



Quadra II

Standard Efficiency Wall-Hung Boilers

Residential Heating



Quadra II



- QUADRA II is a wall-hung boiler with **compact dimensions and low lift weight** which enable a flexible installation almost anywhere in the home.
- Efficiency ★★★ according to European Directive EEC 92/42 (on C.S.I. model).
- Borella primary heat exchanger in copper.
- **DHW plate heat exchanger in stainless steel.**
- Simple and easy-to-use, control panel with white backlight digital display and diagnostics LEDs signaling boiler status.
- **NEW DIN connections**, to enable an easy installation both as a replacement or in new buildings with the same configuration.
- Selectable 3-speed circulator, located on the right side of the boiler (frontal view).
- “Survivor” function in DHW mode, allowing the boiler, in the event of failure of the DHW NTC probe, to continue to operate.
- Reduced waiting time for DHW supply thanks to **pre-heating function.**
- Built-in climatic thermoregulation that can be activated through the external probe (as option) for a high comfort level inside the house.
- S.A.R.A. system: automatic temperature control in heating mode.
- Electrical protection IPX5D.
- 8 l expansion vessel, allowing to support circuits with high water contents.
- Double air inlet allowing to fit easily in the existing flues.
- Hydraulic connections, gas and DHW taps (available as option) to make the installation easier.
- Suitable for the connection with remote control panel Borella (available as option).



Circulator anti-blocking cycles



IPX5D electrical protection



Flame detector



Frost protection system



“Survivor” function



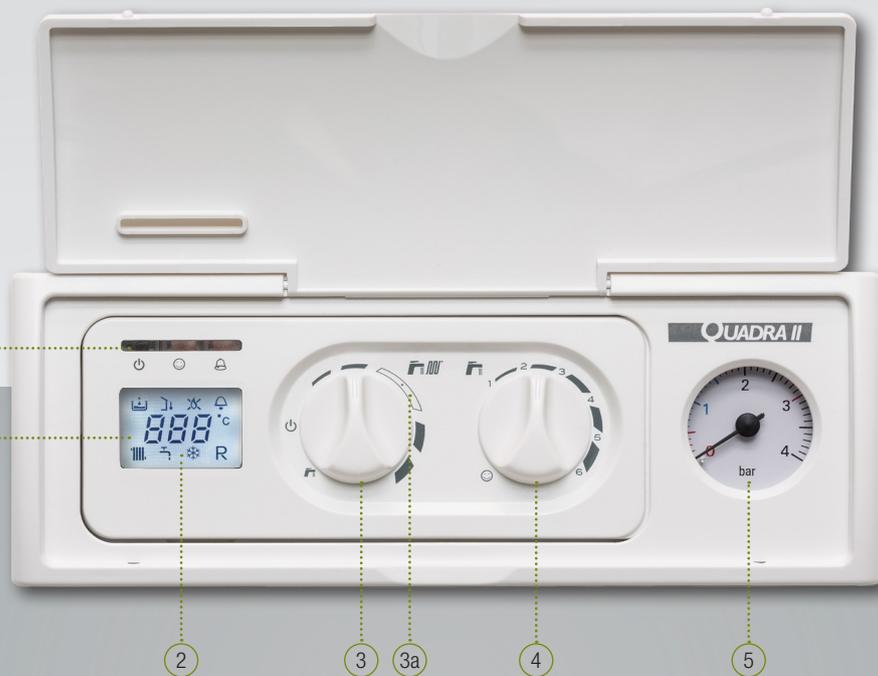
Flues evacuation pressure switch (C.S.I. model)



Linear design, user-friendly controls

QUADRA II range, characterized by a linear and stylish design, is provided with a simple and easy-to-use control panel that allows to easily adjust the boiler parameters and to activate all different functions.

A white backlight digital display, thanks to the easy-to-read symbols, and three LEDs, signal in a clear way boiler operation status and diagnostics codes. Two easy-to-use knobs allow to set the central heating temperature and the DHW temperature and to activate the S.A.R.A. function.



1 Three diagnostic LEDs

3 On/off/Summer/Winter/Reset/Heating Temperature Selector

4 DHW temperature/Pre-heating activation selector

2 White backlight digital display

3a “S.A.R.A. function” selector

5 Hydrometer

Outstanding comfort from a compact appliance

QUADRA II is available in combi version, both as conventional flue and room-sealed models, with 24 kW output.

The range boasts some important features such as the built-in climatic thermoregulation, that can be activated through the external

probe (as option), for a higher comfort inside the house, and is suitable for the connection with Beretta remote control panels (as option), to manage all the boiler functions and check the boiler status from a remote location. The user can also activate the pre-heating

function to enable a quicker supply of domestic hot water, while reducing the waiting time.

Thanks to its compact dimensions, the boiler can be sited almost anywhere in the home.

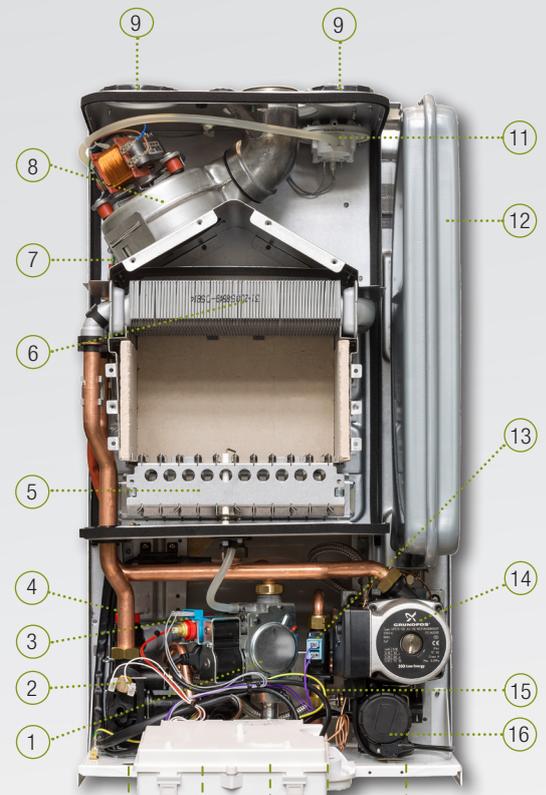
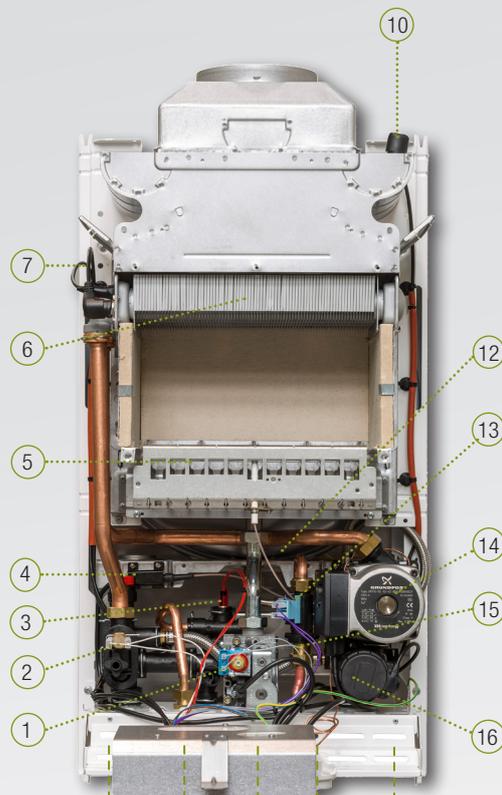
QUADRA II C.A.I.

(combi boiler, conventional flue)

QUADRA II C.S.I.

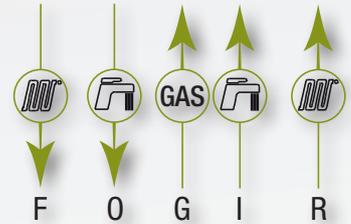
(combi boiler, room-sealed)

- ① Gas valve
- ② Water pressure switch
- ③ DHW NTC probe
- ④ Safety valve
- ⑤ Burner
- ⑥ Primary heat exchanger
- ⑦ NTC probe
- ⑧ Fan
- ⑨ Double air inlet for twin system
- ⑩ Flues thermostat
- ⑪ Flues evacuation pressure switch
- ⑫ Expansion vessel
- ⑬ Flow switch
- ⑭ Circulation pump with anti-blocking function
- ⑮ DHW heat exchanger
- ⑯ 3-way valve



New configuration with DIN connections

The new QUADRA II models, thanks to the configuration with DIN hydraulic connections, represent the ideal solution for an easy and quick installation, both in case of replacement and of new buildings with the same configuration.



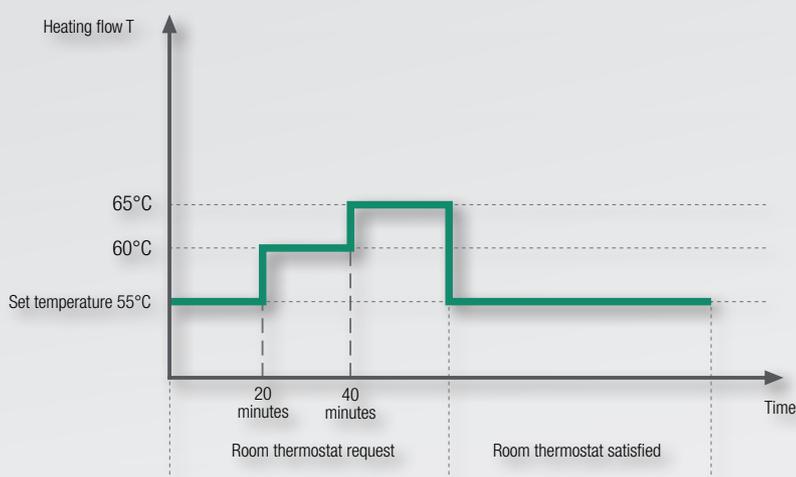
KEY:

- F: CH flow 3/4"
- O: DHW outlet 1/2"
- G: Gas 3/4"
- I: DHW inlet 1/2"
- R: CH return 3/4"

S.A.R.A. system: comfort and saving

All the models in the QUADRA II range are equipped with the Beretta patented S.A.R.A. system (Automatic Temperature Control), which can be enabled by moving the temperature control knob of the central heating circuit to the dedicated sector (between 55°C and 65°C). The S.A.R.A system achieves the best compromise between the average temperature of the radiators and the quickness in reaching the required room temperature,

while providing energy and money saving. When there is a demand for heating, the appliance will automatically raise the heating flow temperature twice by 5°C every 20 minutes, in order to heat the home more quickly. When the heating request has been satisfied (see diagram), the appliance will switch off automatically till the next heating request. At that point the boiler will start again at the previously set flow temperature.



Quality and reliability

The new boiler QUADRA II offers highly reliable combustion and electronics and boasts the high electric protection degree IPX5D. Thanks to the high quality components, the range is characterized by safety and solidity. QUADRA II comes with the most innovative safety devices: control systems that check the flame presence, the proper exhaust flue evacuation, the temperatures and pressures. The anti-blocking function on the pump and the frost protection system on the electronic board increase boiler longevity. QUADRA II also boasts the "Survivor" Function in DHW mode, allowing the boiler, in the event of failure of the NTC probe, to continue operating.

High DHW comfort levels

The new boiler QUADRA II is equipped with two heat exchangers: primary heat exchanger in copper and DHW plate heat exchanger in stainless steel, ensuring high DHW comfort.



Thermoregulation, to further enhance your home comfort

The built-in climatic Thermoregulation is a standard feature for QUADRA II range. Your installer just has to connect the external sensor (optional) to QUADRA II electronic board, to enable this function.

The Thermoregulation Function adjusts boiler operation according to external climate changes in order to optimize comfort and maximise saving.

Quadra II

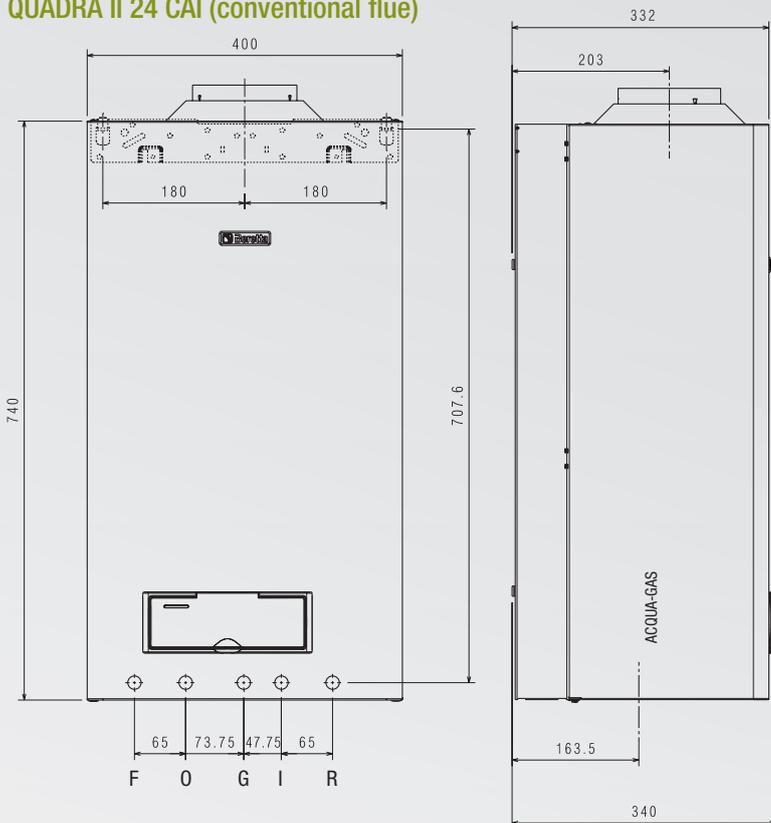
Technical drawings

KEY:

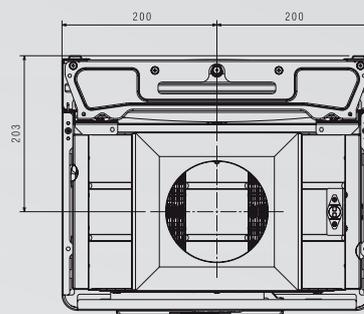
System: Flow F/ Gas G/ Return R

Domestic water: Outlet O/ Inlet I

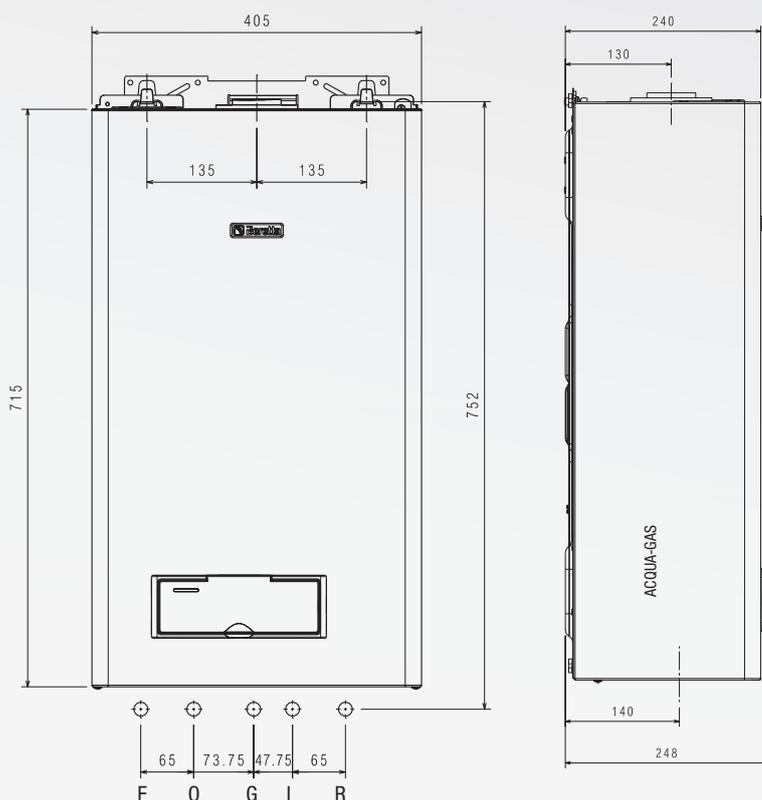
QUADRA II 24 CAI (conventional flue)



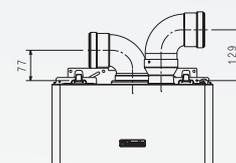
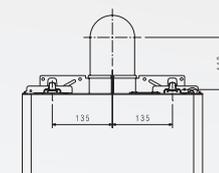
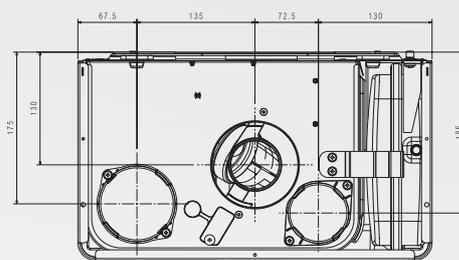
View from above



QUADRA II 24 CSI (room-sealed)



View from above



For all flueing configurations please refer to the current local and national rules.

Technical data

C Combi model (CH + DHW);

R Heating Only model;

S Room-sealed;

A Conventional flue;

I Electronic ignition, Ionisation flame control;

SPECIFICATIONS AND MODELS

		QUADRA II 24 C.S.I.	QUADRA II 24 C.A.I.
CH nominal heat input	kW	25,80	26,70
CH maximum heat output (80°-60° C)	kW	23,94	24,11
CH minimum heat input	kW	8,90	10,40
CH minimum heat output (80°-60° C)	kW	7,61	8,89
DHW heat input	kW	25,80	26,70
DHW maximum heat output*	kW	23,94	24,11
DHW minimum heat input	kW	8,90	10,40
DHW minimum heat output*	kW	7,61	8,89
Efficiency nominal output (Pn max - Pn min)	%	92,8 - 85,5	90,3 - 85,5
Efficiency at partial load 30% (47°C return)	%	90,9	88,6
Max power consumption	W	116	80
Power supply	V - Hz	230 - 50	230 - 50
Electrical protection	IP	X5D	X5D
CENTRAL HEATING			
Maximum pressure - temperature	bar - °C	3 - 90	3 - 90
Minimum pressure for standard operation	bar	0,25 - 0,45	0,25 - 0,45
Adjustable CH water temperature range	°C	40/80	40/80
CH expansion vessel pre-charge/Capacity	bar/l	1/8	1/8
DHW			
Maximum - minimum pressure	bar	6 - 0,15	6 - 0,15
DHW production $\Delta T=25^{\circ}C$	l/min	13,7	13,8
with $\Delta T=30^{\circ}C$	l/min	11,4	11,5
with $\Delta T=35^{\circ}C$	l/min	9,8	9,9
Hot water minimum flow rate	l/min	2	2
Adjustable hot water temperature range	°C	37/60	37/60
CONNECTIONS			
CH flow - return/Gas	Ø	3/4"	3/4"
DHW inlet - outlet	Ø	1/2"	1/2"
Gas	Ø-	3/4"	3/4"
CONCENTRIC PIPES			
Diameter	mm	60-100	-
Maximum length	m	4,25	-
CONCENTRIC PIPES			
Diameter	mm	80-125	-
Maximum length	m	12,4	-
TWIN PIPES			
Diameter	mm	80	-
Maximum length	m	16+16	-
DIMENSIONS, WEIGTH, GAS			
Boiler dimensions (HxWxD)	mm	715X405X250	740X400X332
Net weight	kg	29	30
Available gas versions		NG/LPG**	NG/LPG**

* average among the different functioning conditions in DHW

** LPG version available with separate kit (option)

Beretta International Markets

Trading address:

Via Risorgimento 23/A - 23900 LECCO - ITALY

Tel. +39-0341-277111 - fax +39-0341-277263

info@berettaboilers.com

www.berettaboilers.com

In order to improve its product, Beretta reserves the right to modify the characteristics and information shown in this manual at any time and without advance warning. This brochure, therefore, cannot be considered as contractually binding on third parties.

