



*Lamborghini*  
CALORECLIMA

AZIENDA CERTIFICATA ISO 9001



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PLEASE MAKE SURE THAT THE  
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TENGAN LA AMABILIDAD DE  
ENTREGARLE AL USUARIO EL  
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AO SR. UTENTE

CALDAIA MURALE A GAS CON BOLLITORE AD ACCUMULO - ALTO RENDIMENTO - MODULANTE  
WALL-HUNG GAS BOILER WITH STEEL WATER-HEATER - HIGH EFFICIENCY - MODULATING UNIT  
CALDERA MURAL A GAS CON ACUMULADOR - ALTO RENDIMIENTO - MODULANTE  
CALDEIRA DE MURO À GÁS COM FERVEDOR PARA ACUMULAÇÃO - ALTO RENDIMENTO - MODULÁVEL



*Vela X* **N 24 MBS/IT**

MANUALE DI  
INSTALLAZIONE E  
MANUTENZIONE

INSTALLATION  
AND MAINTENANCE  
MANUAL

MANUAL PARA  
LA INSTALACIÓN Y  
EL MANTENIMIENTO

MANUAL DE  
INSTALAÇÃO E  
MANUTENÇÃO

GB

Read carefully all warning and instructions contained in this manual as they give important safety instructions regarding installation and maintenance. Keep this manual for future reference.

Installation must be carried out by qualified personnel who will be responsible for respecting existing safety regulations.



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## *Congratulations...*

.....on an excellent choice. We thank you for the preference accorded to our products. LAMBORGHINI CALORECLIMA has been actively present in Italy and throughout the world since 1959 with a widespread network of agents and concessionary agents to constantly guarantee the presence of our product on the market.

Alongside this is the support of a technical service, "LAMBORGHINI SERVICE", which is entrusted with the qualified servicing of the product.

For the installation and positioning of the boiler:  
**CAREFULLY OBSERVE THE LOCAL REGULATIONS IN FORCE**



## GENERAL INSTRUCTIONS

- This booklet constitutes an integral and essential part of the product. Read carefully the instructions contained in this booklet as they provide important directions regarding the safety of installation, use and maintenance. Preserve this booklet with care for any further consultation. The installation of the boiler must be carried out in compliance with current regulations, according to the instructions of the manufacturer and by qualified personnel. An incorrect installation can cause injury or damage to persons, animals and objects, for which the manufacturer cannot be held responsible.
- After removing the packaging materials, check the content integrity. In case of doubt, do not use the unit and contact the supplier. The packaging material (wooden crates, nails, clips, plastic bags, foam, etc.) must not be left within reach of children as they are potential sources of danger.
- This boiler is designed to heat water to a temperature below boiling (atmospheric pressure). It must be connected to a heating system compatible with its performances and output.
- This appliance should be destined only for the use for which it has been expressly envisaged. Any other use is to be considered improper and therefore dangerous. The manufacturer cannot be considered responsible for any damages caused from improper, erroneous or unreasonable use.

**ALL INSTALLATION, MAINTENANCE AND GAS CONVERSION OPERATIONS MUST BE CARRIED OUT BY AUTHORISED SKILLED TECHNICIANS.**

**TO ENSURE THAT BOILER IS INSTALLED CORRECTLY AND THAT IT FUNCTIONS PROPERLY, WE RECOMMEND THAT ONLY LAMBORGHINI ACCESSORIES AND SPARE PARTS BE USED.**

**ON NOTICING THE SMELL OF GAS DO NOT TOUCH ANY ELECTRIC SWITCH. OPEN DOORS AND WINDOWS. SHUT OFF THE GAS TAPS.**

**INSTALL THE BOILER ON WALLS WHICH ARE AS WIDE AS OR WIDER THAN THE BOILER ITSELF.**



## DESCRIPTION

These boilers are fully automatic and gas control is effected by an electronic control unit having the following characteristics:

- continuous modulation mode on both circuits;
- possibility to adjust the heating output;
- possibility to adjust the slow ignition;
- anti-legionella function

They are equipped with:

- Safety flow switch;
- Total safety thermostat;
- High efficiency flue gas exchanger;
- 60-liter tank in stainless steel for plenty of hot water
- Electric 3-way valve

### **VELA X N 24 MBS W TOP**

Equipped with electronic control unit for automatic ignition and ionization electrode flame control.

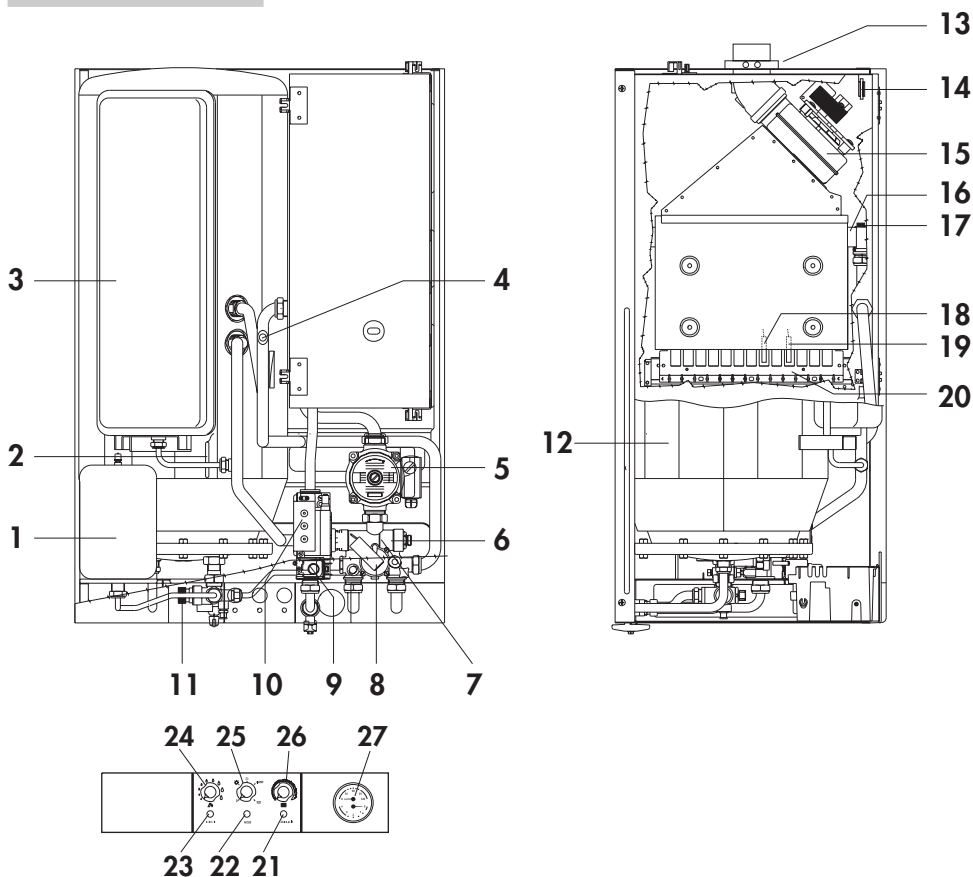
To ensure safe operation, the electric fan is controlled by a pressure switch.

Flue gas exhaust can be made by means of the following:

- a flue pipe concentric with the air intake pipe;
- a double pipe, one for flue gas exhaust and the other for combustion air intake.



## MAIN COMPONENTS

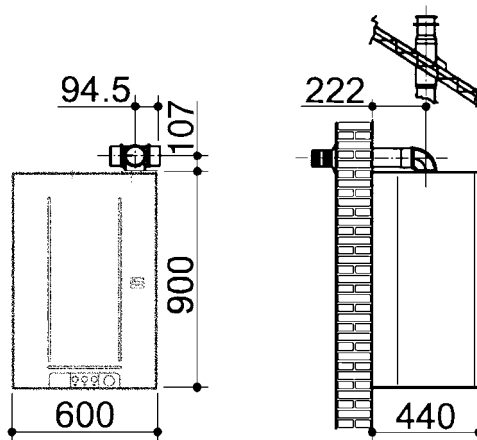


### LEGEND

- |                            |  |                                       |
|----------------------------|--|---------------------------------------|
| 1 Hot water expansion tank | 11 Hot water circuit:<br>- 8-bar safety valve<br>- Non-return valve<br>- Inspection filter | 18 Control electrodes                 |
| 2 Water-heater sensor      | 12 Stainless steel water-heater  | 19 Ignition electrodes                |
| 3 Heating expansion tank   | 13 Taken combustion test   | 20 Burner                             |
| 4 Delivery sensor          | 14 Fume pressure switch  | 21 Malfunction warning light          |
| 5 Circulator               | 15 Fume fan  | 22 ON/OFF warning light               |
| 6 Electric 3-way valve     | 16 Fume exchanger  | 23 Lock-out warning light             |
| 7 Automatic By-Pass        | 17 Total safety thermostat   | 24 Hot water adjustment potentiometer |
| 8 Safety flow switch       |  | 25 Function selector                  |
| 9 Modulating coil          |  | 26 Heating adjustment potentiometer   |
| 10 Gas valve               |  | 27 Thermohydrometer                   |



## DIMENSIONS mm



## TECHNICAL FEATURES

MODEL	Thermal capacity				Min. thermal capacity				Hot water supply			Operating pressure		Expansion tank		Weight
	Input		Output		Input		Output		Supply Δ 30°C	Peak output in first 10 minutes	Water heater capacity	Heating circuit max.	Hot water circuit max.	Heating	Hot water	
	kW	kcal/h	kW	kcal/h	kW	kcal/h	kW	kcal/h	l/min	l	l	bar	bar	l	l	
VELA X N 24	26	22360	24,36	20950	12,1	10406	10,68	9185	11,4	157	65		8	8	2	68

Boiler version: mod. MBS type C12-C32-C42-C52-C62-C82

Max. water temperature  $90^\circ\text{C}$

Category: II 2H3+

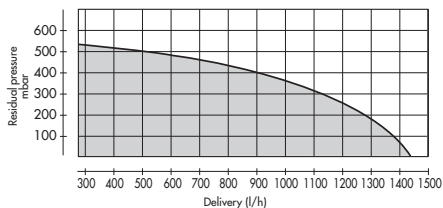
Rated gas pressure: Natural gas 20 mbar

B 28/30 mbar - P 37 mbar

## CIRCULATING PUMP FEATURES

System delivery/pressure

### VELA X N 24 MBS W TOP/IT



Safety flow switch minimum cut-in threshold  $\Delta P$  1.2 m



## GAS - NOZZLE CALIBRATION

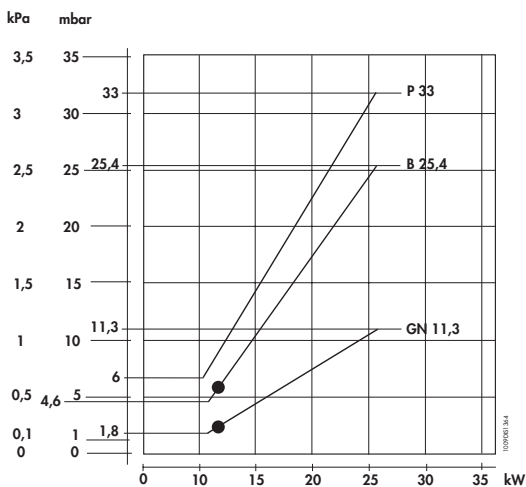
The boilers leave the factory calibrated and ready to operate with NATURAL GAS and LIQUID GAS.

For proper calibration, see the table below:

Gas type	Jets pressure mbar VELA X N 24		Delivery VELA X N 24	Burner jets VELA X N 24	L.C.V.
	min.	max.	m <sup>3</sup> /h	Ø mm.	kcal/h
<b>NATURAL GAS</b> (G20-20mbar)	1,8	11,3	2,7	1,25	8.127
<b>LIQUID GAS B</b> (G30-28/30mbar)	4,6	25,4	0,78	0,77	29.000
<b>LIQUID GAS P</b> (G31-37mbar)	6	33	1	0,77	22.000

## BURNER PRESSURE CURVES - OUTPUT

### VELA X N 24 MBS



- Slow ignition adjustment  
3 mbar NATURAL GAS  
7,5 mbar LIQUID GAS





## ELECTRICAL CONNECTIONS - WIRING DIAGRAMS

The boiler must be connected to an earthed, single-phase 230V-50 Hz mains supply by means of a three-wire cable, ensuring that connections to the LINE and NEUTRAL terminals are made correctly.

A bipolar switch must be used with contacts opening to at least 3 mm.

The power lead must only be replaced by another with the following characteristics: "HAR H05 vv-F" 3 X 1.00 mm<sup>2</sup>. **(You are strongly advised to use original LAMBORGHINI accessories and spare parts only).**

**Installation must be made in compliance with safety REGULATIONS IN FORCE.**

**Make a good earth connection.**

Voltage	Frequency	Absorbed power kW	Protection index	Noise level dB (A)
V	Hz	VELA X N 24	IP	VELA X N 24
230	50	0,150	X4D	46

To gain access to the electrical panel which houses the power supply terminal block and any connection to a room thermostat, proceed as follows:

- Disconnect the boiler power supply
- Undo the two grating screws (fig. 1)
- Undo the four shell attachment screws **A** (fig. 2)
- Remove the shell (fig. 3)
- To gain access to the electrical and electronic components loosen screws **B** and pull the entire panel outwards (fig. 4). Tilt it downwards and undo the screws **C** on the cover **D**

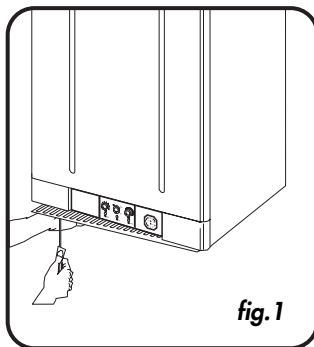


fig.1

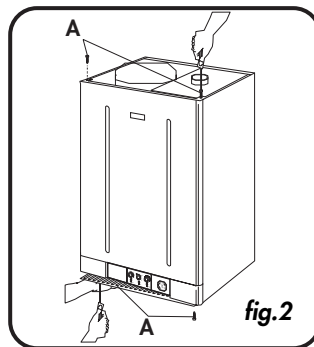


fig.2

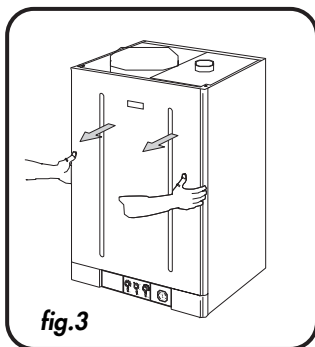


fig.3

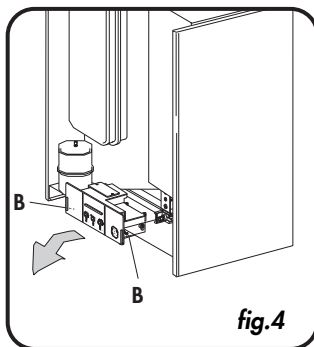


fig.4

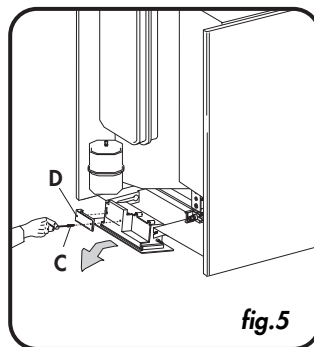
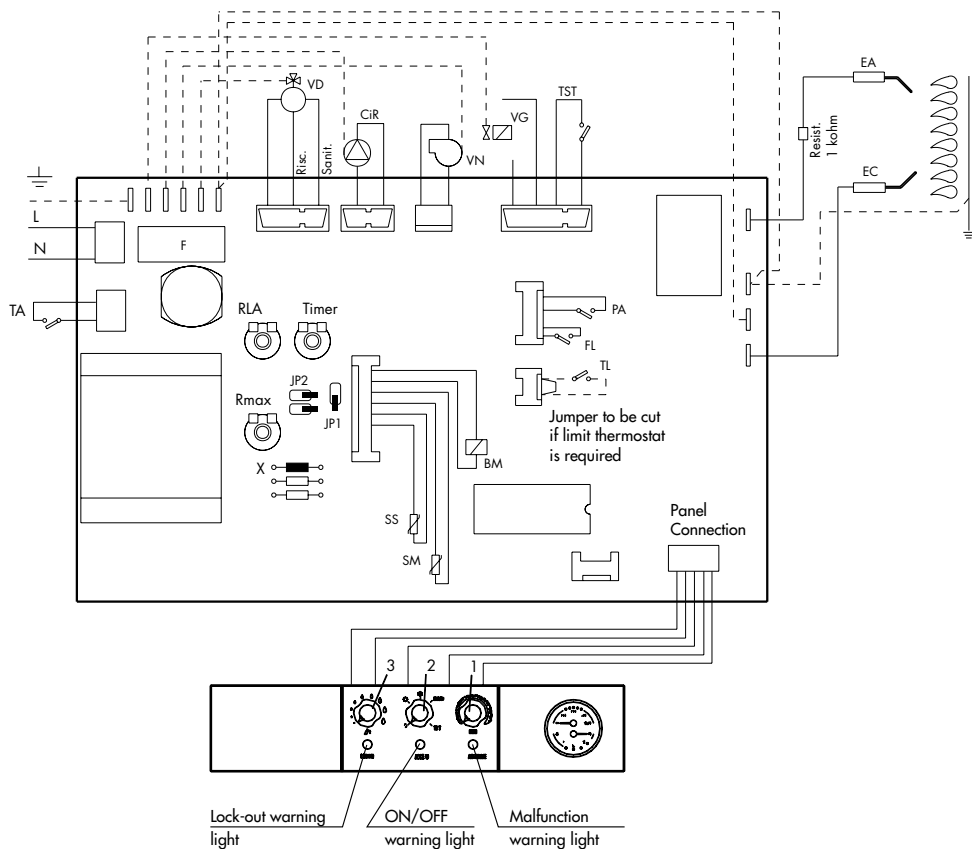


fig.5



## ASSEMBLY DIAGRAM



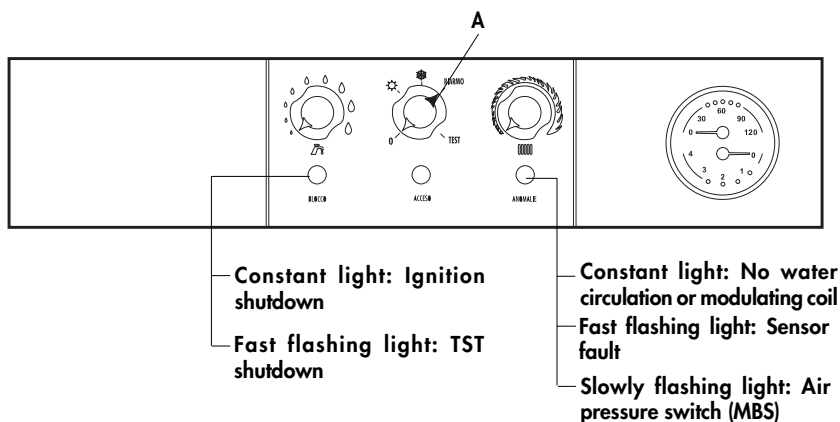
## CONTROL PANEL

## LEGEND

<b>BM</b>	Modulating coil	<b>RLA</b>	Slow ignition adjustment	<b>X</b>	Resistor to be cut for low temperatures
<b>CiR</b>	Heating circulator	<b>Rmax.</b>	Heating max. power adjustment	<b>1</b>	Heating potentiometer
<b>EA</b>	Ignition electrode	<b>SM</b>	Delivery sensor	<b>2</b>	Selector: Off
<b>EC</b>	Control electrode	<b>SS</b>	Hot water sensor		Summer
<b>F</b>	Fuse	<b>TA</b>	Room thermostat (if any)		Winter
<b>FL</b>	Safety flow switch	<b>TL</b>	Limit thermostat (if any)		Reset
<b>JP1</b>	Methane/LPG selector	<b>TST</b>	Safety thermostat		Test
<b>JP2</b>	Post-circulation selector	<b>Timer</b>	Boiler timer adjustment device	<b>3</b>	Hot water potentiometer
<b>L</b>	Line 230 V 50 Hz	<b>VD</b>	Boiler timer adjustment device		
<b>N</b>	Neutral	<b>VG</b>	Gas valve		
<b>PA</b>	Air pressure switch	<b>VN</b>	Fan		



## MULFUNCTIONS AND ADJUSTMENTS



Should the boiler shut down it must be reset by rotating function selector to the reset position A.

### Legend:



**On**



**Off**



**JP1**

**On** LPG

**Off** METHANE



**JP2**

**On**  
(post-circ. off)  
heating

**Off**  
post-circ.  
on **2.5 minutes**



Resistor R150 cut, floor heating temp. set to 30/40°C.  
Resistor R150 uncut, heating temperature 35/80°C.



**RLA**  
Increase

Slow ignition adjustment



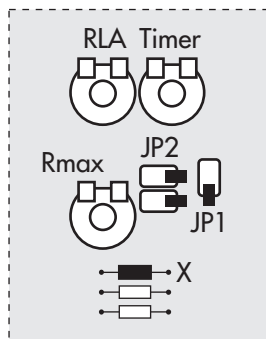
**R max**  
Increase

Max. heating power adjustment



**Timer**  
Increase

Boiler timer adjustment





## WATER CONNECTION

Fit the supporting hooks and attach the assembly template, moving it up to the wall; fit all the pipes, starting with the end pipe fittings already mounted on the template: system supply, system return, cold water, hot water, any gas pipes and electric mains leads with room thermostat.

Once the pipes have been fitted, the end pipe fittings can be removed and ordinary caps fitted, ready for hydraulic tests to be carried out. The template can be removed or, if left in place, will be embedded in the wall once finishing operations have been completed (plaster and tiles); only the two supporting hooks will protrude from the wall, as well as an opening for the connections. Attach the boiler to the hooks through the holes at the back of the frame and push it up against the finished wall. Make the necessary hydraulic connections.

### SUGGESTIONS ON HOW TO PREVENT VIBRATIONS AND NOISE IN SYSTEMS

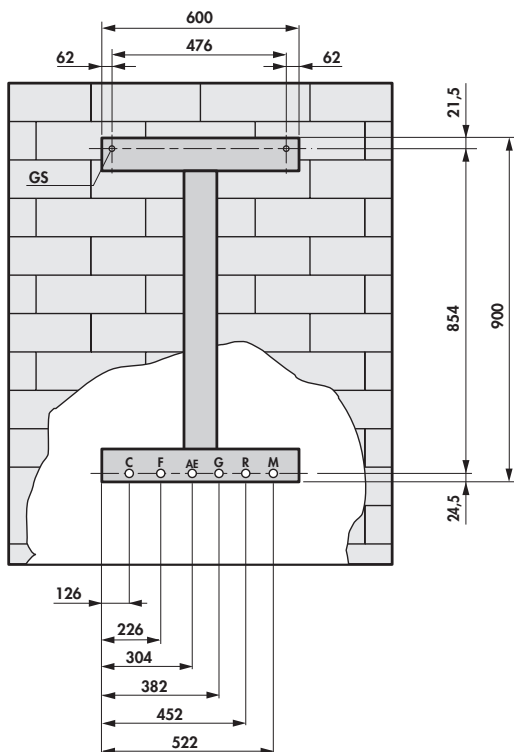
- avoid using pipes of small diameter;
- avoid using tight elbows and sharp reductions in flow cross-section;
- hot flushing of the system is recommended to eliminate impurities originating in pipes and radiators (particularly oil and grease) that could risk damaging the pump.

#### LEGEND

- C** Hot water Ø 1/2"  
**G** Gas Ø 1/2" - Ø 3/4" (see tap supplied with the boiler)  
**F** Boiler water supply Ø 1/2" (cold)  
**AE** Electrical supply  
**M** System delivery Ø 3/4"  
**R** System return Ø 3/4"

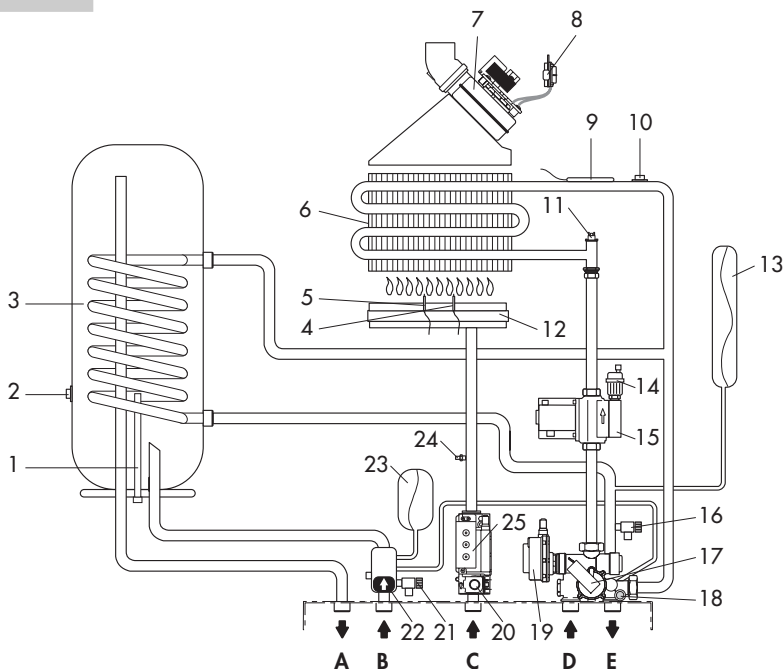
**GS** Holding hooks Ø10 mm.

**NOTE:** Provide female water connections.





## WATER CIRCUIT



### LEGEND

<b>A</b>	Hot water outlet	<b>11</b>	Total safety thermostat
<b>B</b>	Cold water inlet	<b>12</b>	Burner
<b>C</b>	Gas	<b>13</b>	Expansion tank
<b>D</b>	System return	<b>14</b>	Automatic air bleed valve
<b>E</b>	System delivery	<b>15</b>	Circulator
<b>1</b>	Magnesium anode	<b>16</b>	Heating safety valve
<b>2</b>	Water-heater sensor	<b>17</b>	Safety flow switch
<b>3</b>	Water-heater	<b>18</b>	Filling tap
<b>4</b>	Ignition electrode	<b>19</b>	Electric 3-way valve
<b>5</b>	Control electrode	<b>20</b>	Modulating coil
<b>6</b>	Exchanger	<b>21</b>	Hot water safety valve
<b>7</b>	Fan	<b>22</b>	Non-return valve
<b>8</b>	Fumes pressure switch	<b>23</b>	Hot water expansion tank
<b>9</b>	Thermometer	<b>24</b>	Pressure reading point
<b>10</b>	Delivery sensor	<b>25</b>	Gas valve



## INSTALLATION

### **To be carried out by qualified personnel.**

The installation must be in compliance with the stipulations of the law regarding the evacuation of combustion materials according to the REGULATIONS IN FORCE.

The gas fume evacuation must be effected with a pipe of a diameter not less than that required by the boiler and it must be connected to a flue pipe suitable for the capacity of the installation.

For connection of appliances to smoke conduits:

- a) they must be easy to dismantle;
- b) they must be sealed and of a material able to resist the products of combustion and their possible condensation;
- c) they must not have regulation devices (gate valves). If such devices are already in operation they must be eliminated;
- d) the connection itself must not protrude inside the flue pipe but stop before the internal face of the same.

## **GAS CONNECTION**

### **Carry out the gas connection in accordance with the regulations in force.**

The boiler must be connected to the installation with a rigid metal pipe or a flexible stainless steel pipe with continuous wall of the approved type. The flexible corrugated metal pipes must be installed in such a way that their length, in a state of maximum extension, is not greater than 2000 mm. The boilers are calibrated and tested to function with NATURAL GAS and LIQUID GAS, category II 2H3+, with rated pressures of 20 mbar, 28/30 mbar and 37 mbar respectively.

## **PUTTING THE BOILER INTO SERVICE**

- Proceed with the clearing out of air.
- Check that there are no gas leaks (use a soapy solution or equivalent product).

## START-UP

### **REFILLING INSTALLATION**

Open the supply tap slowly until the pressure of the installation, indicated by the hydrometer, is raised to the value of 1.5 bar, then close it again. Verify that the automatic air bleed valve on the circulator has its cap loosened. Operate the circulator repeatedly to release any air remaining in the circuit.

### **SWITCHING ON**

Open the gas tap and turn the selector switch to the desired position. The burner will ignite automatically. Should the burner fail to ignite check the lock-out warning light to see whether it is on, and if so turn the selector switch to the RESET position so that the boiler repeats the ignition sequence.

Then, adjust heating and hot water temperatures as desired via the appropriate controls.



## FLUE EXHAUST CONNECTION

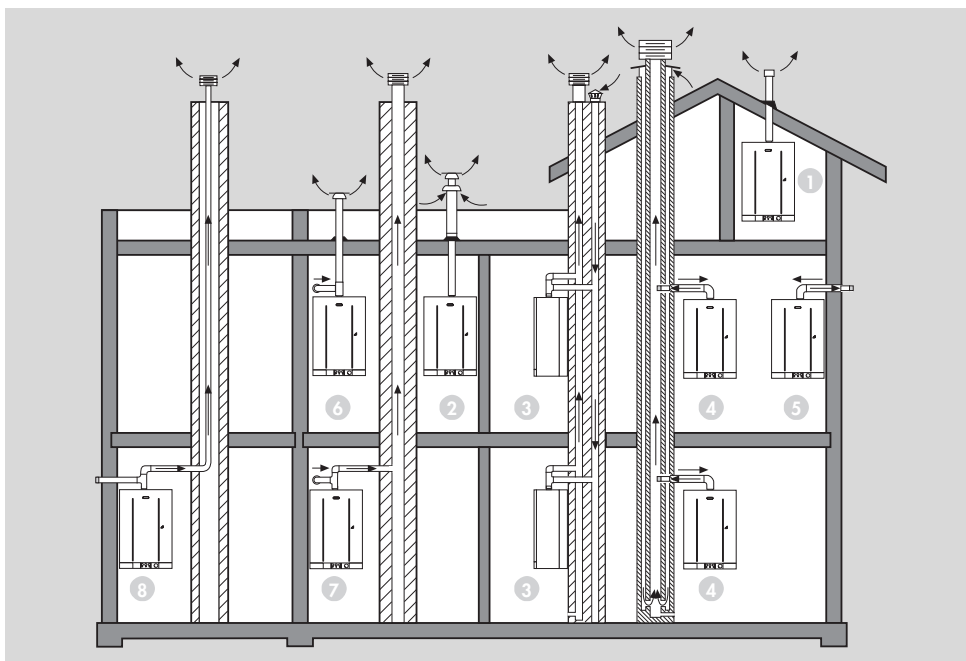
The boiler is for combustion in a sealed chamber and does not require any special ventilation, it can also be located in small rooms, lumber-rooms, laboratories. In addition, there are various possibilities for combustion fume evacuation and external air intake. Basically the boiler is designed for two types of fume evacuation/air intake:

- fume evacuation/air intake concentric pipes system,
- fume evacuation/air intake double pipes system.

In this way it is possible, by using suitable kits, to connect the boiler to concentric flues, ventilating flues, separate flues, etc. Some possible solutions are indicated below.

### FUME EVACUATION/AIR INTAKE

- 1 Concentric flue pipe, from the roof C32
- 2 Concentric flue pipe, from the terrace C32
- 3 Double flue pipe from separate flues C42
- 4 Concentric flue pipe, connected to concentric flues C42
- 5 Concentric flue pipe, from an external wall C12
- 6 Double flue pipe from the terrace C52
- 7 Double flue pipe from single flue C82
- 8 Double flue pipe C62



For positioning and for distances of draught terminals from windows, doors, etc. see **regulations in force**.

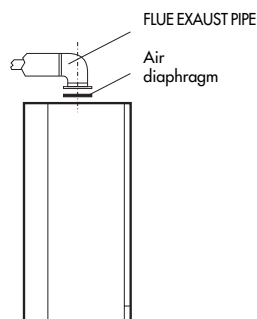
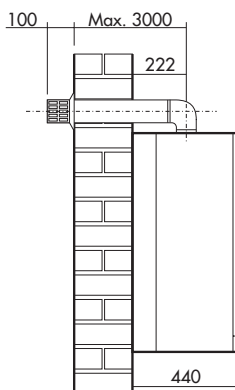
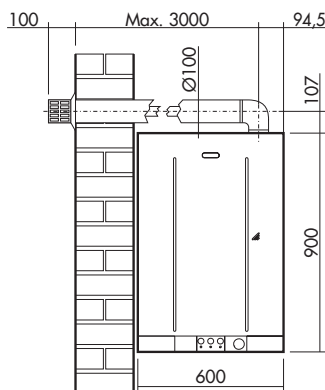


## FLUE EXHAUST INSTALLATION

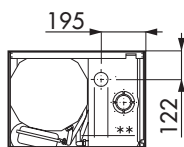
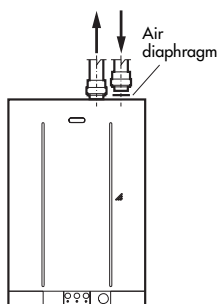
### CONCENTRIC FLUE PIPE

Fit the concentric elbow pipe positioning it on the desired direction and insert on it the sealing gasket. Then fit the appropriate diaphragm (see table below).

Fit the air intake and flue exhaust pipes, observing the distances indicated on the installation scheme. The flue pipe should slope slightly outward.



### DOUBLE FLUE PIPE



\*\* Air intake Ø 80

	CONCENTRIC FLUE PIPE		DOUBLE FLUE PIPE		
	Max. length 1 m	Over 1 m	from 0,5 to 10 m	from 10 to 20 m	Over 20 m
VELA X N 24	Diaphr. Ø 77 mm	Diaphr. Ø 88 mm	Diaphr. Ø 44 mm	Diaphr. Ø 48 mm	No diaphr. (hole standard)

Maximum length of CONCENTRIC FLUE PIPE 3 m

Maximum length of DOUBLE FLUE PIPE

(Intake + Exhaust) 20 m VELA X N 24

Installing an elbow to connect the boiler to the chimney will cause a drop in pressure.

The values set out in the table below indicate the necessary modifications to the length of the linear pipes.

TYPE OF INSTALLATION	ELBOW FITTED AT 90°	ELBOW FITTED AT 45°
Concentric flue pipe	1 m	0,5 m
Separate intake/exhaust	0,6 m	0,3 m

ATTENTION: Use only air intake/ fume evacuation kits produced by Lamborghini Caloreclima.





## ADJUSTMENTS

he boilers have a fast opening gas valve. The necessary calibration for gas flow-rate may be obtained from a double modulator coil. Calibration of the slow ignition (pre-calibrated in the factory) is electronically done and is adjustable (for optimising and for gas type conversion) by the trimmer **RLA** on the electronic board. The necessary thermal output for the heating system can be regulated by manipulating the trimmer **R MAX**. All the boilers are calibrated in the factory to release 70% of their maximum heating capacity. By manipulating the trimmer **timer** the waiting time for re-starting the boiler may be varied. All adjustments must be made on the basis of the specific characteristics of the apparatus in use. It is necessary to check the inlet and outlet pressures at the pressure plugs. After checking, tighten the bolts properly.

### ADJUSTMENT OF OUTLET PRESSURE

Maximum pressure:

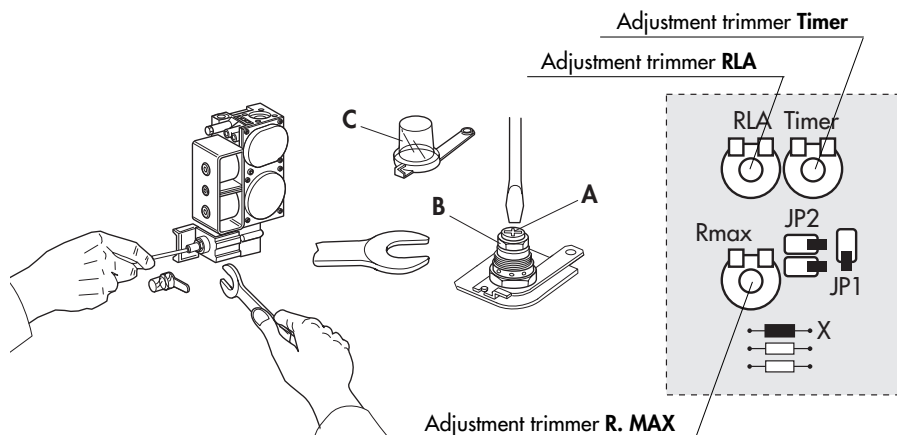
- Turn the function selector to the TEST position. The TEST function remains active for 15 minutes max.
- Power the modulator with the proper voltage.
- By turning nut **B** clockwise (use a 10 mm wrench), the outlet pressure increases.

Minimum pressure screw **A** (adjust only after the calibration of the maximum outlet pressure has been completed):

- Disconnect modulator feeding.
- While blocking the nut **B** with a wrench, turn the screw **A** clockwise to increase the outlet pressure.

After calibration:

- Check the maximum and the minimum pressures and adjust them if necessary.
- Fit the plastic cap **C**.
- Turn the function selector to the required position.



**ATTENTION:** Use only air intake/ fume evacuation kits produced by Lamborghini Caloreclima.



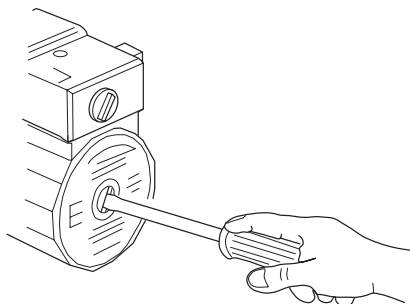
## SWITCHING OFF

### TEMPORARY SWITCHING ON/OFF

Proceed in one of the following ways:

- use the room thermostat;
- use the adjustment potentiometers (on the instrument panel);

**NOTE:** with a new boiler or after a long period of inactivity, one can check for the locking of the circulating pump. In this case it is necessary to unscrew the front stopper and make the motor shaft rotate with a screwdriver.



## MAINTENANCE

Regular inspection and servicing is required to guarantee continued smooth operation and efficiency of the appliance, within the limits prescribed by current statutory regulations and/or standards.

The frequency of inspection depends on the specific conditions of installation and use. **Annual inspection** by a **Lamborghini Service** authorised technician is recommended. It is important to remember that servicing and repairs can be carried out only by persons with qualifications required by law, and specific knowledge in the areas of safety, efficiency, environmental hygiene and combustion. The inspection/service technician must be familiar with the latest construction and functional specifications of the appliance intrinsic to correct maintenance.

When working on or maintaining structures positioned near flue ducts and/or extraction systems and accessories switch off the appliance, and having completed the work, have a qualified technician check the system to verify efficient operation.

**IMPORTANT:** before doing any cleaning or maintenance work on the appliance, disconnect from the power supply at both the panel switch and the isolating switch, and shut off the gas supply to the boiler by closing the burner inlet valve. Having taken all the above precautions, the types of operations can be limited to the following:

- removing any oxidation from burners;
- removing any scale from heat exchangers;
- inspection and general cleaning of fan;
- inspection of connections between various sections of pipes (fumes and air);
- general cleaning of pipes;
- external inspection of boiler;
- verifying ignition, switch-off and operation of appliance for both hot water and heating functions;
- inspection of gas and water connection pipelines and fittings for leaks;
- verification of gas consumption at maximum and minimum power;
- verification of flame detection electrode position;



- verification of combustion and efficiency parameters;
- verifying safety in the absence of gas;
- verification of plumbing system pressure;
- inspection of expansion vessel;
- verifying operation of temperature control and safety thermostats;
- checking operation of the recirculation pump;
- checking for leaks (even minimal) of gas from the system, and of combustion gases from the damper or the boiler-flue connector;
- checking the gas flow rate;

**Do not clean** the appliance and/or parts with readily inflammable substances (e.g. petrol, alcohol, etc.)

**Do not clean** panels, painted parts and plastic parts with paint thinners.

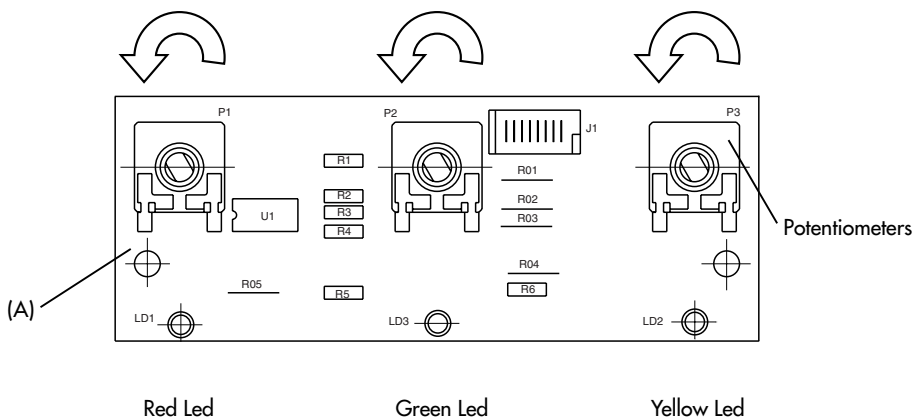
Panels should be cleaned with soapy water only.

## KNOB ASSEMBLY INSTRUCTIONS

If the electronic display board (A) is replaced, the knobs and the control board must be correctly positioned during reassembly.

Before reassembling the new display board, zero set the potentiometers (trimmers) by turning anticlockwise as illustrated in the figure:

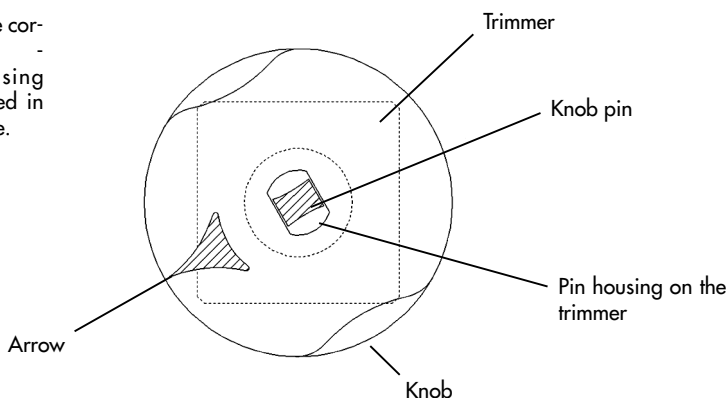
Turn the trimmers to zero set.





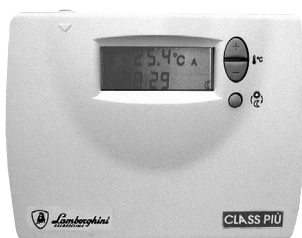
Then remove the knobs from the front panel. Screw the display board onto the back of the panel and insert the knobs so that the arrows on the knobs are set at the minimum value (zero).

Enlarged detail of the correct knob pin - potentiometer housing coupling as described in the instructions above.



If a room thermostat is installed we recommend our chronothermostat CLASS PIU' which, in addition to guaranteeing the comfort of a precise regulation of temperature, offers a notable range of heating programmes; alternatively use a programming digital timer.

**ATTENTION.** The room thermostat with 230 V mains supply must be connected to the earth terminal, or use a class II room thermostat.



Chronothermostat CLASS PIU' (accessory)



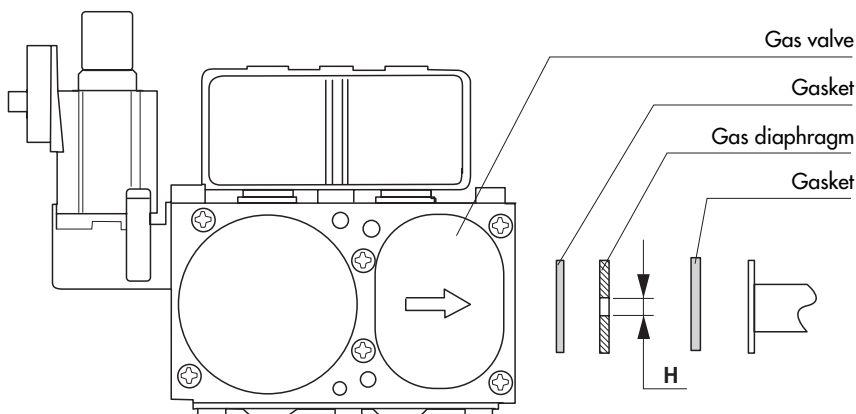
## OPERATION WITH DIFFERENT TYPES OF GAS

### CONVERSION FROM NATURAL GAS TO LIQUID GAS

Replace the burner jets, insert the diaphragm as illustrated in the diagram included with the relevant kit. Shift the jumper JP1 on the modulating board from the NATURAL GAS position to the B-P position. Then adjust properly as described in the “ADJUSTMENTS” chapter on page 38. For information on jets diameter and working gas pressure see the table below.

Gas type	Jets pressure mbar VELA X N 24		Gas flow-rate VELA X N 24	Burner jets VELA X N 24	L.C.V.	NOx class	Gas diaphragm H VELA X N 24
	min.	max.	m <sup>3</sup> /h	Ø mm.	kcal/h		Ø
<b>NATURALE GAS</b> (G20-20mbar)	1,8	11,3	2,7	1,25	8.127	2	-
<b>LIQUID GAS B</b> (G30-28/30mbar)	4,6	25,4	0,78	0,77	29.000	2	5,2
<b>LIQUID GAS P</b> (G31-37mbar)	6	33	1	0,77	22.000	2	5,2

### COMPONENTS FOR OPERATION ON LIQUID GAS





## FAULT-FINDING CHART

FAULT	CAUSE	REMEDY
<b>1 NO IGNITION</b>	<b>A.</b> Gas tap closed <b>B.</b> "Lock-out" button on <b>C.</b> No flame detection <b>D.</b> No ignition spark <b>E.</b> Air inside pipes <b>F.</b> Safety thermostat intervention <b>G.</b> Water not circulating <b>H.</b> Boiler water temperature higher than figure set on the adjustment thermostat	<b>A.</b> Open gas tap <b>B.</b> Reset by pressing <b>C.</b> Neutral and phase inverted <b>D.</b> Call technical service <b>E.</b> Repeat ignition <b>F.</b> Press reset push-button <b>G.</b> Adjust boiler pressure and check circulator <b>H.</b> Adjust thermostat setting on desired temperature.
<b>2 CRACKLING IGNITION</b>	<b>A.</b> Irregular flame <b>B.</b> Insufficient or wrongly adjusted gas flow-rate	<b>A.</b> Call technical service <b>B.</b> Call technical service
<b>3 SMELL OF GAS</b>	<b>A.</b> Leak in pipes circuit (inside and outside boiler)	<b>A.</b> Check the external pipes Check the internal pipes Call technical service
<b>4 SMELL OF UNBURNT GAS AND BAD BURNER COMBUSTION</b>	<b>A.</b> Flue cross-section or height with joint not suitable for the boiler <b>B.</b> Excessive gas consumption - Combustion is imperfect <b>C.</b> Flames tend to detach <b>D.</b> Flames have yellow tips	<b>A.</b> Replace unsuitable components <b>B.</b> Adjust gas flow-rate <b>C.</b> Check/adjust gas valve pressure stabilizer <b>D.</b> Check that air volutes and Venturi cones of the burner are clean If items <b>A-B-C-D</b> have been checked with negative result call technical service
<b>5 CONDENSATION IN THE BOILER</b>	<b>A.</b> Flue cross-section or height not suitable (excessive size) <b>B.</b> Boiler operating at low temperature	<b>A.</b> Replace unsuitable components. <b>B.</b> Adjust boiler thermostat at a higher temperature and check if air intake pipe/flue exhaust connection is correct.
<b>6 COLD RADIATORS IN WINTER</b>	<b>A.</b> Function selector on summer position <b>B.</b> Room thermostat set too low or faulty <b>C.</b> System or radiators closed <b>D.</b> Circulator blocked	<b>A.</b> Place it in winter position <b>B.</b> Adjust thermostat at a higher temperature or replace it. <b>C.</b> Check if system gate valves and radiator taps are opened. If item <b>C</b> has been checked with negative result call technical service <b>D.</b> Unblock with a screwdriver and check electrical supply

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# Lamborghini

**CALORECLIMA**

**AZIENDA CERTIFICATA ISO 9001**

**IT**

**CALDAIA MURALE A GAS CON BOLLITORE AD ACCUMULO  
ALTO RENDIMENTO - MODULANTE  
MANUALE PER L'UTENTE**

**2**

*Alla cortese attenzione del sig. INSTALLATORE:*

Consegnare il presente manuale d'uso all'UTENTE

**GB**

**WALL-HUNG GAS BOILER WITH STEEL WATER-HEATER  
FOR HIGH EFFICIENCY - MODULATING  
USER MANUAL**

**9**

*For the attention of the INSTALLATION TECHNICIAN:*

make sure that this manual is handed over to the USER

**ES**

**CALDERA MURAL A GAS CON ACUMULADOR  
ALTO RENDIMIENTO - MODULANTE  
MANUAL PARA EL USUARIO**

**16**

*A la atención del sr. INSTALADOR:*

Entregar el presente manual para el uso al USUARIO

**PT**

**CALDEIRA DE MURO À GÁS COM FERVEDOR PARA  
ACUMULAÇÃO - ALTO RENDIMENTO - MODULANTE  
MANUAL DO UTENTE**

**23**

*Atenção do Sr. INSTALADOR:*

Entregue este manual de uso ao UTENTE



# Vela X N 24 MBS/IT





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## *Dear User...*

.....you have entered into possession of a product that is the result of a careful design and advanced production systems ensuring high-top operational reliability and saving. Read carefully this guide in order to know any detail concerning the product's operation system.

The "LAMBORGHINI SERVICE" after-sales centres are at your disposal to ensure QUALIFIED MAINTENANCE and PROMPT SERVICE.

LAMBORGHINI CALORECLIMA

For the installation and positioning of the boiler  
**CAREFULLY OBSERVE THE LOCAL REGULATIONS IN FORCE**



## GENERAL INSTRUCTIONS

- This booklet constitutes an integral and essential part of the product and should be preserved for any further consultation.

Read carefully the instructions contained in this booklet as they provide important directions regarding the operation of the appliance, allowing a great saving in its use and maintenance.

- If the appliance is sold or transferred to other people or if you move house and leave your apartment, ensure that the manual remains with the appliance so that it can be used by the new owner.

This appliance should be destined only for the use for which it has been expressly envisaged. Any other use is to be considered improper and therefore dangerous. The manufacturer cannot be considered responsible for any damages caused from improper or unreasonable use.

- Do not touch the parts of the boiler which during the operation become overheated. These parts can be dangerous for children or inexperienced persons.
- Do not obstruct the inlet or dissipation screens.
- Do not make the boiler wet with splashes of water or other liquids.
- Do not rest any object upon the boiler.
- Use of the boiler is prohibited for children or the inexperienced.
- Do not carry out any cleaning of the boiler with inflammable substances.
- Do not deposit containers of inflammable substances in the location where the boiler is situated.
- In the presence of the risk of freezing suitable provisions must be taken which are not however the concern of the boiler manufacturer.

**ALL INSTALLATION, MAINTENANCE AND GAS CONVERSION OPERATIONS MUST BE CARRIED OUT BY AUTHORISED SKILLED TECHNICIANS.**

**TO ENSURE THAT BOILER IS INSTALLED CORRECTLY AND THAT IT FUNCTIONS PROPERLY, WE RECOMMEND THAT ONLY LAMBORGHINI ACCESSORIES AND SPARE PARTS BE USED.**

**ON NOTICING THE SMELL OF GAS DO NOT TOUCH ANY ELECTRIC SWITCH. OPEN DOORS AND WINDOWS. SHUT OFF THE GAS TAPS.**



## INSTRUCTIONS FOR THE USE

- In case of breakdown and/or malfunctioning of the appliance, disconnect it avoiding any attempt of repair or direct intervention.  
Call exclusively professionally qualified personnel.  
Any repair must be carried out by an after-sale service centre "LAMBORGHINI SERVICE" authorised by the manufacturing firm, and using original replacements exclusively.  
Non-observance of the above could compromise the safety of the appliance.  
In order to guarantee the efficiency of the appliance and its proper operation it is indispensable to keep to the manufacturer's directions, by ensuring the periodical servicing of the appliance is carried out by professionally qualified personnel.
- Check the system hydraulic pressure during the first ignition and then periodically by using the hydrometer. Check that readings for the system when cold are within manufacturer-specified limits. Should any falls-off in pressure be noticed contact a qualified technician.
- After each reopening of the gas tap wait a few minutes before restarting the boiler.
- Do not leave the boiler switched on if it is not used for long time: in this case switch gas main supply, electricity and water supply off by their own taps and switches.
- As soon as one decides not to use the appliance further, one should take care to render innocuous those parts liable to be potential sources of danger.
- As soon as one decides to disconnect the boiler definitively, one should ask qualified personnel to effect the related works, then ensure that the main supplies have been disconnected.
- For the power supply to the boiler the use of adaptors, multiple sockets or extensions is not permitted. The use of a switch as indicated by the safety regulations in force must be provided.
- The use of appliances which utilise electrical energy involve the observation of fundamental rules which are:
  - a) not to touch the appliance with parts of the body which are wet or when in bare feet;
  - b) not to pull electrical wires;
  - c) not to expose the appliance to the atmospheric agents;
  - d) not to allow use of the appliance to children or the inexperienced.
- In the case of structural work positioned near the flue pipe, turn off the boiler and at the end of the work ensure that the efficiency of the flue exhaust is verified by qualified personnel.
- On noticing the smell of gas do not touch any electric switch. Open all doors and windows. Shut off the gas taps and call qualified personnel.

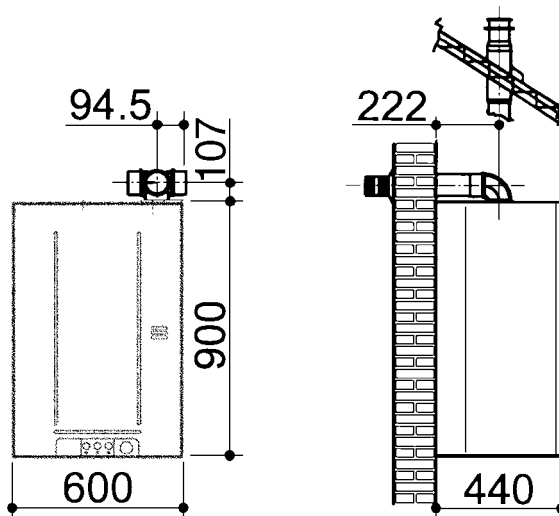


## CHECKS AND MAINTENANCE

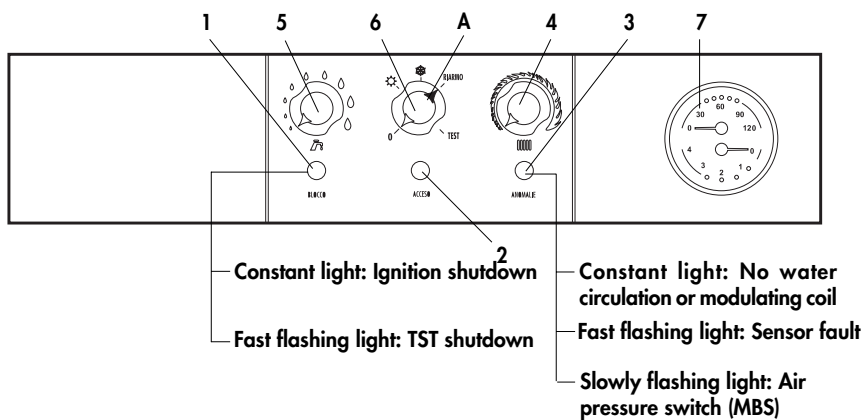
- Before starting up the boiler ask qualified personnel "LAMBORGHINI SERVICE" to check:
  - a) that the data on the information plate corresponds to that required by the gas, electrical and water supply networks;
  - b) that the pipes which branch off from the boiler are lined with suitable thermally-insulated sheathing;
  - c) the proper functioning of the flue pipe;
  - d) that the comburent air flow and the fumes evacuation take place properly in accordance with the regulations in force;
  - e) that correct aeration and maintenance are possible in case of installation in the furniture.
- The conversion from a gas (methane or B/P) to a gas of another family, which can also be made with the boiler installed, must be made exclusively by qualified personnel.
- Ensure that the installer has connected the boiler and water-heater safety discharge to a waste. In the case of the contrary the intervention of the safety valves could flood the premises. The manufacturer would not be held responsible for this.
- Ensure that the piping of the installation is not used as an earth outlet for other installations; beyond not being ideal for such a use it could in short bring serious damage to the other appliances connected to it.
- Ask qualified personnel "LAMBORGHINI SERVICE" to check:
  - a) the internal and external tightness of the gas system;
  - b) that the gas delivery is that required by the boiler output;
  - c) that the type of gas is suitable for the boiler;
  - d) that the pressure of gas supply is within the values stated on the boiler plate;
  - e) that the gas installation is the correct size and equipped with all the safety and checking devices prescribed by the current regulations.
- Ask periodically to check the proper functioning and the good state of the flue exhaust.
- Ensure that the electrical system has been confirmed by qualified personnel to be adequate for the power required by the appliance itself.
- The electricity supply cable must not be replaced by the user, but by qualified personnel only.
- The electrical safety of the appliance is attained only if the same has been connected to an effective system earthed in accordance with the current regulations. The verification of this fundamental prerequisite should be made by qualified persons as the manufacturer will not be responsible for damage caused by the lack of adequate earthing of the installation.



## DIMENSIONS mm



## CONTROL PANEL AND MUFUNCTIONS



Should the boiler shut down it must be reset by rotating function selector **6** to the reset position **A**.

- |   |                                  |   |                                    |
|---|----------------------------------|---|------------------------------------|
| 1 | Lock-out warning light           | 5 | Hot water adjustment potentiometer |
| 2 | ON/OFF warning light             | 6 | Operation selector                 |
| 3 | Malfunction warning light        | 7 | Thermohydrometer                   |
| 4 | Heating adjustment potentiometer |   |                                    |



## INSTRUCTIONS FOR SWITCHING ON - OPERATION - SWITCHING OFF

### **SWITCHING ON**

Open the gas valve and turn the selector (6) to the required position; the burner ignites automatically. If the burner fails to ignite, check whether or not the lockout (1) and error (3) indicators are alight, and turn the selector (6) to the reset position (A). Turn the selector (6) to the required position. Adjust the heating temperature (4) and hot water temperature (5) as required, using the relative knobs.

### **SWITCHING ON/OFF TEMPORARILY**

Use one of the following methods:

- room thermostat;
- potentiometers (4) and (5) on instrument panel

### **SWITCHING OFF FOR EXTENDED PERIODS**

If the boiler is to remain off for long periods, close the gas valve, turn selector (6) to position (0) and disconnect the appliance from electrical power supply.

### **SUMMER OPERATION**

Turn the selector (6) to Summer position. ☀

Adjust the hot water potentiometer (5) to the required temperature.

### **WINTER OPERATION**

Turn the selector (6) to Winter position ❄

Adjust the heating potentiometer (4) to the required room temperature.

If a room thermostat is installed, it will be the thermostat that controls the heating temperature.

Adjust the hot water potentiometer (5) to the required temperature.

**CAUTION:** when the summer ☀ or winter ❄ position is selected, the ON (symbol) indicator lights up, confirming that the boiler is connected to the power supply.

**CAUTION:** use only 2A/250V – 5x20 fast-acting fuses



## FAULT-FINDING CHART

FAULT	CAUSE	REMEDY
<b>1 NO IGNITION</b>	<b>A.</b> Gas tap closed <b>B.</b> Boiler in lock-out mode <b>C.</b> No flame detection <b>D.</b> No ignition spark <b>E.</b> Air inside pipes <b>F.</b> Safety thermostat intervention	<b>A.</b> Open gas tap <b>B.</b> Reset by pressing <b>C.</b> Call technical service <b>D.</b> Call technical service <b>E.</b> Repeat ignition <b>F.</b> Wait for temperature to lower
<b>2 CRACKLING IGNITION</b>	<b>A.</b> Irregular flame <b>B.</b> Insufficient or wrongly adjusted gas flow-rate	<b>A.</b> Call technical service <b>B.</b> Call technical service
<b>3 SMELL OF GAS</b>	<b>A.</b> Leak in pipes circuit (inside and outside boiler)	<b>A.</b> Call technical service
<b>4 SMELL OF UNBURNT GAS AND BAD COMBUSTION OF THE BURNER</b>	<b>A.</b> Flue section or height with joint not suitable for the boiler <b>B.</b> Excessive gas consumption - Combustion state is imperfect <b>C.</b> Flames tend to move away or have yellow tips	<b>A.</b> Call technical service <b>B.</b> Call technical service <b>C.</b> Call technical service
<b>5 CONDENSATION IN THE BOILER</b>	<b>A.</b> Flue section or height not suitable (excessive size) <b>B.</b> Boiler operating at low temperature	<b>A.</b> Call technical service <b>B.</b> Adjust boiler thermostat at a higher temperature.
<b>6 COLD RADIATORS IN WINTER</b>	<b>A.</b> Function selector on summer position <b>B.</b> Low adjusted or defective room thermostat <b>C.</b> System or radiators closed <b>D.</b> No water warning light on	<b>A.</b> Place it on winter position <b>B.</b> Adjust thermostat at a higher temperature or replace it. <b>C.</b> Check if system gate valves and radiators taps are opened. If item <b>C</b> has been checked with negative result call technical service <b>D.</b> Call technical service

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