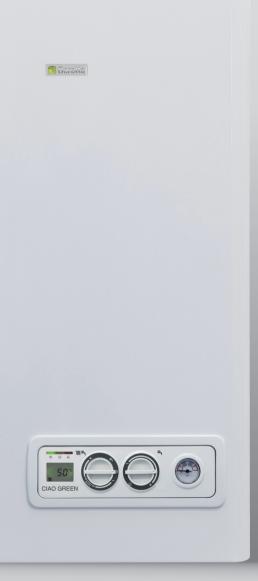


# Ciao Green

Condensing Wall-Hung Boilers

Residential Heating

EFFICIENCY \*\*\*
according to European Directive EEC 92/42



#### Ciao Green



- CIAO GREEN is a wall-hung condensing boiler with compact dimensions and low lift weight which enable a flexible installation almost anywhere in the home.
- Reduces running costs by up to 35% more than a conventional boiler, helping to safeguard the environment.
- Efficiency ★★★ according to European Directive EEC 92/42.
- The RANGE RATED certification allows to adapt the power of the boiler to the real thermal requests of the installation.
- Stylish and easy-to-use control panel with a digital display and 3-LEDs signalling the boiler working status and the selfdiagnostics.
- "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.
- Suitable for the connection with remote control panel Beretta (available as option).
- CIAO GREEN can be converted to LPG through specific LPG kit (available as option).
- Installation 3CEP available with specific flue kit.
- Hydraulic connections, gas and DHW taps available as option.
- New dedicated flue options in PP.



Range Rated



Frost protection system



"Survivor" function



Electrical protection IPX5D

#### Simple and easy-to-use



The control panel is the brain of the boiler operation. Simple and easy-to-use, it allows to adjust the boiler parameters and to activate all different functions.

A backlight digital display and three LEDs signal 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 Diagnostic LEDs
- 2 Backlight digital display
- 3 On/Off/Summer/Winter/Reset/Heating temperature/"S.A.R.A. function" selector
- 4 Domestic hot water temperature/ Pre-heating activation selector
- 5 Hydrometer

#### A range designed to provide high performance

- 1) Double air inlet for twin system
- 2 Flue gas analysis
- 3 Premix (fan and Mixer)
- 4 Burner
- (5) Condensing heat-exchanger made of aluminium alloy
- 6 Circulation pump with anti-blocking function
- (7) Electronic board with frost protection
- (8) IPX5D electrical protection
- 9 Climatic thermoregulation (outdoor probe as option)
- 10 DHW plate heat-exchanger in stainless-steel
- (11) Condensate drain trap
- (12) Expansion vessel (8 litres)
- (13) Ignition and detection electrodes



#### Condensing heat-exchanger

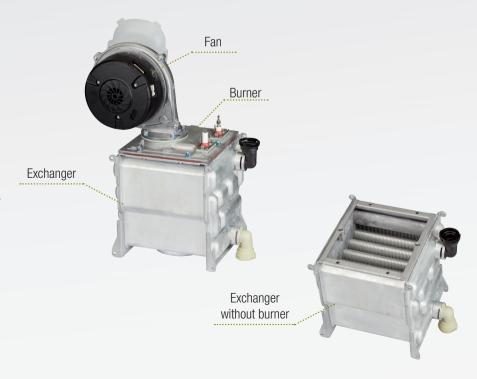
The innovative and compact condensing heat-exchanger of CIAO GREEN, made of an aluminium alloy, is assembled through a brazing manufacturing process in a controlled atmosphere.

The aluminium alloy, besides allowing a more uniform heat distribution, offers high resistance to corrosion to the benefit of a longer life of the component.

Aluminium is also characterised by lightness, excellent thermal transfer, mechanical properties, reliability and recyclability.

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. Thanks to this feature, CIAO GREEN reaches

★★★ (according to the European Directive EEC 92/42) and higher than 93+2 log Pn. The premix burner optimizes the combustion mixture while reducing NOx emissions down to values that place the boiler performance in Class 5 (the best one) according to the European Directive EN 483.





#### 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.

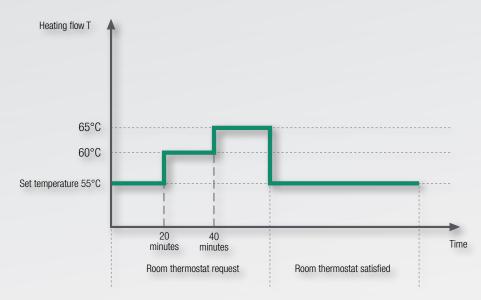
With CIAO GREEN, Beretta offers the possibility to set the power of your boiler according to the real energy requests of the building through a simple operation during the installation. The fan revolutions number (r.p.m.) will only have to be adjusted and the new set power will be written on a label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

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

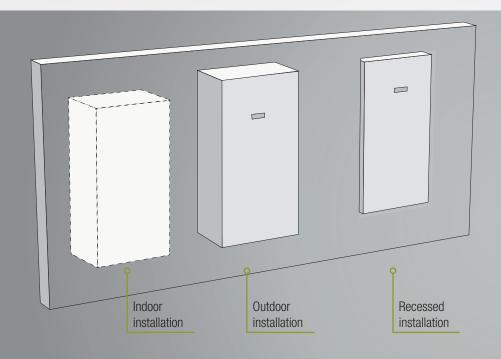
### S.A.R.A. system: comfort and saving

All the models in the CIAO GREEN 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 "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.



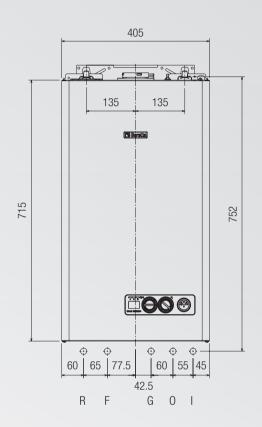
#### A boiler for a versatile installation



CIAO GREEN has been specifically designed to be installed also outdoor in partially protected or recessed places, thanks to the specific accessories and to the frost protection system down to 0°C. In case of colder temperatures, it is possible to extend the protection down to -10°C by using the frost protection kit. In case of outdoor installation of the boiler, not recessed in a box or in a wall, the lower cover is needed for a higher protection.

# Ciao Green

## Technical drawings

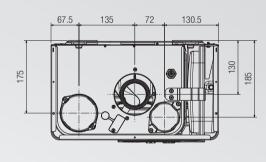


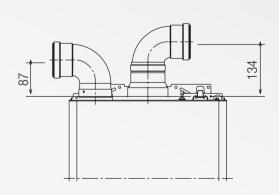


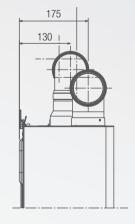
System: Return R/ Flow F/ Gas G
Domestic water: Inlet I/ Outlet 0
CDT: condensate drain trap

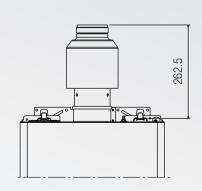
CDT 95

View from above









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

#### Technical data

C Combi model (CH + DHW);

S Room-sealed;

R Heating Only model;

Ionisation flame control.

SPECIFICATIONS AND MODELS		CIAO GREEN 25 C.S.I.	CIAO GREEN 29 C.S.I.	CIAO GREEN 25 R.S.I.
CH nominal heat input	kW	20,00	25,00	20,00
CH nominal heat output (80°-60° C)	kW	19,50	24,45	19,50
CH nominal heat output (50°-30° C)	kW	20,84	26,23	20,84
CH minimum heat input	kW	5,00	6,00	5,00
CH minimum heat output (80°-60° C)	kW	4,91	5,90	4,91
CH minimum heat output (50°-30° C)	kW	5,36	6,40	5,36
DHW nominal input	kW	25,00	29,00	-
DHW maximum output*	kW	25,00	29,00	-
DHW minimum input	kW	5,00	6,00	-
DHW minimum output*	kW	5,00	6,00	-
Efficiency class according European Directive EEC 92/42		***	***	***
Efficiency at max nominal output (80°-60° C)	%	97,5	97,8	97,5
Efficiency at min output (80°-60° C)	%	98,1	98,3	98,1
Efficiency at partial load 30% (47°C return)	%	102,2	102,0	102,2
Efficiency at max nominal output (50°-30° C)	%	104,2	104,9	104,2
Efficiency at min output (50°-30° C)	%	107,2	106,7	107,2
Efficiency at partial load 30% (30°C return)	%	108,9	108,4	108,9
VOx class		5	5	5
Max power consumption	W	110	119	110
Power supply	V/Hz	230/50	230/50	230/50
Electrical protection	IP.	X5D	X5D	X5D
CENTRAL HEATING				
Maximum pressure - temperature	bar - °C	3 - 90	3 - 90	3 - 90
Minimum pressure for standard operation	bar	0,25÷0,45	0,25÷0,45	0,25÷0,45
Adjustable CH water temperature range	°C	20/45-40/80	20/45-40/80	20/45-40/80
CH expansion vessel pre-charge/Capacity	bar/l	1/8	1/8	1/8
DHW				
Maximum - minimum pressure	bar	6 - 0,15	6 - 0,15	-
DHW production ΔT=25°C	l/min	14,3	16,6	-
Hot water minimum flow rate	I/min	2	2	-
Adjustable hot water temperature range	°C	37-60	37-60	-
CONNECTIONS				
CH flow - return/Gas	Ø	3/4"	3/4"	3/4"
DHW inlet - outlet	Ø	1/2"	1/2"	-
FLUE PIPES AND AIR INTAKE				
Max length (including 90° bend) for concentric 60-100mm	m	5,85	4,85	5,85
Max length (including 90° bend) for concentric 80-125mm	m	15,3	12,8	15,3
		45+45	40+40	45+45
viax length for twin 80+80mm	m	45+45		
	m	40+40	10110	
DIMENSIONS, WEIGTH, GAS	m			
Max length for twin 80+80mm  DIMENSIONS, WEIGTH, GAS  Boiler dimensions (HxWxD)  Vet weight		715x405x248 27	715x405x248 27	715x405x248 27

<sup>\*</sup> average among the different functioning conditions in DHW

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<sup>\*\*</sup> LPG version available with separate kit (available as option)