

Condensing Boiler

GREEN EVO - GREEN EVO M

GREEN EVO RAIN - GREEN EVO RAIN M

Essentially Technological.

Green Evo boilers offer excellent comfort in heating.

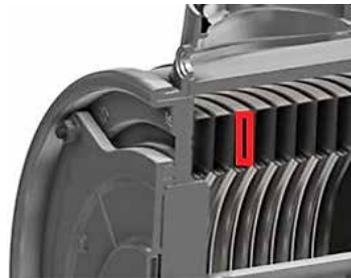


GREEN EVO / GREEN EVO M

The technology of condensation



Condensing technology allows for the recovery of part of the heat that is normally dispersed in the flue gases, 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.

VERSIONE "M"

Thanks to its enhanced plate heat exchanger, the "M" version significantly increases performance while exponentially reducing issues related to the wear and tear of heating systems



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 / GREEN EVO M are designed to better adapt to the domestic environment. Their clean lines and extremely compact dimensions (400x700x250) allow for installation even in tight spaces. Additionally, thanks to the optional opentherm remote control (available among the proposed models), the boiler can be controlled in any installation condition. The casing that covers the boiler, protruding at the bottom, is designed to hide the connection pipes to the system, resulting in an impeccable aesthetic. With a depth of only 250 mm, it can also be installed in a niche recessed into 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



The Hydraulic Unit, entirely made of brass, ensures reliability and durability over time.

The hydraulic system includes:

- High-efficiency circulator (ErP)
- 3-way diverter valve • Bypass
- Filling group
- Sanitary NTC sensor
- Sanitary flow meter

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

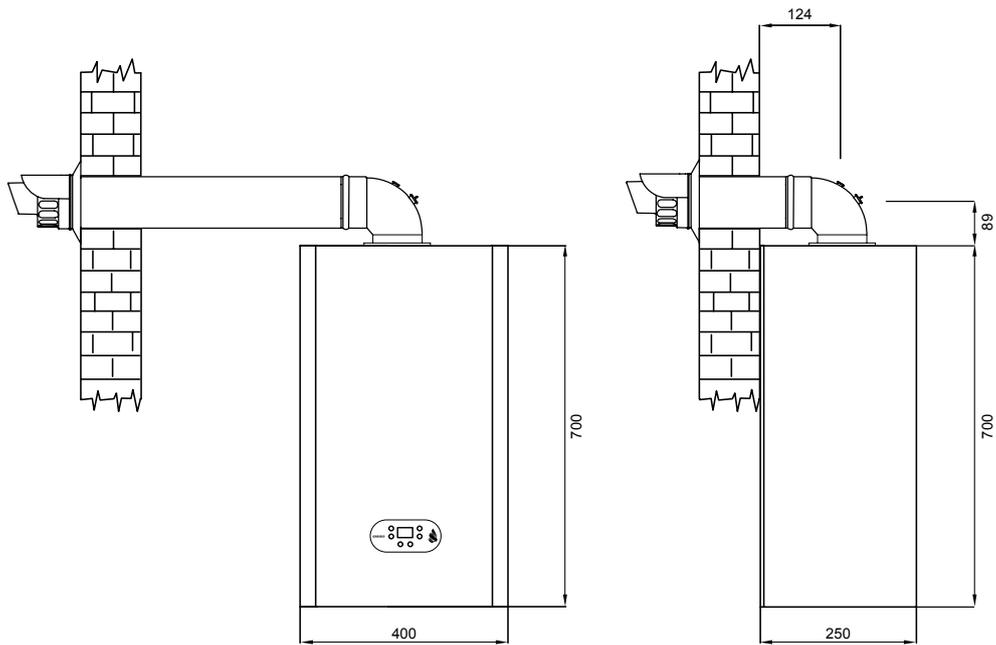


Recommended accessory

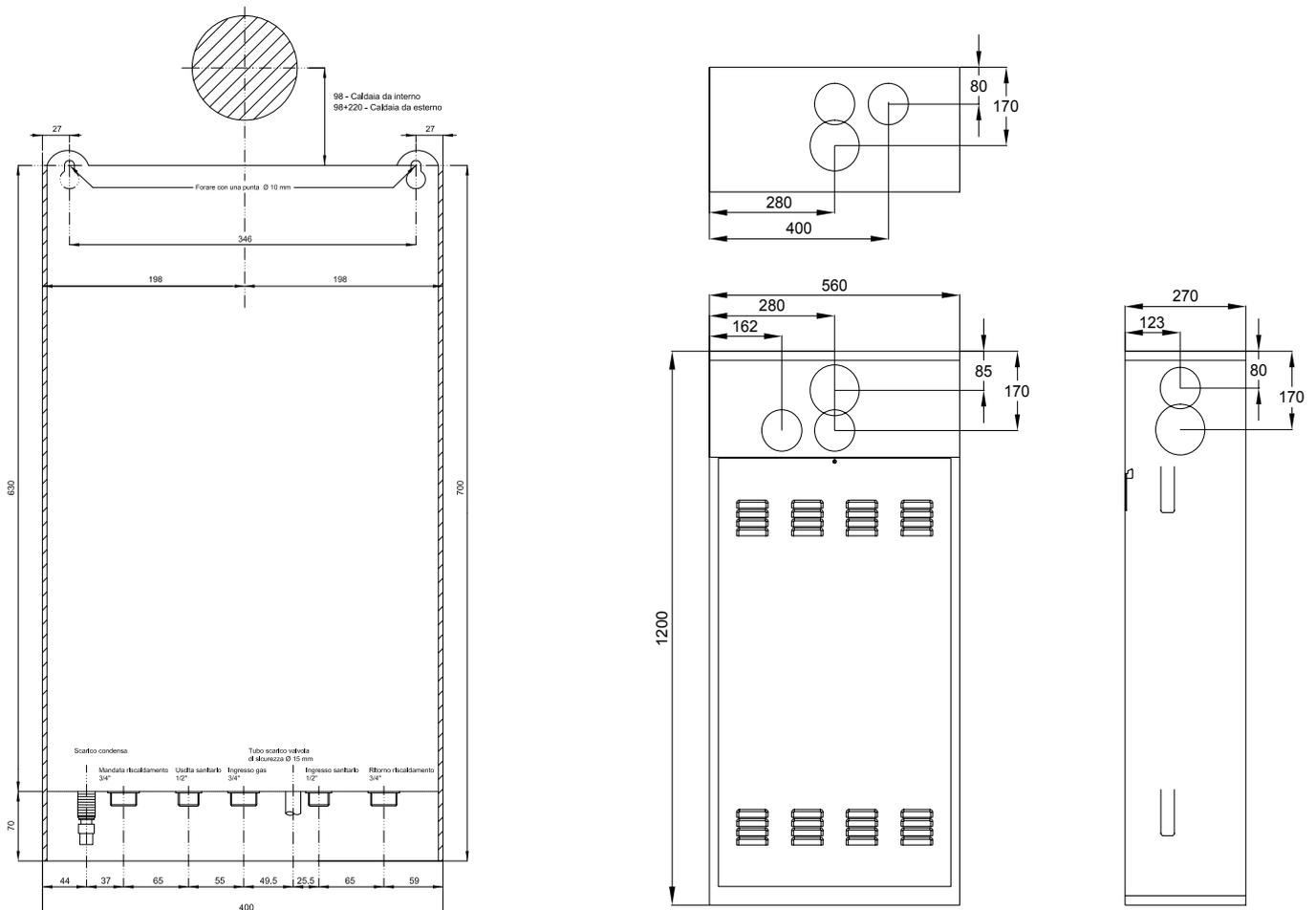
Remote control BTOUCH CRONO
Codice 202.02.010

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.

Overall dimensions GREEN EVO / GREEN EVO M



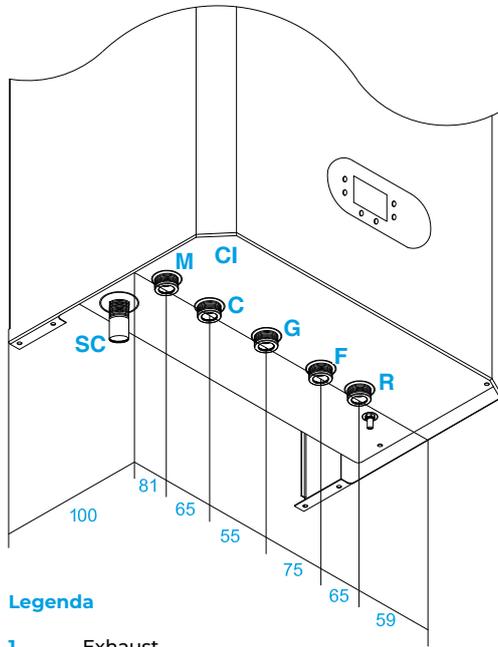
Minimum spaces required GREEN EVO / GREEN EVO M - in wall



CONNECTIONS POSITION

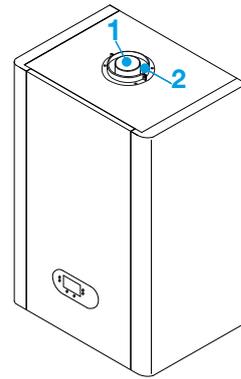
Combined version

GREEN EVO 25-30-35-40 / GREEN EVO 25M-30M



Legenda

- 1** Exhaust
- 2** Air inlet
- G** Gas (3/4")
- R** System return (3/4")
- M** System supply (3/4")
- C** Domestic hot water outlet (1/2")
- F** Domestic cold water inlet (1/2")
- CI** System fill
- SC** Condensate drain

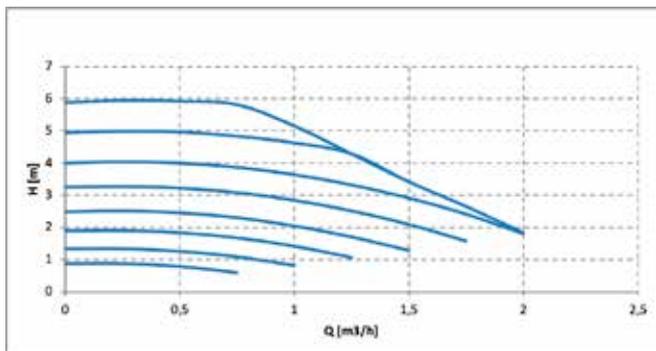


Position of the horizontal section of the exhaust pipes for combustion products for concentric chimneys 60/100

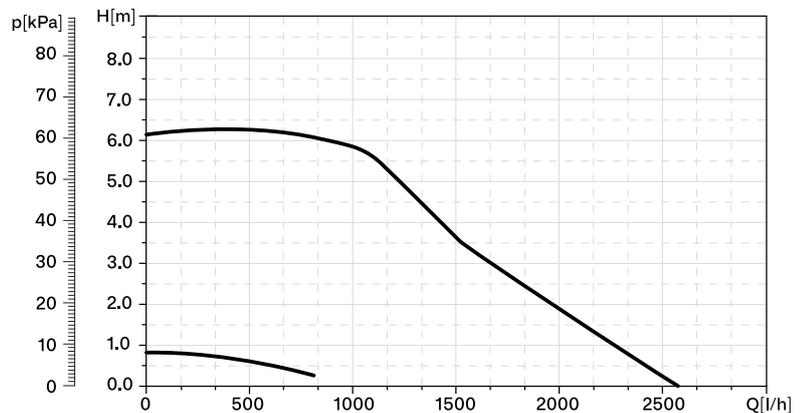
PUMP

Green Evo boilers are equipped with a variable speed circulator that automatically maintains an optimal temperature difference between the supply based on the power output of the boiler. The modulating circulator function is active only in the heating mode.

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.

GREEN EVO		25	30	35	40				
Code		met. 920.11.30	met. 920.11.31	met. 920.11.35	met. 920.11.40				
		gpl 920.21.30	gpl 920.21.31	gpl 920.21.35	gpl 920.21.40				
GREEN EVO M		25M	30M	-	-				
Code		met. 920.11.30M	met. 920.11.31M	-	-				
		gpl 920.21.30M	gpl 920.21.31M	-	-				
Product details (ErP)		Symbol	unit	Value	Value	Value	Value		
Water heating: declared load profile				XL	XL	XL	XL		
Space heating: seasonal energy efficiency class				A	A	A	A		
Water heating: energy efficiency class				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		
Water heating: annual energy consumption	A_{FC}	GJ		17,3	17,4	17,6	17,6		
Space heating: seasonal energy efficiency (GCV)	η_s	%		91,7	92	93,2	92,3		
Water heating: energy efficiency (GVC)	η_{wh}	%		85	84,86	83,6	83,65		
Sound power level	L_{WA}	dB		50,5	52	52	52		
Technical data		unit							
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				
Maximum sanitary heat output	kW	25,5	31,0	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	38				
Maximum sanitary useful power	kW	24,7	30,1	34,0	38				
Minimum useful power	kW	3,5	3,7	3,6	3,6				
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)	%	107,7	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 3,8 min. G20 0,4	max G31 1,4 min. G31 0,16	max G20 4,2 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	
CO ₂		G20 9.0 (+0,5/-0,5) - G31 10,5 (+0,5/-0,5)							
Electrical data		unit							
Power supply		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	
Heating		unit							
Minimum / maximum water pressure		0.5 / 2.5							
Expansion vessel capacity		8		8		10		10	
Minimum / maximum water temperatures		25 / 80							
Domestic hot water		unit							
Domestic water flow Δt di 30°C		11,9		M 12,6		14		M 15,4	
Domestic water flow Δt di 35°C		10,2		M 10,7		12		M 13,1	
Domestic water flow Δt di 40°C		8,9		M 9,3		10,5		M 11,3	
Minimum / maximum water temperatures		25 / 60							
Minimum / maximum water pressure		0.8 / 10							
Minimum water flow		1,5							
Minimum / maximum fan speed		G20 1200 - 6200		G20 1200 - 6600		G20 1200 - 7300		G20 1200 - 8300	
		G31 1200 - 6000		G31 1200 - 6400		G31 1200 - 7100		G31 1200 - 8100	
Flue and hydraulic connection		unit							
Gas connection		3/4"							
Water flow connection		3/4"							
Water return connection		3/4"							
DHW water inlet		1/2"							
Condensate drain		1/2"							
Scarico condensa		Tubo flessibile Ø 25 mm est.							
Coaxial pipe diameter		100/60							
Minimum / maximum length of coaxial exhaust system		Vedi manuale							
Separate intake and exhaust pipe diameter		80							
Minimum / maximum length of separate exhaust system		Vedi manuale							
Dimension data		unit							
Empty boiler weight		31		31		32		33	
Width x Height x Depth		400 x 700 x 250		400 x 700 x 250		400 x 700 x 250		400 x 700 x 250	

GREEN EVO RAIN / GREEN EVO M RAIN

The technology of condensation



Green EVO Rain / Green EVO M Rain are the ideal solution for outdoor installations.

The technical performance characteristics remain the same as the Green EVO sister model, continuing to offer excellent comfort both in heating and in the production of domestic hot water. The casing is designed for outdoor use, utilizing insulated panels made of satin-finished 304 stainless steel with a scotch-brite treatment for better resistance to atmospheric agents; to complete the rain protection, there is a top closure made of painted stainless steel. Green EVO Rain is suitably equipped with an anti-freeze system that allows the circulator or, alternatively, the burner to be automatically activated when temperatures approach zero, in order to protect the boiler from possible freezing. Thanks to the optional Opentherm (Easy Remote Control) remote control in energy class V, it is possible to manage all the functions of the thermal unit from inside your home. The combination with the optional external probe improves performance as the system's supply temperature automatically adapts based on the external temperature, allowing for significant savings.

THE HEART OF THE SYSTEM

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.



Detail of the exchanger with single coil in stainless steel

DESIGN AND COMPACTNESS

The simple and linear design is enhanced by the use of a noble material like stainless steel. The extremely compact dimensions (400x712x250) allow for installation in tight or limited spaces. The casing that covers the boiler (as with the Green EVO sister model) extends at the bottom to conceal the system's supply pipes, ensuring an impeccable aesthetic result. A mandatory remote control allows for the management of the boiler. **(other models also available, see page 4)**



Mandatory accessory
Remote control
Codice 202.02.07

DESIGN AND COMPACTNESS

Thanks to the use of the casing, it is possible to cover any additional components such as a polyphosphate doser and a magnetic dirt separator, ensuring an optimal aesthetic result.



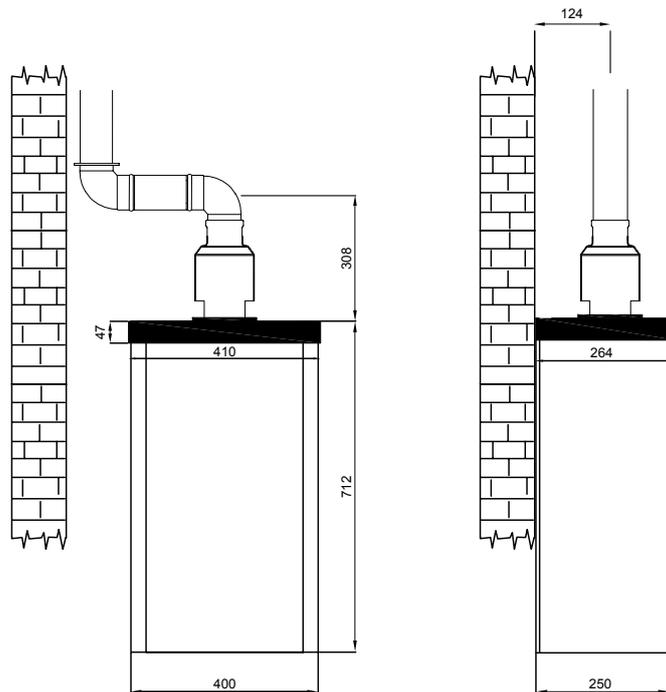
OUTDOOR DIFFUSER

Starting stub \varnothing 60/100 to \varnothing 80, with rain protection on the intake.

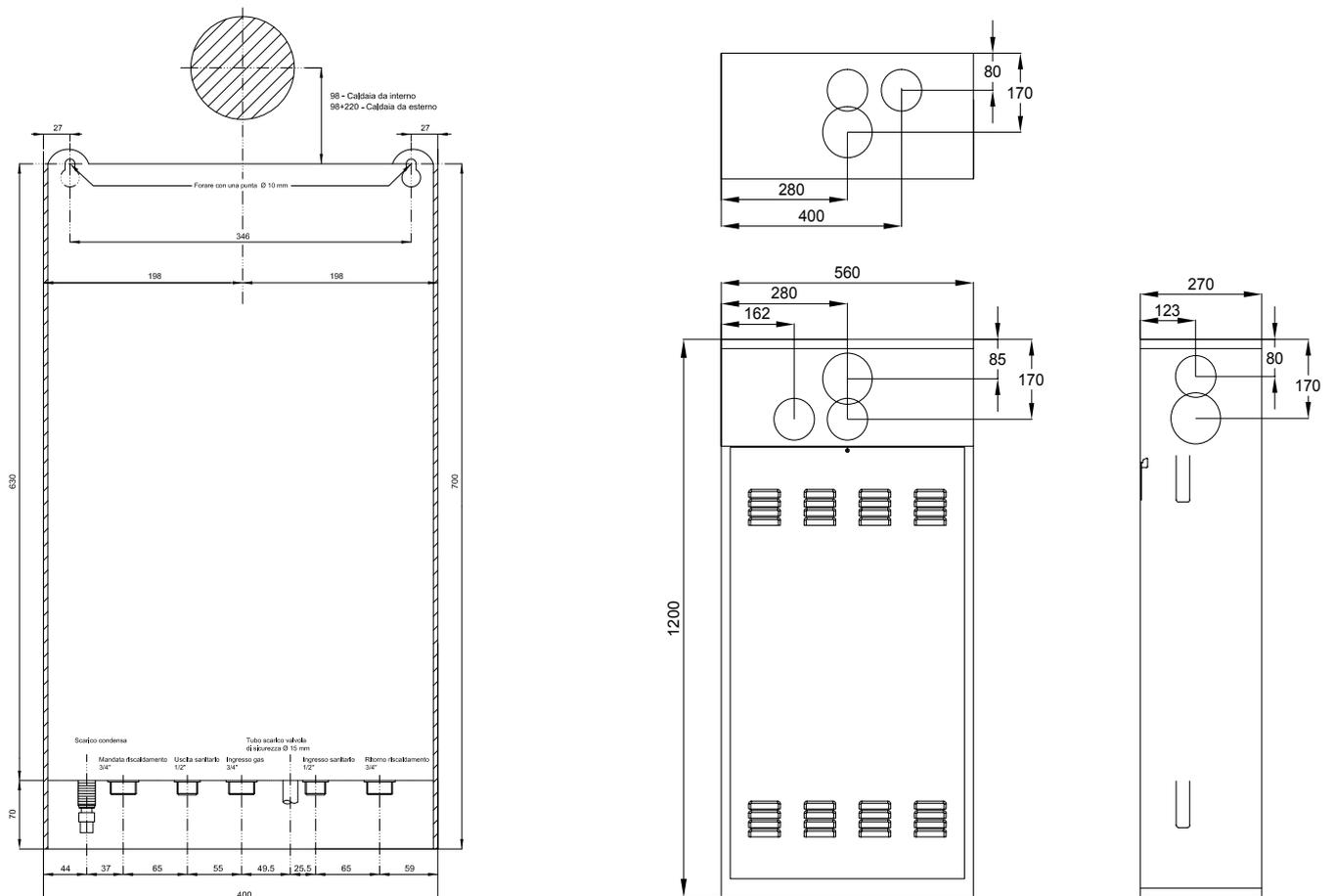
MANDATORY accessory
Outdoor diffuser
Code 100.05.64



Overall dimensions GREEN EVO RAIN / GREEN EVO M RAIN



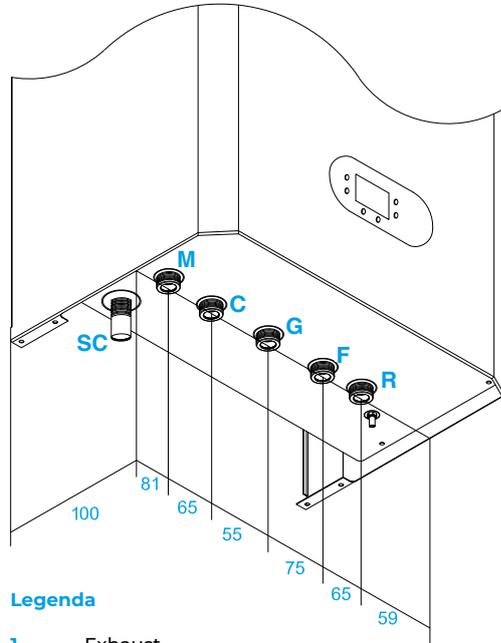
Minimum spaces required GREEN EVO RAIN / GREEN EVO M RAIN - in wall



CONNECTIONS POSITION

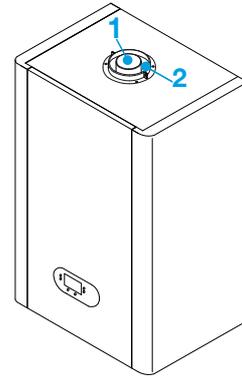
Combined version

GREEN EVO RAIN 25-30-35 / GREEN EVO RAIN 25M-30M



Legenda

- 1** Exhaust
- 2** Air inlet
- G** Gas (3/4")
- R** System return (3/4")
- M** System supply (3/4")
- C** Domestic hot water outlet (1/2")
- F** Domestic cold water inlet (1/2")
- SC** Condensate drain

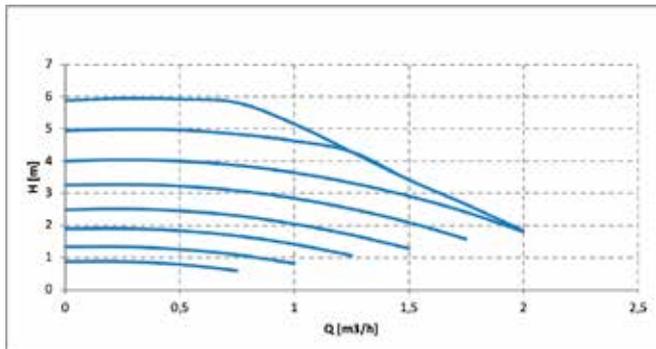


Position of the horizontal section of the exhaust pipes for combustion products for concentric chimneys 60/100

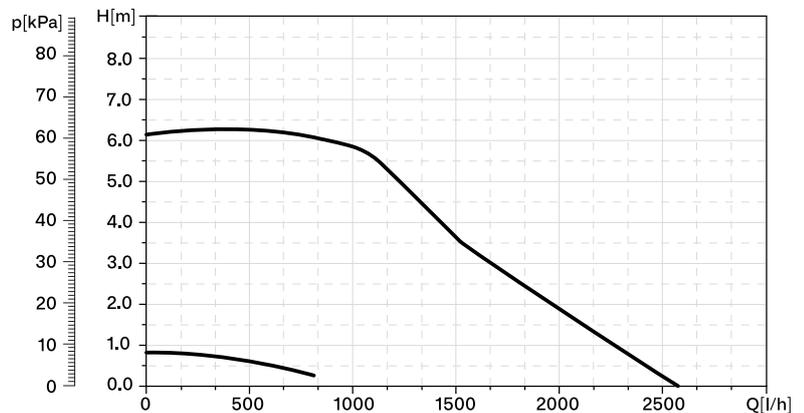
PUMP

Green Evo boilers are equipped with a variable speed circulator that automatically maintains an optimal temperature difference between the supply based on the power output of the boiler. The modulating circulator function is active only in the heating mode.

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.

GREEN EVO RAIN			25	30	35				
Code			met. 920.11.32	met. 920.11.31	met. 920.11.33				
			gpl 920.21.32	gpl 920.21.33	gpl 920.21.34				
GREEN EVO M RAIN			25M	30M	-				
Code			met. 920.11.32M	met. 920.11.33M	-				
			gpl 920.21.32M	gpl 920.21.33M	-				
Product details (ErP)		Symbol	unit	Value		Value		Value	
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	59,5			
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	84,86	83,6			
Sound power level	L_{WA}		dB	50,5	52	52			
Technical data			unit						
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	34,0			
Minimum useful power			kW	3,5	3,7	3,6			
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)			%	107,7	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 3,8 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		G20 1200 - 5400		G20 1200 - 7300	
				G31 1200 - 5000		G31 1200 - 5200		G31 1200 - 7100	
CO ₂				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					
Domestic hot water									
Domestic water flow Δt di 30°C			l/min	11,9	M 12,6	14	M 15,4	16,7	
Domestic water flow Δt di 35°C			l/min	10,2	M 10,7	12	M 13,1	14,3	
Domestic water flow Δt di 40°C			l/min	8,9	M 9,3	10,5	M 11,3	12,5	
Minimum / maximum water temperatures			°C	25 / 60					
Minimum / maximum water pressure			bar	0.8 / 10					
Minimum water flow			l/min	1,5					
Minimum / maximum fan speed			rpm	G20 1200 - 6200		G20 1200 - 6600		G20 1200 - 7300	
				G 31 1200 - 6000		G 31 1200 - 6400		G31 1200 - 7100	
Flue and hydraulic connection									
Gas connection				3/4"					
Water flow connection				3/4"					
Water return connection				3/4"					
DHW water inlet				1/2"					
Condensate drain				1/2"					
Scarico condensa				Tubo flessibile \varnothing 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	



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