



Operation Manual

Wall mounted gas condensing boiler

Condens 8300i W

GC8300iW 35/40 C



Table of contents

1	Explanation of symbols and safety instructions	3
1.1	Explanation of symbols	3
1.2	General safety instructions	3
2	Product Information	5
2.1	Declaration of conformity	5
2.2	Information about your product on the Internet	5
2.3	Display of energy data	5
3	Operation	5
3.1	Turn unit on/off	5
3.2	Display overview	6
3.3	Display readings	6
3.4	Heating key	6
3.4.1	Setting the maximum heating water temperature	6
3.4.2	Setting summer mode	6
3.5	DHW key (domestic hot water)	7
3.5.1	Set DHW temperature	7
3.5.2	Switch off DHW heating	7
3.6	eco key	7
4	Thermal disinfection	7
5	Tips on saving energy	8
6	Faults	8
6.1	Reset faults	8
7	Maintenance	9
8	Environmental protection and disposal	10
9	Technical terms	11

1 Explanation of symbols and safety instructions

1.1 Explanation of symbols

Warnings

In warnings, signal words at the beginning of a warning are used to indicate the type and seriousness of the ensuing risk if measures for minimizing danger are not taken.

The following signal words are defined and can be used in this document:



DANGER

DANGER indicates that severe or life-threatening personal injury will occur.



WARNING

WARNING indicates that severe to life-threatening personal injury may occur.



CAUTION

CAUTION indicates that minor to medium personal injury may occur.

NOTICE

NOTICE indicates that material damage may occur.

Important information



The info symbol indicates important information where there is no risk to people or property.

1.2 General safety instructions

⚠ Notices for the target group

These operating instructions are intended for the heating system operator.

All instructions must be observed. Failure to comply with instructions may result in material damage and personal injury, including danger to life.

- ▶ Read and retain the operating instructions (heat source, heating controller, etc.) prior to operation.
- ▶ Observe the safety instructions and warnings.

⚠ Determined use

The product may only be used in a domestic situation for the heating of central heating water and for DHW heating in closed-loop DHW and heating systems.

Any other use is considered inappropriate. Any damage that may result from misuse is excluded from liability.

This appliance is not suitable to be used as a pool heater.

⚠ If you smell gas

A gas leak could potentially cause an explosion. If you smell gas, observe the following rules.

- ▶ Prevent flames or sparks:
 - Do not smoke, do not use a lighter or strike matches.
 - Do not operate any electrical switches or unplug any equipment.
 - Do not use the telephone or ring doorbells.
- ▶ Turn off the gas supply at the main shut-off valve or at the gas meter.
- ▶ Open windows and doors.
- ▶ Warn your neighbours and leave the building.

- ▶ Prevent anyone from entering the building.
- ▶ Move well away from the building: call the emergency services and the gas supplier.

⚠ Danger to life from poisoning by flue gas

There is a danger to life from escaping flue gas.

▶ Never modify any parts through which flue gas is routed.

If flues are damaged or leaking, or if you smell flue gas, observe the following rules.

- ▶ Switch off the heat source.
- ▶ Open doors and windows
- ▶ Warn your neighbours and leave the building immediately.
- ▶ Prevent third parties from entering the building.
- ▶ Notify an approved contractor.
- ▶ Have any defects rectified.

⚠ Danger to life from carbon monoxide

Carbon monoxide (CO) is a poisonous gas, which arises during the incomplete combustion of fossil fuels such as oil, gas or solid fuels.

Dangers arise, if carbon monoxide escapes from the heating system due to a fault or a leak and collects unnoticed in enclosed spaces.

You can neither see, taste nor smell carbon monoxide.

To avoid danger from carbon monoxide:

- ▶ Have the heating system inspected and serviced regularly by an approved contractor.
- ▶ Use a CO detector, which gives an alarm in good time if CO escapes.
- ▶ If you suspect a CO leak:
 - Warn your neighbours and leave the building immediately.
 - Call an approved contractor.
 - Have any defects rectified.

⚠ Inspection, cleaning and maintenance

The user is responsible for ensuring the heating system is safe and environmentally compatible.

Non-existent or improper inspection, cleaning and maintenance may result in personal injury, including danger to life or material damage.

We recommend that you enter into a contract covering an annual inspection and responsive cleaning and maintenance with an approved contractor.

- ▶ Have work carried out only by an approved contractor.
- ▶ Have the heating system inspected by an approved contractor at least once a year.
- ▶ Have any required cleaning or maintenance work carried out immediately.
- ▶ Have any defects in the heating system remedied immediately, independent of the annual inspection.

⚠ Conversion and repairs

Improper modifications to the heat source or other parts of the heating system can result in personal injury and/or material damage.

- ▶ Have work carried out only by an approved contractor.
- ▶ Never remove the casing of the heat source.
- ▶ Never carry out any modifications to the heat source or to other parts of the heating system.
- ▶ Never close the outlet of the pressure relief valves. Heating systems with DHW cylinder: During heat-up, water can escape from the pressure relief valve of the DHW cylinder.

Open flue operation

The installation location must be adequately ventilated, if the heat source draws its combustion air from the room.

- ▶ Never cover or reduce the size of ventilation openings in doors, windows and walls.
- ▶ Consult a contractor to ensure that ventilation requirements are met:
 - If structural modifications are made (e.g. replacing windows and doors)
 - If devices with an air discharge to the outside are subsequently installed (e.g. extractor fans, kitchen fans or air conditioning units).

Combustion air/ambient air

The air in the installation location must be free of flammable or chemically aggressive substances.

- ▶ Do not store or use any flammable or explosive materials (paper, petrol, thinners, paints, etc.) in the vicinity of the heat source.
- ▶ Do not store or use any corrosive substances (solvents, adhesives, chlorinated cleaning agents, etc.) in the vicinity of the heat source.

Frost damage

If the heating system is not in a frost-proof room **and** is not in operation, it may freeze up when exposed to frost. In summer mode or if heating mode is blocked, only the device frost protection remains active.

- ▶ Leave the heating system switched on at all times whenever possible, and set the flow temperature to at least 30 °C,
-or-
- ▶ Have a competent person drain the heating system and DHW pipework at the lowest point.
-or-
- ▶ Have a competent person mix antifreeze into the heating water and drain the DHW circuit.
- ▶ Check every two years whether the minimum frost protection is still ensured.

Safety of electrical devices for domestic use and similar purposes

The following requirements apply in accordance with EN 60335-1 in order to prevent hazards from occurring when using electrical appliances:

“This appliance can be used by children of 8 years and older, as well as by people with reduced physical, sensory or mental capabilities or lacking in experience and knowledge, if they are supervised and have been given instruction in the safe use of the appliance and understand the resulting dangers. Children shall not play with the appliance. Cleaning and user maintenance must not be performed by children without supervision.”

“If the power cable is damaged, it must be replaced by the manufacturer, its customer service department or a similarly qualified person, so that risks are avoided.”

2 Product Information

2.1 Declaration of conformity

The design and operating characteristics of this product comply with the European and national requirements.

 The CE marking declares that the product complies with all the applicable EU legislation, which is stipulated by attaching this marking.

The complete text of the Declaration of Conformity is available on the Internet: www.bosch-climate.com.au.

2.2 Information about your product on the Internet

We want to actively provide you with suitable information about your product relevant to your situation. We therefore recommend you use the information provided on our web pages. You can find the Internet address on the back of these instructions.

2.3 Display of energy data

Energy data displayed at a connected accessory, e.g. control unit (remote control) is based on an estimate using the internal appliance data.

Many factors affect the energy consumption in real life conditions. This means that the energy data displayed may deviate from the values displayed by an energy meter.

These values only serve to visualise the energy consumption and to perform relative comparisons on different days/weeks/months.

They are not suitable to be used as the basis for billing.

3 Operation

These operating instructions describe the operation of the wall mounted gas condensing boiler. Depending on the heating controller, the operation of several functions may deviate from the description. Observe the operating instructions for the heating controller used.

3.1 Turn unit on/off

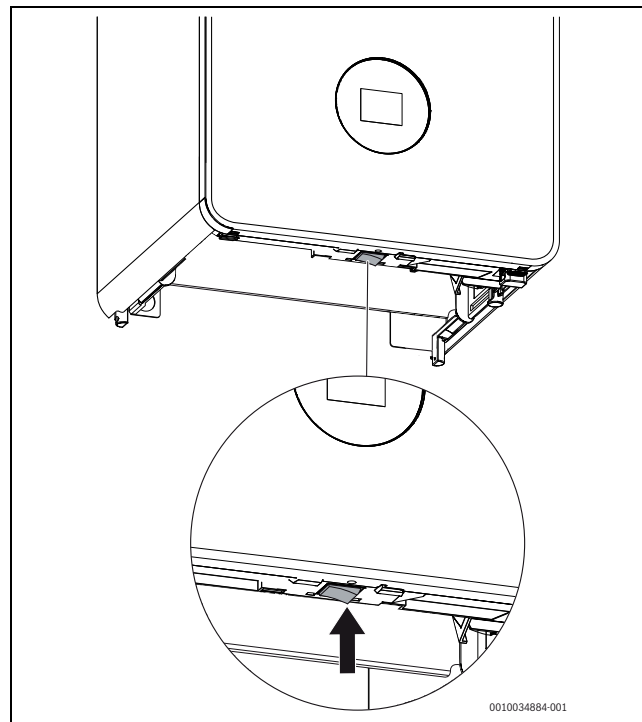


Fig. 1 On/Off-switch

Switching on

- Switch the appliance ON using the ON/OFF switch.



When  and the flow temperature appear alternately on the display, the device remains in heating mode at the lowest heat output for 15 minutes to fill the condensate trap in the device.

Stop

NOTICE

Risk of damage to the system from frost!

The heating system can freeze up after a prolonged period (e.g. during a power failure, switching off the power supply, faulty fuel supply, boiler fault etc.).

- Ensure that the heating system is in constant use (particularly when there is a risk of frost).



The anti-seizing function is not active when the device is switched off. The anti-seizing function prevents the heating pump and the 3-way valve from seizing up following long periods of inactivity.

- Switch off the device using the On/Off switch (→ Fig. 1).

3.2 Display overview

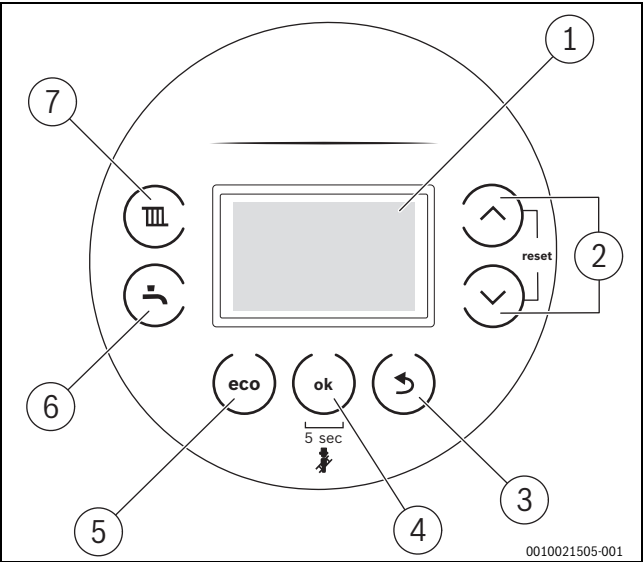


Fig. 2 Control Panel

- [1] Display
- [2] ▼ and ▲ keys
- [3] ↻ key
- [4] ok/heating pressure key
- [5] eco key
- [6] DHW key
- [7] Heating key

3.3 Display readings

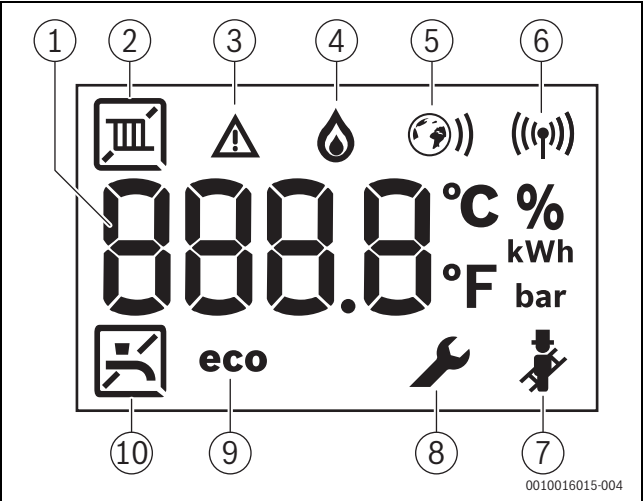


Fig. 3 Display readings

- [1] Digital output
- [2] Heating Mode
- [3] Error display
- [4] Burner operation
- [5] Internet connection
- [6] Wireless connection
- [7] Chimney sweep mode (for service technician only)
- [8] Service mode
- [9] ECO mode active
- [10] DHW heating

3.4 Heating key

 **WARNING**

Risk of scalding!

If the device is switched from heating mode to DHW mode, the DHW temperature may briefly increase above the set temperature if the heating water flow temperature is set higher than the domestic hot water temperature.

- ▶ Do not set the heating water flow temperature above 65 °C (default setting).
- ▶ If the heating water flow temperature is set above 65 °C: Use a thermostatic mixing valve (e.g. shower fitting).

3.4.1 Setting the maximum heating water temperature

The temperature of the heating water is adjusted via the flow temperature.

 **i**

With underfloor heating systems observe the maximum permissible flow temperature.

- ▶ Press the Heating key . The set flow temperature flashes.
- ▶ Press the (→ Tab. 1), key ▲ or ▼ to set the desired maximum flow temperature. The setting is applied after 5 s or after pressing the **OK** key.

Supply temperature	Application example
Approx. 50 °C	Underfloor heating system
Approx. 65 °C	Radiator heating system
Approx. 82 °C	Convactor heating system

Table 1 Maximum flow temperature

3.4.2 Setting summer mode

The heating pump and consequently the heating are switched off in summer mode. The DHW supply and the power supply for the control system remain active.

Summer mode setting:

- ▶ Press the Heating key .
- ▶ Press the ▼ key until **OFF** appears on the display. The setting is applied after 5 s or after pressing the **OK** key. The display shows .

Switch off summer mode:

- ▶ Press the Heating key .
- ▶ Press ▲ key to set the required maximum flow temperature. The setting is applied after 5 s or after pressing the **OK** key. The display shows .

Further notices can be found in the operating instructions for the heating control.

3.5 DHW key (domestic hot water)

3.5.1 Set DHW temperature



WARNING

Risk of scalding!

If the device is switched from heating mode to DHW mode, the DHW temperature may briefly increase above the set temperature if the heating water flow temperature is set higher than the domestic hot water temperature.

- ▶ Do not set the heating water flow temperature above 65 °C (default setting).
- ▶ If the heating water flow temperature is set above 65 °C: Use a thermostatic mixing valve (e.g. shower fitting).

- ▶ Press the DHW key .
- The set DHW temperature is displayed.
- ▶ Press the ▲ or ▼ key to set the required DHW temperature
- The setting is applied after 5 s or after pressing the **OK** key.

Measures for hard water

To protect against increased limescale and resulting service work:



If the water is calcareous with a hard hardness range ($\geq 15^\circ\text{dH}$ / 27°fH / 2.7 mmol/l)

- ▶ Set the DHW temperature to less than 55 °C.

3.5.2 Switch off DHW heating

- ▶ Press the DHW key .
- ▶ Press the ▼ key until **OFF** appears on the display.
- The setting is applied after 5 s or after pressing the **OK** key. The display shows .

3.6 eco key

Comfort mode (no eco appears in the display)

The appliance is continually kept at the set temperature in comfort mode. This results in a brief delay when hot water is drawn. The device therefore switches on, even if no domestic hot water is drawn.

ECO mode

In ECO mode, heating-up to the set temperature begins as soon as DHW starts to be drawn.

- ▶ To set ECO mode, press the **eco** key.
- eco** appears on the display.
- ▶ To return to comfort mode, press the **eco** key.
- eco** goes out on the display.



For maximum gas and DHW saving:

- ▶ Briefly open and close the DHW tap.
- The water is heated once to the set temperature.

4 Thermal disinfection

To prevent hot water from becoming contaminated by bacteria such as legionella, we recommend thermal disinfection after long downtimes.

You can program a heating controller with hot water control to perform thermal disinfection. Alternately, you can have a contractor carry out thermal disinfection.



CAUTION

Risk of scalding.

During thermal disinfection, discharging unmixed hot water can cause serious scalding.

- ▶ Only use the maximum adjustable hot water temperature for thermal disinfection.
- ▶ Inform occupants of the premises of the risk of scalding.
- ▶ Perform thermal disinfection outside of the normal operating times.
- ▶ Do not discharge DHW unmixed.

Proper thermal disinfection involves the DHW system including the draw-off points.

- ▶ Set the thermal disinfection in the hot water program of the heating controller (→ heating controller operating instructions).
- ▶ Close DHW draw-off points.
- ▶ Enable continuous operation of any DHW circulation pump that may be installed.
- ▶ Once the maximum temperature is reached, open the DHW draw-off points one by one, starting from the nearest and ending in the farthest, and draw off DHW until hot water at 70 °C has been discharging for 3 minutes.
- ▶ Restore the original settings.

5 Tips on saving energy

Economy heating

The device is designed for low energy consumption and low environment pollution but with a high degree of comfort. The fuel supply to the burner is regulated according to the heat energy demand of the home. If the heat energy demand is lower, the device continues to operate with a small flame. Experts refer to this process as modulating control. The modulating control keeps the temperature fluctuations low and distributes heat uniformly inside the rooms. This may mean that although the device is in operation for a longer period of time, it actually consumes less fuel than a device that is constantly being switched on and off.

Heating controls

To optimise the performance of the heating system, we recommend using a room temperature-dependent controller or weather-compensated control unit and thermostatic valves as heating controls.

Thermostats

Fully open the thermostatic valves to reach the required room temperature. Increase the required room temperature at the control unit if the temperature is not reached after a prolonged period.

Floor heating

Never set the flow temperature higher than the maximum flow temperature recommended by the manufacturer. We recommend using a weather-compensated control unit.

Ventilating

Close the thermostatic valves when ventilating, and fully open the windows for a short time. Never leave windows slightly open during ventilation. Otherwise heat will always be drawn out of the room without noticeably improving the ambient air.

Hot water

Always set the DHW temperature as low as possible. Choosing a low setting at the temperature controller means significant energy savings. In addition, high DHW temperatures result in increased calcification and thus impair the function of the device (e.g. longer heat-up times or lower draw-off volume).

Circulating pump

Set the DHW circulation pump, if installed, using a time program which is customised to suit your individual requirements (such as morning, midday or evening).

6 Faults

6.1 Reset faults

The symbol  indicates that a fault has occurred. The cause of the fault is displayed in encoded form (e.g. fault code **228**).



Repeated attempts to reset a fault can lead to the appliance being locked for safety reasons (fault code **2980**). This lock can only be removed by a qualified professional or the customer service after the cause of the fault has been determined and remedied on site.

- ▶ Switch off the appliance and switch it on again.
- or-
- ▶ Reset the fault on the appliance.
As soon as the fault is no longer displayed, the appliance returns into operation.

If the fault is still displayed:

- ▶ To ensure system safety, call a qualified professional or the customer service immediately.
- ▶ Inform them of the fault code and the appliance data.
- ▶ Arrange an on-site appointment and have the cause of the fault determined and remedied immediately.

Appliance data	
Appliance name	
Serial number	
Date of commissioning	
System installer	

Table 2 Appliance data to be passed on in the event of a fault

7 Maintenance

Inspection, cleaning and maintenance

The user is responsible for ensuring the heating system is safe and environmentally compatible.

Non-existent or improper inspection, cleaning and maintenance may result in personal injury, including danger to life or material damage.

We recommend that you enter into a contract covering an annual inspection and responsive cleaning and maintenance with an approved contractor.

- ▶ Have work carried out only by an approved contractor.
- ▶ Have the heating system inspected by an approved contractor at least once a year.
- ▶ Have any required cleaning or maintenance work carried out immediately.
- ▶ Have any defects in the heating system remedied immediately, independent of the annual inspection.

Cleaning the casing

Never use aggressive or corrosive cleaning agents.

- ▶ Wipe the casing with a damp cloth.

Check the operating pressure of the heating system

The standard operating pressure is 1 - 2 bar.

Should a higher operating pressure be required, ask your contractor.

- ▶ Press the **ok** key.
The operating pressure is shown in the display.

Fault display: System pressure too low

If the system pressure in the heating system falls below the minimum pressure that has been set, the display shows the message **LoPr => L0.X bar**. The system pressure is too low.

- ▶ Fill the heating system.

If the system pressure in the heating system drops below 0.3 bar, the display shows the message **LoPr** alternating with the operating pressure. The heating system is then blocked.

- ▶ Fill the heating system.

Topping up the heating water

NOTICE

Material damage due to thermal stresses!

When topping up with cold heating water, thermal stresses can lead to cracking due to internal stress.

- ▶ Only fill the heating system when it is in a cold state. Maximum flow temperature 40 °C.

Maximum pressure of 3 bar at maximum heating water temperature must not be exceeded (pressure relief valve will open).

- ▶ Open the valve until the desired pressure is reached.

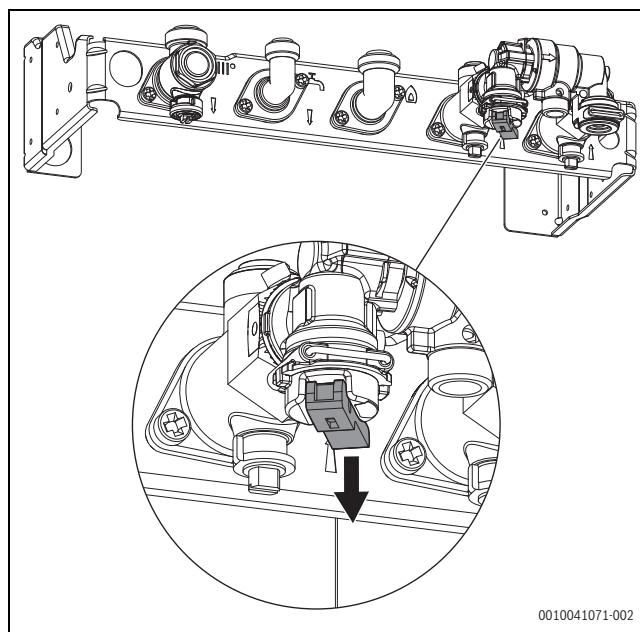


Fig. 4

Bleeding radiators

If radiators heat up at different rates:

- ▶ Bleed radiators.

Checking and refill the heat transfer fluid of the solar thermal system

Heat transfer fluid may only be topped up by an expert.

- ▶ Have the frost protection of the heat transfer fluid checked annually.
- ▶ Have the corrosion protection (pH value) of the heat transfer fluid checked every 2 years.

The maximum pressure of 6 bar with solar thermal system at maximum temperature must not be exceeded (pressure relief valve opens).

8 Environmental protection and disposal

Environmental protection is a fundamental corporate strategy of the Bosch Group.

The quality of our products, their economy and environmental safety are all of equal importance to us and all environmental protection legislation and regulations are strictly observed.

We use the best possible technology and materials for protecting the environment taking account of economic considerations.

Packaging

Where packaging is concerned, we participate in country-specific recycling processes that ensure optimum recycling.

All of our packaging materials are environmentally compatible and can be recycled.

Used appliances

Used appliances contain valuable materials that can be recycled.

The various assemblies can be easily dismantled. Synthetic materials are marked accordingly. Assemblies can therefore be sorted by composition and passed on for recycling or disposal.

Old electrical and electronic appliances



This symbol means that the product must not be disposed of with other waste, and instead must be taken to the waste collection points for treatment, collection, recycling and disposal.

The symbol is valid in countries where waste electrical and electronic equipment regulations apply, e.g. "European Directive 2012/19/EC on old electronic and electrical appliances". These regulations define the framework for the return and recycling of old electronic appliances that apply in each country.

As electronic devices may contain hazardous substances, it needs to be recycled responsibly in order to minimize any potential harm to the environment and human health. Furthermore, recycling of electronic scrap helps preserve natural resources.

For additional information on the environmentally compatible disposal of old electrical and electronic appliances, please contact the relevant local authorities, your household waste disposal service or the retailer where you purchased the product.

You can find more information here:

www.weee.bosch-thermotechnology.com/

Batteries

Batteries must not be disposed together with your household waste.

Used batteries must be disposed of in local collection systems.

9 Technical terms

Wall mounted condensing boiler

The wall mounted condensing boiler does not just use the heat which arises as the measurable temperature of the products of combustion, but also the heat from the water vapour. This means that the wall mounted condensing boiler has a particularly high efficiency.

Instantaneous water heater principle

The water is heated as it flows through the appliance. The maximum draw-off rate is quickly available, i.e. without long waiting times or interruptions for the heat-up process.

Operating pressure

The operating pressure is the pressure in the heating system.

Heating controller

The heating controller ensures the automatic control of the flow temperature depending on the outside temperature (for weather-compensated controllers) or of the room temperature in conjunction with a time program.

CH return

The heating return is the pipework that returns the heating water at a lower temperature from the heating surfaces to the appliance.

Heating flow connection

The heating flow is the pipework that supplies the heating water at a higher temperature from the appliance to the heating surfaces.

Heating water

The heating water is the water used to fill the heating system.

Thermostatic valve

Thermostatic valves are mechanical temperature controllers that enable a lower or higher heating water flow rate subject to ambient temperature in order to maintain a constant temperature.

Siphon

The siphon is a stench trap for draining water that exits a pressure relief valve.

Flow temperature

Flow temperature is the temperature with which the heated heating water flows from the appliance to the radiators, underfloor heating circuits, etc.

Robert Bosch (Australia) Pty Ltd
Thermotechnology Division
1555 Centre Road
Clayton Victoria 3168

Australia
Phone: 1300 30 70 37
Fax: 1300 30 70 38
www.bosch-climate.com.au

New Zealand
Phone: 0800 54 33 52
Fax: 0800 54 33 55
www.bosch-climate.co.nz