



Dina

Gas ADAPTIVE
Stainless Steel
Exchanger
25 - 30 - 35 KW
Small Compact Size
Class A / A+ (with KIT)





Main features

DINA is the new line of wall-mounted Condensation boilers from BIASI, with excellent performance.

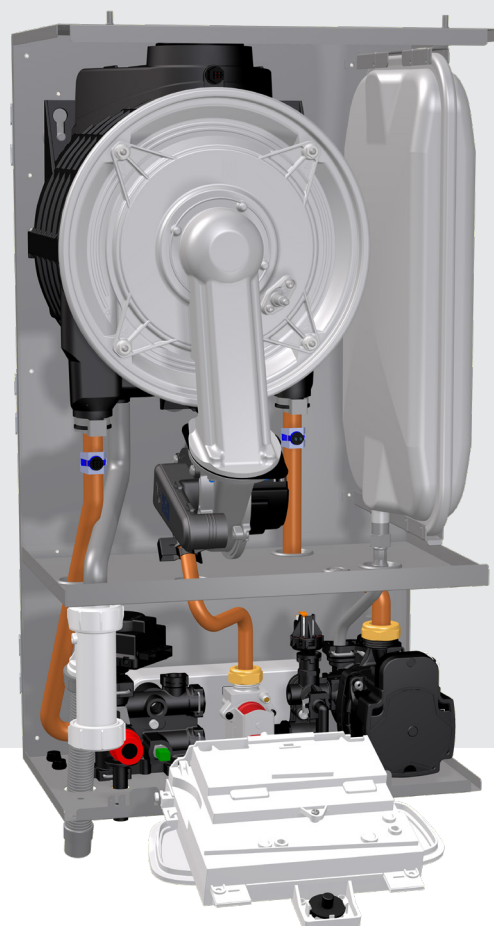
Amongst one of the most compact boilers available today the DINA provides A Rated efficiency reducing your energy bills. It has a stainless-steel condensing exchanger with self-cleaning function, has an intuitive digital control panel. Available in 25, 30 and 35 kW Outputs, it is also certified to work up to 20% of hydrogen and with its compact dimensions of: (706x400x245mm).

With its advanced Gas Adaptive Technology, the Dina manages to minimize consumption and optimize efficiency:

Through this system the boiler can automatically detect the characteristics of the gas and adjusts to maximize the level of efficiency, thus reducing consumption and emissions.

- H2 Ready / 20% hydrogen
- Carrying out combustion analyses gas automatic
- A single model for METHANE and LPG
- 1:5 modulation
- Total premix burner made of stainless steel (NOx Class 6)

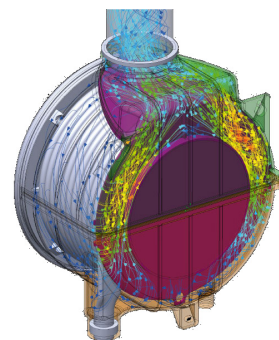
- 7-liter expansion tank
- Low consumption modulating circulator pump
- Digital control panel with backlight display
- Predisposition for thermostat modulating/ remote control and probe external.



Primary heat exchanger in stainless steel

The primary heat exchanger consists of:

- A compact, large-section, oval mono-spiral, made with self-cleaning technology
- Patented high efficiency fume circuit
- Single combustion chamber that allows the total cleaning of the exchanger
- Smoke box in high-performance composite material performance



The water flow is uniformly distributed and guarantees a heat exchange homogeneous. Pressure losses are reduced thanks to the large section of the heat exchanger. The ease of cleaning and the robustness of this exchanger are two of the main advantages, since they allow its use both in new installations and in older systems.

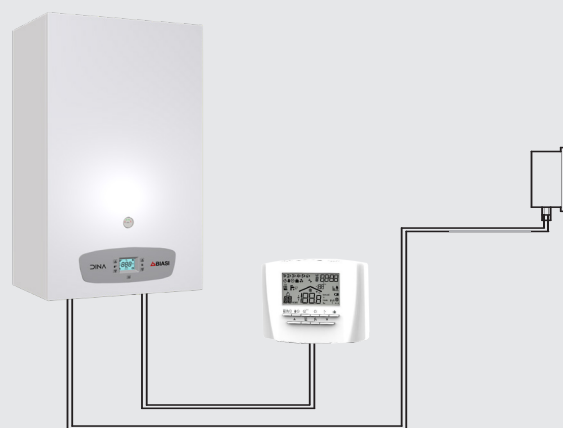
Panel functionality

- Summer/winter/off selection
- Heating Temperature Regulator
- Domestic Hot Water Temperature Regulator
- Domestic Hot Water Temperature and Central Heating Display
- Fault Diagnostic Display

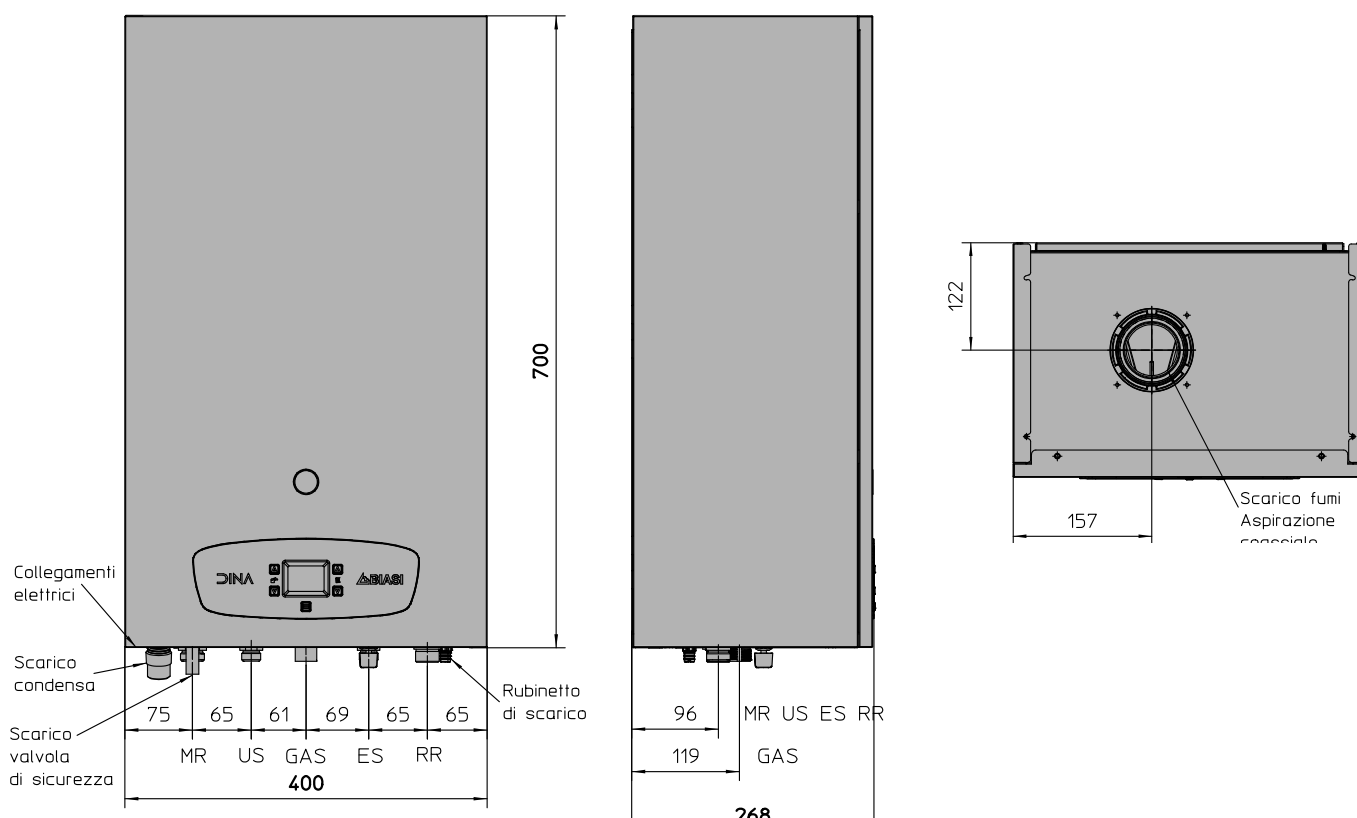


Thermoregulation

To obtain class A+ it is necessary to fit a modulating thermostat plus one external probe to the system, which modulates the temperature of the central heating water depending on the external and internal temperature guaranteeing the maximum comfort and optimizing consumption.



Dimensions



Technical data

		25	30	35
Nominal heat input for heating/DHW	kW	21,0/26,0	26,0/31,0	31,0/34,9
Minimum heating/DHW heat input	kW	5,2/5,2	6,2/6,2	7,0/7,0
Maximum useful power for heating/DHW 60°/80°C *	kW	20,7/25,6	25,7/30,6	30,5/34,3
Minimum useful heating/DHW power 60°/80°C *	kW	4,9/4,9	5,9/5,9	6,6/6,6
Maximum useful power for heating/DHW 30°/50°C **	kW	22,6/28,0	27,9/33,3	33,0/37,2
Minimum useful heating/DHW power 30°/50°C **	kW	5,5/5,5	6,5/6,5	7,3/7,3
Condensate quantity at Q.nom. 30°/50°C (in heating) **		4,2	5,0	5,6
Condensate quantity at Q.min. 30°/50°C (in heating) **		0,8	0,9	1,0
pH of the condensate		4	4	4
Return nom. 60°/80°C *	%	98,58	98,69	98,3
Return. min. 60°/80°C	%	94,0	95,0	95,0
Return nom. 30°/50°C **	%	107,8	107,4	106,5
Return. mine. 30°/50°C **	%	105,9	105,5	105,5
Return at 30% of the load **	%	109,75	109,65	109,71
Energy efficiency η_s	%	94	94	94
Thermal losses in the chimney with the burner in operation Pf (%)		1,1	1,1	1,5
Thermal losses at the chimney with the burner off ΔT 50°C		0,2	0,2	0,2
Thermal losses to the environment through the casing with the burner in operation	Pd (%)	0,3	0,2	0,2
Class NOx	n°	6	6	6
NOx weighted [Hs] ***	mg/kWh	28	32	30
Minimum/maximum heating temperature ****	°C	25/80	25/80	25/80
Minimum/maximum heating pressure	bar	3	3	3
Available heating head (at 1000 l/h)	mbar	430	430	430
Capacity of the expansion vessel	l	7	7	7
Minimum/maximum domestic hot water temperature	°C	33/55	33/55	33/55
Minimum/maximum DHW pressure	bar	0,3/10	0,3/10	0,3/10
Maximum range ($\Delta T=25$ K) / ($\Delta T=35$ K)	l/min	14,9/10,4	17,7/12,3	19,7/13,8
DHW flow rate ($\Delta T=30$ K) *****	l/min	12,5	14,8	16,4
Voltage/Power at nominal heat input	V~/ W	230/94	230/106	230/120
Power at minimum heat input	W	12	11	12
Power at rest (stand-by)	W	3	3	3
Degree of protection	n°	IPX5D	IPX5D	IPX5D
Minimum/maximum flue gas temperature #	°C	36/76	44/78	46/80
Minimum/maximum flue mass flow rate #	kg/s	0,0024/0,0120	0,0029/0,0114	0,0032/0,0162
Minimum/Maximum Air Mass Ported #	kg/s	0,0023/0,0116	0,0028/0,0139	0,0031/0,0156
Max length - coaxial fume exhaust (Ø 60/100 mm / Ø 80/125 mm)	m	10/16	10/15	10/12
Max length - split fume exhaust (Ø 80+80 mm)*		40	40	40
Height x Width x Depth	mm	700 x 400 x 268	700 x 400 x 268	700 x 400 x 268
Weight	kg	31,5	36,0	36,0
Boiler water content	l	2	2	2

* With return water temperatures that do not allow condensation

**Temperatures of the returning water that allow condensation

***With axial fume exhaust 60/100L0.9megasMETHANEG20.

****At minimum useful power.

***** Refers to EN 625 standard.

Values referring to tests with 80 mm split exhaust from 1 + 1 and G20 methane gas.

*The values indicated are measurements of standard exhaust lengths