BIASI

20% H_2 HYDROGEN READY

Dina

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

NOx 6 CLASS

WI-FI READY

APP
BIASI CONNECT

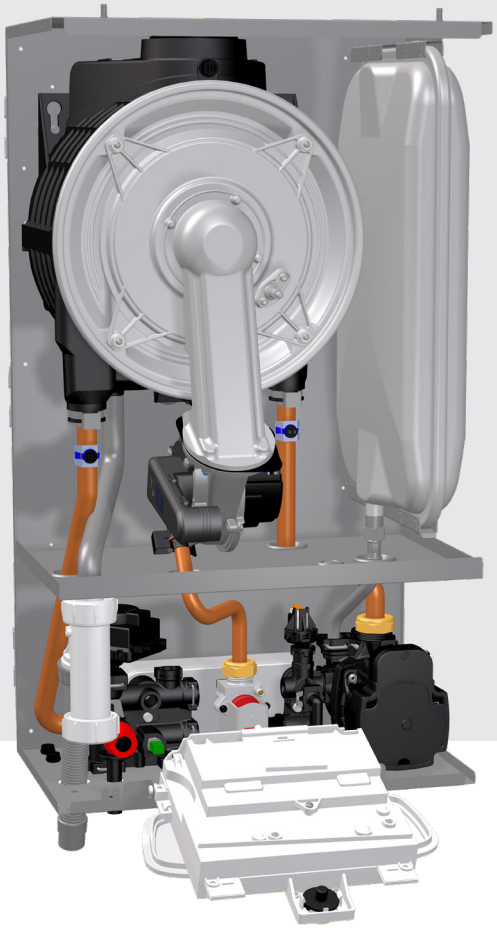
Main features

DINA is the new line of wall-mounted Condensing 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. Specially developed pre-mix burner with modulation control in both heating and hot water modes, which constantly matches output with demand. A unique mix of the latest in intelligent gas boiler technologies and simple, intuitive controls. Available in 25, 30 and 35 kW Outputs, above all the Dina is certified to work up to 20% of hydrogen and has compact dimensions of: (706x400x245mm).

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

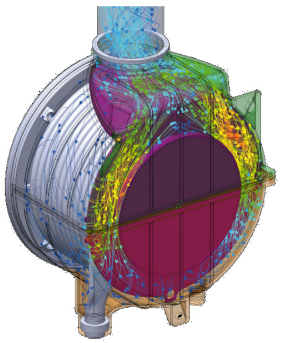
Through this system the boiler can automatically detect the characteristics of the gas and adjusts to maximize the level of efficiency, thus reducing consumption and emissions.

- H2 Ready / 20% hydrogen
- Automatically carrying out gas combustion analyses
- A single model for Natural Gas and LPG
- 1:5 modulation
- Total premix burner made of stainless steel (NOx Class 6)
- 7-liter expansion vessel
- Low consumption modulating circulator Erp pump
- Digital control panel with backlight display
- Predetermined external control and external temperature senor connections



High Performance Stainless Steel Primary Heat Exchanger

The primary heat exchanger consists of:



- A compact, large-sectional oval coil heat exchanger made with innovative self-cleaning technology
- High-quality stainless-steel material chosen for its excellent heat transfer properties and resistance to corrosion.
- Patented high efficiency fume circuit technology
- Single combustion chamber that allows the total cleaning of the exchanger
- High-performance Smoke box made from composite materials
- Robust, reliable and made to last

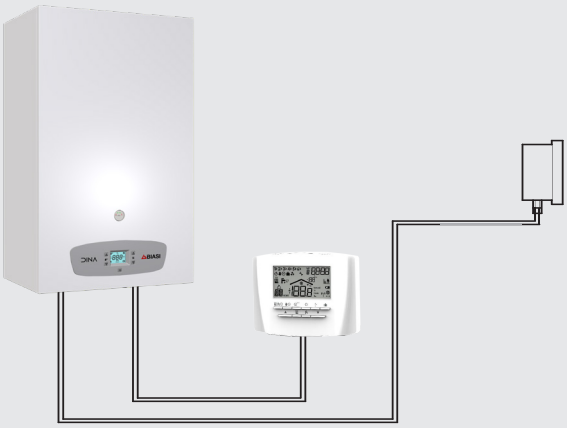
Via its unique shape of the heat exchanger the Dina can uniformly distribute its flow rate guaranteeing maximum efficiency, promoting exceptional performance along with reducing pollutant emissions. Thanks to the large section of the heat exchanger pressure losses are reduced to a minimum. The ease of cleaning and the robustness of this exchanger are two of the main advantages allowing the Dina the perfect boiler for both new and existing installations.

Panel functionality

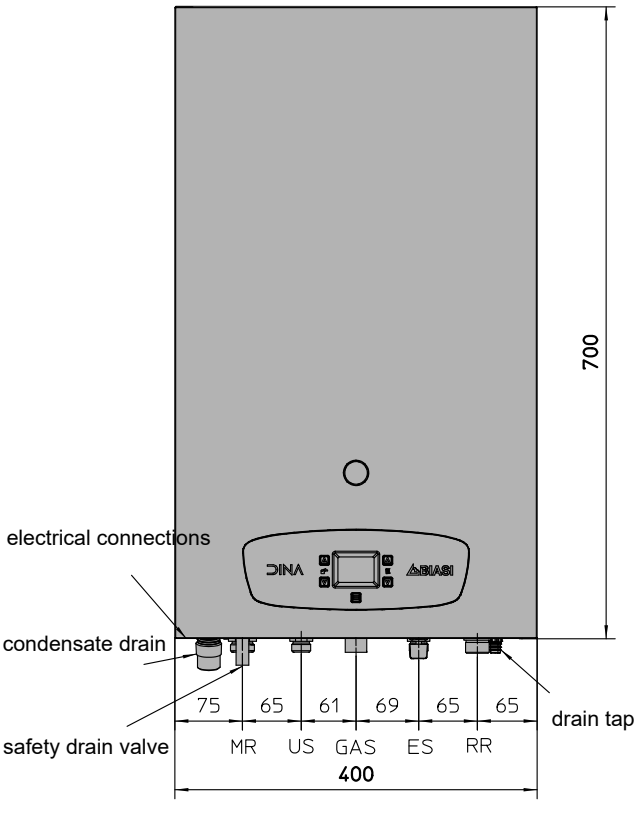
- Summer/Winter- On / Off selection
- Central Heating Temperature Control
- Domestic Hot Water Temperature Control
- Domestic Hot Water Temperature and Central Heating Display
- Fault Diagnostic Display

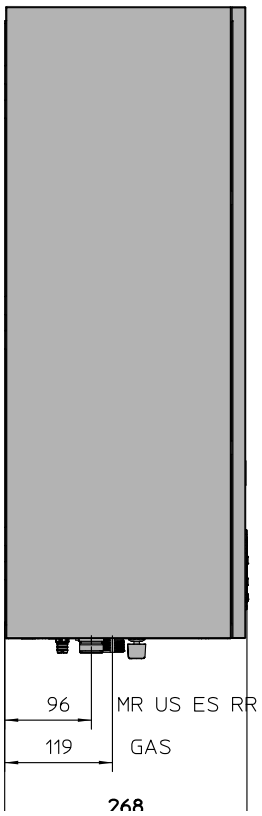
Thermoregulation

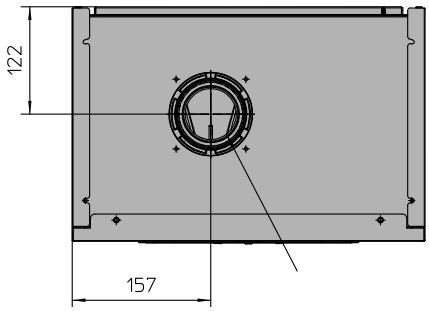
To achieve Class A+ it is necessary to fit a modulating thermostat plus an external temperature probe to the system, which modulates the temperature of the central heating depending on the external and internal temperature guaranteeing the maximum comfort and optimizing consumption.



Dimensions







Flue Outlet / Air Intake (co-axial)

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 ηs	%	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 (ΔT=25 K) / (ΔT=35 K)	l/min	14,9/10,4	17,7/12,3	19,7/13,8
DHW flow rate (ΔT=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 flue exhaust 60/100L0.9 m e gasMETHANE G20.
****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