

Condensing Wall-Hung Boilers with tank



## **High DHW comfort and performance**

#### **HIGH DHW COMFORT**

A range of two models specifically designed to supply immediately plenty of domestic hot water, thanks to the built-in stainless steel DHW tank of 45/60 lt. capacity.

#### **CONDENSING HEAT-EXCHANGER**

Designed to provide high performance in compliance with the strictest European directives in terms of energy efficiency and low emissions.

### HIGH HEAD LOW ENERGY SYNCHRONOUS PUMP

Sensitive reduction of the electrical consumption thanks to the Low Energy pump.

### 5:1 MODULATION RATIO

# MYNUTE BOILER GREEN range is ErP compliant

Beretta MYNUTE BOILER GREEN range complies with the European ErP regulations, which came into force on 26.09.2015.

From that date onwards, a new energy labelling was implemented for appliances and systems producing heating and domestic hot water and a series of efficiency and emissions constraints automatically excluded the less performing classes of appliances. The new ErP regulations aim to help the EU countries to reach by 2020 the "20-20-20" target, meaning a 20% reduction of gas emissions; a 20% increase in the use of renewable energies; a 20% reduction in global energy consumptions.



CO<sub>2</sub> reduction



renewable energies



energy consumptions

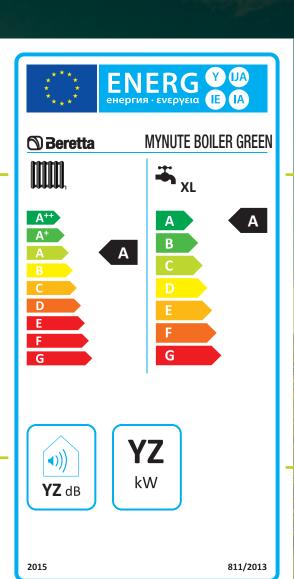




Seasonal space heating energy efficiency class: A (on all models)

# Sound power level inside

Specifications for each model are detailed on the back cover page



#### **Water heating function**

This section refers only to combi models:

- Load profile: XL
- Energy Efficiency Class: A

#### Rated heat output

Specifications for each model are detailed on the back cover page

# Saving energy, saving money

The new energy labelling, that according to the ErP directive was implemented in September 2015 for appliances and systems producing heating and domestic hot water, means that all boilers and heating systems are labelled in the same way as "white goods", like washing machines and refrigerators. The energy labelling enables the end-users to make realistic comparisons among different products. By choosing high efficiency products, the end-users can lower their energy bills, helping to safeguard the environment.





MYNUTE BOILER GREEN range fully complies with the European ErP regulations:



seasonal space heating energy efficiency class



water heating energy efficiency class and water heating load profile

- MYNUTE BOILER GREEN is a condensing boiler with built-in stainless steel tank, available in two models of 25 kW (with 45 litres tank) and of 32 kW (with 60 litres tank).
- The RANGE RATED certification allows to adapt the power of the boiler to the real thermal requests of the installation.
- Efficiency ★★★★ according to European Directive EEC 92/42.
- 5:1 Modulation ratio.

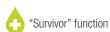
- Low NOx emissions: Class 5 (the best according to European Directive UNI EN 483), helping to safeguard environment.
- Condensing heat-exchanger in extruded aluminium (Patent Pending) providing excellent thermal transfer.
- Built-in thermoregulation (with external probe available as option).
- Ideal for low-temperature installations.
- IPX5D electrical protection.
- High head Low Energy, synchronous pump (EEI ≤ 0.20).
- DHW expansion vessel as standard.
- DHW Comfort ★★★: the highest level according to Pr EN 13203.
- Magnesium anode as standard.
- Suitable for connection with Beretta remote control panels (as option).
- Compatible with the hydraulic separators Beretta CONNECT.



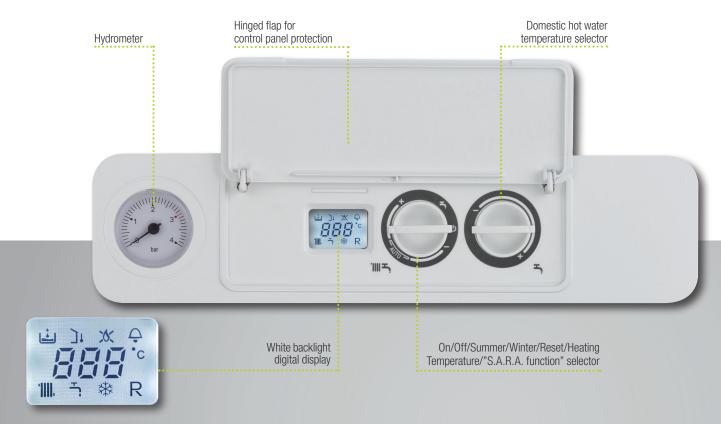












### High performance through user-friendly controls

The MYNUTE BOILER GREEN control panel, located under a hinged flap, is simple and user-friendly. Two ergonomic knobs allow to easily control all the boiler functions. The central

heating knob activates also the S.A.R.A. function. The white backlight digital display on the control panel provides the end-user immediately with all information about the

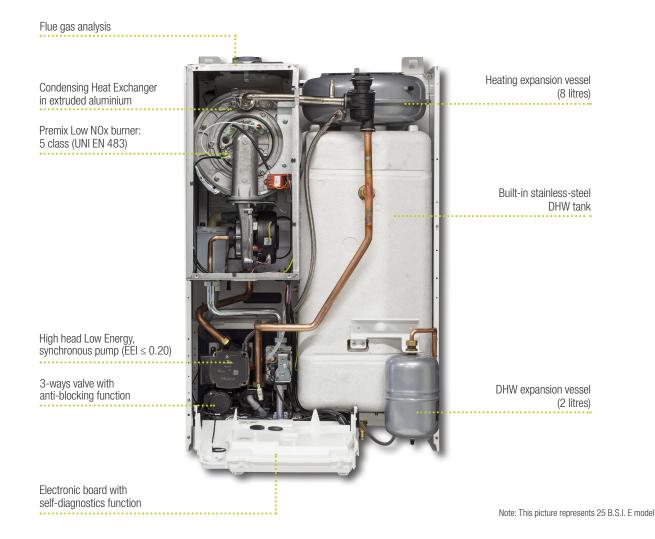
boiler status. The system filling through the practical filling tap can be easily checked on the hydrometer on the control panel.



### A cascade of hot water

MYNUTE BOILER GREEN can immediately supply up to 141/183 litres DHW in 10 minutes (with  $\Delta T=30^{\circ}\text{C}$ ), thanks to the built-in stainless steel tank with 45/60 litres capacity. The DHW tank is equipped with a magnesium anode to offer protection

against stray currents and, thanks to the wide flange, the tank can be easily inspected. In order to save gas consumption, a highly protective insulation of the tank prevents water cooling, while minimizing the burner ignitions (to recover the DHW tank temperature). MYNUTE BOILER GREEN features also the DHW expansion vessel and is suitable for DHW recirculation (through optional kit).



### Highest reliability

MYNUTE BOILER GREEN is provided with the most innovative safety devices: control systems that check the flame presence, the correct flue evacuation, the temperatures and the pressures. Besides, it features a circulation pump and a three-

way valve with anti-blocking cycles that

ensure efficiency and operation: in case of inactivity of the boiler components, being the boiler installed and electrically fed, the blocking of the components is avoided. The boiler allows the climatic thermoregulation, that can be activated through the external probe (available as

option) for a high comfort inside the house; besides it is suitable for connection with the Beretta remote control panel (available as option) for the control and check of the boiler status from remote.



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

MYNUTE BOILER GREEN models 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 "AUTO" 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.

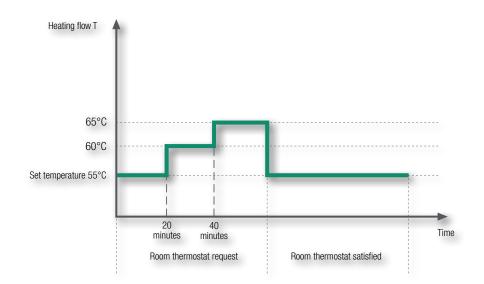
When there is a demand for heating, the appliance will automatically raise the heating flow temperature twice, by 5°C every 20 minutes, in order to heat the home more quickly. When the heating request has been satisfied (see diagram), the appliance will swich off automatically till the next heating request.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

### Range Rated

The term "Range Rated" identifies a product homologated at different levels of heat input and provided with a special feature allowing to precisely adapt the maximum power of the boiler to the thermal needs of the central heating system.

With MYNUTE BOILER GREEN, Beretta offers the possibility to set the power of your boiler according to the real energy requests of the building through a simple operation during the installation. The fan revolutions number (r.p.m.) will only have to be adjusted and the new set power will be written on a label on the boiler.

Thanks to the "Range Rated" certification, MYNUTE BOILER GREEN operation can be optimized, avoiding any gas waste and reducing wear and tear on boiler components.



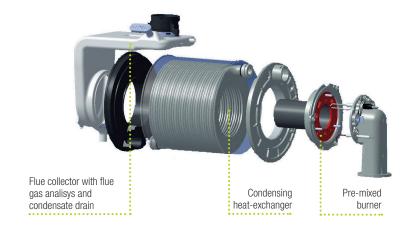
### Condensing heat-exchanger

The Beretta condensing heat exchanger is manufactured in a single aluminium pipe, without weldings.

The high thermal conductivity of the aluminium allows a more uniform temperature distribution so that no hot spots are present: this translates in a longer life span of the exchanger.

Moreover, the aluminium is very resistant against the corrosion.

The single-pipe layout (in-series circuit) offers a wide section for the water passage, with the consequent advantage of having low head losses while preventing the deposit both of limescale and impurities.



The condensing heat-exchanger allows to recover a large part of the latent heat of the gas flues, reducing in this way much of the heat losses.

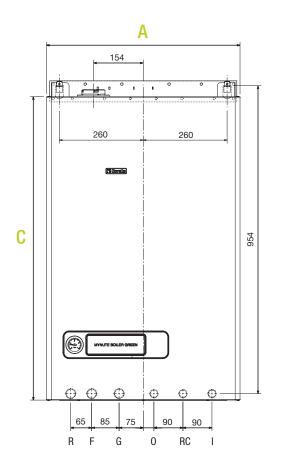
The premix burner optimizes the combustion mixture while reducing NOx emissions to a minimum.

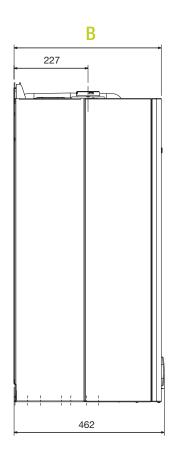


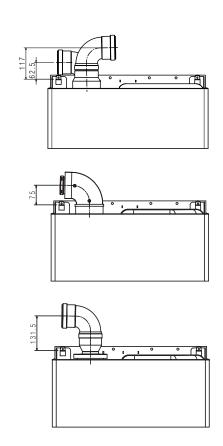
### Technical drawings

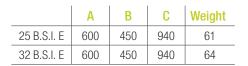
System: Return R/ Flow F/ Gas G / Condensate Drain CD
Domestic water: Inlet I/ Outlet O / Recirculation RC

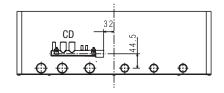
#### MYNUTE BOILER GREEN 25/32 B.S.I. E



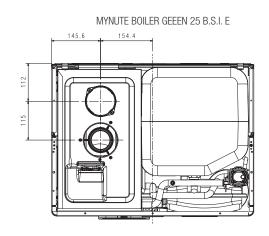


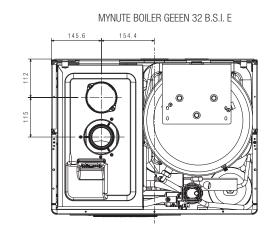






#### View from above





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

### Technical data

Built-in DHW tank



Ionisation flame control

ENERGY LABELLING SPECIFICATIONS			
(according to ErP regulations)		MYNUTE BOILER GREEN 25 B.S.I. E	MYNUTE BOILER GREEN 32 B.S.I. E
Seasonal space heating energy efficiency class		A	А
Vater heating energy efficiency class		A	А
eclared load profile		XL	XL
lated heat output	kW	25	24
Sound power level inside	dB	52	52
Seasonal space heating energy efficiency	%	92	93
UXILIARY ELECTRICITY CONSUMPTION			
at full load	W	40,0	42.0
At part load	W	13,7	14,3
n Stand-by mode	W	2,4	2,4
		_, .	<u>-,.</u>
OTHER SPECIFICATIONS			
CH nominal heat input	kW	25,00	25,00
CH nominal heat output (80°-60° C)	kW	24,50	24,38
CH nominal heat output (50°-30° C)	kW	26,25	26,43
CH minimum heat input	kW	6,00	6,00
CH minimum heat output (80°-60° C)	kW	5,89	5,90
CH minimum heat output (50°-30° C)	kW	6,48	6,46
HW nominal input	kW	25,00	32,00
DHW maximum output*	kW	25,00	32,00
HW minimum input	kW	6,00	6,00
DHW minimum output*	kW	6,00	6,00
fficiency at max - min nominal output (80°-60° C)	%	98.0 - 98.2	97,5 - 98,3
fficiency at partial load 30% (30°C return)	%	107,1	109.3
fficiency at max - min nominal output (50°-30° C)	%	105,0 - 108,0	105,7 - 107,7
ifficiency at partial load 30% (47°C return)	%	102,3	102,7
Ox class			5
Max power consumption CH / DHW	W	 91 / 91	93 / 101
ower supply	V/Hz	230/50	230/50
electrical protection	IP	X5D	X5D
ENTRAL HEATING		NOD .	7,00
Maximum pressure - temperature	bar - °C	3 - 90	3 - 90
OHW	Dai O	3 30	0 00
Maximum pressure	bar		8
HM production ΔT=25°C/30°C/35°C	I/min	 14,3 / 11,9 / 10,2	18,3 / 15,3 / 13,1
djustable hot water temperature range	°C	37 - 60	37 - 60
UILT-IN TANK SPECIFICATION	0	37 - 00	37 - 00
		stainless staal (LDV 2101)	atainlana ataal /LDV 0101)
ype NHW capacity		stainless steel (LDX 2101) 45	stainless steel (LDX 2101) 60
			**
HW quantity drawn in 10' with ΔT=30°C		141	183
Vater tank maximum	bar	8	8
ONNECTIONS		0/4#	-044
H flow - return / Gas	Ø	3/4"	3/4"
HW inlet - outlet	0	1/2"	1/2"
LUE PIPES AND AIR INTAKE			
lax length (including 90° bend) for concentric 60-100mm	m m	7,85	7,85
lax length for concentric 80-125mm	m	14,85	14,85
Max length for twin 80+80mm	m	36 + 36	35 + 35
AS			
Certified gas types		II2H3P / II2ELwLs3P	112H3P / 112E3P
Available gas versions		NG/LPG**	NG/LPG**

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<sup>\*</sup> average among the different functioning conditions in DHW \*\* LPG version available with conversion kit (supplied as option)