



Inovia Cond Plus

CONDENSING BOILER

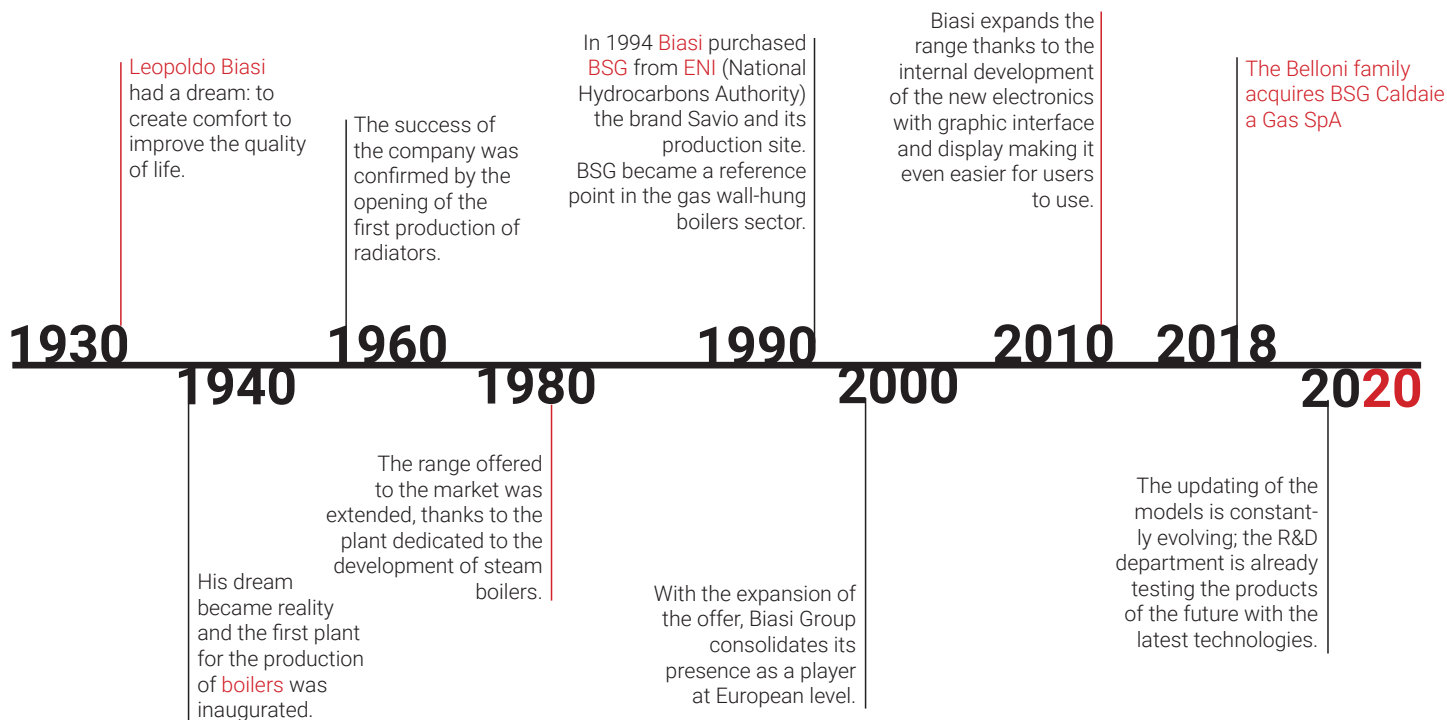


OUR COMPANY

Biasi englobes the experience, skills, organization and patents of a company history that started in the 1930s and developed to become an industry professional. For over 80 years we have been operating in the heating industry, investing in Italy and abroad looking for solutions for comfort in the domestic and professional industries. Today our offer covers all market segments: from wall-hung to floor-standing condensing boilers, water heaters, a wide range of integrated systems with solar based on high energy efficiency. It also supplies new complete systems with heat pumps and hybrids, which can be integrated with radiant solutions, operating at low temperatures.



OUR HISTORY



QUALITY

TECNOLOGY AND RELIABILITY

RESEARCH AND INNOVATION

ITALIAN DESIGN

COSTUMER CARE

FLEXIBILITY

STRUCTURED LOGISTIC

We constantly design and improve our products. We assemble them in our assembly lines, we check the quality at each step of the process. **The value of Made in Italy is in every detail.**



Our wall hung boilers' factory is equipped to:

- produce up to 160,000 boilers per year;
- produce 500 different part numbers;
- produce more than 16 product ranges,

OUR PRODUCTS

RESIDENTIAL

Condensing boilers

Traditional boilers

Hybrid systems

Heat pumps

Water heaters

Air conditioning

Solar panels

Boilers

Integrated systems with solar

PROFESSIONAL

Boilers for centralized systems

SPARE PARTS

Inovia Cond Plus



Inovia Cond Plus

- MODULATION 1:10
- 25 kW - 30 kW
- HEATING WATER
- DOMESTIC WATER
- 14,4 ÷ 16,7 L/min
Domestic hot water production
- NATURAL GAS / LPG
- INTEGRATED SOLAR OPERATION
- STANDARD MULTI-ZONE OPERATION



**NOx 6
CLASS**



**WI-FI
READY**

Inovia Cond Plus

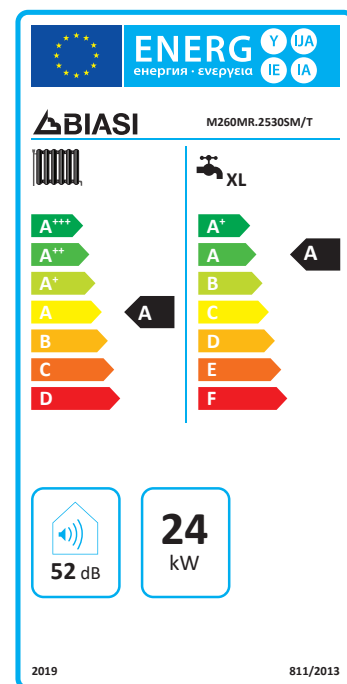
It is available in the **combined versions** for heating and DHW production and **only for heating (SV models)** Inovia Cond Plus has a complete heat output range, **25 and 30 kW** models, both with a very compact dimensions.

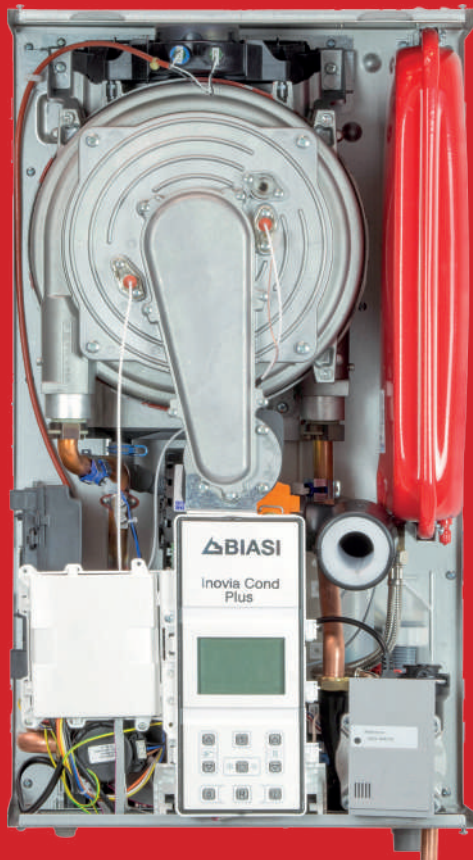
High performance due to its innovative heat exchanger (guaranteed for 10 years) designed to provide high efficiencies that last over time.

Easy to use thanks to the digital control panel with a large display, designed to communicate with the user both easy and convenient.

Dimensions

700 x 400 x 290 mm





Main features:

High efficiency (★★★★★ conforming to Efficiency Directive 92/42 EEC and Legislative Decree 311/06)

DHW Comfort (★★★ EN 13203)

Primary condensing exchanger in stainless steel with aluminium coating to offer maximum resistance to corrosion

Plated DHW heat exchanger in stainless steel

7 -litre expansion vessel

High efficiency PWM pump with low energy consumption and variable speed

Maximum output adjustable based on the installation

Protection rating IPX5D

Integration with BIASI solar system by means of solar kit

Innovative digital control panel

Digital pressure reading

Set up for remote control and external probe

Possibility of using remote control to manage a zone valve in the case of multi-zone system



Control panel

Winter/Summer/Off selector

Heating temperature regulator

DHW temperature regulator

Digital pressure reading

Screen display of DHW and heating temperature

Display of fault diagnostics, lockout conditions and fault log

Recommended filling display and filling guide

View of the missing months after the annual maintenance deadline

Display of outside temperature (with external probe connected) and indication of external probe connected and K value set

Display of flame modulation

View of BIASI SOLCONTROL, solar control unit connected to Inovia Cond Plus, active solar pump and solar integration

Health comfort function selectable using a programmable button

Set up for remote control and external probe

Possibility of using remote control to manage a zone valve in the case of multi-zone system

Direct access to the user dedicated INFO menu

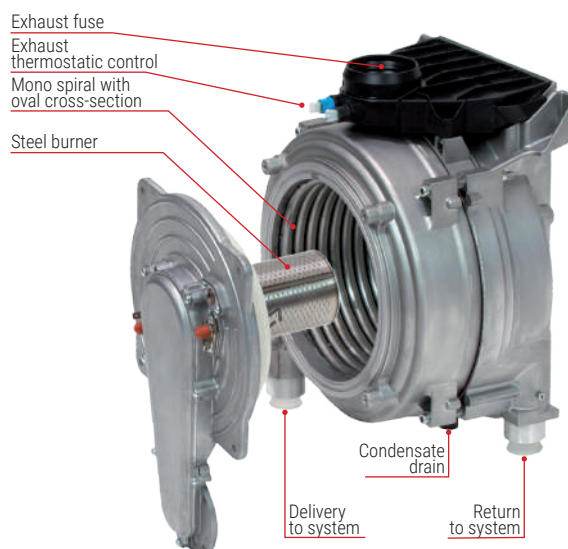
Technical features

High circulation, mono spiral primary heat exchanger

Biasi produces the **new Steelcoil heat exchanger**, consisting of a spiral in stainless steel, enclosed in an aluminium casing. Thanks to the **large heat exchanging surface area** of the spiral, **greater thermal yield** is ensured with less head loss and it is easier to clean.

The **robustness** and **ease** with which these heat exchangers can be **cleaned** are just two of the strengths

of the product given that it can be used on new installations as well as on an old installation in the case of a substitution. Steelcoil integrates the **round flow function** in which the water produces a **centrifugal effect for cleaning** the internal walls of the mono spiral. The fact that there are no parallel circuits ensures easy **"washing"** operations of the heat exchanger and the elimination of any air present in the system circuit.



Thermoregulation

Using the **external probe** and the **remote control** (optional) directly in the boiler you can use the **climatic control**. Inovia Cond Plus **will adjust the water temperature** in the system to external climatic conditions, ensuring the desired ambient temperature is reached without any wastage and **optimising consumption**. The use of climate regulation also produces a rise in the regulation efficiency, **increasing the value of your home**.



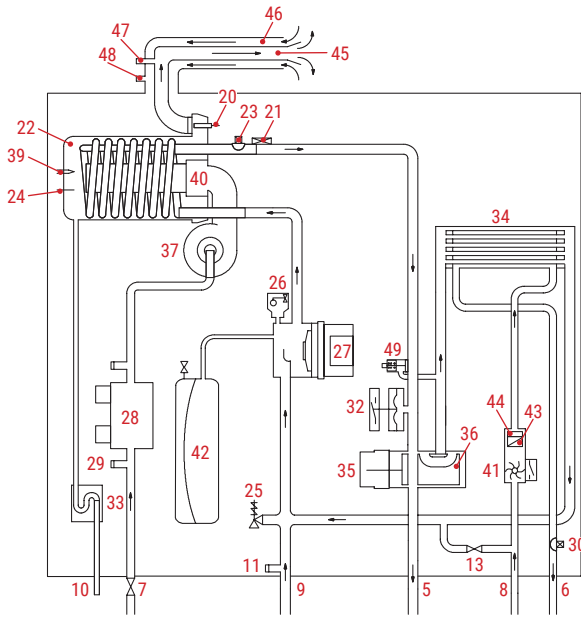
Zone management

Inovia Cond Plus has a **series of zone management circuits boards** which allow a zone valve to be controlled using the **BIASI remote control**. If the installation has multiple high temperature zones, one zone can be managed by the remote control and the other zones can be managed by the chrono-thermostats. This allows **two thermoregulation curves** to be selected, one in the boiler and the other in the remote control. All the zones

controlled by the chrono-thermostats will be managed by the thermoregulation curve set in the boiler, while the zone controlled by the remote control will be managed by the thermoregulation curve set in the remote control itself. In the case of installations with multiple high and low temperature zones, it is recommended that the BIASI Multizone system manager is used.



Functional scheme Inovia Cond Plus



3. Heating delivering pipe
4. Domestic hot water outlet pipe
5. Gas cock
6. Domestic hot water inlet pipe
7. Heating delivery pipe
8. Condensate drain pipe
9. Heating circuit discharge pipe
11. Heating circuit filling pipe
22. Exhaust NTC sensor and exhaust temperature fuse
23. Exhaust NTC heating sensor (inlet)
24. Exhaust NTC heating sensor (outlet)
25. Primary condensing exchanger
26. Safety thermostat
27. Flame detection electrode
28. Muffler pipe
29. Safety 3 bar valve
30. Automatic bleed valve
31. Pump
32. Gas valve
33. Pressure gauge gas valve
34. DHW NTC probe (inlet)
35. DHW NTC probe (outlet)
36. Control panel containing Terminal board for external temperature probe, remote control, boiler probe and low-voltage ambient thermostat.
37. Heating driver
38. Condensing siphon drain
39. DHW exchanger
40. Three-way valve
41. Three-way valve plug
42. Fan
43. Air/Gas mixer
44. Ignition electrode
45. Burner
46. DHW flowmeter
47. Expansion vessel
48. Domestic hot water filter
49. DHW flow rate limiter
50. Flue gas exhaust duct
51. Air suction duct
52. Fume extraction
53. Air suction
54. Integrated bypass

Technical data

Technical data		Inovia Cond Plus			
		25 S	25 SV	30 S	30 SV
Nominal heating/d.h.w. heat input	kW	20,0 / 26,0	20,0 / 26,0	25,0 / 30,0	25,0 / 30,0
Minimum heat/ d.h.w input	kW	2,6	2,6	3,0	3,0
Output power for heating/d.h.w. 60°/80° C *	kW	19,3 / 25,1	19,3 / 25,1	24,3 / 29,1	24,3 / 29,1
Minimum output power for heating/d.h.w 60/80° C **	kW	2,4	2,4	2,8	2,8
Output power for heating/d.h.w. 30°/50° C	kW	21,5 / 27,9	21,1 / 27,4	26,9 / 32,3	26,6 / 32,3
Minimum output power for heating/d.h.w 30°/50° C	kW	2,7	2,7	3,2	3,2
Quantity of drain to Q.nom 30°/50° C (in heating)	l/h	3,2	3,2	4,8	4,8
Quality of drain to Q.nom 30°/50° C (in heating)	l/h	0,4	0,4	0,5	0,5
Ph of condensation		4,0	4,0	4,0	4,0
Efficiency at nominal input 60°/80° C *	%	96,7	96,7	97,0	97,0
Efficiency at minimum input 60°/80° C **	%	92,4	92,4	93,6	93,6
Efficiency at nominal input 30°/50C **	%	107,5	105,5	107,7	106,5
Efficiency at minimum input 30°/50C **	%	105,4	103,6	105,6	105,0
Efficiency at 30% load *	%	n.a.	n.a.	n.a.	n.a.
Efficiency at 30% load **	%	107,4	107,4	107,1	107,1
Efficiency electric n°		★★★★	★★★★	★★★★	★★★★
Heat loss at the chimney with burner on	Pf (%)	1,4	1,4	1,9	1,9
Heat loss at the chimney with burner off Δt = 50°	Pfbs (%)	0,2	0,2	0,2	0,2
Heat loss towards the environment through the casing with the burner operating	Pd (%)	1,9	1,9	1,1	1,1
Class NOx	n°	6	6	6	6
Weighted NOx ***	mg/kWh	27	27	26	26
Minimum/maximum heating temperature	°C	25 / 80	25 / 80	25 / 80	25 / 80
Minimum/maximum heating pressure	bar	0,3 / 3,0	0,3 / 3,0	0,3 / 3,0	0,3 / 3,0
Available heating prevalence (a 1000 l/h)	bar	0,37	0,37	0,34	0,34
Total capacity of the expansion tank	l	7,0 / 3,5	7,0 / 3,5	7,0 / 3,5	7,0 / 3,5
Minimum/ maximum d.h.w. temperature	°C	35 / 60	35 / 60	35 / 60	35 / 60
Minimum/ maximum d.h.w pressure	bar	0,3 / 10,0	-	0,3 / 10,0	-
Maximum flow rate (Δt = 25 K) / (Δt = 35 K)	l/min	14,4 / 10,3	-	16,7 / 11,9	-
Specific d.h.w flow (Δt = 30 K) *****	l/min	12,0	-	13,9	-
Voltage / electric power at nominal heat input	V~/ W	230/100	230/100	230/110	230/110
Electric power at minimum heat input	W	13	13	17	17
Electric power in stand-by	W	5	5	5	5
Electric degree of protection	n°	IPX5D	IPX5D	IPX5D	IPX5D
Max flue gas temperature	°C	46 / 73	46 / 73	43 / 71	43 / 71
Max / min exhaust gas mass flow rate	kg/s	0,0013 / 0,0089	0,0013 / 0,0089	0,0016 / 0,0133	0,0016 / 0,0133
Max / min air mass flow rate	kg/s	0,0014 / 0,0085	0,0014 / 0,0085	0,0015 / 0,0127	0,0015 / 0,0127
Max. coaxial flue gas discharge length (Ø 60/100 mm / Ø 80/125 mm)	m	10 / 10	10 / 10	10 / 10	10 / 10
Max twin flue pipe gas discharge length (Ø 80+80 mm)	m	40	40	40	40
Height x Width x Depth	mm	700x400x290	700x400x290	700x400x290	700x400x290
Weight	kg	32,7	31,2	32,7	32,7
Water contained in the boiler	l	2	2	2	2
Fuel		Natural gas (G20) - Propane (G31)			

* With return water temperatures that do not allow condensation. ** With return water temperatures that allow condensation.
 *** With flue gas outlet 60/100 L 0,9 m and NATURAL GAS G20. **** At minimum useful power. ***** Referred to standard EN 625.
 # Values referred to tests with split exhaust 80 mm 1 + 1 and natural gas G2.

Appunti



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