

Operating Instructions

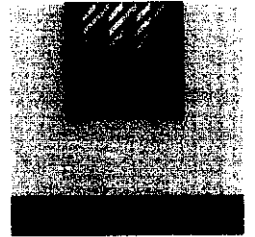
VIESSMANN

Pendola

Gas central heating boiler, type PUK, PUL
Gas combination boiler, type PWK, PWL

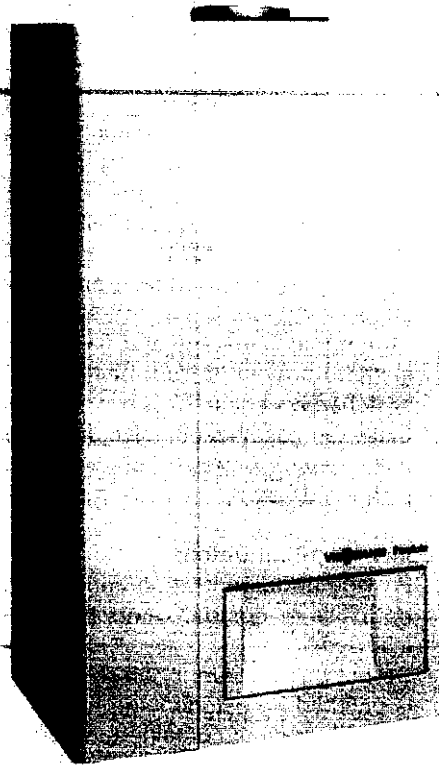
with control unit for weather-compensated operation

Natural gas version



Pendola

Keep in service wallet



Safety instructions



This hazard symbol precedes all important notes on safety.

Please follow these safety instructions closely to prevent possible risk of injury to persons and damage to property.

Operation

Please read these operating instructions carefully. Your heating engineer will be pleased to explain to you how the system works and show you how to operate it.

Please note:

Any damage due to failure to observe the operating instructions is not covered by our warranty.

In emergencies

- Immediately switch off the mains voltage, e.g. at the separate fuse (unless there is a smell of gas) and
- close the gas shut-off valve.
- Use suitable extinguishers in the event of fire.

Also, if you smell gas

- Don't smoke! Don't use naked flames or cause sparks (e.g. by switching lights or electrical appliances on and off)
- Open windows and doors (also if you smell fumes)
- Inform your heating engineers/ service contractors from outside the building
- Observe the safety regulations of your gas supply company (see gas meter) and those of your heating engineers (see start-up or instruction report).

Work on the equipment

Installation, initial start-up, maintenance and repairs **must** be carried out by a **competent person** (heating engineer/service contractor) (GB: registered with C.O.R.G.I.).

- Before work is undertaken on the equipment/heating system, switch off the mains voltage and take steps to prevent it from being switched on again.
- Close the gas shut-off valve and make secure to prevent unauthorized use.

Boiler room conditions

- Provide good ventilation and do not close or obstruct vents (if installed)
- Do not use a room in which the air is polluted by halogenated hydrocarbons (e.g. as contained in aerosols, paints, solvents and cleaning agents)
- Do not use a room subject to high levels of dust
- Do not use a room subject to permanently high humidity
- The room should be frost-protected
- Max. ambient temperature 35 °C.

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Tips on getting started

The timer of the control unit switches over between "normal room temperature" and "reduced room temperature" at the required times.

1. Normal room temperature

for the times you spend at home and require a comfortably warm room temperature (e.g. 20 °C).

Please note:

Via the programming unit/timer you can set the times and duration of the two room temperatures.

2. Reduced room temperature

for the times you spend sleeping or away from home. To save energy, a lower temperature is normally selected for this purpose (e.g. 14 °C).

You can set the temperature value to your personal preference in terms of both the "normal room temperature" and the "reduced room temperature".

The timer of the control unit switches the domestic hot water supply on and off at the required times.

1. Domestic hot water heating takes place

during the times you spend at home and require hot water for your daily requirements (e.g. for showering).

Via the programming unit/timer you can set the times and duration of domestic hot water heating.

You can set the temperature value for the hot water to your personal preference up to 60 °C.

2. Domestic hot water heating does not take place

during the times you spend sleeping, for example.

Your Pendola

Please ask your heating contractor to put an X in the appropriate box (☒).

- Pendola without separate domestic hot water cylinder**
(gas central heating boiler)

The control unit switches on the boiler and supplies the central heating system with heat.

- Pendola with separate domestic hot water cylinder**
(gas central heating boiler)

Domestic hot water heating has priority over central heating. The control unit switches automatically to central heating when the preset domestic hot water temperature is reached.

- Pendola with integral instantaneous water heater**
(gas combination boiler)

Domestic hot water heating has priority over central heating. The comfort control guarantees that hot water is available immediately via the instantaneous water heater. If no domestic hot water is drawn when the instantaneous water heater is at the required temperature (standby), the control unit switches automatically to central heating.

Your system type

Please ask your heating contractor to put an X in the appropriate box (☒).

Type 1

Pendola (A) with one heating circuit (B) (without mixing valve), optionally with

- DHW cylinder (E) (only with gas central heating boiler)
 remote control

Type 2

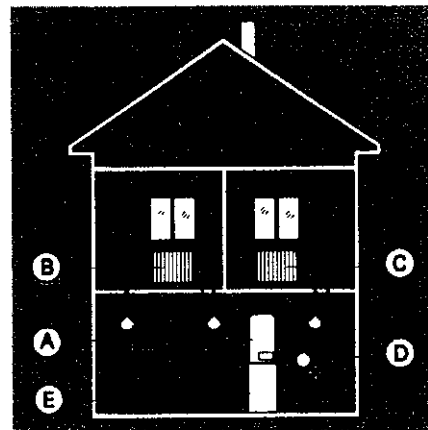
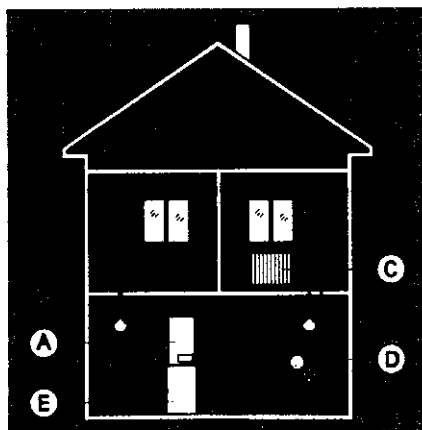
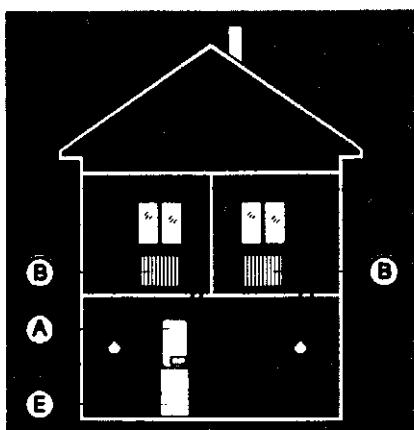
Pendola (A) with one heating circuit (C) (with mixing valve (D)), optionally with

- DHW cylinder (E) (only with gas central heating boiler)
 remote control

Type 3

Pendola (A) with the first heating circuit (B) (without mixing valve) and the second heating circuit (C) (with mixing valve (D)), optionally with

- DHW cylinder (E) (only with gas central heating boiler)
 remote control

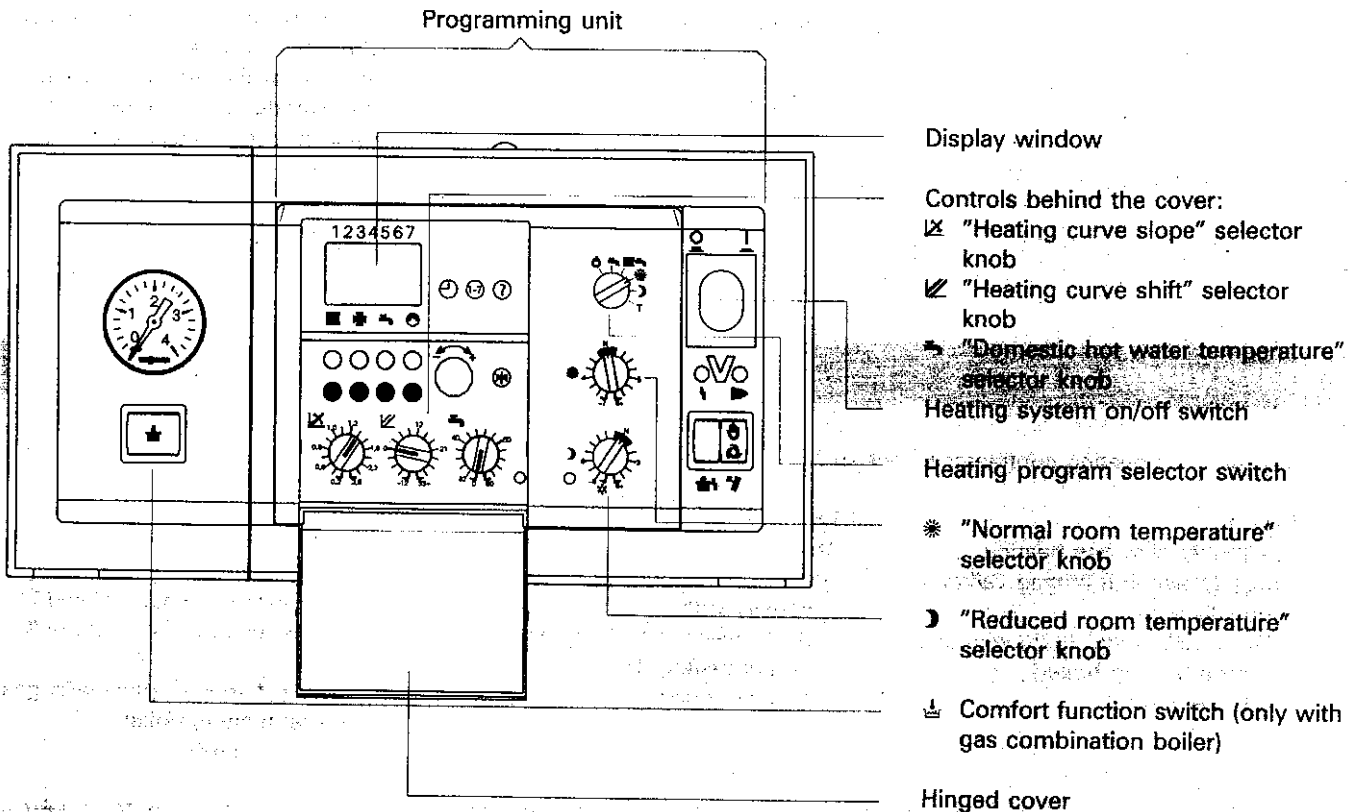


The main controls

You can carry out all the settings on your heating system centrally on the control unit and integrated programming unit.

The programming unit can be taken out of the control unit and installed in a wall mounting fixture (available as an accessory) located in your living room where it can be used as a remote control.

The control unit is behind the hinged cover in the front of the Pendola. The hinged cover of the control is opened by applying gentle fingertip pressure at the top and must be closed again after use (splash protection).

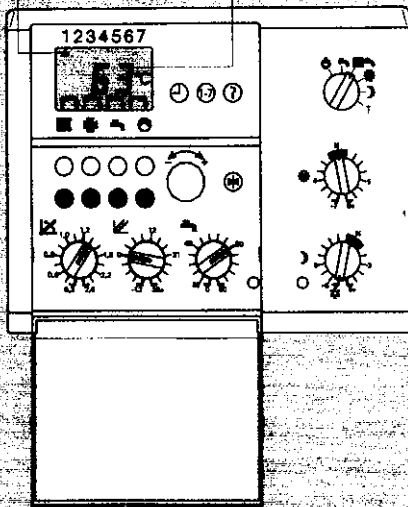


Your heating system is preset...

The control unit is preset in the factory to a standard operating mode. Your heating system is therefore ready for operation. You can change the factory settings to suit your individual preferences.

*▲ points to the current day of the week
1 = Monday
2 = Tuesday
etc.

Digital display (here: 53 °C boiler water temperature)



Date and time (CET)

The date and time are preset in the factory and are updated through the built-in long-life battery.

Resetting for summer/winter time takes place automatically.

Heating program

The heating program is set for winter operation, i.e. central heating and domestic hot water heating take place in accordance with the preset switching times.

Switching times

The switch-on time is set to 6:00 hrs, the switch-off time to 22:00 hrs.

Between 6:00 and 22:00 hrs central heating takes place with the normal room temperature and domestic hot water heating (if installed).

Between 22:00 and 6:00 hrs central heating takes place with a reduced room temperature.

Press the "▲" button to reset the switching times to their factory settings.

Comfort function

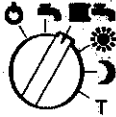
The comfort function is switched on with the gas combination boiler, i.e. hot water is immediately available.

Selecting the heating program (winter, summer)

Select one of the heating programs according to your personal requirements.

⚠ Important:

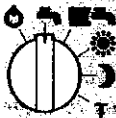
The "T" setting is for maintenance and service purposes only and is solely for use by the heating contractor.



Winter operation

- Central heating with alternating normal and reduced room temperature according to the preset switching times
- Domestic hot water supply (if a DHW cylinder or instantaneous water heater is installed)
- Frost protection of the heating system.

e.g. for the winter and transitional periods.



Summer operation

- No central heating
- Domestic hot water supply (if a DHW cylinder or instantaneous water heater is installed)
- Frost protection of the heating system.

e.g. for the summer.



Standby operation

- No central heating
- No domestic hot water supply
- Frost protection of the heating system.

e.g. for the summer holiday period.

Please note:

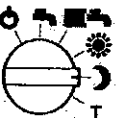
The connected pumps are switched on for a short time every 24 hours to prevent them from seizing up.



Continuous normal room temperature

- Central heating continuously with normal room temperature
- Domestic hot water supply (if a DHW cylinder or instantaneous water heater is installed)
- Frost protection of the heating system.

e.g. on bank holidays or for parties.



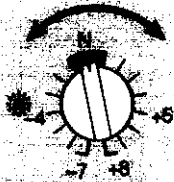
Continuous reduced room temperature

- Central heating continuously with reduced room temperature
- No domestic hot water supply
- Frost protection of the heating system.

e.g. to protect house plants during your winter holiday.

Changing the room temperature

In the winter operating mode central heating takes place with alternating "normal room temperature" and "reduced room temperature" according to the preset switching times. You can set the required room temperature as follows.

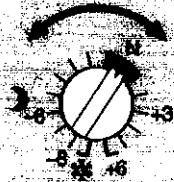


"Normal room temperature"
(factory setting: from 6:00 hrs in the morning)

"N" stands for normal setting and corresponds to a room temperature of approx. 20 °C with a correctly adjusted heating curve. The "normal room temperature" can be set between 13 and 28 °C.

Example

For the times you spend at home and require a comfortably warm room temperature.



"Reduced room temperature"
(factory setting: from 22:00 hrs in the evening)

"N" stands for normal setting and corresponds to a room temperature of approx. 14 °C with a correctly adjusted heating curve. The "reduced room temperature" can be set between 6 and 20 °C.

Example

For the times you spend sleeping or away from home.

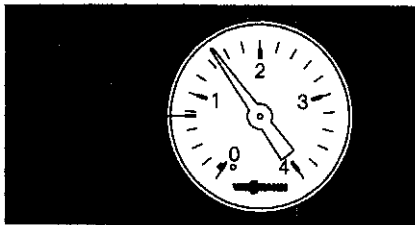
Changing the room temperature
Change the required temperature with the appropriate selector knob.

1 graduation corresponds to a temperature change of approx. 1 °C.

Initial start-up and re-starting the heating system

The initial start-up and matching of the control unit to local conditions and the structural characteristics of the building must be carried out by your heating contractor.

We advise you to contact your heating contractor before re-starting the heating system if it has been shut down for a long period.



To start up the system

1. Check the pressure of the heating system.

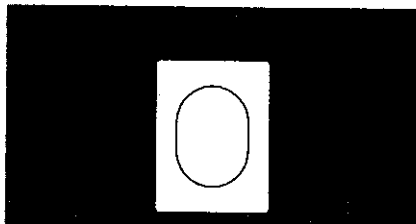
Minimum system pressure

0.75 bar.

If the needle of the manometer is below 0.75 bar, the system pressure is too low, in which case please contact your heating contractor.

2. Open flued operation only (type PUK or PWK):
Check that the ventilation facilities in the boiler room are open and are not obstructed.
3. Open the gas shut-off valve.
4. Switch on the mains voltage (e.g. at the separate fuse).
5. Switch on the heating system on/off switch.

Your heating system and, if connected, the remote control are now ready for operation.



Shutting down the heating system

If you do not want to use your heating system temporarily e.g. during your summer holidays, switch to standby operation (see "Selecting the heating program", page 8).

If you do not want to use your heating system for a long period (several months), you should shut down the system.

We advise you to contact your heating contractor before shutting down the heating system for long periods.

Your heating contractor will take any necessary action, e.g. for frost protection of the system or to safeguard the heat exchange surfaces.

To shut down the heating system

1. Switch off the heating system on/off switch.
2. Close the gas shut-off valve and make secure to prevent unauthorized opening.
3. Switch off the mains voltage (e.g. at the separate fuse).

The power supply to the system is now switched off.

Please note:

The settings of the control unit still remain intact.

How switching times work ...

By setting the corresponding activation periods, the **central heating** can be switched up to 4 times per day to and fro between the "normal room temperature" and the "reduced room temperature".

The time between switching on the "normal room temperature" and changing over to "reduced room temperature" is called an activation period.

The activation periods are called up and set on the appropriate timer channel.

Each **timer channel** is effective for a particular part of your heating system as defined in the factory:

Timer channel "III" – Central heating (for heating circuit without mixing valve)

Timer channel "X" – Central heating (for heating circuit with mixing valve).

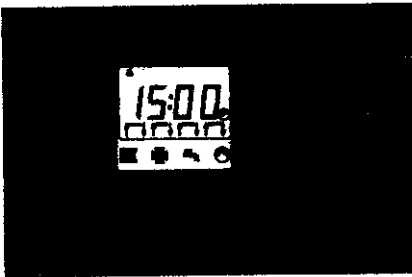
The **domestic hot water supply** can be switched on and off up to 4 times per day by setting the corresponding activation periods.

The timer channel "A" is effective for the domestic hot water supply (if a domestic hot water cylinder or an instantaneous water heater is installed).

The factory setting gives you the "normal room temperature" in the activation period from 6.00 to 22.00 hrs on every day of the week.

Please note:

Timer channel "O" is not connected.



The factory setting gives you domestic hot water in the activation period from 6.00 to 22.00 hrs on every day of the week.

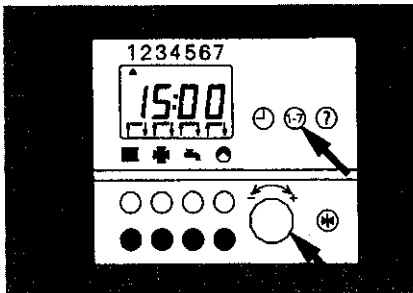
Please note:

When setting the activation periods, please take into account the reaction time of your heating system.

Therefore choose correspondingly earlier switch-on and switch-off times.

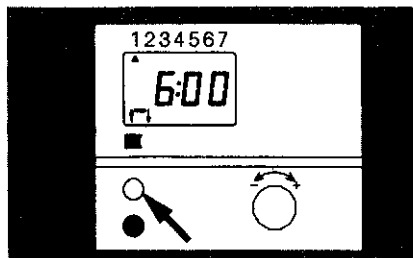
Setting the switching times

Scanning the activation periods



To set the required day of the week

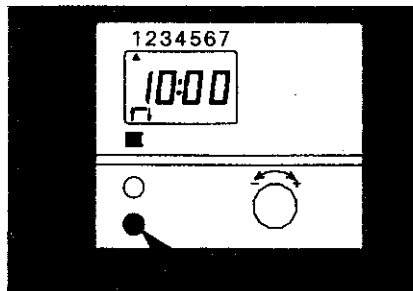
1. Press the "1-7" button and turn the "↻" selector knob clockwise or counter-clockwise until the arrow "▲" points to the day of the week (1 = Monday, 2 = Tuesday etc.) for which you wish to scan the switch-on and switch-off times.
2. Release the "1-7" button.



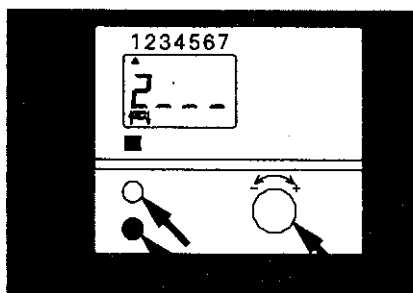
1. Press the red "O" button under the symbol "III".
The switch-on time appears.

Please note:

When scanning the switch-on and switch-off times, note which **activation period** you are in. The number of horizontal bars between the right and left arrow indicate the corresponding activation period (see "To scan other activation periods").



2. Press the blue "●" button under the symbol "III".
The switch-off time appears.



To scan other activation periods

1. Press the red "O" button and the blue "●" button under the symbol "III" simultaneously.
2. Within five seconds, turn the "↻" selector knob clockwise or counter-clockwise until the required activation period appears.
3. To scan the switch-on and switch-off times, follow the same procedure as for scanning the first activation period.

The figure "1", "2", "3" or "4" appears for five seconds. The figures stand for the activation periods.

The required activation period is selected.

Please note:

Approx. three minutes after you have finished scanning, the arrow "▲" automatically jumps to the current day of the week.

For the heating circuit with mixing valve:

Scan the activation periods accordingly on timer channel "✕".

For the domestic hot water supply:

Scan the activation periods accordingly on timer channel "↗".

Changing the activation periods

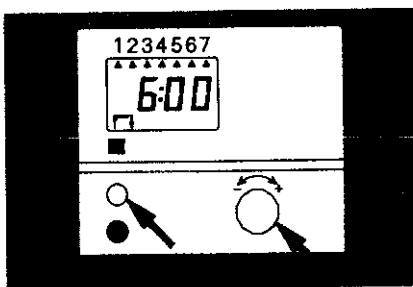
You can set the activation periods the same for every day of the week or individually for each day.

Changing the activation periods to "same for every day of the week"

Press the "⌘" button – the arrows "▲" are displayed for every day of the week (1-7).

Important:

If you have already set individual activation periods, they are erased when the "⌘" button is pressed. The activation periods are reset to the factory settings (normal room temperature/domestic hot water supply from 6.00 to 22.00 hrs).

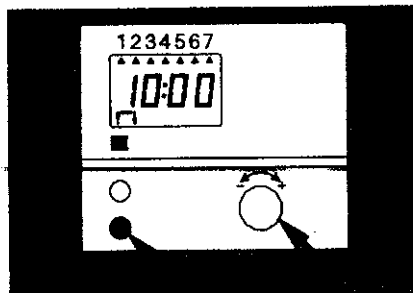


To change the switch-on time for the first activation period

1. Press the red "○" button under the symbol "III" and turn the "↻" selector knob clockwise or counter-clockwise until the required switch-on time appears.

2. Release the red "○" button.

The displayed switch-on time is stored.

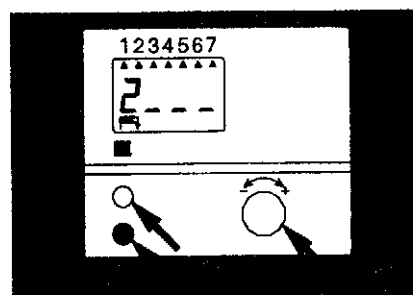


To change the switch-off time for the first activation period

1. Press the blue "●" button under the symbol "III" and turn the "↻" selector knob clockwise or counter-clockwise until the required switch-off time appears.

2. Release the blue "●" button.

The displayed switch-off time is stored.



To select other activation periods (two to four)

1. Press the red "○" button and the blue "●" button under the symbol "III" simultaneously.

The figure "1" appears for five seconds.

The "1" stands for the first activation period.

2. Within five seconds, turn the "↻" selector knob clockwise until the required activation period "2", "3" or "4" appears.

The required activation period is selected.

3. To set the switch-on and switch-off times, follow the same procedure as for setting the first activation period.

For the heating circuit with mixing valve:

Change the activation periods accordingly on timer channel "⌘".

For the domestic hot water supply:

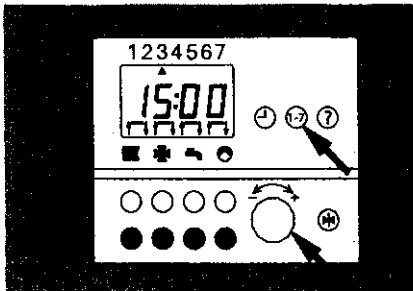
Change the activation periods accordingly on timer channel "●".

Or,

to change the times for "individual days", see following page.

Changing the activation periods (continued)

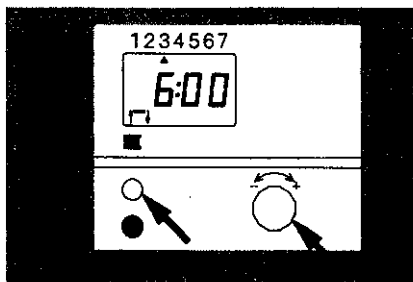
Changing the activation periods "for individual days"



To set the required day of the week

1. Press the "1-7" button and turn the "↻" selector knob clockwise or counter-clockwise until the arrow "▲" points to the day of the week (1 = Monday, 2 = Tuesday etc.) for which you wish to set the switch-on and switch-off times.

2. Release the "1-7" button.

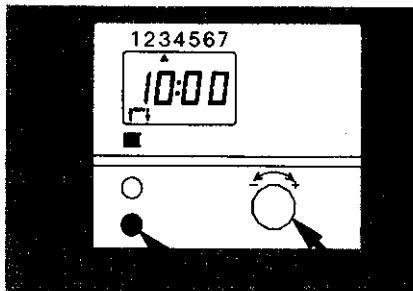


To change the switch-on time for the first activation period

1. Press the red "O" button under the symbol "III" and turn the "↻" selector knob clockwise or counter-clockwise until the required switch-on time appears.

2. Release the red "O" button.

The displayed switch-on time is stored.

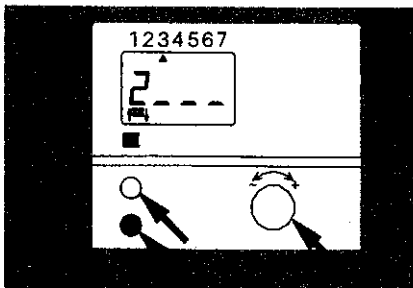


To change the switch-off time for the first activation period

1. Press the blue "●" button under the symbol "III" and turn the "↻" selector knob clockwise or counter-clockwise until the required switch-off time appears.

2. Release the blue "●" button.

The displayed switch-off time is stored.



To select other activation periods (two to four)

1. Press the red "O" button and the blue "●" button under the symbol "III" simultaneously.

The figure "1" appears for five seconds. The "1" stands for the first activation period.

2. Within five seconds, turn the "↻" selector knob clockwise until the required activation period "2", "3" or "4" appears.

The required activation period is selected.

3. To set the switch-on and switch-off times, follow the same procedure as for setting the first activation period.

Please note:

Approx. three minutes after you have finished the setting, the arrow "▲" automatically jumps to the current day of the week.

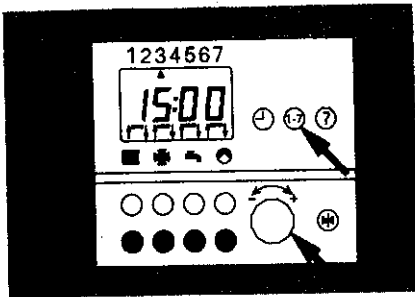
For the heating circuit with mixing valve:

Change the activation periods accordingly on timer channel "✱".

For the domestic hot water supply:

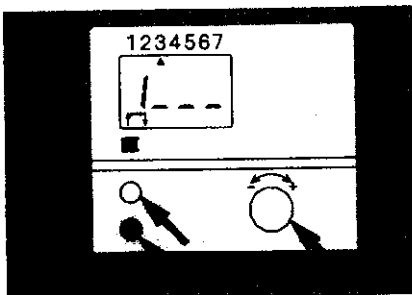
Change the activation periods accordingly on timer channel "✶".

Erasing the activation periods



1. Press the "1-7" button and turn the "..." selector knob clockwise or counter-clockwise until the arrow "▲" points to the day of the week (1 = Monday, 2 = Tuesday etc.) for which you wish to erase the switch-on and switch-off times.

2. Release the "1-7" button.

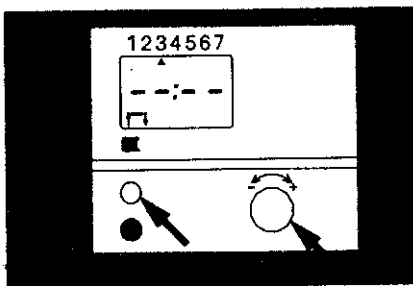


3. Press the red "O" button and the blue "●" button of the corresponding timer channel ("III", "✱" or "☛") simultaneously.

4. Within five seconds, turn the "..." selector knob clockwise or counter-clockwise until the required activation period appears.

The figure "1", "2", "3" or "4" appears for five seconds. The figures stand for the activation periods.

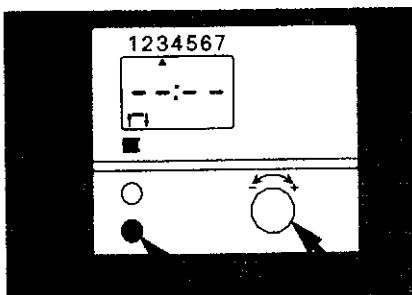
The required activation period is selected.



5. Press the red "O" button of the corresponding timer channel ("III", "✱" or "☛") and turn the "..." selector knob counter-clockwise until ":-:-" appears.

The switch-on time is erased.

6. Release the red "O" button.



7. Press the blue "●" button of the corresponding timer channel ("III", "✱" or "☛") and turn the "..." selector knob counter-clockwise until ":-:-" appears.

The switch-off time is erased.

8. Release the blue "●" button.

Please note:

Approx. three minutes after you have finished erasing, the arrow "▲" automatically jumps to the current day of the week.

Or

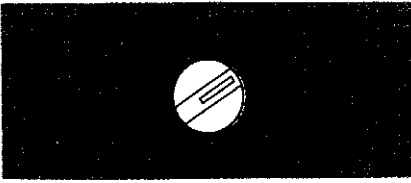
press the "✱" button.

Important:

All switching times are reset to the factory settings (normal room temperature/domestic hot water supply from 6.00 to 22.00 hrs).

Domestic hot water supply settings

Changing the domestic hot water temperature



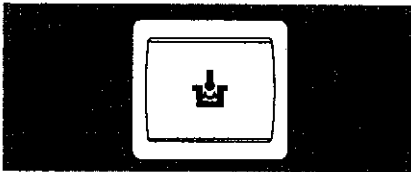
1. Open the cover on the programming unit.
2. Turn the "↔" selector knob to the required temperature.

1 graduation corresponds to a temperature change of approx. 2 °C.

Switching the comfort function on and off

Gas combination boiler only

When the comfort function is switched on, the instantaneous water heater is maintained at the required temperature (standby). Domestic hot water is therefore immediately available.



The comfort function can be switched off with the "↓" switch to avoid switching on the boiler and therefore consuming energy at times when no hot water is drawn (e.g. at night).

Setting the energy saving mode for the holiday period

If you are going on holiday and want to set your heating system to the minimum energy consumption, choose one of the following heating programs.



Standby operation

- No central heating
- No domestic hot water supply
- Frost protection of the heating system.

e.g. for the summer holiday period.

Please note:

The connected pumps are switched on for a short time every 24 hours to prevent them from seizing up.



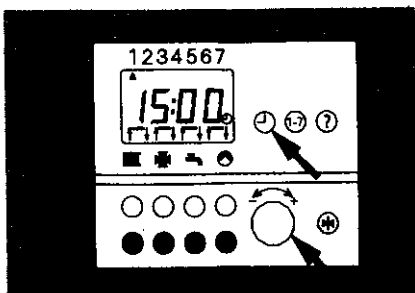
Continuous reduced room temperature

- Central heating continuously with reduced room temperature
- No domestic hot water supply
- Frost protection of the heating system.

e.g. to protect house plants during your winter holiday.

Other settings

Resetting the time (if required)



1. Press the "0" button and turn the "..." selector knob clockwise or counter-clockwise until the required time is displayed.
2. Release the "0" button. The time is stored.

Please note:

The date and time (CET) are preset in the factory and are updated through the built-in long-life battery. Resetting for summer/winter time takes place automatically.

Scanning temperatures

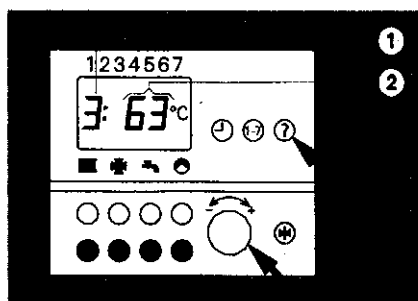
You can scan various current temperature values on the programming unit.

1. Choose the code number for the temperature concerned from the table below.

Code number	Meaning of display	Actual temperature in °C (display example)
1*1	Outdoor temperature	1: 8 °C
3	Boiler water temperature	3: 63 °C
5*2	Cylinder temperature	5: 50 °C
7*2	Room temperature (only if the programming unit is used as a room temperature dependent control)	7: 20 °C

*1The temperature value displayed measures weather conditions such as wind, sunshine and the wall temperature of the building.

*2Only if the sensor is connected/activated.



2. Press the "3" button and turn the "..." selector knob clockwise or counter-clockwise until the code number ① for the corresponding temperature appears in the display window. The current temperature value ② appears at the same time.

3. Release the "3" button.

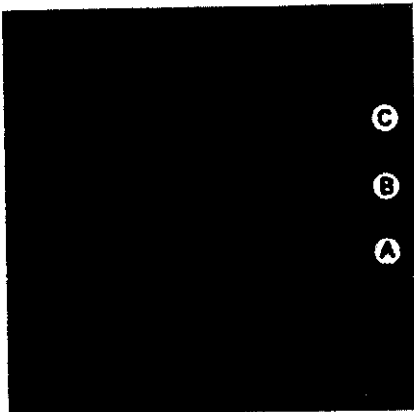
The temperature scan is ended.

Changing the heating curve

The heating curves represent the relationship between the outdoor temperature and the boiler water or flow temperature. Put simply: The lower the outdoor temperature, the higher the boiler water/flow temperature. In turn, the room temperature is dependent on the boiler water/flow temperature. In the factory settings, the shift is set to 0 and the slope to 1.4.

The heating curves shown are based on the following settings:

- * Selector knob for "normal room temperature" = N (corresponding to approx. 20 °C)
- ✓ Selector knob for "shift of heating curve" = 0.

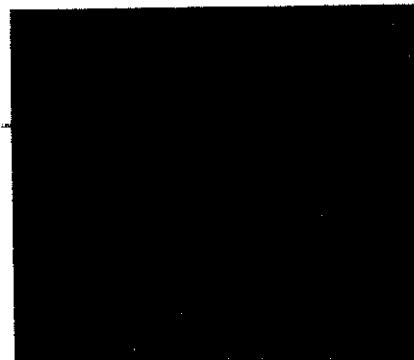


The slope of the heating curve is normally within the range marked

- (A) for underfloor heating systems,
- (B) for modulating heating systems,
- (C) for heating systems with temperatures over 75 °C.

Examples

- well insulated house in protected position (radiator heating):
Slope = 1.4
- House in exposed position or with old heating system (radiator heating):
Slope = 1.6

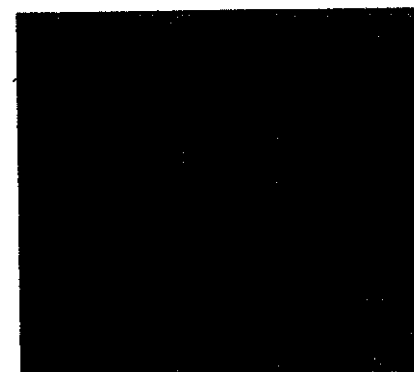


To raise or lower the slope (gradient) of the heating curve

1. Open the cover of the programming unit.
2. Turn the "∞" selector knob to the required value (slope range 0.2 to 2.6).

Please note:

As a guide, please refer to the table headed "Change heating curve if..." on page 21.



To raise or lower the shift (parallel adjustment) of the heating curve

1. Open the cover of the programming unit.
2. Turn the "∞" selector knob to the required value (shift range -12 to +33).

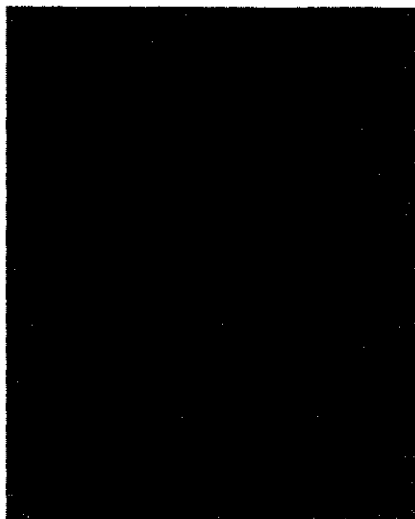
Changing the heating curve (continued)

Effects on the heating curve of adjusting the "☼" and "☾" selector knobs

The heating curve is adjusted along the desired room temperature axis ©.



Example 1:
Change setting on "☼" knob from "N" to "+6" in heating mode.



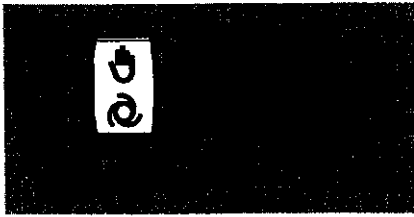
Example 2:
Change setting on "☾" knob from "-8" to "N" in reduced operation.

Changing the heating curve (continued)

Change heating curve if ...	Action	Example
... the living room is too cold at cold time of year	Adjust the slope of the heating curve upwards by one increment	
... the living room is too warm at cold time of year	Adjust the slope of the heating curve downwards by one increment	
... the living room is too cold at transitional time of year and at cold time of year	Adjust the shift of the heating curve upwards by one increment	
... the living room is too warm at transitional time of year and at cold time of year .	Adjust the shift of the heating curve downwards by one increment	
... the living room is too cold at transitional time of year , but warm enough at cold time of year.	Adjust the shift of the heating curve upwards by one increment and the slope downwards by one increment	
... the living room is too warm at transitional time of year , but warm enough at cold time of year.	Adjust the shift of the heating curve downwards by one increment and the slope upwards by one increment	

Emissions test switch

The information provided here is intended for emissions inspection purposes.



For flue gas measurements with constant boiler water temperature for a short time:

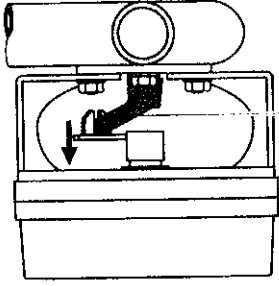
1. Open the hinged cover on the front panel of the Pendola.
2. Turn the emissions test switch "*/" from "E" to "G".
3. Trigger heat emission (e.g. by opening the thermostatic valves).
4. After completing the measurement, turn the emissions test switch "*/" back to "E".
5. Close the hinged cover.

Please note:

The following functions are triggered (with provisional operation):

- *The boiler water temperature is limited by the limit thermostat,*
- *the circulation pump is switched on (heating mode),*
- *the mixing valve (if installed) remains in its control mode,*
- *the burner is switched on (at max. rated output).*

Diagnosis and correction

Fault	Cause	Remedy
Heating system does not start up	Heating system switch on the control unit is turned to OFF	Switch on
	Fuse in the domestic power circuit or in the control unit has blown or tripped	Inform heating engineer
	Low water, thermal circuit breaker has operated	Inform heating engineer
Display symbol "▶" (burner operation) flashes (open flued operation only)	Flue gas monitoring device has triggered	Inform heating engineer
Burner does not switch on or only erratically	No gas	Open gas shut-off valve
	Control unit incorrectly programmed or set	Check and if necessary correct the setting of the heating program selector switch and the programming of the timer
	Fault on control unit	After consulting your heating engineer, the boiler can be operated temporarily with constant boiler water temperature by operating the emissions test switch "⚡". Inform your heating engineer.
Burner does not start; red burner fault display "⚡" is lit on the control unit	Faulty start	Press burner fault reset button "⚡" - if this attempt also fails, contact your heating engineer
Burner is switched off even if the rooms have not reached the required temperature	Fault in air supply or flue gas ducting	Inform heating engineer
The rooms are too cold even though burner is operating	Domestic hot water heating has priority (only with gas central heating boiler with DHW cylinder)	Wait until domestic hot water cylinder has been heated up
The green LED "▶" and the red LED "⚡" (behind the cover) are flashing	Heating program selector switch incorrectly set	Set the heating program selector switch to one of the following heating programs: "☀", "☀☀", "☀☀☀" or "☀☀☀☀".
	Fault on control unit	Inform heating engineer
If mixing valve controller installed: Boiler operating, but heating circuit cold	Mixing valve motor defective	Pull out the mixing valve motor and adjust the mixing valve lever ① manually. Inform heating engineer
		
A flashing error code appears in the display window	Heating system fault	Make a note of the error code and notify your heating engineer

Servicing instructions for your heating system

The servicing of heating systems is required by current heating system regulations and standards.

We advise you to have your heating system serviced regularly to ensure troublefree, energy-saving and environmentally friendly heating. We strongly recommend that you arrange a service contract with your heating contractor.

Pendola

All boilers have to be cleaned at certain intervals as the flue gas temperature and therefore the energy loss rise as the level of contamination increases.

Notes on operation:

- *Keep the boiler room and the boiler clean.*
- *Regularly check the pressure of the heating system on the manometer: If the needle of the manometer is below 0.75 bar, the system pressure is too low, in which case please contact your heating contractor.*

Domestic hot water cylinder

Current regulations state that the domestic hot water cylinder must be serviced or cleaned two years after start-up at the latest and at regular intervals thereafter.

Cleaning of the inside surfaces of the domestic hot water cylinder including the domestic hot water connections may only be undertaken by an approved heating contractor.

Please note:

If the cold water supply to the hot water cylinder incorporates a water treatment device (e.g. a sluice or inoculation unit), the filling must be renewed promptly.

The same applies if a dirt trap or a filter is fitted in the cold water supply. These must be flushed out and serviced at regular intervals.

CeraCell:

We recommend that a functional inspection is carried out annually by the heating contractor to check the sacrificial anode. This can be done without interrupting the operation of the system. The heating contractor measures the protective current with an anode testing instrument.

Safety valve (DHW cylinder)

The user or the heating contractor should check the function of the safety valve through venting at six-monthly intervals.

Please note:

There is a risk of dirt collecting at the valve seat (see valve manufacturer's instructions).

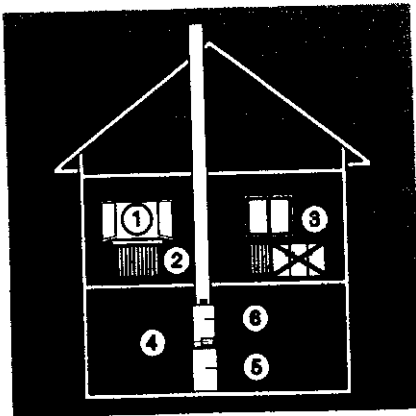
Drinking water filter (if installed)

For hygienic reasons

- *replace the filter element every 6 months on filters which cannot be flushed back (and make a visual inspection every 2 months),*
- *flush back reversible flow filters every 2 months.*

How to save energy

... by heating correctly



Apart from using the benefits offered by a modern heating system, there's a lot you can do yourself to make additional fuel savings. For instance:

- **Proper ventilation:**
Fully open the windows ① for a short time with the thermostatic valves ② closed
- **Don't overheat:**
Aim at a room temperature of 20 °C. Every degree less in the room temperature will reduce your heating bills by up to 6%
- **Close window shutters (if fitted) at dusk**
- **Operate thermostatic valves ② correctly**
- **Don't obstruct radiators ③ and thermostatic valves ②**
- **Make use of the individual adjustment facilities of the control unit ④:**
e.g. "normal room temperature" alternating with "reduced room temperature"
- **Set the domestic hot water temperature of the DHW cylinder ⑤ on the control unit ④**
- **Control your consumption of hot water:**
A shower generally uses less energy than a bath

... by regular maintenance

Regular maintenance of your heating system ⑥ by a service contractor will ensure energy-saving and environmentally friendly operation.

... by effective insulation

If you wish to make use of additional energy-saving measures, check out the thermal insulation:

- of the heating and domestic hot water pipes,
- of the external walls and the roof
- between the heated and the unheated rooms
- the windows

Attestation of conformity and manufacturer's certificate

Attestation of conformity for Pendola

We, Viessmann Werke GmbH & Co, D-35107 Allendorf, bearing sole responsibility, declare that the product

Pendola

conforms to the following standards:	According to the provisions of the guidelines
EN 297	90/396/EEC
EN 60 335	89/336/EEC
DIN VDE 0722/pr EN 50 165	73/ 23/EEC
EN 50 082	92/ 42/EEC
EN 55 011/55 014	
EN 60 555	

this product is designated as follows:

CE-0085

Manufacturer's certificate

We, Viessmann Werke GmbH & Co, D-35107 Allendorf, confirm that the following product satisfies the NO_x emission limits required in accordance with current legislation:

Pendola

Allendorf, 19th March 1997

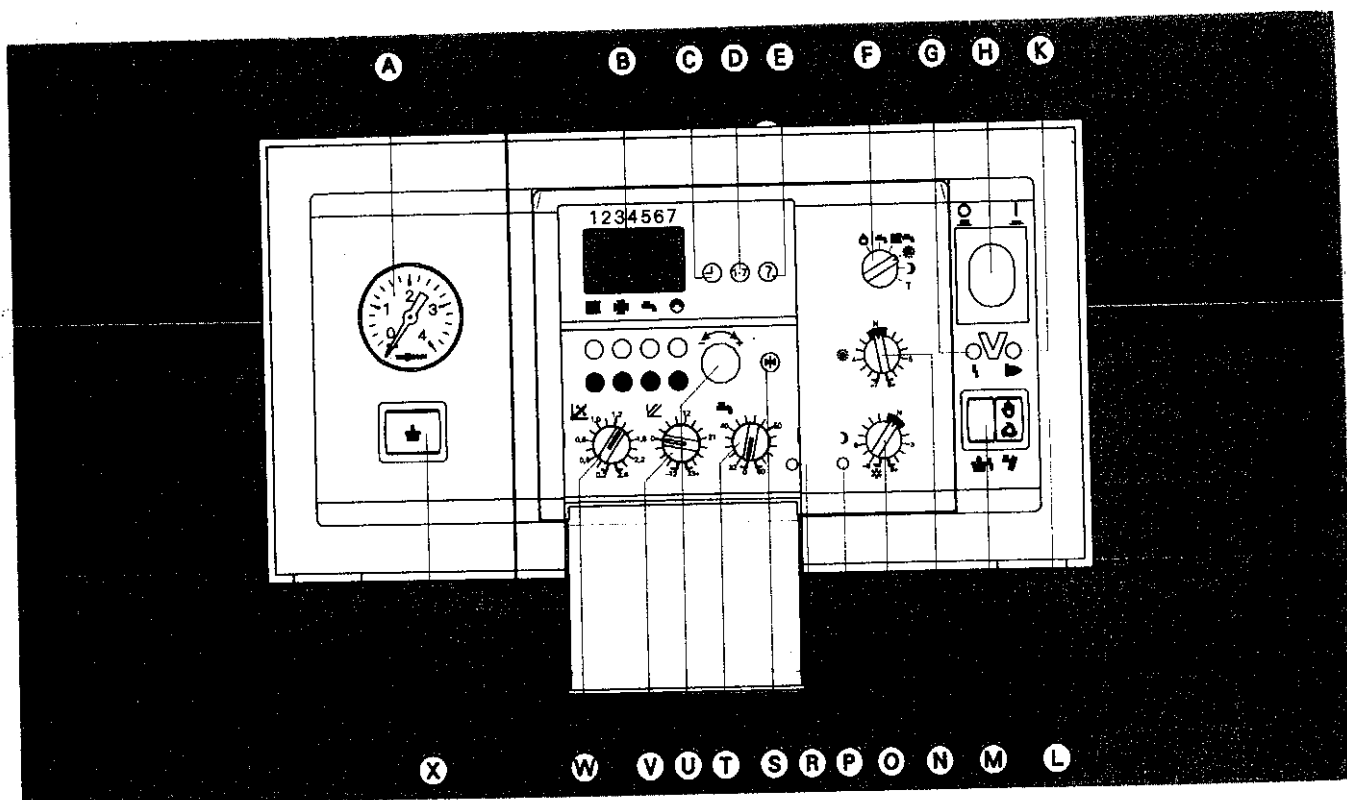
Viessmann Werke GmbH & Co
ppa.



Prof. Dr.-Ing. Helmut Burger

Overview of the controls and indicators

- (A) Manometer
- (B) Display window
- (C) Time setting button
- (D) Day setting button
- (E) Service button (for use by the heating contractor only)
- (F) Heating program selector switch
 - Standby operation
 - ↶ Summer operation
 - ⏏ Winter operation
 - * Continuous normal room temperature
 - ☾ Continuous reduced room temperature



- (G) Burner fault display
- (H) Heating system on/off switch
- (K) Burner operation display
- (L) Emissions test switch
- (M) Burner fault reset button
- (N) * "Normal room temperature" selector knob
- (O) ☾ "Reduced room temperature" selector knob
- (P) "Reduced room temperature" display
- (R) "Domestic hot water heating" display
- (S) "Factory settings" button
- (T) ↶ "Domestic hot water temperature" selector knob
- (U) ⋯ selector knob
- (V) ⚡ "Heating curve shift" selector knob
- (W) ⚡ "Heating curve slope" selector knob
- (X) Comfort function switch (gas combination boiler only)

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