

Condensing Boiler

GREEN EVO B

GREEN EVO SR

Essentially Technological.

Green Evo boilers offer excellent comfort in heating.

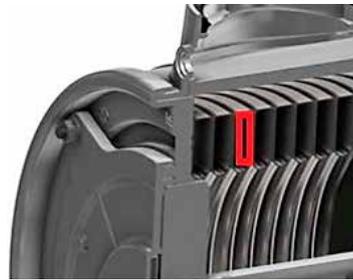


GREEN EVO B - GREEN EVO SR

The technology of condensation



The condensation technology allows you to recover part of the heat that is normally dispersed in the fumes, significantly increasing the overall efficiency of the system.



Detail of the exchanger with single coil in **stainless steel**

THE HEART OF THE SYSTEM



Silicon aluminum case



Internal stainless steel coil

The heart of the system is a stainless steel exchanger, formed by a single spiral, with suitably sized passages, inside a silicon aluminum case. The premix burner guarantees excellent combustion efficiency and very low NOx emissions. A large modulation ratio allows you to adapt the boiler power to the actual needs of the system. To change the type of gas, transformations with diaphragms or particular gas nozzles are not necessary, but everything takes place through the modification of a single parameter on the electronic board.

ELECTRONIC MANAGEMENT

Thanks to intelligent electronics and programmable functions, it is possible to easily adapt the operation of the boiler to the actual needs of the user. By connecting an external probe, climatic thermoregulation operation is obtained during which the temperature delivered to the system is adjusted according to the temperature of the external air, guaranteeing absolute comfort by optimizing management costs. The boiler is also equipped with an anti-freeze function. The intuitive control panel and the display showing the temperatures and the operating status of the boiler allow the end user to easily manage and program. Furthermore, for greater comfort it is possible to integrate the zone control module with the boiler, which allows to manage, via remote commands or on/off contacts, 2 different zones of the house.



DESIGN AND COMPACTNESS

Green Evo B e SR was created to better adapt to the home environment. Clean lines and extremely compact dimensions (400x700x250) allow it to be installed even in confined spaces. An open-therm remote control is also available which allows the boiler to be controlled in any condition installation. The casing that covers the boiler, protruding in the lower part, was designed to hide the pipes connecting the system from view, with an impeccable aesthetic result. The depth of only 250 mm allows it to be installed even in a recessed niche in the wall.

Comando remoto



**Comando
BTtouch Crono**



**Comando
Kronos OT11**



HYDRAULIC CONNECTIONS COVER

Thanks to the use of the optional casing it is possible to cover any components add-ons such as poly-phosphate dispensers and magnetic dirt separator, ensuring an optimal aesthetic result.



HYDRAULIC GROUP - GREEN EVO B



The brass hydraulic group guarantees reliability and durability overtime.

- Complete of:
- High efficient pump (ErP)
 - 3- way diverter valve
 - By-pass
 - Filling group

Green Evo B Hydraulic group is designed to connect an external tank. The storage tank probe is supplied with the boiler.

HYDRAULIC GROUP - GREEN EVO SR



The brass hydraulic group guarantees reliability and durability overtime.

- Complete of:
- High efficient pump (ErP)
 - By-pass
 - Filling group

GREEN EVO in wall



All versions are also available in a built-in version.

Created for professional installations integrated into the facade, it is the ideal product to solve problems of aesthetics and space.

The recessed frame in galvanized steel can be supplied painted and coated so as to be completely integrated with the wall that houses the boiler.



Recommended accessory

Remote control
Codice 202.02.07



Recommended accessory

Remote control KRONOS OT11
Codice 202.02.011



Recommended accessory

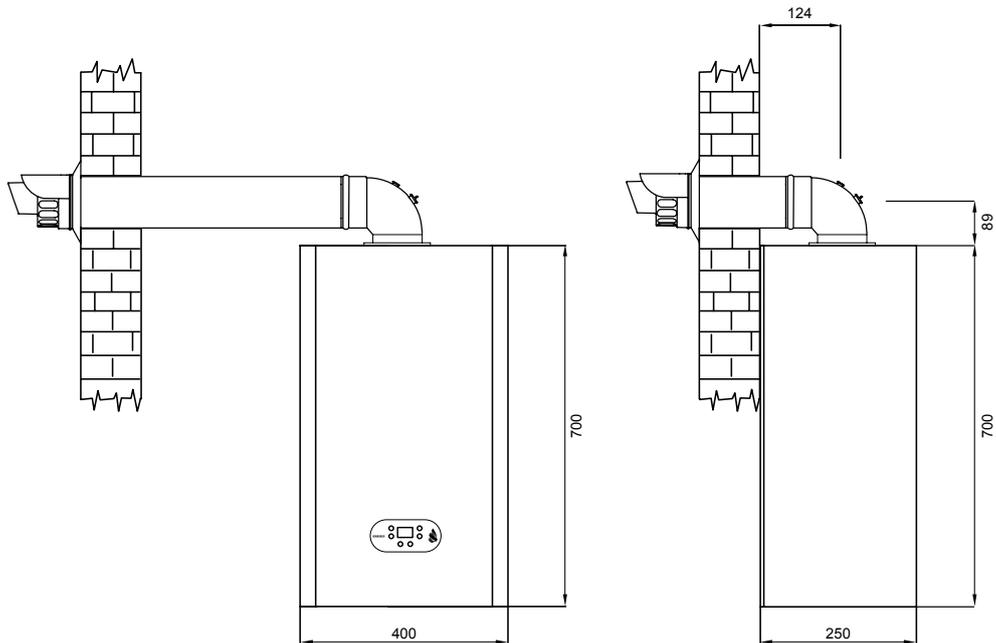
Remote control BTOUCH CRONO
Codice 202.02.010

Remote control that allows you to adjust the room, sanitary and heating temperatures and to program both temperatures and operating times. The display indicates anomalies.

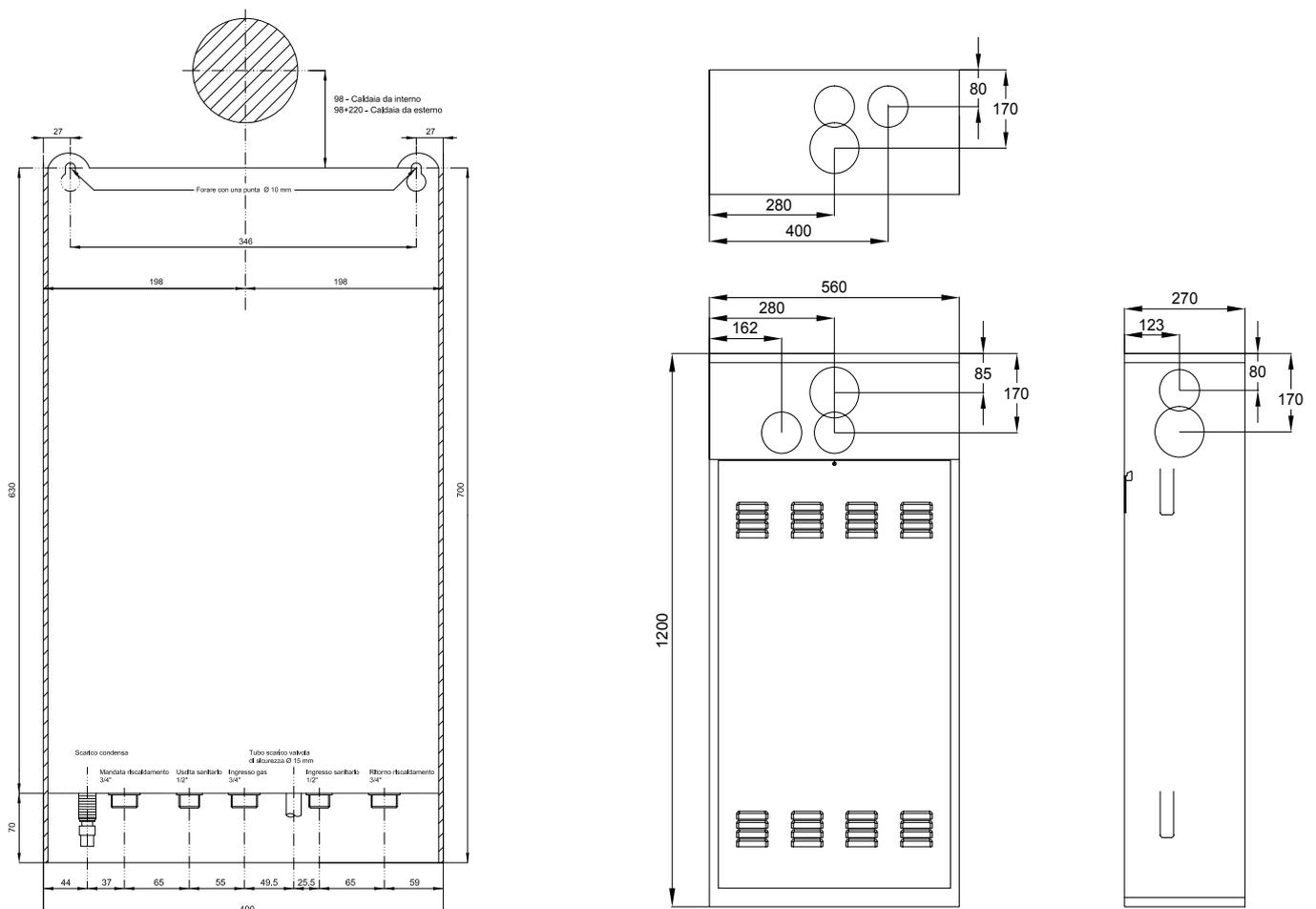
GREEN EVO B			25 B	30 B	35 B		
Codice			met. 920.11.47	met. 920.11.36	met. 920.11.48		
			gpl 920.21.47	gpl 920.21.36	gpl 920.21.48		
Product details (ErP)		Simbolo	u.m.	Valore	Valore	Valore	
Water heating: declared load profile			XL	XL	XL		
Space heating: seasonal energy efficiency class			A	A	A		
Water heating: energy efficiency class			A	A	A		
Nominal heat output		P _{nominate}	kW	21,0	25,0	34,9	
Space heating: annual energy consumption		Q _{HE}	GJ	43,2	51,5	57,5	
Water heating: annual energy consumption		A _{FC}	GJ	17,3	17,4	17,6	
Space heating: seasonal energy efficiency (GCV)		η _s	%	91,7	92	93,2	
Water heating: energy efficiency (GVC)		η _{wh}	%	85,1	84,86	83,6	
Sound power level		L _{WA}	dB	50,5	52	50,5	
Technical data			u.m.				
Destination			ES - GB - IE - IT - PT - GR - SE - NO - CH - HR - CZ - SK - LV - BG - RO - BA - PL - FR				
Category			II2H3P / II2EP3 - II2HM3P / II2E+3P				
Appliance type			C13 - C33 - C53 - C63 - C83				
Nox			6 (24,40 mg/kWh)	6 (36,06 mg/kWh)	6 (25,23 mg/kWh)		
Maximum heating heat output		kW	21	25,0	34,9		
Maximum sanitary heat output		kW	25,5	31,0	34,9		
Minimum nominal heat input		kW	3,7	4,0	4,0		
Maximum useful power heating		kW	20,4	24,3	34,0		
Maximum sanitary useful power		kW	24,7	30,1	36,7		
Minimum useful power		kW	3,5	3,7	3,7		
Efficiency to 100% Pn (80/60°C)		%	97	97,1	97,2		
Efficiency to 100% Pn (50/30°C)		%	105,1	105,5	105,2		
Efficiency to 30% Pn (50/30°C)		%	107,1	107,8	109,2		
Maximum / minimum gas consumption		m ³ /h	max G20 2,2 min. G20 0,4	max G31 0,9 min. G31 0,4	max G20 2,6 min. G20 0,4	max G31 1 min. G31 0,16	max G20 3,1 min. G20 0,4
Inlet gas pressure		mbar	G20 20	G31 37	G20 20	G31 37	G20 20
Fan speed (min ÷ max)		rpm	G20 1200 - 5200	G31 1200 - 5000	G20 1200 - 5400	G31 1200 - 5200	G20 1200 - 7300
CO2			G20 9.0 (+0,5/-0,5) - G31 10,5 (+0,5/-0,5)				
Electrical data							
Power supply		V / Hz	230 V / 50 HZ				
Printed circuit fuse			F1= 3.15 A (20 mm to BS 4265)				
IP protection			IP X4 D		IP X4 D		IP X4 D
Heating							
Minimum / maximum water pressure		bar	0.5 / 2.5				
Expansion vessel capacity		lt	8	8	10		
Minimum / maximum water temperatures		°C	25 / 80				
Boiler Circuit							
Minimum / maximum water temperatures		°C	25 / 60				
Minimum / maximum water pressure		bar	0.8 / 10				
Minimum / maximum fan speed		rpm	G20 1200 - 6200	G31 1200 - 6000	G20 1200 - 6600	G31 1200 - 6400	G20 1200 - 7300
			G 31 1200 - 6000		G 31 1200 - 6400		G31 1200 - 7100
Flue and Hydraulic connecions							
Gas connection			3/4"				
Water flow connection			3/4"				
Water return connection			3/4"				
Boiler flow			3/4"				
Boiler return			3/4"				
Condensate drain			Tubo flessibile Ø 25 mm est.				
Coaxial pipe diameter		mm	100/60				
Minimum / maximum length of coaxial exhaust system		m	Vedi manuale				
Separate intake and exhaust pipe diameter		mm	80				
Minimum / maximum length of separate exhaust system		m	Vedi manuale				
Dimension data							
Empty boiler weight		kg	31	31	32		
Width x Height x Depth		mm	400 x 700 x 250	400 x 700 x 250	400 x 700 x 250		

GREEN EVO SR		25 SR		30 SR		35 SR		40 SR		
Codice		met. 920.11.30		met. 920.12.31		met. 920.11.39		met. 920.22.32		
		gpl 920.22.30		gpl 920.22.31		gpl 920.21.39				
Product details (ErP)		Simbolo	u.m.	Valore	Valore	Valore	Valore	Valore	Valore	
Space heating: seasonal energy efficiency class				A	A	A	A	A	A	
Nominal heat output	$P_{nominate}$	kW	21,0	25,0	34,9	39,0				
Space heating: annual energy consumption	Q_{HE}	GJ	43,2	51,5	59,5	68,1				
Space heating: seasonal energy efficiency (GCV)	η_s	%	91,7	92	93,2	92,6				
Sound power level	L_{WA}	dB	50,5	52	50,5	52				
Technical data		u.m.								
Destination		ES - GB - IE - IT - PT - GR - SE - NO - CH - HR - CZ - SK - LV - BG - RO - BA - PL - FR								
Category		II2H3P / II2EP3 - II2HM3P / II2E+3P								
Appliance type		C13 - C33 - C53 - C63 - C83								
Nox			6 (24,40 mg/kWh)	6 (36,06 mg/kWh)	6 (25,23 mg/kWh)	6 (27 mg/kWh)				
Maximum heating heat output		kW	21	25,0	34,9	39,0				
Minimum nominal heat input		kW	3,7	4,0	4,0	4,0				
Maximum useful power heating		kW	20,4	24,3	34,0	37,5				
Minimum useful power		kW	3,5	3,7	3,7	3,7				
Efficiency to 100% Pn (80/60°C)		%	97	97,1	97,2	96,2				
Efficiency to 100% Pn (50/30°C)		%	105,1	105,5	105,2	103,5				
Efficiency to 30% Pn (50/30°C)		%	107,1	107,8	109,2	108,5				
Maximum / minimum gas consumption		m ³ /h	max G20 2,2 min. G20 0,4	max G31 0,9 min. G31 0,4	max G20 2,6 min. G20 0,4	max G31 1 min. G31 0,16	max G20 2,6 min. G20 0,4	max G31 1,4 min. G31 0,16	max G20 3,1 min. G20 0,4	max G31 1,4 min. G31 0,16
Inlet gas pressure		mbar	G20 20	G31 37	G20 20	G31 37	G20 20	G31 37	G20 20	G31 37
Fan speed (min ÷ max)		rpm	G20 1200 - 5200		G20 1200 - 5400		G20 1200 - 7300		G20 1200 - 8300	
			G31 1200 - 5000		G31 1200 - 5200		G31 1200 - 7100		G31 1200 - 8100	
CO2			G20 9.0 (+0,5/-0,5) - G31 10,5 (+0,5/-0,5)							
Electrical data										
Power supply		V / Hz	230 V / 50 HZ							
Printed circuit fuse			F1= 3.15 A (20 mm to BS 4265)							
IP protection			IP X4 D	IP X4 D	IP X4 D	IP X4 D	IP X4 D	IP X4 D	IP X4 D	
Heating										
Minimum / maximum water pressure		bar	0.5 / 2.5							
Expansion vessel capacity		lt	8	8	10	10				
Minimum / maximum water temperatures		°C	25 / 80							
Flue and Hydraulic connections										
Gas connection			3/4"							
Water flow connection			3/4"							
Water return connection			3/4"							
Condensate drain			Tubo flessibile Ø 25 mm est.							
Coaxial pipe diameter		mm	100/60							
Minimum / maximum length of coaxial exhaust system		m	Vedi manuale							
Separate intake and exhaust pipe diameter		mm	80							
Minimum / maximum length of separate exhaust system		m	Vedi manuale							
Dimension data										
Empty boiler weight		kg	31	31,0	32	33				
Width x Height x Depth		mm	400 x 700 x 250	400 x 700 x 250	400 x 700 x 250	400 x 700 x 250				

Overall dimensions GREEN EVO B / GREEN EVO SR

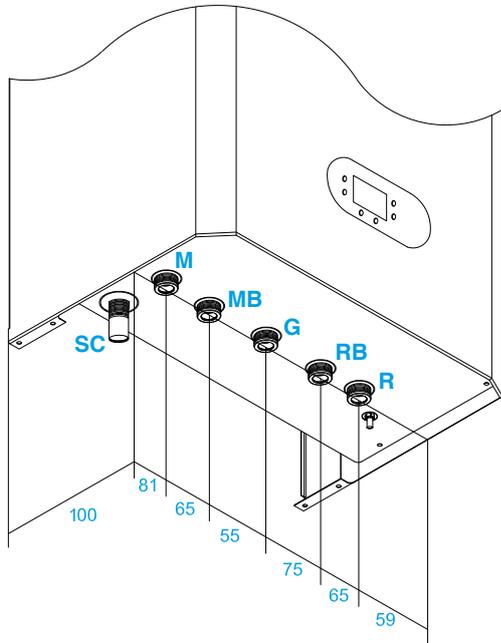


Minimum spaces required GREEN EVO B / GREEN EVO SR - in wall



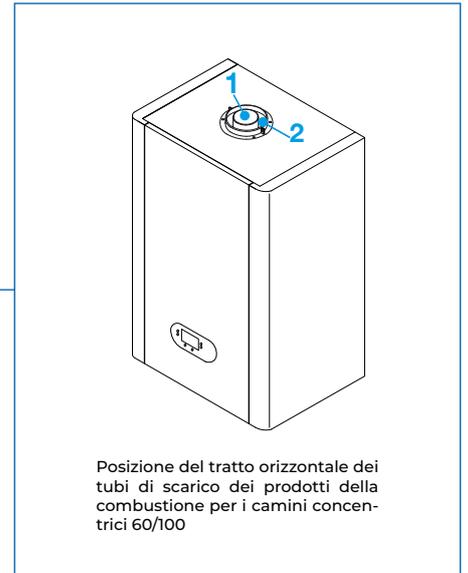
CONNECTIONS POSITION

GREEN EVO B 25-30-35

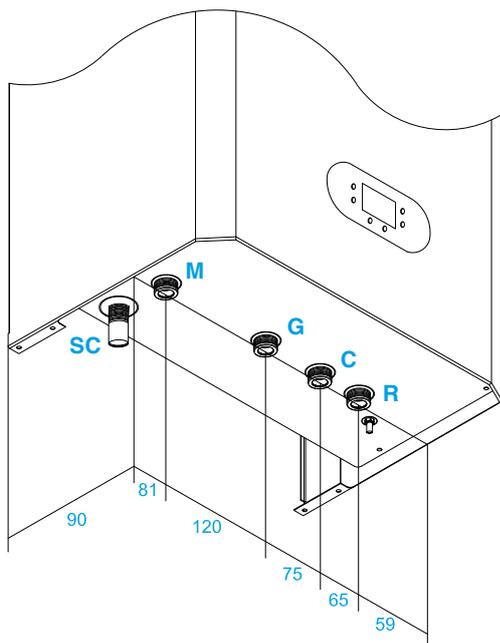


Legenda

- 1** Flue outlet
- 2** Air inlet
- G** Gas (3/4")
- R** System return (3/4")
- M** System flow (3/4")
- MB** Boiler flow (3/4")
- RB** Boiler return (3/4")
- SC** Condensate drain



GREEN EVO SR 25-30-35-40

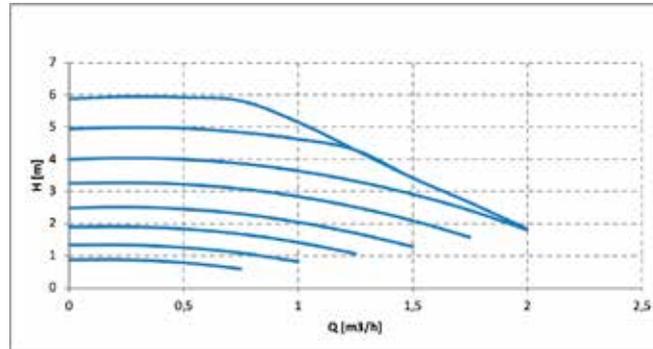


Legenda

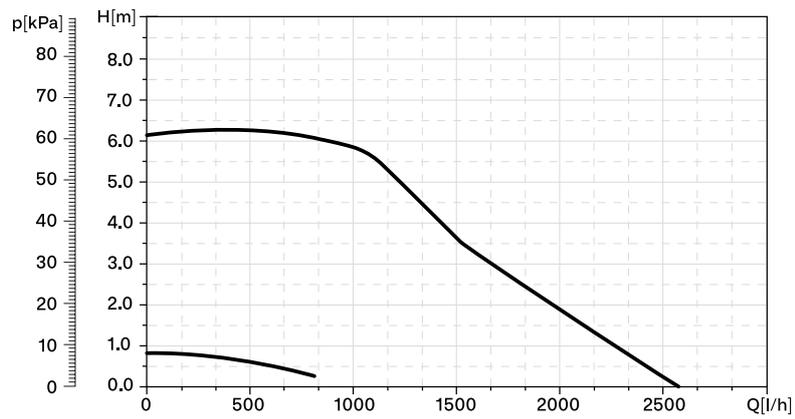
- 1** Flue outlet
- 2** Air inlet
- G** Gas (3/4")
- R** Heating return (3/4")
- M** Heating flow (3/4")
- C** Heating load (3/4")
- SC** Condensate drain

PUMP

AVAILABLE PUMP HEAD GRUNDFOS



AVAILABLE PUMP HEAD TACO



The values shown refer to the head available in the system and are net of the pressure drops of the boiler's internal circuits.



AR RISCALDAMENTO S.P.A.

Via Caboto, 15 - 36075 Montecchio Maggiore (VI) - Italy

Tel: (+39) 0444 499030 - Fax: (+39) 0444 499032 - E-mail: info@ar-therm.com