Power wall-mounted gas condensing boilers for heating



BLU POWER Wall-mounted boilers from thermal power plants



BLU POWER EXTRA Outdoor wall-mounted boilers with remote control as standard









Technical and construction characteristics

BLU POWER and BLU POWER EXTRA are condensing boilers with low NOx emission, for use in thermal power plants according to the Ministerial Decree. 8/11/2019.

The available powers are: 45 - 70 - 95 - 110 - 150 kW.

The primary heat exchanger is made of AISI 316 L stainless steel spiral tube and is designed to optimize the recovery of latent heat with the insertion of dedicated secondary coils. The total premix burner allows you to adjust the air and gas ratio, which is controlled by the simultaneous modulation of the combustion mixture, improving efficiency and reducing polluting emissions. The burner can operate on both methane and propane (LPG); the generator is also approved for operation with a mixture of methane and up to 20% hydrogen.

The electronic board controls the operation of the thermal module and provides for the signaling and storage of anomalies with explicit, easy-to-read parameters.

The maximum power in domestic hot water and heating can be adjusted independently.

The boiler is in fact designed to power a possible domestic hot water storage tank, with the probe and power supply to the loading pump or three-way valve connected to the board. The climate regulator is an integral part of the board and, combined with the external probe (optional), allows the management of the delivery temperature based on the external temperature. All models are equipped as standard with a modulating pump and I.N.A.I.L. approved expansion tank.

The BLU POWER boilers are designed to be installed inside a technical room created according to the indications and technical regulations referred to in the above Decree.

The complete range of accessories makes installation easier, starting from the I.N.A.I.L. safety group, passing through the possibility of creating a possible secondary circuit with hydraulic separator or plate exchanger, up to the provision of a dedicated flue system.

BLU POWER EXTRA boilers are designed to be installed outside rooms adjacent to fireproof walls, respecting the distances and surrounding requirements established by current legislation. The I.N.A.I.L. security group it is already integrated inside the outdoor covering box.

The fume exhaust pipe is supplied.

The use of accessories to be installed inside allows you to complete the installation, for example by creating a secondary hydraulic circuit or adding complete hydraulic groups.

Thermal flow kW	Thermal Power kW*	Code	€
45,0	46,4	30440045	4.640,00
69,9	74,5	30440070	6.040,00
95,0	101,2	30440095	7.510,00
115,0	118,7	30440110	8.440,00
150,0	154,5	30440150	9.490,00
<u> </u>		•	
45,0	46,4	30450045	6.640,00
69,9	74,5	30450070	8.210,00
95,0	101,2	30450095	9.660,00
115,0	118,7	30450110	10.570,00
150,0	154,5	30450150	11.580,00
	69,9 95,0 115,0 150,0 45,0 69,9 95,0 115,0	69,9 74,5 95,0 101,2 115,0 118,7 150,0 154,5 45,0 46,4 69,9 74,5 95,0 101,2 115,0 118,7	69,9 74,5 30440070 95,0 101,2 30440095 115,0 118,7 30440110 150,0 154,5 30440150 45,0 46,4 30450045 69,9 74,5 30450070 95,0 101,2 30450095 115,0 118,7 30450110

*Heating thermal power (50 - 30 °C)



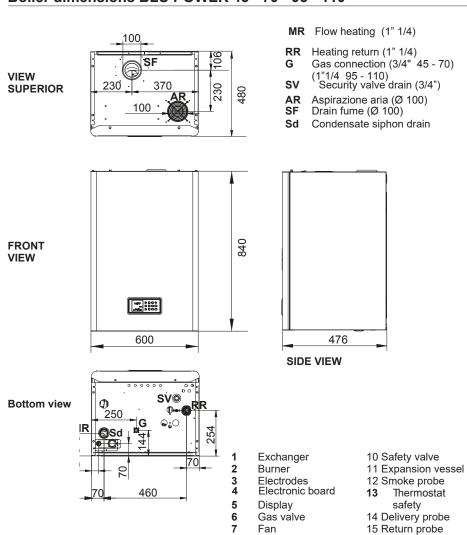
Power wall-mounted gas condensing boilers for heating

Accessories BLU	POWER - BLU POWER EXTRA		Code	€
	Plate exchanger kit complete with I.N.A.I.L. safety unit. compliant with the "R" collection, prepared only for the BLU POWER boiler	mod. BLU POWER 45 mod. BLU POWER 70 mod. BLU POWER 95 mod. BLU POWER 110 mod. BLU POWER 150	30403150 30403151 30403152 30403153 30403154	3.560,00 3.976,00 4.472,00 4.632,00 4.954,00
	Hydraulic separator kit complete with I.N.A.I.L. safety unit. compliant with the "R" collection, prepared only for the BLU POWER boiler	mod. BLU POWER 45 - 70 mod. BLU POWER 95÷150	30403250 30403251	2.076,00 2.080,00
	I.N.A.I.L. safety stub kit compliant with the "R" collection, prepared only for the BLU POWER boiler	mod. BLU POWER 45 - 70 mod. BLU POWER 95÷150	30403350 30403351	904,00 910,00
	Support structure kit for BLU POWER boilers		30403450	518,00
- Mileson	Standard command and remote control բ (standard for BLU POWER EXTRA)	panel	30400034	106,00
	External probe		30403109	26,00
Q	Domestic hot water tank temperature probe (3 meters long)		30403451	26,00
	3-way motorized diverter valve with 1" 1/4 connections and spring return		30403452	300,00
	Acid condensate neutralizer kit suitable for up to 350 thermal kW		30403453	306,00
	Transformation nozzle for propane gas	mod. 150	30403454	40,00
	Mixer for propane boiler transformation complete with nozzles	mod. 70 mod. 95 mod. 110	30403455 30403456 30403457	174,00 174,00 174,00
	Adjustable semi-automatic self-cleaning magnetic dirt separator for vertical and horizontal installations with 1" 1/4 connections	ctions	30403137	480,00

Power wall-mounted gas condensing boilers for heating

Accessories BLU POWER		Code	€	
	Reduction kit Ø 100 - Ø 80		30404020	86,00
	Ø 100 flue starter kit with smoke outlet		30405020	90,00
	Fume exhaust terminal	mod. Ø 80 mod. Ø 100	30403122 30403222	18,00 28,00
	Curve M/F 90° PP	mod. Ø 80 mod. Ø 100	30403013 30403104	8,00 34,00
	Curve M/F 45° PP	mod. Ø 80 mod. Ø 100	30403012 30403105	8,00 32,00
	Extension M/F PP 1000 mm	mod. Ø 80 mod. Ø 100	30403011 30403125	10,00 45,00

Boiler dimensions BLU POWER 45 - 70 - 95 - 110



8

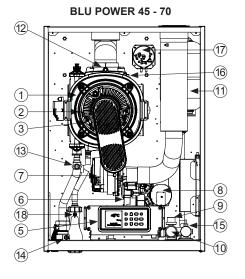
Values expressed in mm

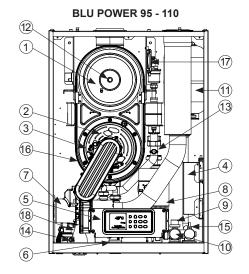
^ACCORRONI

Pump

Trasductor

pressure





16 Thermal fuse

18 Siphon

17 Siphon pressure switch

Power wall-mounted gas condensing boilers for heating

Boiler dimensions BLU POWER 150

100

230

840

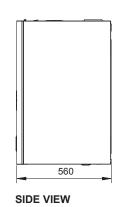
115

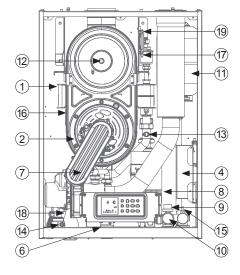


BOTTOM VIEW

MR Heating flow (1" 1/4) RR Heating return (1" 1/4) G Gas connection 1"1/4 SV Safety valve exhaust (3/4") AR Air intake (Ø 100)

SF Smoke exhaust (Ø 100) Sd Condensate siphon drain





SV_{©RR} 151 7 Values expressed in mm

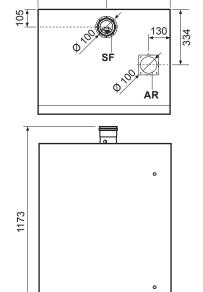
197 0 000 0 5000 0 5000

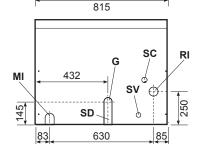
600

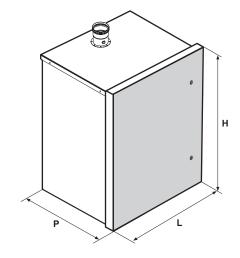
1 exchanger

- 2 Burner
- 3 Electrodes
- 4 Electronic board
- 5 Display
- 6 Gas valve
- 7 Fan
- 8 Circulator
- 9 Pressure transducer
- 10 Safety valve
- 11 Expansion vessel
- 12 Smoke probe
- 13 Safety thermostat
- 14 Delivery probe
- 15 Return probe
- 16 Thermal fuse
- 17 Siphon pressure switch
- 18 Siphon
- 19 APS pressure switch

Outdoor boiler dimensions BLU POWER EXTRA 45 - 70 - 95 - 110 - 150





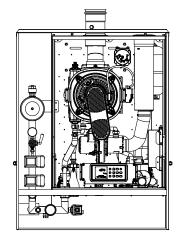


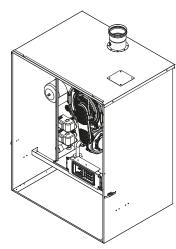
Model	45	70	95	110	150
L	815	815	815	815	815
Н	1074	1074	1074	1074	1074
P	640	640	640	640	640
Peso	77 kg	86 kg	114 kg	123 kg	133 kg

Values expressed in mm

- MI System delivery (1" 1/4 M)
- RI System return (1" 1/4 M)
- SD Condensate siphon drain (25 mm)
- SV Safety valve drain
- SC Boiler drain
- SF Smoke exhaust (Ø 100)
- AR Air intake (Ø 100)
- G Methane gas/LPG inlet

(3/4" mod. 45 - 70) (1" 1/4 mod. 95 - 110 - 150)

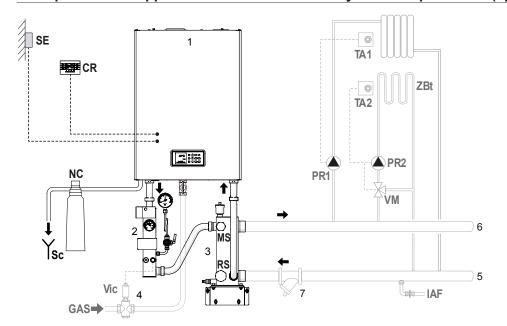






Power wall-mounted gas condensing boilers for heating

Example of boiler application BLU POWER with hydraulic separator kit (optional)



- 1 2 Safety mode I.N.A.I.L. (*)
- 3 Hydraulic separator (*)
- Fuel shut-off valve
 System return manifold 4
- 5 System delivery manifold
- Decanting filter

SE External probe (*)

NC Condensate neutralizer (*)

Sc Drain

ZAt High temperature zone

ZBt Low temperature zone TA1 High zone room thermostat

temperature

TA2 Low zone room thermostat temperature

PR1 High temperature system pump

PR2 Low temperature system pump VM System mixing valve

low temperature

GAS Fuel supply

IAF Cold water inlet

MS Domestic hot water delivery

RS Sanitary return

Available as an accessory

Boiler technical data table BLU POWER - BLU POWER EXTRA

DESCRIPTION	U.M.	45	70	95	110	150	
Device category				II2H3P			
Heating heat flow (max/min)	kW	45,0 / 5,0	69,9 / 7,7	95,0 / 10,5	115,0 / 12,0	150,0 / 20,0	
Thermal power with ΔT 80°/60° (max/min)	kW	43,8 / 4,8	68,0 / 7,5	92,9 / 10,2	112,0 / 11,8	146,1 / 19,2	
Thermal power with ΔT 50°/30° (max/min)	kW	46,4 / 5,3	74,5 / 8,1	101,2 / 11,2	118,7 / 12,5	154,5 / 20,7	
Useful yield PCI 100% (50/30 °C)		103,1%	106,6%	106,5%	103,2%	103,0%	
Heating energy efficiency class				Α			
Minimum pressure of the heating circuit	bar			0,5			
Safety valve opening pressure	bar	4	,0	5,4			
Maximum operating pressure	bar	4	,5	6,0			
Power supply				230V/1/50Hz			
Max power absorbed	W		3	00 540			
Degree of protection for models BLU POWER EXTRA		IPX4D					
Methane gas consumption within reach max*	m³/h	4,70	7,40	10,10	12,20	15,50	
LPG consumption within reach max*	m³/h	1,90	2,70	3,90	4,50	6,00	
Maximum operating temperature	°C			85,0			
ΔT maximum delivery-return	°C	35,0					
Total capacity of expansion tank	I	5,0					
Boiler exchanger water content	I	2,7	3,5	6,8	8,4	10,1	
Water flow rate ΔT= 20 K nominal	m³/h	1,9	3,0	4,1	4,7	6,4	
Residual pump head ΔT= 20 K nominal	m H ₂ O	3,5	3,8	2,2	7,8	4,1	
Fume exhaust connection	mm			100			
Shell leaks when the burner is working (Pmax/Pmin)		0,4/8,2 %	1,6/5,0 %		1,3/2,5 %		
Leaks with burner off (Pmax/Pmin)		0,3/2,4 %	0,15/0,1 %		0,2/1,8 %		
Chimney leaks when the burner is working (Pmax/Pmin)		3,7/1,8 %	2,3/2,1 %		2,4/1,8 %		
Mass flow rate of fumes (Pmax/Pmin)	g/s	11,9 / 1,3	13,0 / 1,6	45,0 / 5,0	53,0 / 6,0	69,0 / 10,0	
Smoke temperature	°C	80,0 / 55,0	68,0 / 65,0		80,0 / 55,0		
Max condensate production at Nominal Flow Rate	l/h	7,0	11,0	14,8	18,0	22,5	
Thermal efficiency useful for power max (60/80°C)		97,3%	97,3%	97,8%	97,4%	97,4%	
Thermal efficiency useful for power max (30/50°C)		103,1%	106,6%	106,5%	103,2%	109,8%	
Thermal efficiency useful for power min. (60/80°C)		96,5%	97,2%	97,1%	98,2%	103,0%	
Thermal efficiency useful for power min. (30/50°C)		102,1%	105,8%	106,9%	104,0%	103,4%	
Useful thermal efficiency at 30% of the load		108,1%	108,4%	108,7%	108,3%	108,3%	
Emission class NOx		6					
Empty weight	Kg	60	69	97	97	107	
* Value referred to 15°C 1012 mbox							

^{*} Value referred to 15 °C - 1013 mbar

