

BAXI

Luna Platinum+ GA



March 2015



Luna PlatinumWall hung condensing boilers



Luna Platinum+ 1.12 GA Luna Platinum+ 1.18 GA Luna Platinum+ 1.24 GA Luna Platinum+ 1.32 GA Luna Platinum+ 24 GA Luna Platinum+ 33 GA

Main features

- Advanced removable control (text display, backlight)
- Full modulating low energy circulating pump (ErP ready - class A) with enhanced head pump
- Modulating pump and 1:10 GAC modulation ratio
- Built-in solar control
- Systems integration
- Noiseless operation

Luna Platinum range of wall-mounted boilers is composed of heating-only and combi condensing boilers with an output from 12 to 32 kW (at 80°/60°C). The range stands out for its high performance, easiness of use and installation and wide range of accessories for single installation or in cascade. The core element of these condensing boilers is the heat exchanger in stainless steel. The low water content of the exchanger allows for very limited heat inertia and therefore a rapid response to variations in heat demand on the system. The stainless steel surfaces protect the exchanger from the risk of corrosion caused by condensation. The various parts

of the generator are controlled by the latest generation electronics circuit board which makes for simple, reliable boiler management using the removable control panel with wide LCD display. Daily and weekly programming of heating and DHW functions is possible, as is climatic setting according to the comfort criteria chosen by the user and the visualisation of error messages relating to any faults. In addition, such boiler electronics allow technicians to access a series of adjustment parameters and configure the generator so as to optimise efficiency depending on the type of system used.

Luna Platinum+ GA

Models available

Heating only boiler with possibility to connect to a DHW tank and combi boiler



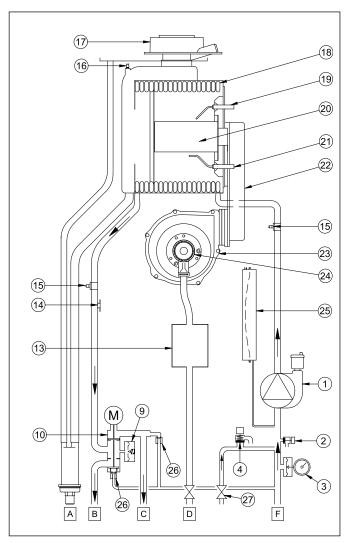
Model Luna Platinum	Power range (kW)	
	∆t 50/30°C	∆t 80/60 °C
Luna Platinum+ 1.12 GA	2,2 to 13,1	2 to 12
Luna Platinum+ 1.18 GA	2,2 to 18,4	2 to 16,9
Luna Platinum+ 1.24 GA	2,6 to 26,1	2,4 to 24
Luna Platinum+ 1.32 GA	3,5 to 34,9	3,2 to 32
Luna Platinum+ 24 GA	2,6 to 17,4	2,4 to 16
Luna Platinum+ 33 GA	3.6 to 26.1	3.3 to 24

Model Luna Platinum	NOx EMISSION LEVEL
Luna Platinum+ 1.12 GA	< 25,4 mg/kWh
Luna Platinum+ 1.18 GA	< 29,5 mg/kWh
Luna Platinum+ 1.24 GA	< 24,7 mg/kWh
Luna Platinum+ 1.32 GA	< 31,1 mg/kWh
Luna Platinum+ 24 GA	< 20,5 mg/kWh
Luna Platinum+ 33 GA	< 28,9 mg/kWh

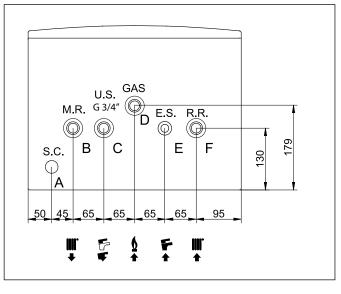


Technical specifications

Luna Platinum+ 1.12 GA - 1.18 GA - 1.24 GA - 1.32 GA



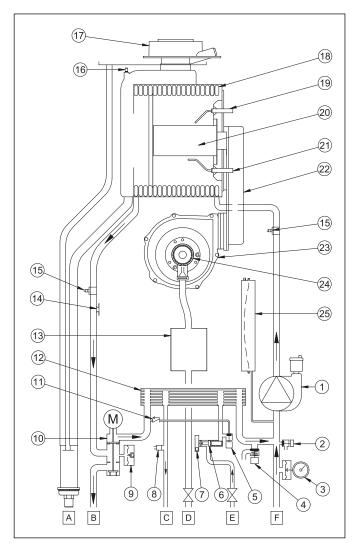
- 1 Pump with air separator
- 2 Boiler drain tap
- 3 Pressure gauge
- 4 Hydraulic Safety valve
- 9 Hydraulic Pressure Sensor
- 10 3-way valve with motor
- 13 Gas valve
- 14 Safety thermostat
- 15 NTC heating sensor (flow/return)
- 16 Fumes sensor
- 17 Coaxial connector
- 18 Water-fumes exchanger
- 19 Ignition electrode
- 20 Burner
- 21 Flame detection electrode
- 22 Air/gas blend manifold
- 23 Fan Ventilator
- 24 Venturi
- 25 Expansion vessel
- 26 Automatic by-pass
- 27 Boiler filling tap with non-return valve
- A Siphon with condensate drain
- B Heating flow tap
- C Storage boiler
- Gas inlet tap
- E Cool DHW inlet tap
- F Heating return tap



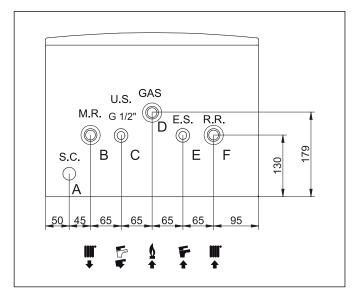
- S.C. Condensing trap that can be installed on a Ø 21 pipe
- M.R. Heating system flow G 3/4"
- U.S. Storage tank flow G 3/4"
- GAS Gas inlet G 3/4"
- E.S. Mains water G 1/2"
- R.R. Heating system return G 3/4"

Technical specifications

Luna Platinum+ 24 GA - 33 GA



- Pump with air separator
- Boiler drain tap
- 3 Pressure gauge
- Hydraulic Safety valve
- Boiler filling tap
- Flow sensor with water filter and flow limiting device
- DHW priority sensor
- 8 NTC DHW sensor
- Hydraulic Pressure Sensor
- 3-way valve with motor
- Non-return valve
- 12 DHW heat exchanger
- 13 Gas valve
- 14 Safety thermostat
- 15 NTC heating sensor (flow/return)
- 16 Fumes sensor
- Coaxial connector
- Water-fumes exchanger
- 19 Ignition electrode
- 20 Burner
- 21 Flame detection electrode
- Air/gas blend manifold
- Fan Ventilator
- 24 Venturi
- 25 Expansion vessel
- Siphon with condensate drain
- В Heating flow tap
- C DHW outlet
- Gas inlet tap
- D E Cool DHW inlet tap
- Heating return tap



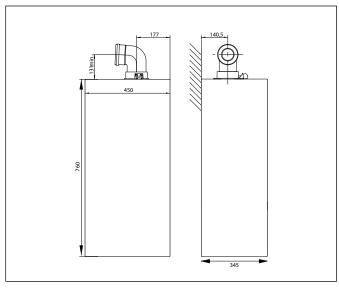
- S.C. Condensing trap that can be installed on a Ø 21 pipe
- M.R. Heating system flow G 3/4"
- U.S. DHW outlet G 1/2"
- GAS Gas inlet G 3/4"
- E.S. Mains water G 1/2"
- R.R. Heating system return G 3/4"

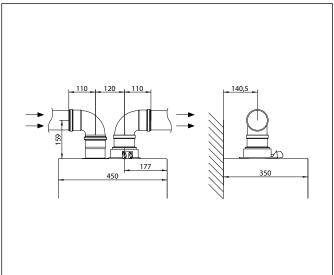


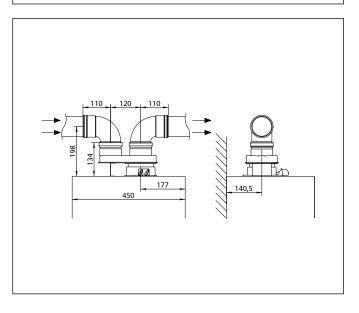
Technical specifications

		1.12 GA	1.18 GA	1.24 GA	1.32 GA	24 GA	33 GA
Maximum DHW heat input	kW	-	-	-	-	24,7	34
Maximum heating heat input	kW	12,4	17,4	24,7	33	16,5	24,7
Maximum heating heat output 80/60°C	kW	12	16,9	24	32	16	24
Maximum heating heat output 50/30°C	kW	13,1	18,4	26,1	34,9	17,4	26,1
Minimum heat output 80/60°C	kW	2	2	2,4	3,2	2,4	3,3
Minimum heat output 50/30°C	kW	2,2	2,2	2,6	3,5	2,6	3,6
Energetic efficiency 92/42/CEE		***	***	***	***	***	***
Average efficiency (DIN4702-T8)	%	109,8	109,8	109,8	109,8	109,8	109,8
Nominal efficiency 80/60°C	%	97,7	97,6	97,6	97,6	97,7	97,6
Nominal efficiency 50/30°C	%	105,7	105,8	105,5	105,5	105,4	105,4
Efficiency at 30%	%	109	108,9	108,9	108,8	108,9	108,9
NOx class (EN483)		5	5	5	5	5	5
Minimum working temperature	°C	-5	-5	-5	-5	-5	-5
Extension vessel capacity/pre.charge	lt	8/0,8	8/0,8	8/0,8	10/0,8	8/0,8	10/0,8
Regulation of water temperature in heating circuit	°C	25/80	25/80	25/80	25/80	25/80	25/80
DHW temperature regulation	°C	35/60	35/60	35/60	35/60	35/60	35/60
Heating system max pressure	bar	3	3	3	3	3	3
Coaxial flue system max length Ø 60/100	m	10	10	10	10	10	10
Dual flue system max lenght Ø 80	m	80	80	80	80	80	80
Maximum flue mass flow rate	kg/s	0,006	0,008	0,011	0,015	0,011	0,016
Minimum flue mass flow rate	kg/s	0,001	0,001	0,001	0,002	0,001	0,002
Maximum flue temperature	°C	80	80	80	80	80	80
Comburent air-flow at Qn	Pa	100	100	100	100	100	100
Dimensions (hxwxd)	mm			760x45	50x345		
Net weight	kg	34,5	34,5	34,5	37,5	38,5	39,5
Gas type				Natural §	gas / LPG		
Power consumption	W	64	83	91	103	91	105
Noise (1 mt far from the boiler)	dBA	<40	<40	<40	<40	<40	<40
Grade of protection		IPX5D	IPX5D	IPX5D	IPX5D	IPX5D	IPX5D

Technical specificationsLuna Platinum+ 1.12 GA - 1.18 GA - 1.24 GA - 1.32 GA - 24 GA - 33 GA









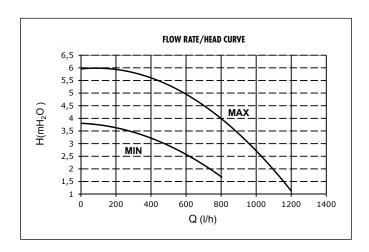
Diagrams

The figures below illustrate the heating system layout and enable more detailed analysis of generator behaviour in various conditions of use.

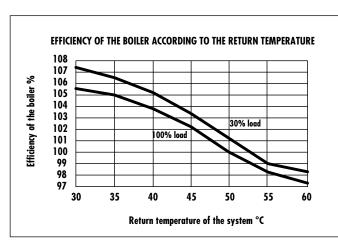
The pump flow rate-head curve defines the dynamic characteristics of the BAXI circulator inside the hydraulic group. As is known, the temperature of the return water directly influences the efficiency of condensing boilers: at very low temperatures there is better use of the latent heat and consequently improved boiler efficiency.

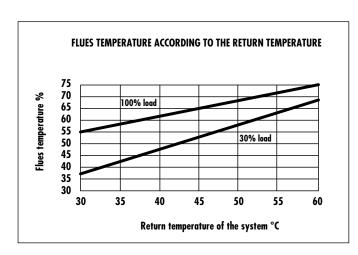
ErP Pump- main features

- Remotely speed –controlled, high-efficiency pump fitted with electronically commutated motor (ECM) with permanent-magnet rotor and frequency converter
- Validated components, second generation of the first boiler-integrated variable-speed ECM circulator pumps
- Fits into existing boiler ranges, no expanded space requirements, possible use of existing pump housings,
 electrical compatibility with existing PWM controllers and no ambient-temperature constraints (EN 60335)
- Energy-optimized due to improved hydraulic efficiency. Use up to 80% less electrical power than conventional constant- speed pumps



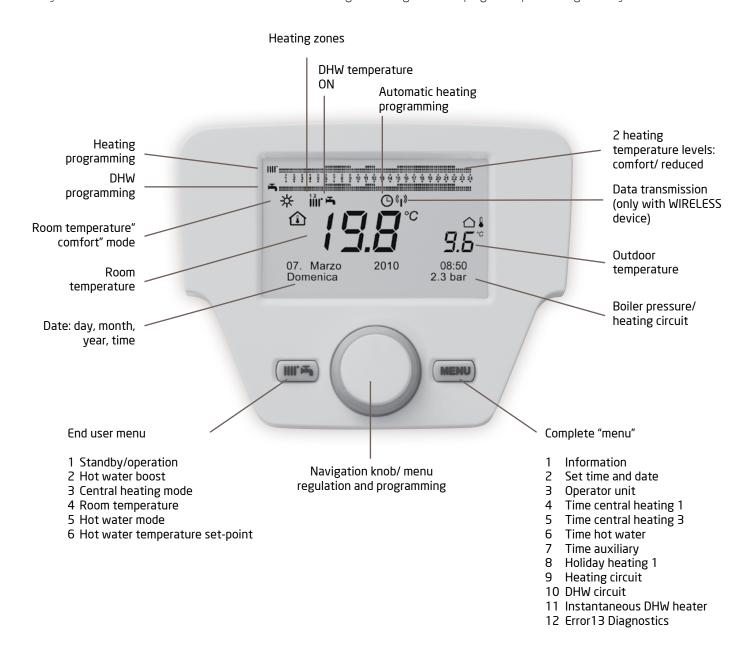
The graph below shows the variations in efficiency, as the ratio of the flow rate to the heat output of the condensing generator specified, depending on the return temperature of the boiler. The last figure shows the trend of the flue temperature of the generator depending on the return temperature.





Electronics: the latest-generation interface

Baxi has developed for the new range of boilers Platinum an innovative removable control panel with a wide display and easy reading thanks to the text and icons. The control is distinguished by a clear back-lighting and easiness of use, thanks to the navigation knob and two push-buttons dedicated to the set of the comfort and complete programming of the boiler. The advanced electronics enable an easy remote interaction of the boiler with different heating technologies developing a complete integrated system.





Programming, setting and digital control

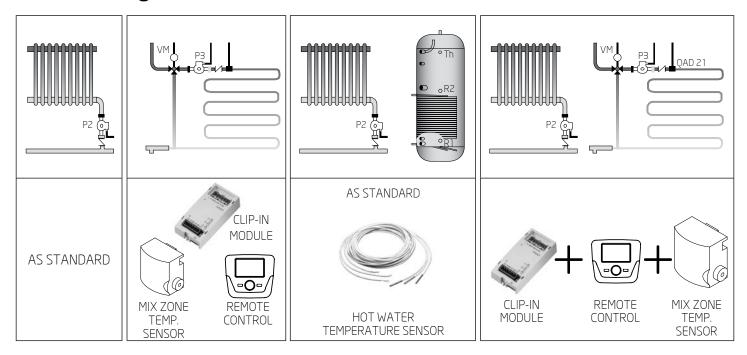
Picture	Model	Description	Code
04-100-24-5-3-100 PT 1-100 PT	Room thermostat THINK	Modulating room thermostat, version with wires (3led interface with support 7102340) or wireless (5led interface with support 7102441). If the control panel is installed in the boiler, it is necessary to buy the wireless aerial (see below). Dimensions: 105x98 mm	7101061 (wired) 7103044 (wireless)
10 M	Room thermostat with timer THINK	Modulating room thermostat with timer, version with wires (3led interface with support 7102340) or wireless (5led interface with support 7102441) Advanced DHW managing. Dimensions 120x98 mm	7102980 (wired) 7102979 (wireless)
	3LED interface with support THINK	This accessory allows to install the wired control panel in a representative room. It can be used to control the room temperature and to set and control a heating circuit including a cascade installation and several low temperature zones.	7102340
	5LED interface with support THINK	This accessory allows to install the wireless control panel in a representative room. It can be used to control the room temperature and to set and control a heating circuit including a cascade installation and several low temperature zones.	7102441
0 W 1 E	Wireless aerial THINK	This accessory permits installation of the wireless outdoor sensor. If the 5 LED interface circuit with support is installed this accessory need not be installed.	7102343
	External sensor THINK (QAC34)	Outdoor sensor is a temperature sensor which communicates to the boiler the temperature outside the dwelling so that the generator adapts the flow temperature to the effective needs of heating the environment as set by the user.	7104873 (wired) 7103027 (wireless)
	Programmable clip-in module THINK (AGU2.550)	With this accessory the device can run: heating circuits at different temperatures, solar system and other specific applications (pools, sanitary recirculation pump etc.). This accessory can directly manage the circuit components (pump, temperature sensor, mixing valve etc.) up to a maximum of 3 independent relay outlets, 2 temperature sensors and 1 control inlet. Some predefined functions can be used.	7100345

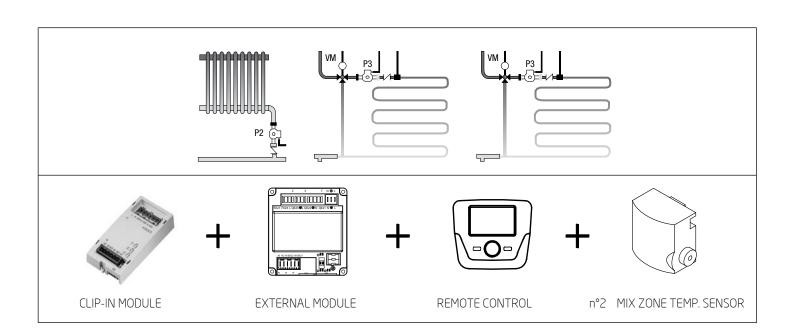
Programming, setting and digital control

Picture	Model	Description	Code
	Programmable external module THINK (AVS75)	Use of the external module means that a heating system with max 16 boilers in cascade can be run, with separate storage for hot sanitary water where required. This accessory, connected to one of the boilers, can directly control the circuit components up to a max of 3 independent relay outlets, 2 inlet temperature sensors, 1 connector for limit thermostat in HV and one control inlet (for example TA).	7105037
	Interface kit for boilers in cascade THINK (OCI345)	Interface kit for boilers in cascade is an electronic device that permits communication via bus (two cables) between boilers connected in cascade or between one boiler (or the boilers in cascade) and a mixing zone controller.	7104408
Economic Co	Heating controller for mixing zones THINK (RVS46)	Heat regulation control unit for piloting a mixing zone (usually low temperature). It can run a mixing valve, a pump and the flow sensor of the controlled zone. It can also exchange data with the boiler board by means of the connection bus. It includes a flow/return sensor THINK.	7105199
socie di	Heating flow/return sensor clip-in module THINK (QAD36)	This sensor is necessary to detect the delivery temperature of the mixed zones in the heating plant. It have to be connected to the THINK CLIP IN or external module.	KHG 71407891
	Hot water temperature sensor	This is the sensor that detects the DHW tank temperature.	KHG 71407681
	Sensor for solar controller	Sensor connected to the electronic platform THINK that detects the temperature of the solar collectors.	LNC 71000004

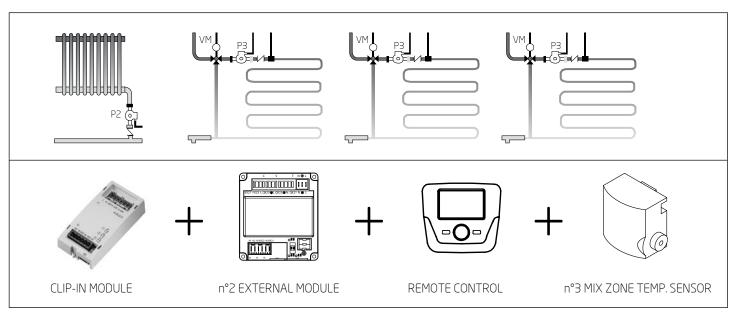


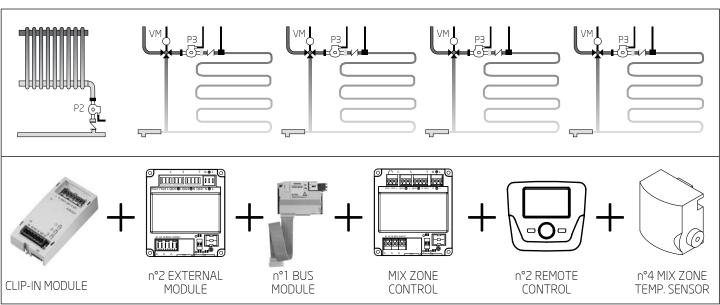
All the configurations must have the OUTDOOR SENSOR



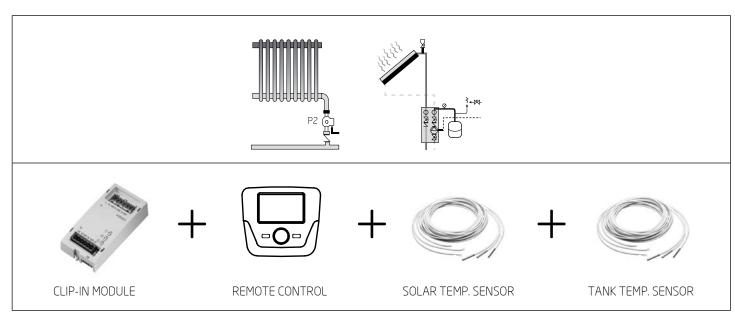


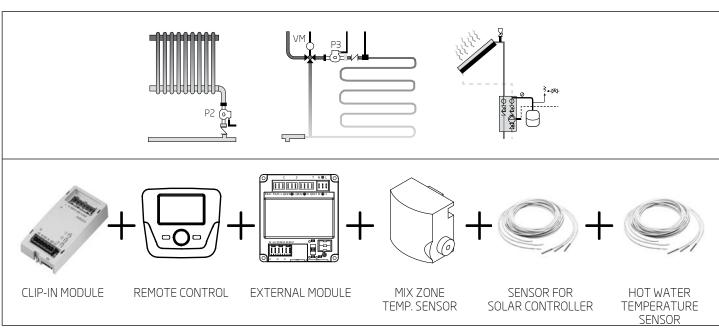
Luna Platinum+ GA











Information required for installation

Instructions on installation

The installation must satisfy the requirements of UNI and CEI standards and local by-laws and technical regulations. Moreover, the installation technician must be qualified to install heating appliances. Additionally, bear in mind the following:

- The boiler can be used with any kind of convector plate, radiator or thermoconvector. Design the system sections as usual, though, bearing in mind the available capacity-head at the plate.
- Initial ignition of the boiler must be carried out by the Authorised Service Center.

Location

LUNA PLATINUM condensing boilers must be installed in premises protected from frost, which can also be ventilate, they must never be installed above a heat source or a cooking appliance.

The IPX5D protection index enables them to be installed in kitchens and bathrooms, excluding protection volumes 1 and 2.

The wall to which the boiler is secured must be capable of bearing the weight of the boiler when full of water.

Ventilation (chimney connection only B₂₃)

The cross-section of the boiler room ventilation (through which combustive air is taken in) must comply with the prevailing standard. N.B.: For boilers connected to a concentric forced flue (type C13 or C33 connections) ventilation of the installation premises is not necessary, unless the gas supply includes one or more mechanical connections (see prevailing standard).

Ventilation

Direct air inlet according to the prevailing standard.

Top and bottom ventilation vents mandatory

Top ventilation:

Cross section equal to half of the total cross section of the flue gas conduits with a minimum of 2,5 dm²

Bottom ventilation

Direct air inlet

 $S(dm^2) \ge 0.86P/20$ with P = installed output in kW

The location of air inlets in relation to the top ventilation openings will ensure that air is renewed in the entire volume of the boiler room.

In order to avoid damage to boilers, it is necessary to prevent the contamination of combustion air by chloride and/or fluoride compounds, which are particularly corrosive.

These compounds are present, for example, in aerosol spray cans, paints, solvents, cleaning products, washing powders/liquids, detergents, glues, snow cleaning salts, etc.

It is therefore necessary:

- To avoid sucking in air discharged from premises using such products: hairdresser, dry cleaners, industrial premises (solvents), premises containing refrigeration systems (risk of leaking refrigeration fluids), etc.
- To avoid the storage of such products close to boilers.



Gas connection

Compliance with prevailing instruction and regulations is mandatory. In all cases, a sectional valve must be fitted as close as possible to the boiler. A gas filter should be fitted to the boiler inlet.

The diameters of the pipes must be defined according to the prevailing regulations.

Gas supply pressure:

- 20 mbar on Natural Gas
- 37 mbar on Propane

Electrical Connection

The boiler is only electrically safe if it is correctly connected to an efficient earth system in compliance with current safety regulations. Connect the boiler to a 230V single-phase earthed power supply using the supplied three-pin cable, observing correct Live-Neutral polarity.

Use a double-pole switch with a contact separation of at least 3 mm.

Note:

- The sensor cables must be separated from the 230 V circuits by at least 10 cm
- In order to protect the pump antifreeze and cleaning functions, we recommend not switching off the boiler at the mains switch.

Heating Plant

The principle of a condensing boiler is to recycle the energy contained in the water vapour in the combustion gases (latent vaporisation heat). Consequently, to achieve an annual operating efficiency in the order of 110%, it is necessary to size the heating surfaces in such a way as to obtain low return temperatures, below the dew point (e.g. underfloor heating, low temperature radiators, etc.) during the entire heating period.

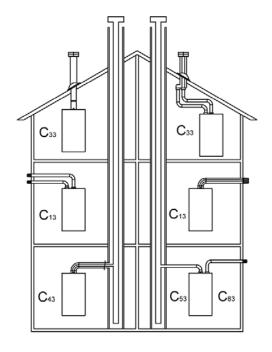
Condensate Discharge

It must be connected to the waste water discharge system. The connection must be removable and the flow of condensates visible. The connections and pipes must be in corrosion-resistant material. Condensates neutralisation stations are available as optional equipment.

Requirements on heating water

- pH: 6.5 to 8.5
- Chloride content < 50 mg/l
- Conductivity < 500 S/cm to 25°C

Flue configurations



Configuration C13: Air/flue gas connection by means of concentric pipes to a horizontal terminal or twin pipes in the same side (so called forced flue)

Configuration C33: Air/flue gas connection by means of concentric pipes to a vertical terminal (roof outlet) or twin pipes to a single vertical terminal

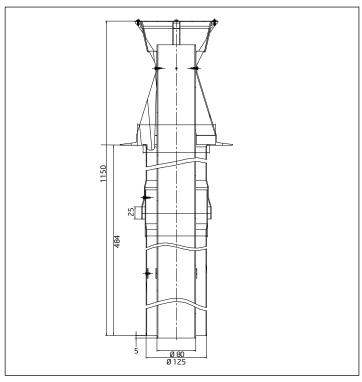
Configuration C43, C83: the flue terminal or flue duct must be suitable for the purpose

Configuration C63: The maximum pressure drop ΔP of the ducts must not exceed the values indicated in table 1 (A-B). The ducts must be certified for this specific use and for a temperature in excess of 100°C. The flue terminal must be certified to EN 1856-1.

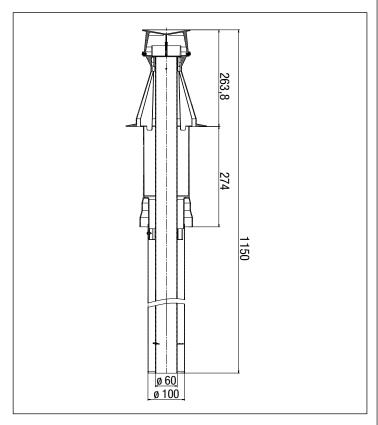
Configuration C53: Do not fit the flue and air duct terminals on opposite walls of the building.



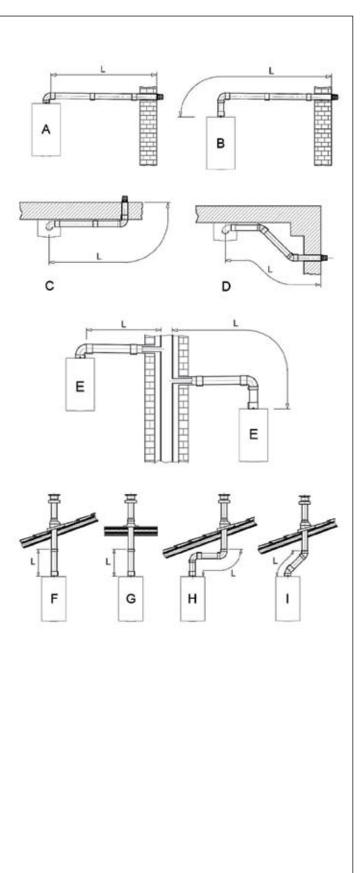
Flue installation requirements Luna Platinum+ 1.12 GA - 1.18 GA - 1.24 GA - 1.32 GA - 24 GA - 33 GA



Cod. KHG 71409351 PP vertical chimney terminal Ø 80/125



Cod. KUG 71413581 PP vertical chimney terminal Ø 60/100

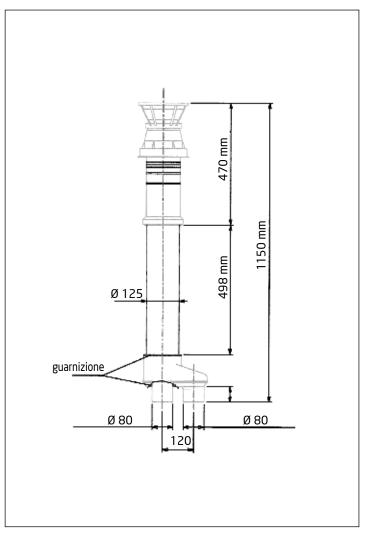


Coaxial flue system accessories Luna Platinum+ 1.12 GA - 1.18 GA - 1.24 GA - 1.32 GA - 24 GA - 33 GA

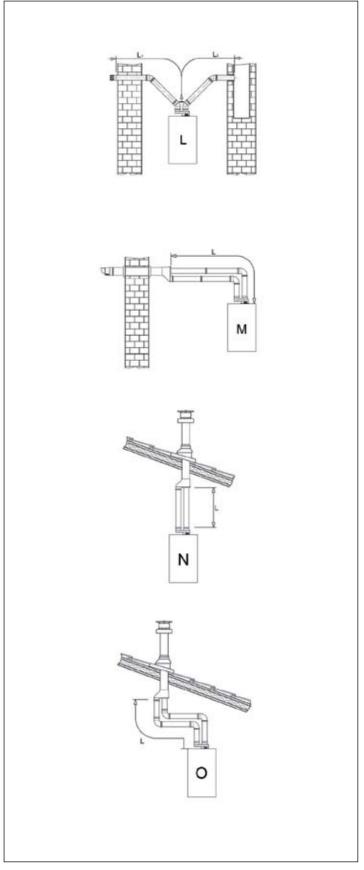
Picture	Description	Code
(=	PP coaxial flue pipes with terminal Ø 60/100 L=750 mm supplied with windproof terminal and sealing collar	KHG 71405961
	PP coaxial flue pipe with terminal Ø 80/125 L=1000 mm supplied with wind proof terminal and sealing collar	KHG 71408891
	PP coaxial flue pipe extension 60/100 L=1000 mm	KHG 71405951
	PP coaxial flue pipe extension 80/125 L=1000 mm	KHG 71408851
	PP coaxial flue pipe extension 60/100 L=500 mm	KHG 71411981
	PP coaxial flue pipe extension 80/125 L=500 mm	KHG 71408861
	PP coaxial 90° bend - Ø 60/100	KHG 71405971
	PP coaxial 87° bend - Ø 80/125	KHG 71408871
	PP coaxial 45° bend - Ø 60/100	KHG 71405981
	PP coaxial 45° bend - Ø 80/125	KHG 71408881
	Internal sealing collar Ø 100	KHG 71401771
	PP vertical chimney terminal Ø60/100	KUG71413581
	Pitched roof tile Ø 100	KHG71403661
•	PP vertical chimney terminal Ø 80/125	KHG 71409351
	PP reduction from Ø 80/125 to 60/100	KHG 71409391
	Flat roof tile to be used with a vertical chimney terminal Ø 80/125	KHG 71409361
	Pitched roof tile to be used with a vertical chimney terminal Ø 80/125; it is adjustable from 15° to 45°	KHG 71409371



Dual flue system installation Luna Platinum+ 1.12 GA - 1.18 GA - 1.24 GA - 1.32 GA - 24 GA - 33 GA



Cod. KHG 71409351 + KHG 71409381 Dual flue pipes vertical chimney terminal



Dual flue system accessories Luna Platinum+ 1.12 GA - 1.18 GA - 1.24 GA - 1.32 GA - 24 GA - 33 GA

Picture	Description	Code
33	Orientable dual flue system	7102689
88	PP dual flue system Ø 80 it includes: flue reduction, intake connection	KHG 71405911
8	PP vertical flue system B23 type installation	KHG 71411101
	PP reduction from Ø 80 to Ø 60	KHG 71407561
	PP pipe extension Ø 80 L=1000 mm	KHG 71405941
	PP pipe extension Ø 80 L=500 mm	KHG 71405991
	PP pipe extension Ø 80 L=250 mm	7107183
	PP pipe extension Ø 60 L=1000 mm	KHG 71407531
	PP pipe extension Ø 60 L=500 mm	KHG 71407521
	PP 90° bend Ø80	KHG 71405921
	PP 90° bend Ø60	KHG 71407541
	PP 45° bend Ø80	KHG 71405931
	PP 45° bend Ø60	KHG 71407551
輿	Pipe Ø 80 centring kit (pack of 5)	KHG 71403741
	Clamp centring kit Ø 80	KHG 71410611
	PP Reduction M/F from Ø 80 to Ø 50 ⁽¹⁾	7107175
	PP Tube extension Ø 50 L=500 mm ⁽¹⁾	7107174
	PP Tube extension Ø 50 L=1000 mm ⁽¹⁾	7107057
	PP Tube extension Ø 50 L=2000 mm ⁽¹⁾	7107058



Dual flue system accessories Luna Platinum+ 1.12 GA - 1.18 GA - 1.24 GA - 1.32 GA - 24 GA - 33 GA

Picture	Description	Code
	PP 90° bend Ø 50 ⁽¹⁾	7107060
	PP 45° bend Ø 50 (1)	7107059
(CO	PP 90° flue terminal Ø 50 ⁽¹⁾	7107176
ĮĮ)	Pipe Ø 60 centring kit (pack of 5)	KHG 71405151
	Pipe Ø 80 supporting bracket (pack of 5)	KHG 71403731
	Internal sealing collar Ø 80	KHG 71401851
	External sealing collar Ø 80	KHG 71401841
	Coaxial vertical chimney terminal Ø 80/125	KHG 71409351
8	Dual flue pipes adapter for coaxial chimney Ø80/125	KHG 71409381
	Flat roof tile Ø 125 to be used with a vertical chimney terminal	KHG 71409361
	Pitched roof tile Ø 125 to be used with a vertical chimney terminal; it is adjustable from 15° to 45°	KHG 71409371
	Dual flue terminal Ø 80	KHG 71401041
	Dual flue terminal Ø 60	KHG 71403721
	PP flexible pipe Ø 80 L= 1,5 m	KHG 71410571
	PP flexible pipe Ø 80 L= 20 m	KHG 71410581
	PP tee joint Ø 80 with supporting bracket and condensate drainings	KHG 71410591
	PP 90° bend Ø 80 with supporting bracket	KHG 71410601
×	Flexible centring kit Ø 80 (pack of 3)	KHG 71410621
	Triple lips gaskets kit Ø 80 (pack of 5)	KHG 71411121

Boiler general accessories

Neutralizer filter to process the water deriving from the condensation of BAXI wall hung condensing boilers ${\it Code\ KHG\ 71412561}$



Neutralizer kit for wall hung boilers up to 120 kW

Maximum condensate water flow	l/h	15
Max potentiality of the boiler	kcal/h	43.000 - 103.000
Max potentiality of the boiler	kW	up to 120
Maximum working pressure	bar	4
Maximum temperature of the water content	°C	Corresponding to the maximum temperatures of the condensate waters
Min/Max room temperature	°C	5-40
Diameter	mm	100
Height	mm	260

Picture	Description	Code
	Polyphosphate batcher	KHG 71402301
	Polyphosphate recharge (pack of 4)	KHG 71402431
	Condensate drain kit for condensing boilers up to 45 kW	7213162



Quality Environment Safety

are Baxi strategic aims and the awarded certifications ensure compliance with the specific regulations

BAXISPA

36061 BASSANO DEL GRAPPA (VI) - ITALY Via Trozzetti, 20 marketing@baxi.it www.baxi.it

The Company assumes no responsibility for any possible contents mistakes, and reserves the right to make changes in products, due to technical or commercial demands, at any time without notice.

Baxi S.p.A. 03-15 (E)