Filling pressure in the heating installation too low. F.22 "Water pressure too low" appears in the display	<ol style="list-style-type: none"> 1. Fill the heating installation. (→ Page 11) 2. If the pressure drops too frequently, contact an approved heating specialist company. The cause of the loss in heating water must be established and eliminated.

Symptom	Possible cause	Measure
No hot water, heating stays cold	Fault during the ignition process. F.28 "No ignition during start-up" or F.29 "Flame goes out during operation" appears in the display. The  symbol is shown in the display.	<ol style="list-style-type: none"> 1. Check whether the gas stopcock is open. 2. If the gas stopcock is closed, open the gas stopcock with the agreement of an installation company. 3. Press and hold the reset button for one second to cancel ignition switch-off after three unsuccessful attempts if the burner has so far failed to ignite. 4. If the product does not start up after three reset attempts, contact an approved heating specialist company.
	Fault in the air/flue gas route or condensate discharge. F.32 "Speed deviation too great" or F.50 "Failure Siphon switch" appears in the display. The  and  symbols are shown in the display.	<ol style="list-style-type: none"> 1. Contact an approved heating specialist company.
Domestic hot water functioning correctly; heating does not start up	Control settings not correct	<ol style="list-style-type: none"> 1. Compare the control settings with the specifications in the control's operating instructions. 2. Correct the settings in accordance with the operating instructions for the control. 3. Contact an approved heating specialist company if you encounter problems when configuring the settings.
	The rotary knob for the heating flow temperature is not at the clockwise end stop when the control is connected	<ol style="list-style-type: none"> 1. Check the setting of the rotary knob for the heating flow temperature when the control is connected. 2. Turn the rotary knob for the heating flow temperature as far as it will go clockwise.
	Heating flow temperature set incorrectly with no control connected	<ol style="list-style-type: none"> 1. Check the heating flow temperature setting. 2. Set the rotary knob for the heating flow temperature to the required heating flow temperature with no control connected.
No hot water, heating functioning correctly	Control settings not correct	<ol style="list-style-type: none"> 1. Compare the control settings with the specifications in the control's operating instructions; the rotary knob for the cylinder temperature is at the clockwise end stop when the control is connected. 2. Correct the settings in accordance with the operating instructions for the control. 3. Contact an approved heating specialist company if you encounter problems when configuring the settings.
	The rotary knob for the cylinder temperature is not at the clockwise end stop when the control is connected	<ol style="list-style-type: none"> 1. Check the setting for the rotary knob for the cylinder temperature when the control is connected. 2. Set the rotary knob for the cylinder temperature as far as it will go clockwise when the control is connected.
	The cylinder temperature is set incorrectly with no control connected	<ol style="list-style-type: none"> 1. Check the cylinder temperature setting. 2. Set the rotary knob for the cylinder temperature to the required cylinder temperature with no control connected.



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