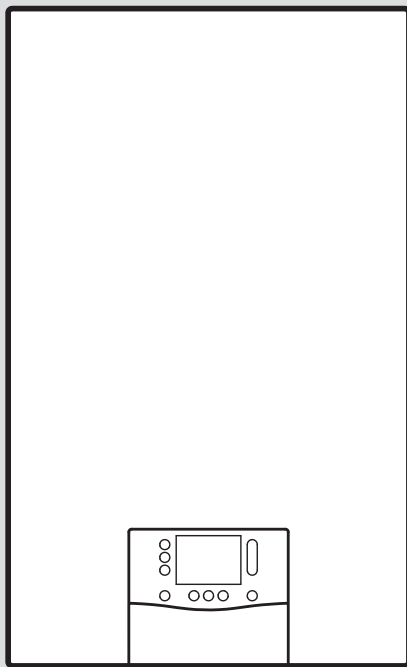




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Operating instructions

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1 Safety

1.1 Intended use

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

Intended use also includes the following:

- Using the product while observing the operating instructions included for the product and any other installation components
- Observing all inspection and maintenance intervals listed in the instructions

Any other use that is not specified in these instructions, or use beyond that specified in this document, shall be considered improper use.

Improper use of any kind is prohibited.

1.2 Qualification

- Employ only a qualified competent person to install, convert and set the product.

As the end user, you may carry out all of the work that is described in these instructions.

Exception: 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. Work that is described in other instructions must only be carried out by persons who meet the requirements described therein.

1.3 General safety information

The following sections convey important safety information. It is essential to read and observe this information in order to prevent risk of death, risk of injury, material damage or environmental damage.

1.3.1 Gas

If you smell gas:

- 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, door-

! bells, telephones or other communication systems in the building.

- ▶ Close the emergency control valve or the main isolator.
- ▶ If possible, close the gas stopcock 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.

1.3.2 Flue gas

If you smell flue gas:

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

1.3.3 Retroactive changes

- ▶ 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:

- to 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
- ▶ Ensure that there is an evenly sufficient combustion air supply.

1.3.4 Material damage

- ▶ 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.
- ▶ During a period of frost, ensure that the heating installation remains in operation and that all rooms are heated, even when you are away.
 - If a control is installed, switch the product on and off using the control to keep the frost protection devices active.
- ▶ If you cannot ensure the operation, have a competent person drain the heating installation.

- 
- 
- ▶ Only fill the heating installation with suitable heating water and, in cases of doubt, ask a competent person about this.

1.3.5 Legionella

- ▶ Have a competent person inform you about the measures that should be taken to protect against Legionella in your installation.
- ▶ Do not set any water temperatures below 60 °C without consulting the competent person first.

2 Notes on the documentation

- Always observe all operating instructions enclosed with the installation components.
- Store these instructions and all other applicable documents for further use.

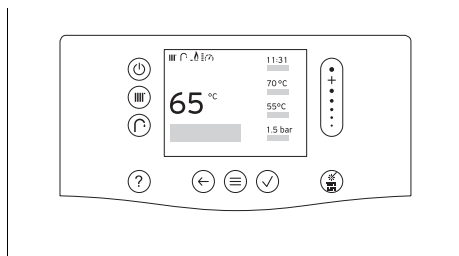
These instructions apply for the following products only:

Product article number

VU 15CS/1-5 (N-INT3)	– 0010024655 – 0010043972
VU 25CS/1-5 (N-INT3)	– 0010024656 – 0010043974
VU 30CS/1-5 (N-INT3)	– 0010024653 – 0010043975
VUW 36CS/1-5 (N-INT3)	0010024660

3 Product description

3.1 Display and control elements



Control element	Function
	– Activate/deactivate standby mode: Press for less than three seconds – Reset button: Press and hold for more than three seconds to restart
	Setting the flow temperature and/or desired temperature
	Setting the domestic hot water temperature

Control element	Function
	– Calling up help – Calling up the time programme assistant (control module required)
	– Go one level back – Cancelling input
	– Calling up MENU – Back to MENU – Calling up the basic display
	– Confirming a selection/change – Saving the set value
	Calling up chimney sweep mode (carrying out the combustion analysis)
	– Navigating through the menu structure – Reducing or increasing the set value – Navigating to individual numbers and letters
	Unit main switch – Located on the right-hand side below the product. – Disconnects the product from the power supply; the frost protection function is deactivated.

3.2 Displayed symbols

Symbol	Meaning
	Current burner modulation rate (display in five levels).
	Current system pressure (display in five levels): – Permanently on: Filling pressure in the permitted range – Flashing: Filling pressure outside the permitted range
	Heating mode activated: – Permanently on: Burner off, no heat demand – Flashing: Burner on, heat demand present
	Heating mode is switched off

Symbol	Meaning
	Domestic hot water generation activated: – Permanently on: Burner off, no heat demand – Flashing: Burner on, heat demand present
	Product with integrated domestic hot water generation or product with connected domestic hot water cylinder Comfort mode activated: – Permanently on: Comfort mode is activated – Flashing: Burner on, comfort mode on
	Installer level active
	Display locked
	Connected to the system control
	Connection to the Vaillant server established
	Product is busy with a task.
	Setting the time: – Permanently on: Time is set – Flashing: The time must be reset
	Warning
F.XXX	Fault in the product: Appears instead of the basic display, may be an explanatory plain text display.
N.XXX	Limp home mode: Appears instead of the basic display, may be an explanatory plain text display.
	Maintenance required: You can find more information in code I.XXX.
I.XXX	Maintenance required: Appears instead of the basic display, may be an explanatory plain text display.

3.3 Serial number

The serial numbers are located on the underside of the front panel and on the data plate.

The 3rd to 6th digits provide the production date (year/week), the 7th to 16th digit provide the article number for the product.

3.4 CE marking



The CE marking shows that the products comply with the basic requirements of the applicable directives as stated on the declaration of conformity.

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

4 Operation

4.1 Operating concept

Control elements that are lit up in colour can be selected.

Adjustable values and list entries can be changed using the scrollbar. Briefly tap on the top and bottom end of the scrollbar in order to implement changes.

You must confirm a change to a value. Only then is the new setting saved. You have to press flashing control elements again to confirm.

Control elements that are lit up in white are active.

The menu and the control elements are dimmed after 60 seconds in order to save energy. The status display is shown after another 60 seconds.

You can find additional assistance for the control elements under **MENU → INFORMATION → Control elements**.

4.1.1 Basic display

If the status display is shown, press  to call up the basic display.

In the basic display, you can set the desired domestic hot water temperature and flow temperature/desired temperature (desired temperature only available for products with a control module).

The flow temperature is the temperature at which the heating water leaves the heat generator (e.g. 65 °C).

The desired temperature is the temperature that is actually desired for the living room (e.g. 21 °C).

Press  to set the temperature for domestic hot water mode.

Press  to set the temperature for heating mode.

Further settings for heating mode and domestic hot water mode are described in the relevant sections.

If the basic display is shown, press  to call up the menu.

The functions that are available in the menu depend on whether a system control is connected to the product. If you have connected a system control, the settings for heating mode must be available in the system control. (→ System control operating instructions)

You can find additional assistance for navigation under **MENU → INFORMATION → Menu introduction**.

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

4.1.2 Operating levels

If the basic display is shown, call up the menu in order to display the end user level.

In the end user level, you can change and individually adapt the settings for the

product. The table in the appendix lists the menu items and setting options that can be selected. (→ Appendix A)

The installer level must only be operated by persons with expertise and is therefore protected by a code.

4.2 Setting the language

1. Press  twice.
2. Navigate to the bottom menu item ( **xxx**) and confirm by pressing .
3. Select the third menu item and confirm by pressing .
4. Select the first menu item and confirm by pressing .
5. Select the required language and confirm by pressing .

4.3 Activating/deactivating the button lock

1. Call up **MENU → SETTINGS → Button lock**.
2. Confirm by pressing .
– The button lock is activated.
3. To deactivate the button lock, press and hold  for four seconds.

4.4 Heating mode

In heating mode, the rooms are heated up in accordance with your settings.

4.4.1 Setting the flow temperature/desired temperature

1. From the basic display, press .
◁ The flow temperature/desired temperature that has already been set is shown in the display.
2. Set the desired flow temperature/desired temperature.

4.4.2 Permanently switching off heating mode (summer mode)

- ▶ From the basic display, press  for at least three seconds.
 - ◁ Heating mode is switched off.
 - ◁ The symbol for heating mode is shown as deactivated in the display.

4.5 DHW mode

Validity: Product with integrated hot water generation OR Product with connected domestic hot water cylinder

In domestic hot water mode, the potable water is heated to the required domestic hot water temperature.

4.5.1 Setting the domestic hot water temperature

1. From the basic display, press .
2. Set the required domestic hot water temperature.

4.5.2 Switching comfort mode on/off

Validity: Product with integrated hot water generation



Note

Comfort mode keeps the domestic hot water generation ready and supplies hot water at the desired temperature without you having to wait for the heat-up time.

1. Call up **MAIN MENU** → **CONTROL** → **Comfort mode**.
2. Activate **On** or **Off**.

4.6 Calling up status codes

- ▶ Call up **MENU** → **INFORMATION** → **Status code**.
Status codes (→ Appendix B)
 - ◁ The current operating mode (status code) is shown on the display.

5 Care and maintenance

5.1 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.

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

5.3 Reading maintenance messages

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

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

5.4 Guaranteeing the filling pressure of the heating installation

5.4.1 Checking the filling pressure of the heating installation

1. Call up **MENU** → **INFORMATION** → **Water pressure:**
 - ◁ The values for the current filling pressure and for the minimum and maximum filling pressures appear in the display.
2. Check the filling pressure in the display.
3. If the filling pressure is lower than 0.8 bar (0.08 MPa), top up the heating installation. (→ Section 5.4.2)



Note

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.

5.4.2 Topping up 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.

- ▶ Ask your competent person where the filling tap is located.
- ▶ Connect the filling tap to a heating water supply in the way you were told by the competent person.
- ▶ Open all radiator valves (thermostatic valves) of the heating installation.
- ▶ Open the heating water supply.
- ▶ Turn the filling tap on slowly and allow water to flow in until the required filling pressure has been reached.
- ▶ Close the heating water supply.
- ▶ Purge all radiators.
- ▶ Check the filling pressure in the display.
- ▶ Top up with more water if necessary.
- ▶ Close the filling tap.
- ▶ Return to the basic display.

5.5 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.

6 Troubleshooting



Danger!

Risk of death caused by improper repair work

- ▶ If the power supply cable is damaged, never replace this yourself.
 - ▶ Contact the manufacturer, customer service or a similarly qualified person.
-
- ▶ If fault codes (**F.XXX**), LHM codes (**N.XXX**) are shown in the display or

faults occur, proceed in accordance with the tables in the appendix.

Fault codes (→ Appendix C)

Troubleshooting (→ Appendix D)

- ▶ If you are unable to eliminate the fault or malfunction using the specified measures in the tables, contact a competent person.
- ▶ If limp home mode messages are displayed in the display, contact a competent person.

7 Decommissioning

7.1 Temporarily decommissioning the product

Condition: Risk of frost

- ▶ Press .
 - ◁ The display goes out. The standby button continues to light up.
 - ◁ However, the frost protection for the heating installation is active.

Condition: No risk of frost

- ▶ Switch off the product at the unit main switch.
 - ◁ The display goes out. The product is not working.
 - ◁ The frost protection function is deactivated.
- ▶ Close the gas stopcock on the product.

Validity: Product with integrated hot water generation
OR Product with connected domestic hot water cylinder

- ▶ Close the cold-water isolation valve.

7.2 Permanently decommissioning the product

- ▶ Have a competent person permanently decommission the product.

8 Restarting

1. Switch on the unit main switch if the unit main switch has been switched off.
2. Open the gas stopcock on the product if the gas stopcock is closed.
3. If required, press  if the unit main switch has been switched on.

Validity: Product with integrated hot water generation
OR Product with connected domestic hot water cylinder

- ▶ Open the cold-water isolation valve.

9 Recycling and disposal

Disposing of the packaging

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

Disposing of the product



■ 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.

Disposing of batteries



■ If the product contains batteries that are labelled with this mark:

- ▶ In this case, dispose of the batteries at a collection point for batteries.
 - ◁ **Prerequisite:** The batteries can be removed from the product without causing any destruction. Otherwise, the batteries are disposed of together with the product.
- ▶ In accordance with the legal regulations, used batteries must be returned since batteries may contain substances

that are harmful to health and the environment.

Deleting personal data

Personal data may be misused by unauthorised third parties.

If the product contains personal data:

- Ensure that there is no personal data on or in the product (e.g. online login details or similar) before you dispose of the product.

10 Guarantee and customer service

10.1 Guarantee

For information on the manufacturer's guarantee, you can write to the contact address that is provided on the back page.

10.2 Customer service

For contact details for our customer service department, you can write to the address that is provided on the back page, or you can visit www.vaillant.com.

Appendix

A End user level

When the status display is displayed, press  twice to call up the menu.

CONTROL menu item	
Comfort mode:	Product with integrated domestic hot water generation or product with connected domestic hot water cylinder On: Keeps the domestic hot water generation ready.
INFORMATION menu item	
Water pressure:	Displays the current water pressure.
Energy data	→ Gas consumption
	→ Heating
	→ DHW
	→ Power consumption
	→ Heating
	→ DHW
	The product, the system control and the app show approximate values for energy consumption, energy yields and efficiencies, which are extrapolated based on calculation algorithms. The values that are displayed in the app may differ from the other display options due to staggered transfer intervals. The determined values depend on: – Installation and system of the heating installation – User behaviour – Seasonal weather effects – Various tolerances of unit-internal components The values can be read in the following time forms: – Today – Yesterday – Last month – Last year – Total The recording of the values only includes the product in the factory-delivered condition. Supplementary accessories, even if they are installed on the product, as well as any other components in the heating system and other external consumers, are not part of the data recording. Deviations between the determined values and the actual values may be significant. The determined values are therefore not suitable for creating or comparing energy billing, for example. Note When replacing the PCB, the values recorded up to that point are completely reset in the product and system control.
Status code	Displays the current status code.
Control elements	Step-by-step explanation of the individual control elements.
Menu introduction	Explanation of the menu structure.
Installer contact info	→ Phone no. → Company

INFORMATION menu item	
Software version	Displays the software versions.
SETTINGS menu item	
Chimney sweep mode	→ Adjustable heat load
	→ Max. DHW heat input
	→ Min. heat input
Installer level	
Language, time, display	→ Language:
	→ Date:
	→ Time:
	→ Display brightness:
	→ Daylight saving time:
Button lock	Blocks the keyboard.
	To unblock, press and hold  for at least four seconds.

B Status codes



Note

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

The code table only shows an extract of the entire code.

Code	Meaning
S.000	There is no demand for heating mode.
S.002	Heating mode is active and the heating pump is in prerun mode.
S.003	Heating mode is active and the unit ignites.
S.004	Heating mode is active and the burner is operating.
S.006	Heating mode is active and the fan is in overrun mode.
S.007	Heating mode is active and the heating pump is in overrun mode.
S.008	Heating mode is active and the unit is in burner anti-cycling time.
S.012	The domestic hot water draw-off is active and the heating pump is in prerun mode.
S.013	The domestic hot water draw-off is active and the unit ignites.
S.014	The domestic hot water draw-off is active and the burner is operating.
S.016	The domestic hot water draw-off is active and the fan is in overrun mode.
S.017	The domestic hot water draw-off is active and the heating pump is in overrun mode.
S.020	There is no demand for the domestic hot water cylinder charging.
S.022	The domestic hot water cylinder charging is active and the pump is in prerun mode.
S.023	The domestic hot water cylinder charging is active and the unit ignites.
S.024	The domestic hot water cylinder charging is active and the burner is operating.

Code	Meaning
S.026	The domestic hot water cylinder charging is active and the fan is in overrun mode.
S.027	The domestic hot water cylinder charging is active and the heating pump is in overrun mode.
S.028	The domestic hot water cylinder charging is active and the unit is in burner anti-cycling time.
S.031	Heating mode has been deactivated and there is no domestic hot water demand.
S.034	The frost protection function is active.

C Fault codes



Note

The code table only shows an extract of the entire code.

Code/meaning	Possible cause	Measure
F.022 No/insufficient water in the product or the water pressure is too low.	Water deficiency in the heating installation	1. Check the filling pressure of the heating installation. (→ Section 5.4.1) 2. Top up with heating water. (→ Section 5.4.2)
F.028 The flame signal was not detected during the ignition phase.	After five unsuccessful ignition attempts, the product has switched to fault mode.	1. Check whether the gas stopcock is open. 2. Press the reset button for longer than three seconds. – Maximum number of repetitions: 3 3. If you are unable to eliminate the ignition fault, contact a competent person.
F.281 The flame has failed during the stabilisation period.	After five unsuccessful ignition attempts, the product has switched to fault mode.	1. Check whether the gas stopcock is open. 2. Press the reset button for longer than three seconds. – Maximum number of repetitions: 3 3. If you are unable to eliminate the ignition fault, contact a competent person.

D Troubleshooting

Symptom	Possible 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 power supply in the building is disconnected.	► Check the fuse in the building. The product automatically switches back on when the power supply is restored.
	The cold water stop valve is closed.	► Open the cold water stop valve.

Symptom	Possible cause	Measure
Product does not start up (no hot water, heating remains cold)	The product is switched off.	► Restart the product. (→ Section 8)
	The room temperature/domestic hot water temperature has been set too low and/or heating mode/domestic hot water mode has been switched off.	1. Set the flow temperature/desired temperature. (→ Section 4.4.1) 2. Set the domestic hot water temperature. (→ Section 4.5.1)
	There is air in the heating installation.	1. Purge the heating installation (→ "Topping up the heating installation" section). 2. If you are unable to purge the heating installation yourself, contact a competent person.
Heating will not start (hot water generation OK)	The external control is not set correctly.	► Set the external control correctly (→ Control operating instructions).

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