



LIPARI PRO TFS

11i - 14i

IST 03 C 1208 - 03

GAS WATER HEATER INSTALLATION, USE AND MAINTENANCE



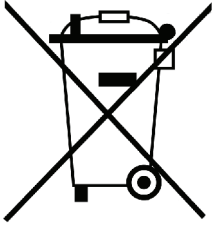
MADE IN ITALY



EN

Translation of the original
instructions (in Italian)

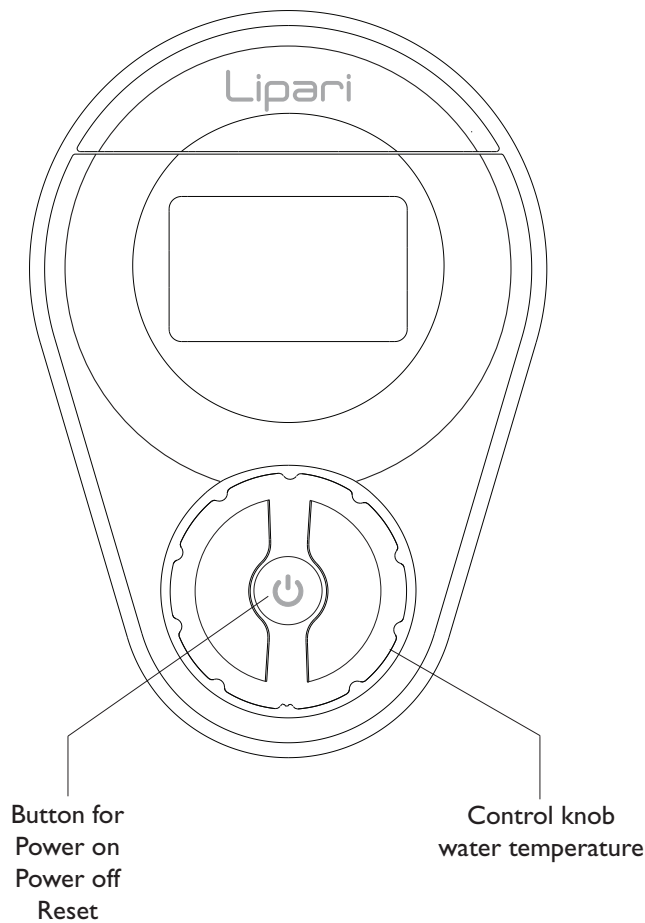
 **fondital**



When the product has reached the end of its serviceable life, it shall be disposed of in an environmentally friendly way and disposed of according to the regulations in force.

Separate collection and recycling of the product avoid negative impact for environment and health, and allows recovery of materials, in order to obtain energy and resources saving.

QUICK-START GUIDE





POWER ON

Press the power on button .

WATER TEMPERATURE ADJUSTMENT



Turn the control knob to the right to increase the temperature and to the left to decrease it (temperature between 37 and 60°C).

POWER OFF

Press and hold the on/off button . As soon as the symbols  begin to flash, release the button.

The appliance will be in the OFF state, the display shows .

RESET

Press and hold the reset button . As soon as the display shows the wording  release the button.

The appliance is available for use.

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Regulations



This appliance is manufactured in accordance with the rules of good practice in compliance with current legislation.

The CE mark on the product means that it conforms to the following European Directives and Regulations:

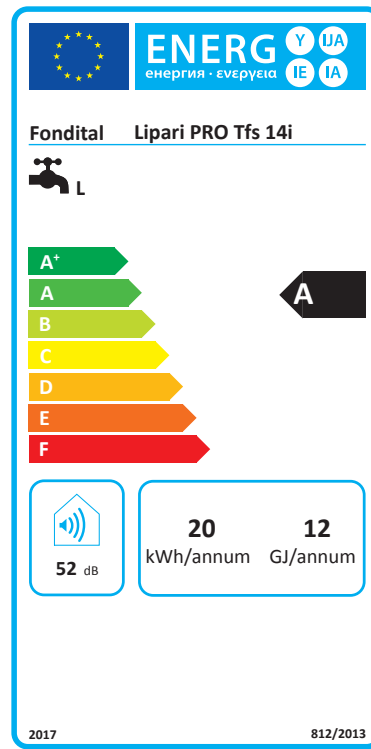
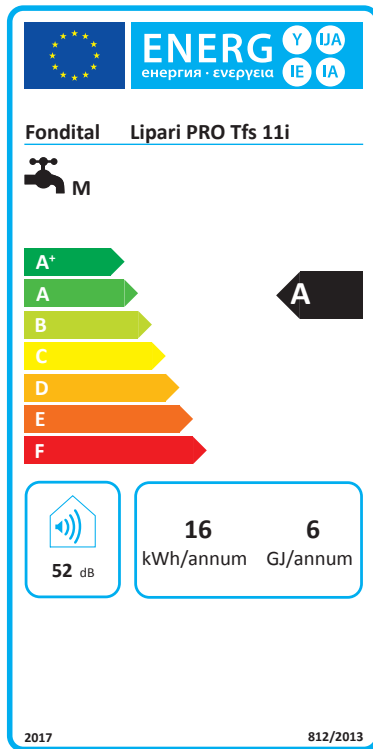
- **Gas appliance regulation (UE) 2016/426**
- **Low voltage directive 2014/35/UE**
- **European standard for gas appliance for the immediate production of domestic hot water UNI EN 26:2015**
- **Electromagnetic compatibility directive 2014/30/UE**
- **Ecodesign directive for energy-related products 2009/125/EC**
- **Regulation (EU) 2017/1369 setting a framework for energy labelling**
- **Delegated regulation (EU) no 812/2013**
- **Delegated regulation (EU) no 814/2013**

ErP Ready

The appliance complies with the Regulation (EU) 2017/1369 setting a framework for energy labelling.

The energy label carries the information regarding the product's energy efficiency characteristics.

In this way the end consumer can identify and compare similar products and can make informed choices regarding high efficiency appliances.




PRODUCT DATA SHEET			
Fondital		Lipari Pro Tfs 11i	Lipari Pro Tfs 14i
Declared load profile		M	L
Internal sound power level	dB(A)	52	52
Water heating energy efficiency class		A	A
Water heating energy efficiency	%	71	77
Annual power consumption	GJ	6	12
Annual power consumption	kWh	16	20
Nitrogen oxide emissions G20-G30-G31	mg/kWh	35-60-45	29-45-21


General warnings and safety devices

WARNING


This manual contains data and information for both the user and the installer. Specifically, the user must pay attention to the chapters: General warnings and safety devices, Control panel and Use of the appliance.


A number of symbols are used in some parts of the manual:


 **ATTENTION** = for actions that require particular care and adequate preparation


 **PROHIBITED** = for actions that **MUST NOT** be performed


The instruction manual is an integral part of the product and must therefore be carefully stored and always accompany the appliance; in case of loss or damage, request another copy from the Technical Service Centre.


 The appliance must be used as intended by the manufacturer. contractual and non-contractual liability is excluded for damage to persons, animals or property, due to installation, adjustment and maintenance errors or improper use


 The installation, service and user manual constitutes an integral part as well as essential equipment of the water heater and must be retained for the entire period of use and read carefully as it contains all the information and warnings regarding safety during installation, operation and maintenance, which must be respected. In the case of transfer of the appliance to any other user, ensure it is accompanied by the installation, service and user manual


 Installation of the appliance and any other intervention of service and maintenance must be performed by qualified personnel in compliance with the legislation in force and subsequent updates


 For installation it is advisable to use specialist personnel


 Failure to comply with the recommendations of this user manual and failure to adhere to the instructions included therein by installers and by the user will invalidate any future warranty claim

 The safety or automatic adjustment devices must only, throughout the life of the system, be altered by the manufacturer


 This appliance is used to produce hot water. It must therefore be connected to a domestic hot water distribution network, according to its performance and power


 In case of leakages of water, close the water supply and promptly notify the qualified personnel of the Technical Service Centre

 In case of prolonged absence, shut off the gas supply. Where the risk of freezing is anticipated, empty the water heater of the water contained therein


 In case of failure and/or malfunction of the appliance, switch it off and do not attempt any kind of repair or direct action


 Maintenance must be performed at least once a year: scheduling this with the Technical Support Centre will avoid wasting time and money


 At the end of its life span the product must not be disposed of as solid urban waste but must be removed to a recycling centre


 The casing can reach high temperatures in the burner area, with the risk of burns in the event of contact.


Use of the appliance requires strict adherence to certain fundamental safety rules:


 Do not use the appliance for purposes other than those for which it was intended


 Under no circumstances cover with rags, papers or other material the inlet or dissipation grids and the ventilation shaft of the room where the appliance is installed


 Where the smell of gas is perceived, refrain from using any electrical switches, telephones or any other object that could cause sparks. Ventilate the room by opening doors and windows and close the main gas valve

 Do not place objects on the appliance

 Do not leave containers or flammable substances in the room where the appliance is installed

 Any attempt to carry out a repair in case of failure and/or malfunction of the appliance is inadvisable

 The use of this appliance by children or inexperienced persons is not recommended

 It is forbidden to intervene on sealed elements

Description of the appliance

NOx identifies the group of the two most important nitrogen oxides:

- NO Nitrogen monoxide (not harmful to humans)
- NO2 Nitrogen dioxide (very harmful to humans and the environment).

NOx is formed during combustion processes at high temperatures. To reduce NOx emissions it is necessary to cool the flame.

The water inside the water heater, after have been heated by heat exchanger, gets in the burner, cools the flame and gets out to the final user.

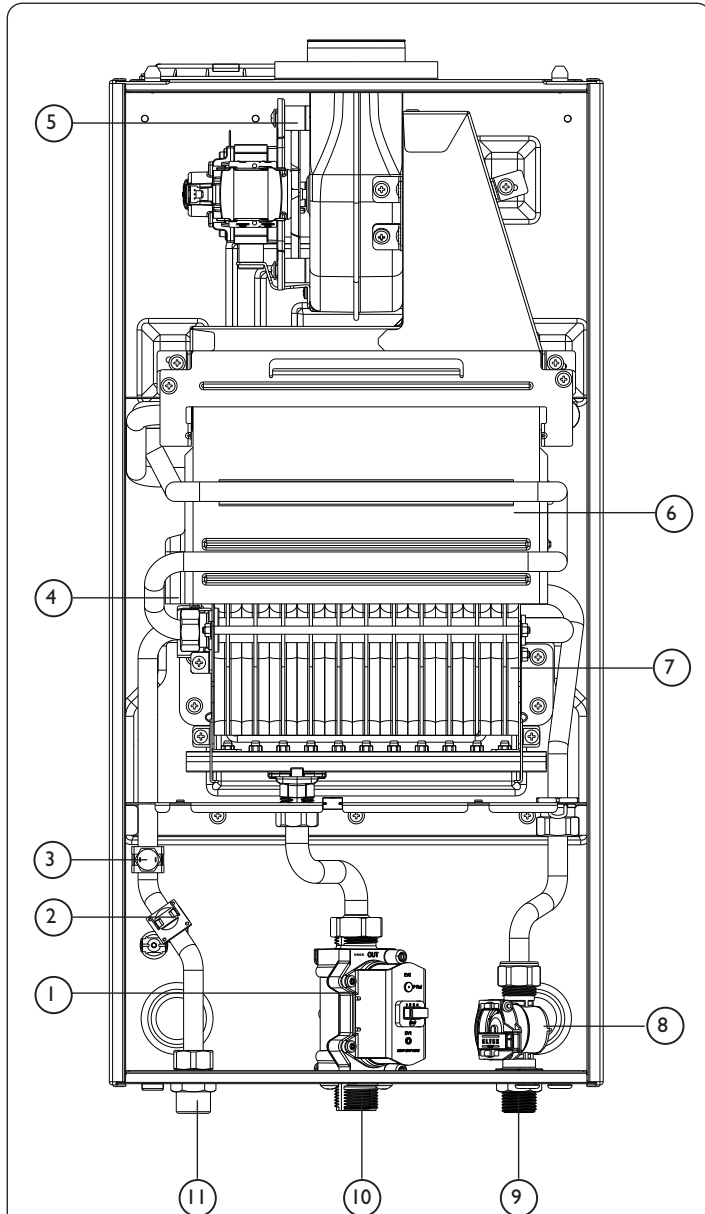
The special burner cools the flame and check the airflow necessary for the combustion, set up “cooled flames” avoiding the loss of thermal efficiency, generating an optimal combustion with low emissions.

The packaging of the water heater includes:

- no. 1 wall mounting bracket with screws and plugs
- no. 1 flange flues
- no. 1 paper template

Water heater components

Fig. 1 - Water heater components

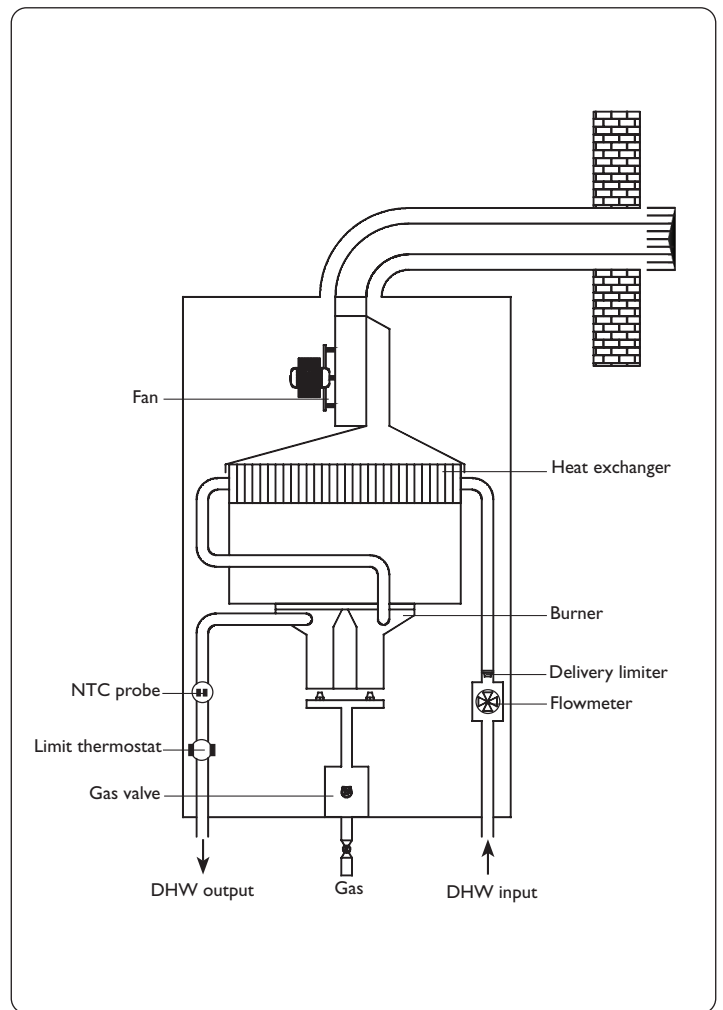


Legend

- 1. Gas valve
- 2. Limit thermostat
- 3. NTC probe
- 4. Ignition/detection electrode
- 5. Fan
- 6. Heat exchanger
- 7. Burner
- 8. Flowmeter
- 9. DHW input
- 10. Gas
- 11. DHW output

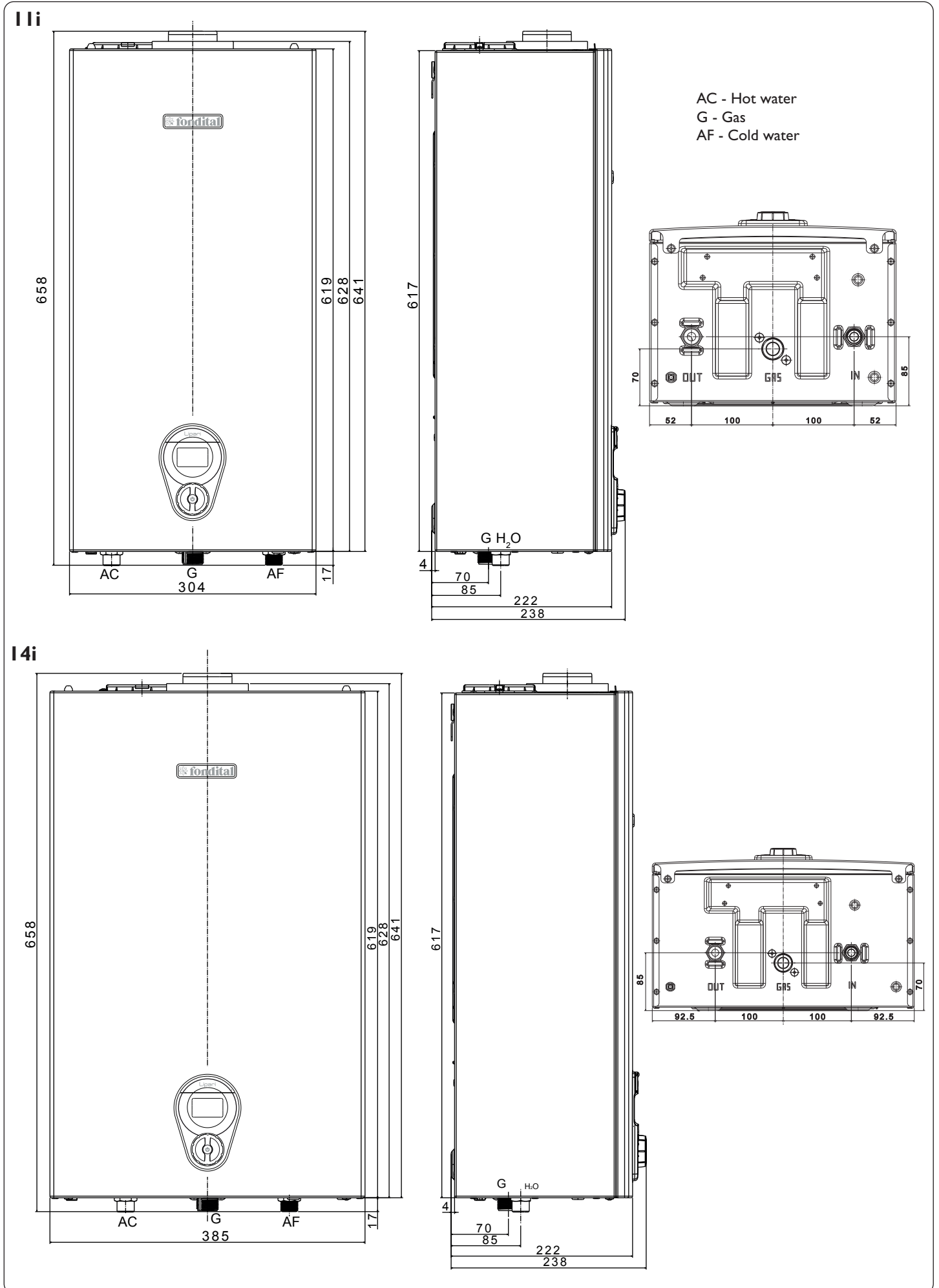
Hydraulic circuit

Fig. 2 - Hydraulic circuit



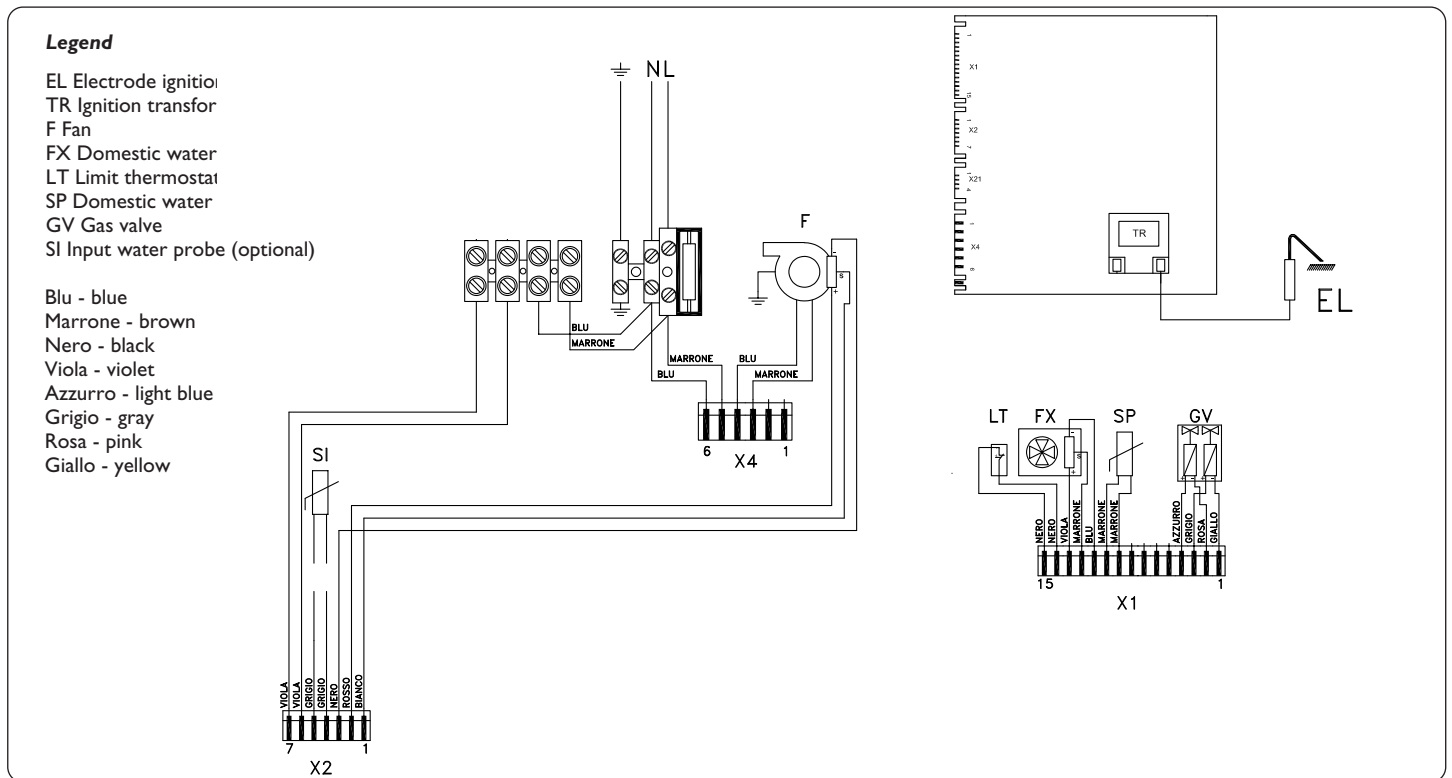
Size and distances between hydraulic connections

Fig. 3 - Installation size - Measurements in mm



Wiring diagram

Fig. 4 - Wiring diagram



Installation

Regulations

- ⚠ Entrust installation of the water heater to personnel with appropriate professional qualifications
- ⚠ Connection of the water heater to the water, gas and flue gas exhaust systems and the room where the heater is to be installed must comply with the rules and regulations in force
- ⚠ Following installation of the water heater, check the tightness of all the gas and water connections
- ⚠ Installation, gas connection, the air intake pipes/flue gas release tube installation, electrical connection and commissioning of the water heater must be entrusted to an authorised installer in accordance with the Law in force
- ⚠ Verify if the mains gas network corresponds to that indicated for use of the appliance
- ⚠ Install a valve on the gas supply line, upstream of the appliance, in a visible and accessible position and in any case as close as possible to the appliance
- ⚠ Verify that the appliance to be installed is fitted for the gas type distributed over the network
- ⚠ Check the water hardness (°F). If it is very hard, fit, upstream from the appliance, a device for softening water or another comparable mechanism that complies with the applicable regulations

Wall mounting

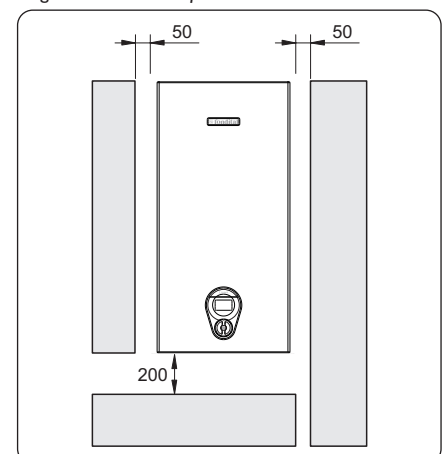
Precautions

- ⚠ **Do not install this appliance in a room with an ambient atmosphere containing fatty and/or corrosive dust or vapours**
- The appliance must be installed on a suitable wall and close to a flue gas release tube
- To allow maintenance operations, leave the minimum distances shown in the figure around the appliance.

Location

- It is forbidden to install the water heater in rooms where the temperature can drop below 0°C. If the appliance is positioned in areas exposed to the risk of frost, the water heater must be disconnected and emptied
- The water heater must never be hermetically sealed in a cabinet or in a cavity and there must be an adequate supply of air
- The heater must not be placed above a cooker or other cooking appliance in order to prevent the deposition of cooking vapour grease and consequent malfunction
- Heat-sensitive walls (e.g. wooden ones) must be protected with appropriate insulation

Fig. 5 - Minimum required distances



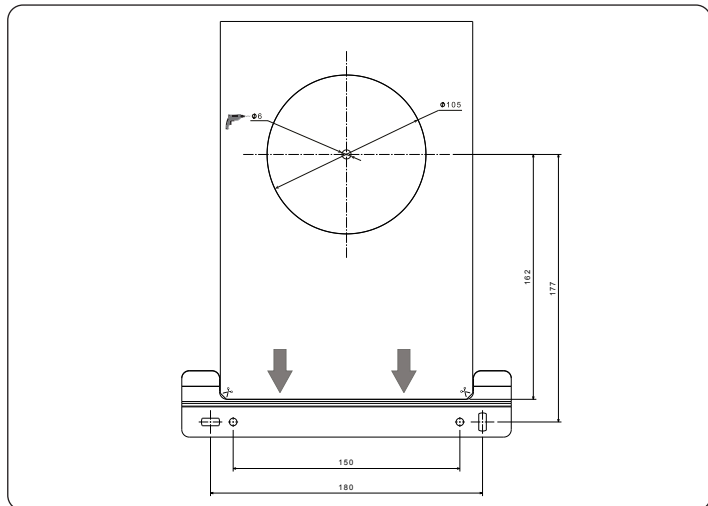
Support bracket

Having established the position of the appliance, drill no. 2 Ø 6 holes to apply the support bracket (use the same bracket to mark the holes). Secure it with the plugs supplied.

Below is described the type of rear and horizontal outlet which is the most common:

- Position the paper template between the wall and the appliance support fins
- Mark the centre of the hole of the pipe
- Drill a Ø 105 mm hole as indicated on the paper template
- Connect the appliance to the support bracket and connect the flue gas release tubes.

Fig. 6 - Support bracket



Electrical connection



Electrical current with 230V voltage

Before any work on the electrical equipment, always disconnect the 230V voltage.

Connect the supplied cable to the line respecting the phase, neutral and earth.

In the event of replacement of the power supply cable, an operation which must in any case be performed by a qualified technician, connect the appliance with a cable type H 05 V VF 3 x 0.75 mm² with Ø max 7mm similar to that provided. In addition, the earth wire must be 30 mm longer than the power supply cables. Power the appliance via an all-pole switch with an opening of at least 3 mm between the contacts. For maintenance operations, disconnect the power by turning the omni-pole switch.

N.B. no responsibility is accepted for damage to persons, animals or property caused by failure to earth the appliance and the creation of an electrical installation that does not comply with current standards (CEI 68.4).

Arrange for qualified personnel to check that the electrical installation is suitable for the maximum power absorbed by the appliance, as indicated on the data plate, ensuring in particular that the wire section of the system is suitable for the power absorbed by the appliance.

For the main power supply of the appliance from the mains, the use of adapters, multiple sockets and/or extension cords is not permitted. The use of any component that uses electricity involves the observance of a number of fundamental rules such as:

- Do not touch the appliance with wet parts of the body and/or bare feet
- Do not pull the electrical cables
- Do not leave the appliance exposed to atmospheric agents (rain, sun, etc.)
- Do not allow the appliance to be used by children or inexperienced persons.

The power cable of the appliance must not be replaced by the user. If the cable becomes damaged, switch off the appliance and for the purposes of replacement, use exclusively professionally qualified personnel.

Where the appliance will not be used for a certain period of time, it is

advisable to disconnect the power supply to all the system components that use electricity.

Gas connection



Non-compliance with the applicable laws may result in fire or explosions, causing serious damage to materials, animals or persons, possibly even irreparable

Determine the diameter of the pipe in accordance with the regulations in force.

Before installing the appliance blow into the gas pipe in order to remove any residue. Connect the water heater to the gas pipe of the internal system and fit upstream from the appliance a valve for gas interception and opening.

Comply with the prescriptions of the relevant standard.

For initial start-up of the appliance, the following checks must be carried out by qualified technicians:

- Checking for internal and external leakage of the gas supply system
- Adjustment of the gas flow rate according to the power required by the appliance
- That the appliance is powered by the type of gas for which it was designed
- That the gas supply pressure is in the range between the values indicated on the data plate
- That the gas supply system is dimensioned for the capacity required by the appliance and is equipped with all the safety and control devices required by current regulations.

In case of prolonged absence of the user of the appliance, close the main gas supply valve to the appliance.

Do not obstruct the ventilation openings of the room where a gas appliance is installed in order to avoid dangerous situations such as the formation of toxic and explosive mixtures.

Do not use the gas pipes as electrical appliance earthing devices.

Water connection

Connect the water heater to the water mains and fit a water shut-off valve upstream from the appliance.

Looking at the appliance, the cold water inlet is on the right and the hot water outlet is on the left.

Make sure that the piping of your water system is not being used as an earth electrode for your electric or telephone system. It would be completely unsuitable for this purpose.

Severe damage to the pipes could occur in a short space of time and to the appliance.

The minimum distance between the water heater and sampling point of hot water must exceed of 0,5 m.

Evacuation of combustion products

The manufacturer separately supplies various types of air intake and fume exhaust pipes specific for any installation need.

By varying the type of installation the classification of the water heater also varies, precisely:

- B type: the terminal takes air intake directly from the room in which the water heater has been installed. The room must be ventilated by a suitable air intake meeting current standards.
- C type: The water heater is a type C appliance (sealed chamber) and must therefore have a secure connection to the flue release tube and combustion air intake that both flow outside and without which the appliance cannot function.

In rooms with corrosive vapour risks (for example, laundries, hair dressers, galvanic processing rooms, etc.), it is very important to use the type C installation with air intake for combustion from the outdoors. This protects the appliance against corrosion effects.

For exhaust product evacuation, refer to current regulations. The water heater uses original pipes and other of the same EC certified specifications for fume exhaust and recovery of combustible air to ensure that the connection is correct, as indicated by the instructions

supplied with the fume accessories. Several appliances can be connected to a single flue provided that they are all sealed chamber type (refer to current regulations).

⚠ Pipes should not be in contact or near flammable materials and should not cross flammable walls or flammable material structures.

⚠ The ducts reach high temperatures, use pipes made of suitable material.

TYPE B22/B22P: Open chamber and forced draught for indoor use

The water heater should not be installed in rooms where commercial, crafts or industrial activities are performed, where products able to develop products or substances that can be harmful to appliance components and jeopardise operations are used. The water heater cannot be installed in bedrooms, bathrooms, studio apartments or where there are open chimneys without their own air flow. The installation room must have adequate ventilation, meeting all current regulations.

TYPE B32: Horizontal coaxial exhausts

In this configuration, combustion product exhaust is outside the home through concentric pipes, while air intake is in the room where the appliance is installed.

TYPE C: Horizontal coaxial exhausts

In this configuration, air intake and combustion product exhaust is outside the home through concentric pipes. Coaxial exhausts can be faced in the direction most appropriate to room needs, meeting the methods and lengths indicated in the following table. The reference quotas for where to trace wall hole for the support bracket are provided in figure 8.

TYPE C: Vertical coaxial exhausts

Use the vertical exhaust manifold and, if necessary, the relevant extensions, observing the maximum admitted lengths as indicated in the table.

TYPE C: Split exhausts

In this configuration, the intake and exhaust pipes are separate: combustion air intake is from outside the home (AS) and combustion product exhaust (SC) in a chimney or flue (see fig. 8). Split exhausts can face the direction most appropriate to room needs. The top view of the water heater is provided in figure 9 with the reference quotas for fume exhaust and combustion air intake distances from the support bracket.

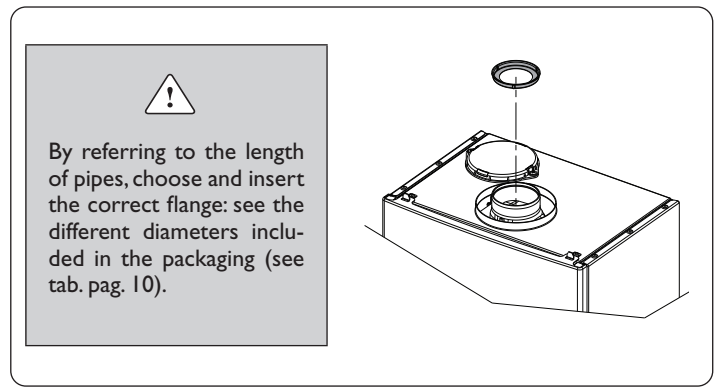


Fig. 7 - Type B exhaust dimensions

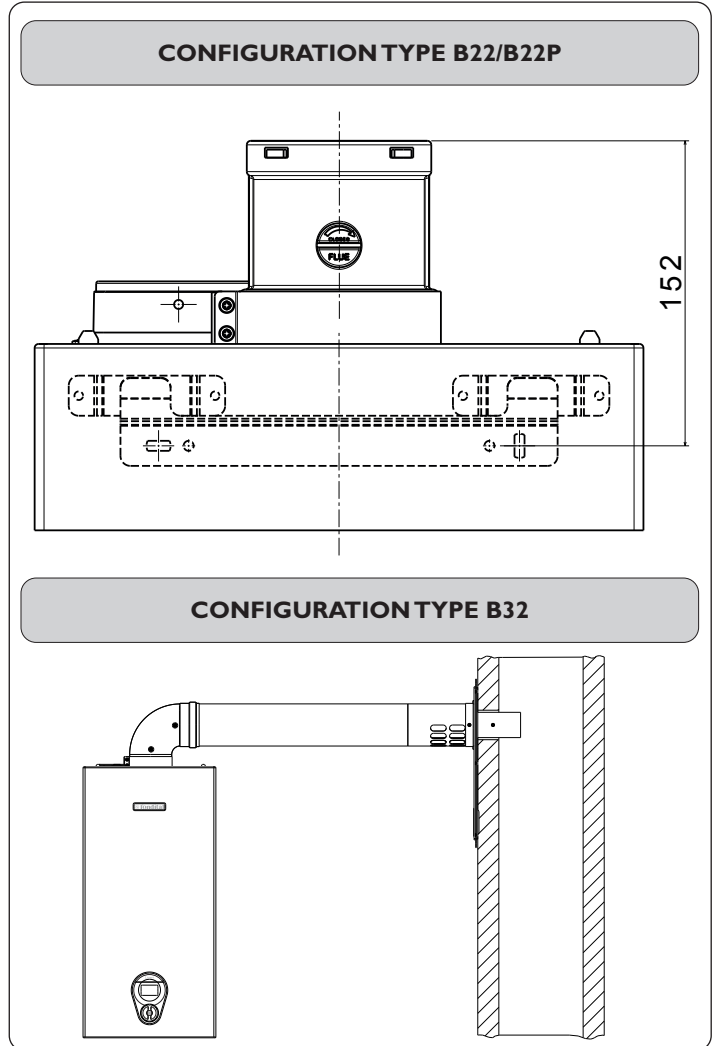


Fig. 8 - Type C exhaust dimensions

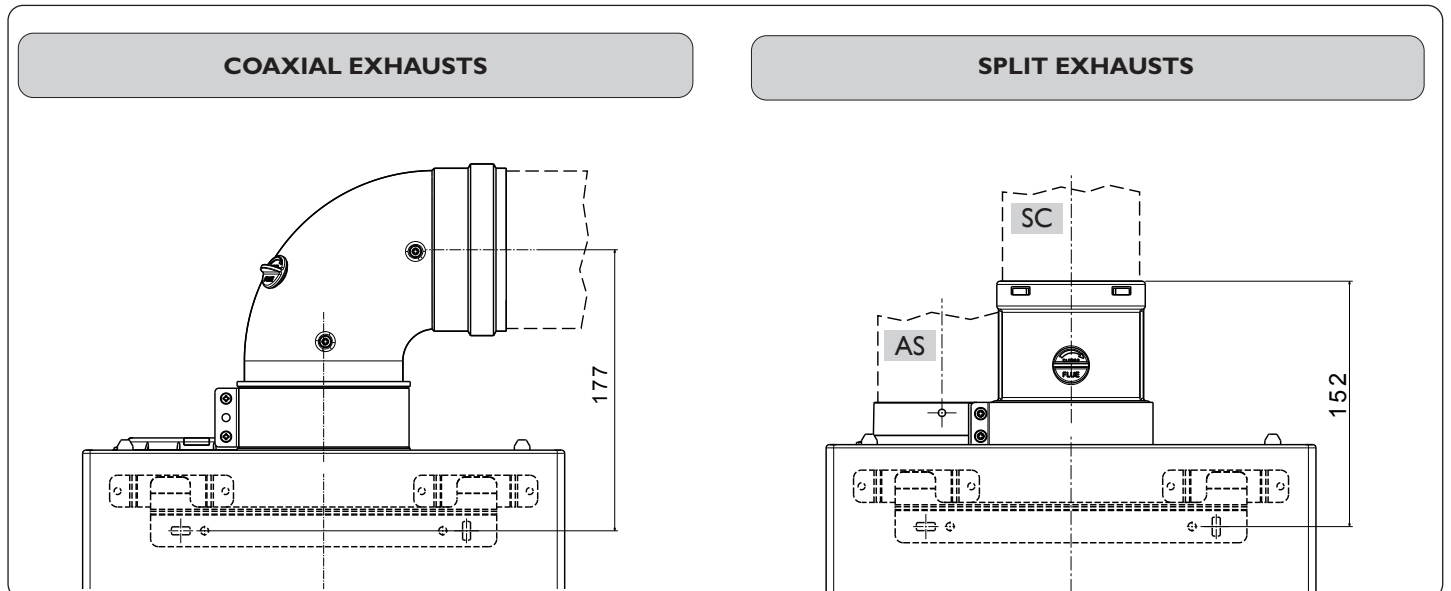


Fig. 9 - Top view with distances

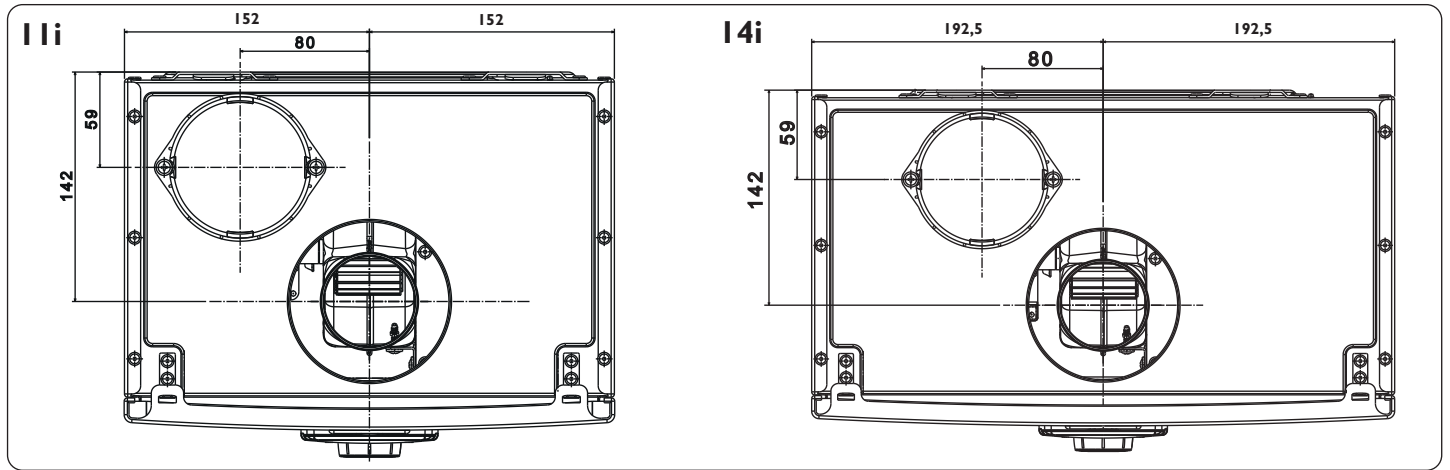
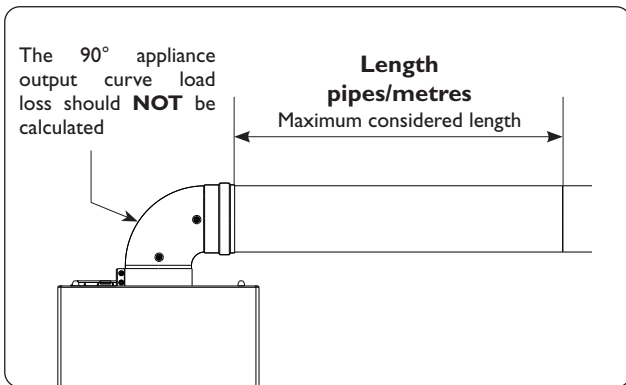


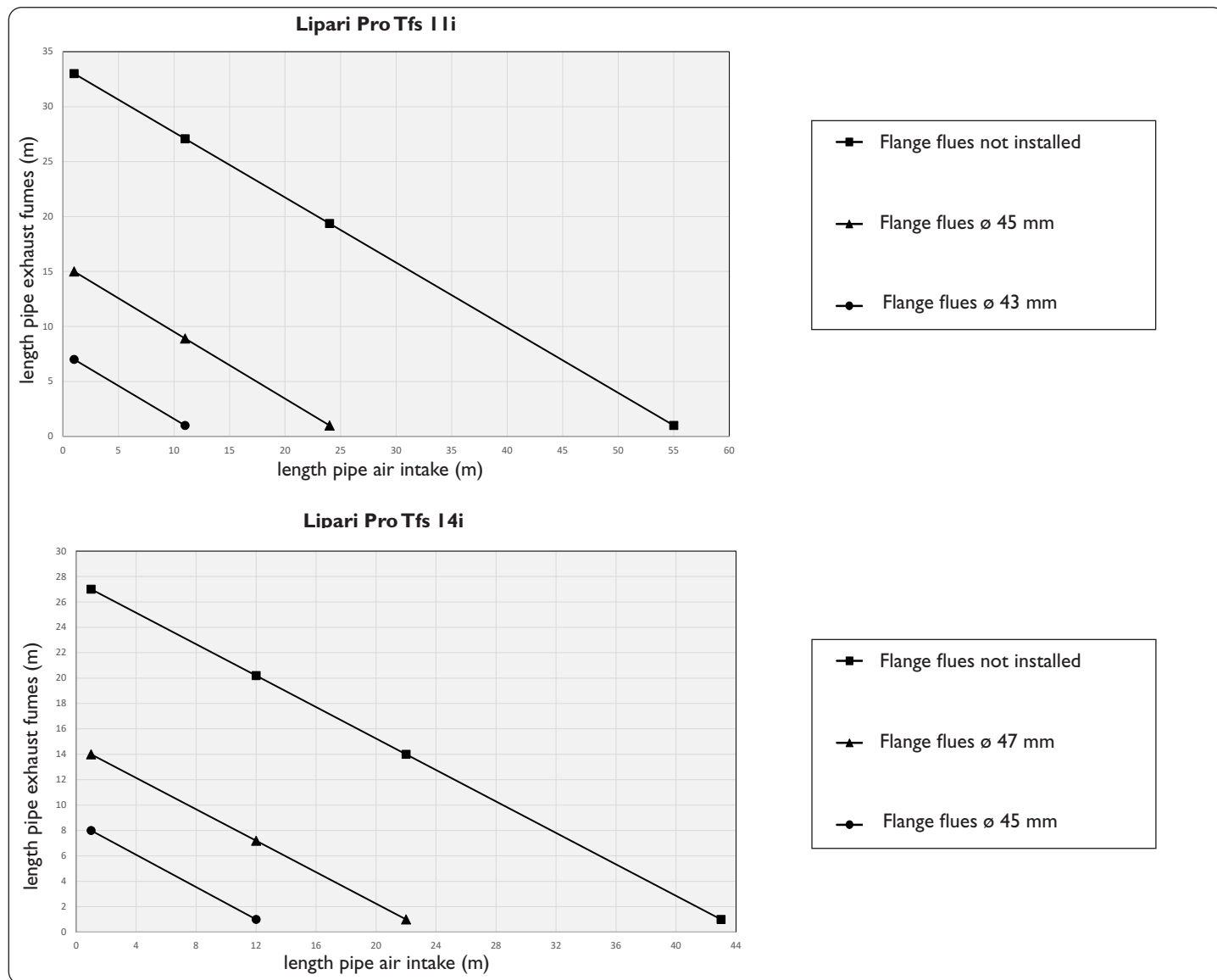
Fig. 9a - Maximum pipe length (see following table)



Reference table for maximum workable length based on the selected exhaust type

Exhaust type	Length pipes/metres Excluding the 90° appliance output curve Refer to fig. 9a	Fume flange (mm) The fume flange, when necessary, must be removed using a screwdriver as a lever	Load loss for each additional curve	
			45°	90°
TYPE B22 Open chamber and forced draught for indoor Lipari Pro Tfs 11i	up to 7	ø 43	1,3 m	1,8 m
	from 7 to 13	ø 45		
	from 13 to 31	not installed		
TYPE B22 Open chamber and forced draught for indoor Lipari Pro Tfs 14i	up to 7	ø 45	1,3 m	1,8 m
	from 7 to 13	ø 47		
	from 13 to 25	not installed		
TYPE C - TYPE B32 Horizontal coaxial exhausts Lipari Pro Tfs 11i	up to 1	ø 43	1 m	1,4 m
	from 1 to 2,7	ø 45		
	from 2,7 to 5,7	not installed		
TYPE C - TYPE B32 Horizontal coaxial exhausts Lipari Pro Tfs 14i	up to 1	ø 45	1 m	1,4 m
	from 1 to 1,9	ø 47		
	from 1,9 to 3,7	not installed		
TYPE C Vertical coaxial exhausts Lipari Pro Tfs 11i	up to 2	ø 43	1 m	1,4 m
	from 2 to 3,7	ø 45		
	from 3,7 to 6,7	not installed		
TYPE C Vertical coaxial exhausts Lipari Pro Tfs 14i	up to 2	ø 45	1 m	1,4 m
	from 2 to 2,9	ø 47		
	from 2,9 to 4,7	not installed		
TYPE C Split exhausts Lipari Pro Tfs 11i	5+5	ø 43	1,3 m	1,8 m
	from 5+5 to 10+10	ø 45		
	from 10+10 to 21+21	not installed		
TYPE C Split exhausts Lipari Pro Tfs 14i	5+5	ø 45	1,3 m	1,8 m
	from 5+5 to 9,5+9,5	ø 47		
	from 9,5+9,5 to 17+17	not installed		

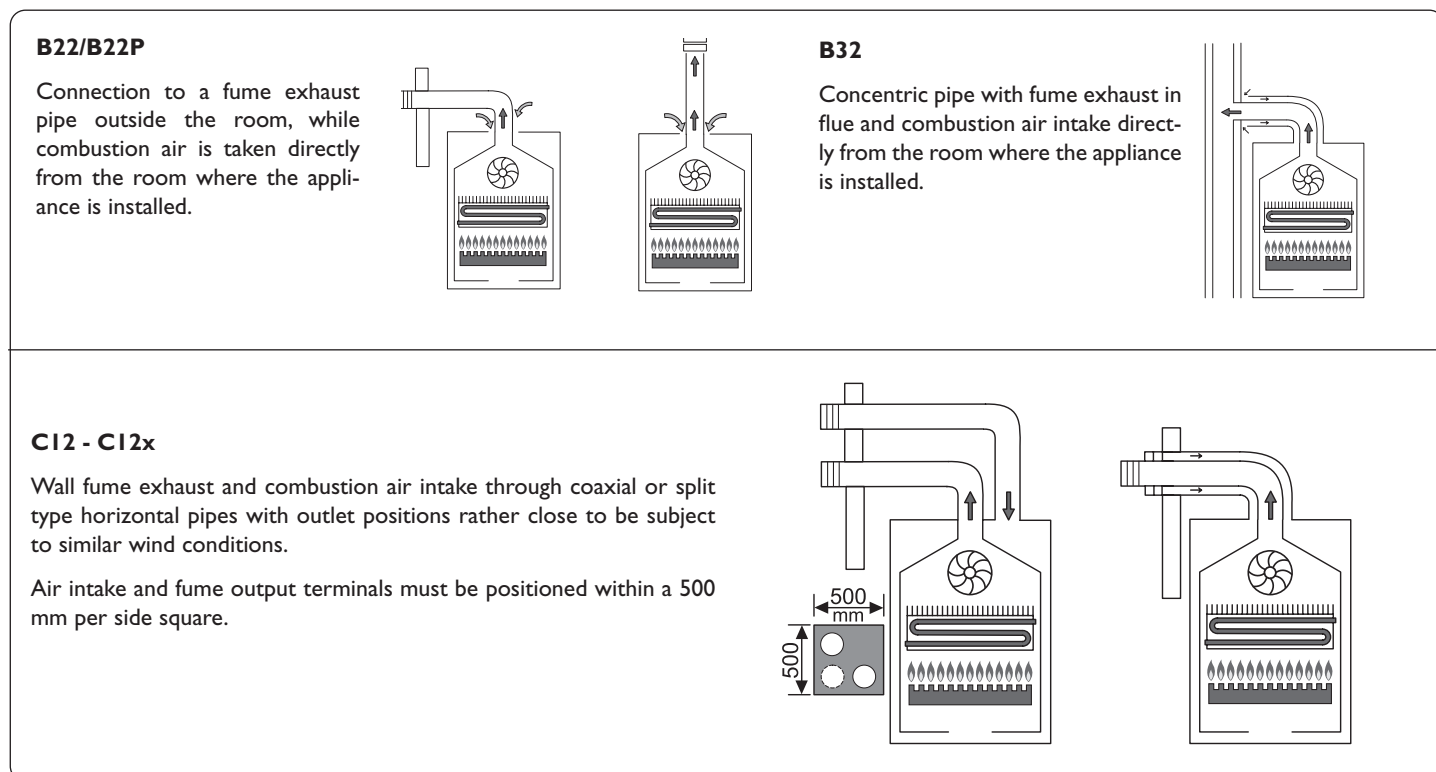
For pipes with different lengths, refer to the following illustrations.

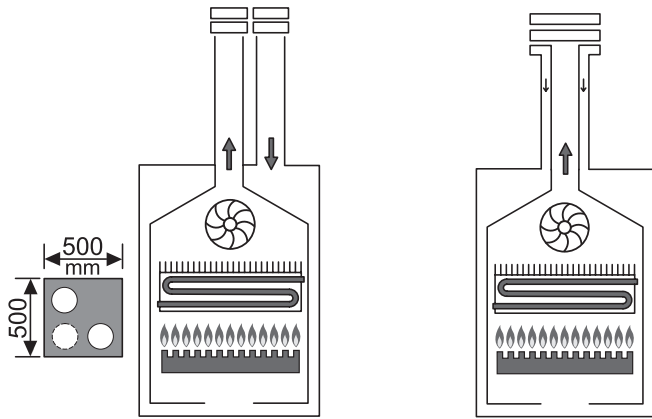


Possible exhaust configurations

The appliance is certified for the following configurations: B22-B22P-B32-C12-C12x-C32-C32x-C42-C42x-C52-C52x-C62-C62x-C82-C82x.

Fig. 10 - Exhaust configurations

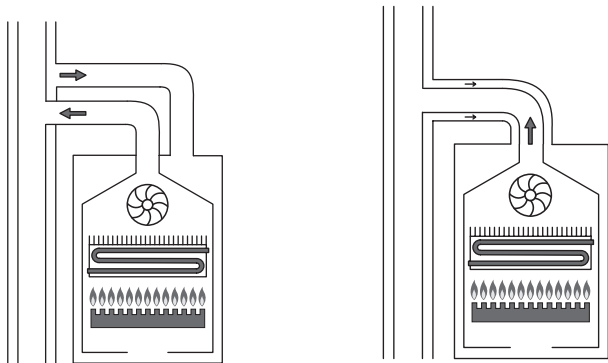




C32 - C32x

Roof fume exhaust and combustion air intake through coaxial or split type vertical pipes with outlet positions rather close to be subject to similar wind conditions.

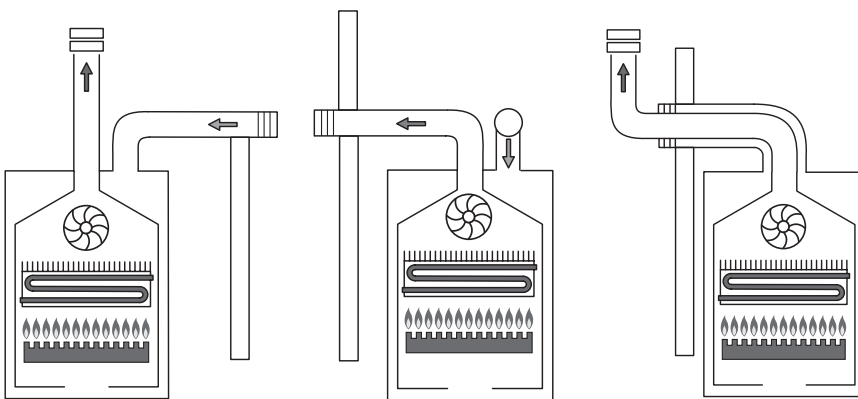
Air intake and fume output terminals must be positioned within a 500 mm per side square.



C42 - C42x

Group flue system made up of two pipes, concentric or separate, where combustion product exhaust is in one and combustion air intake in the other.

The outlets placed rather close to be subject to similar wind conditions.

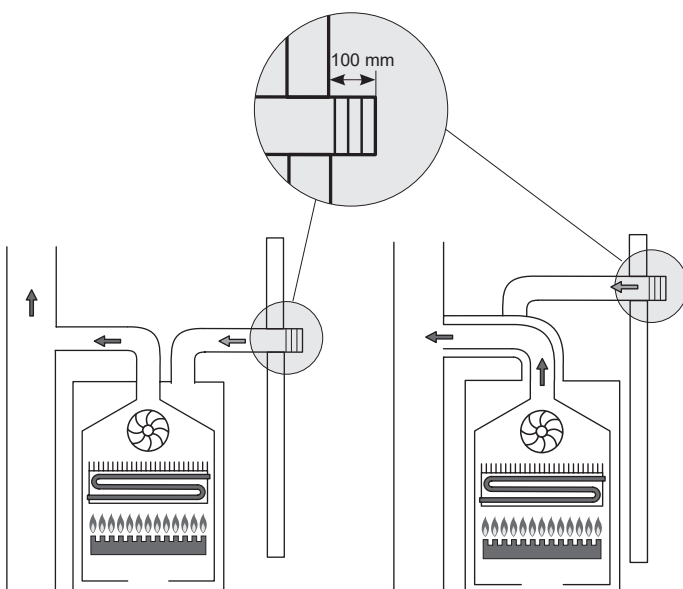


C52 - C52x

Fume exhaust and combustion air intake through coaxial or split pipes placed in different pressure zones.

C62 - C62x

Fume exhaust and combustion air intake with separately sold and certified pipes (EN 1856/1859)



C82 - C82x

Appliance connected to a wall combustion air intake pipe and fume exhaust pipe through an individual or group chimney.

Warnings before ignition

Please remember that appliance installation, first ignition, maintenance and repairs must be performed by qualified personnel.

Before turning on the appliance, proceed with suitable checks:

- Ensure the gas system seal is good (according to current regulations)
- Make sure mains data match those stated on the data plate
- Make sure the installation meets current local regulations
- Check the type of gas set for appliance operations on the serial plate
- Make sure the flue meets current regulations
- Make sure the system pipes are free of residue, slag or dirt
- Check connections with the electrical mains, L-N polarity and grounding connections
- Check the mains pressure as indicated in the next paragraph.

Checking the system pressure (minimum supply pressure) (only for gas natural water heater)


- Unplug the water heater
- Removing the casing by unscrewing the fastening screws located on the bottom of the water heater and detaching the casing from the upper part
- Remove the cover that closes the service inlet (located on the shelf Fig. 11) and insert through the hole the silicon pressure gauge tube
- Loosen by approximately two turns the screw of the pressure tap upstream of the gas valve and connect the pressure gauge to it
- Carefully close the casing
- Turn the water temperature control knob to the maximum point
- Electrically connect the water heater
- Open a hot water valve to full capacity

Check the gas pressure referring to the values indicated in the data table. If the pressure is higher than 15 mbar, calibrate the gas valve. During measurement a tolerance of ± 0.5 mbar is permitted.

- Close the hot water tap
- Disconnect the pressure gauge and tighten the pressure tap upstream of the gas valve.

Gas conversion

The gas conversion can be easily performed even while it is mounted. The instructions for transforming and regulating the product to receive various types of gas are below.

 This operation must be performed by qualified personnel according to law in force.

Disconnect the omni-polar switch outside the water heater and close the gas and water valves to the appliance.

- Remove the casing by referring to the specific paragraph
- For LPG conversion: place the plate on the collector as shown in fig. 12
- Remove the clip (detail A fig. 12a)
- Remove the gas pipe (detail B fig. 12a)
- Turn the screws showed in fig. 13 and lower the plate (fig. 14)
- Turn the collector fixing screws
- Extract the gas collector (fig. 15) and replace it
- Reposition the components that had previously been removed

Fig. 11 - Check mains pressure

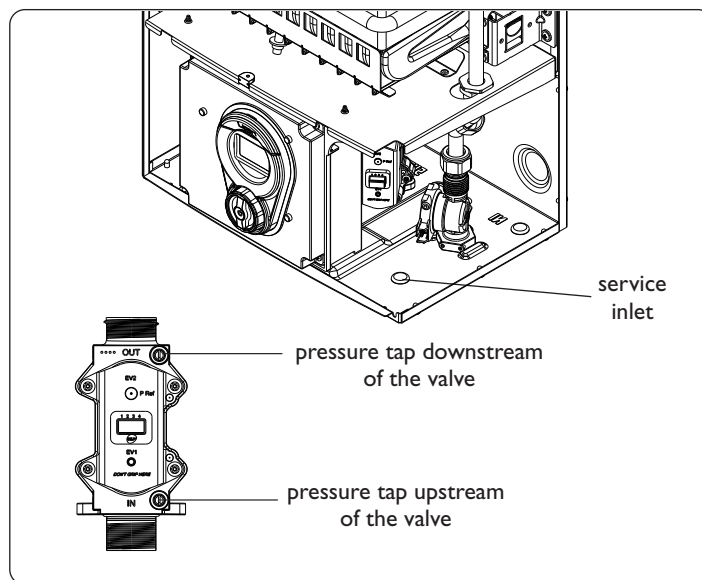


Fig. 12 - LPG conversion

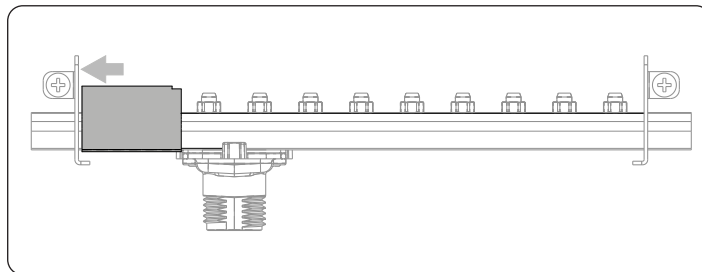


Fig. 12a - Disassembly components

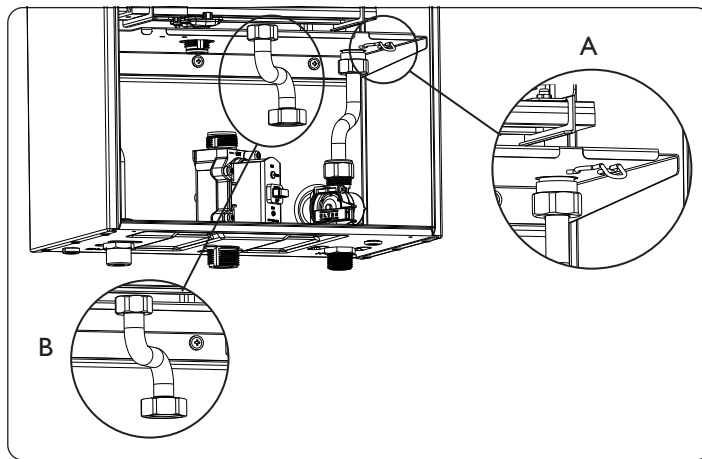
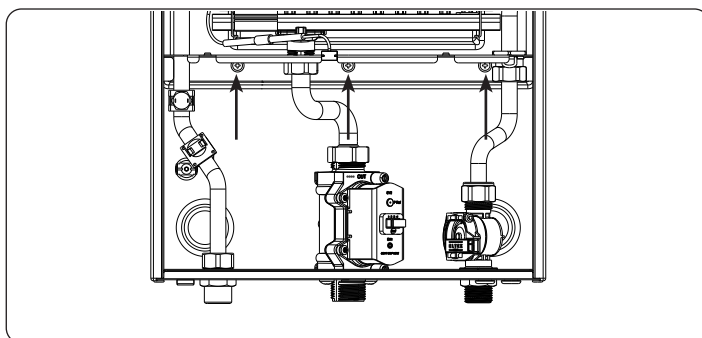



Fig. 13 - Disassembly components



Change parameter 02 (Gas type)

Start-up the appliance and access in the Parameters menu **t5**:

- With water heater powered on, hold down the reset button  for about 10 seconds, the display symbols start to flash, first the symbol **— —** is displayed and then the **00** symbol
- Release the reset button
- Enter the code **06** by turning the knob and confirm by pressing the reset button
- Turn the knob and select **t5** (Parameters menu) and confirm the selection by pressing the reset button
- Turn the knob and select the parameter 02 (gas type), press the reset button, the value flash: turn the knob and select the gas type required, 0 (MTN) - 1 (LPG)
- If selected LPG gas, the gas setted is propane. If is necessary to set butane gas, set parameter 13 to 2
- To store the value press the reset button.
- At the end of the procedure, the appliance displays alarm AL62 which indicates that the gas valve requires calibration.



Exit from the menu automatically stops after 5 minutes of inactivity or by pressing and holding the reset button.

Calibration gas valve

The gas valve can **ONLY** be calibrated by an **Authorised Service Centre**.

Refer to the instruction sheet in the gas change kit for the procedure.

Fig. 14 - Disassembly components

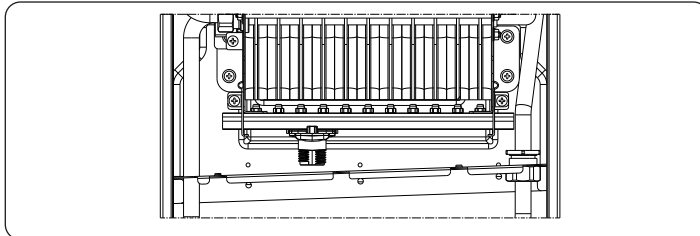


Fig. 15 - Disassembly components

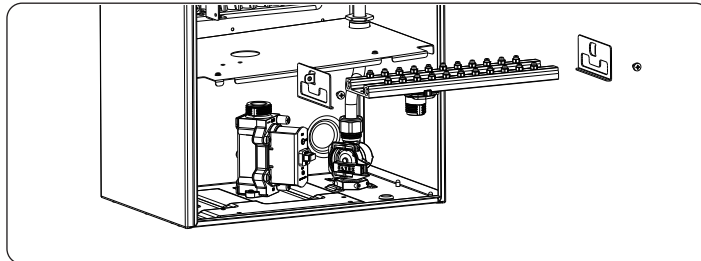
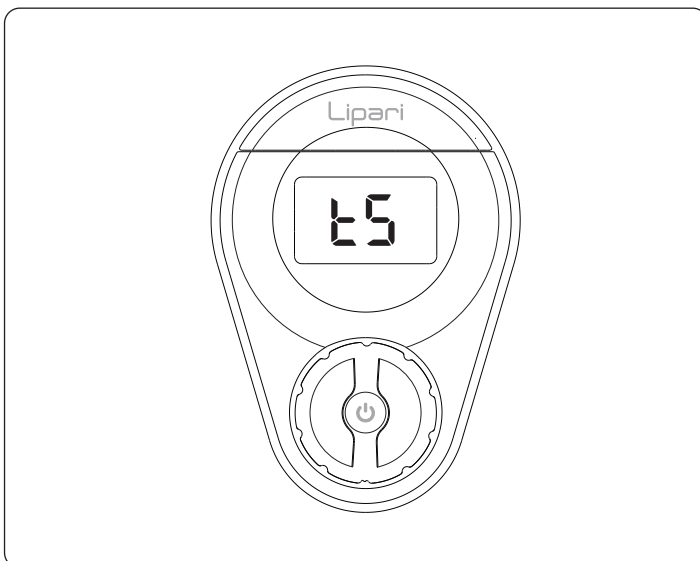


Fig. 16 - "Parameters Menu" Activation



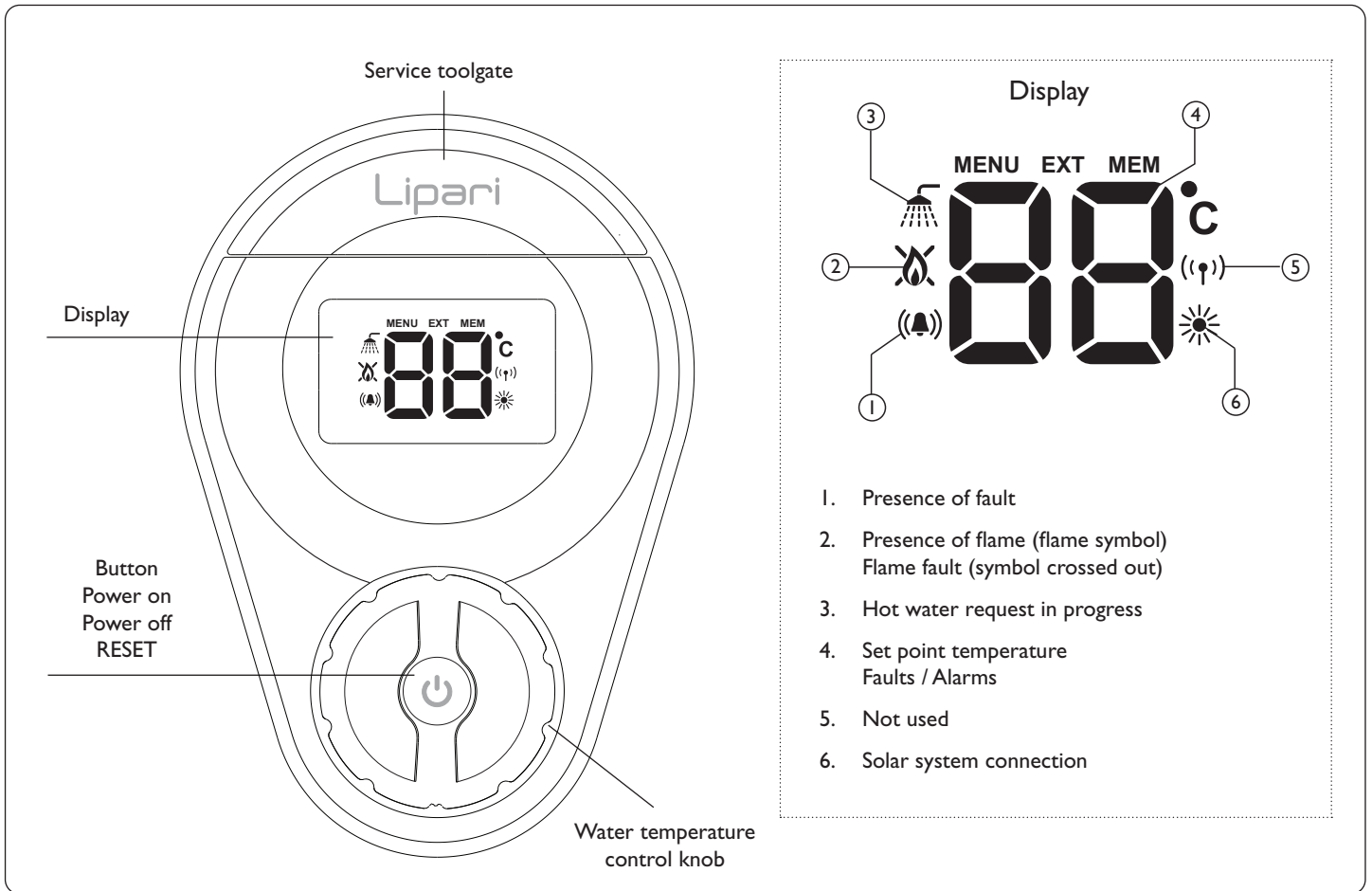
Technical data

		Lipari ProTfs I li			Lipari ProTfs I 4i		
		kW - kcal/h			kW - kcal/h		
Nominal heat input (Qn)		21,5 - 18.490			27,0 - 23.220		
Nominal output power (Pn)		19,3 - 16.600			24,3 - 20.900		
Minimum heat input (Qm)		9,5 - 8.170			10,0 - 8.600		
Minimum output power (Pm)		8,6 - 7.400			9,0 - 7.740		
GAS TYPE		NATURAL GAS	BUTANE	PROPANE	NATURAL GAS	BUTANE	PROPANE
		G20	G30	G31	G20	G30	G31
P.C.I. (15° C 1013 mbar)	MJ/m ³	34,02	116,09	88,00	34,02	116,09	88,00
W.I. (15° C 1013 mbar)	MJ/m ³	45,67	80,58	70,69	45,67	80,58	70,69
Consumption (15° C 1013 mbar)		2,28 m ³ /h	1,70 kg/h	1,67 kg/h	2,86 m ³ /h	2,13 kg/h	2,10 kg/h
Maximum burner pressure	mbar	11,7	28,3	36,4	12,4	28,2	36,0
Minimum burner pressure	mbar	2,6	6,1	8,0	2,0	4,4	5,6
N. nozzle Ø Main burner nozzle	N. mm	18x0,86 +4x0,83	18x0,50 +4x0,48		24x0,86 +4x0,83	24x0,50 +4x0,48	24x0,50 +4x0,48
NOx emissions (according to EN26:2015 on H ₂)	mg/kWh	35	60	45	29	45	21
Ø Gas connection		3/4			3/4		
Country of destination - Gas category		IT - II2R3R					
Nominal supply pressure	mbar	20	28-30	37	20	28-30	37
Country of destination - Gas category		ES-PT - II2R3R					
Nominal supply pressure	mbar	20	-	37	20	-	37
Country of destination - Gas category		ES-PT - I3R					
Nominal supply pressure	mbar	-	28-30	37	-	28-30	37
FUMES EXHAUSTION		Lipari ProTfs I li			Lipari ProTfs I 4i		
		G20	G30	G31	G20	G30	G31
Flue gas mass flow rate (min-max)	kg/h	39,308-60,035	42,465-57,527	43,379-49,379	40,233-66,526	45,936-73,412	38,273-62,873
Flue temperature (max-min)	°C	160 - 101	165 - 101	159 - 96	177 - 90	177 - 95	174 - 91
Air capacity	Nm ³ /h	46,315	44,359	37,911	51,262	56,620	48,280
Ø flue gas release tube		100/60 80/80			100/60 80/80		
FAN PERFORMANCE		Lipari ProTfs I li			Lipari ProTfs I 4i		
Residual head of boiler without pipes	Pa	72			90		
ELECTRICAL CIRCUIT		Lipari ProTfs I li			Lipari ProTfs I 4i		
Power supply voltage	V - Hz	230 - 50			230 - 50		
Electric power	W	41			59		
Degree of Protection		IPX5D			IPX5D		
INSTALLATION SITE TEMPERATURE		Lipari ProTfs I li			Lipari ProTfs I 4i		
Minimum working temperature	°C	3			3		
WATER		Lipari ProTfs I li			Lipari ProTfs I 4i		
Domestic water flow limiter	l/min	8			10		
Continuous intake capacity (ΔT 35 K)	l/min	8			10		
Minimum ignition flow	l/min	2			2		
Selectable water temperature	°C	37-60			37-60		
Minimum pressure	bar	0,13			0,13		
Maximum pressure	bar	10			10		
Ø water connections		1/2"			1/2"		
DIMENSIONS AND WEIGHTS		Lipari ProTfs I li			Lipari ProTfs I 4i		
Height	mm	619			619		
Width	mm	304			385		
Depth	mm	222 (238 with aesthetics)			222 (238 with aesthetics)		
Weight	Kg	14			16		

Note: cold water temperature of reference 15°C.

Control panel

Fig. 17 - Control panel and display



Use of the appliance

Initial ignition must be performed by the authorised Technical Support Service that must check

Appliance start-up

Following the necessary checks, proceed with the following operations:

Electrically power the water heater

Open the gas valve installed upstream of the water heater

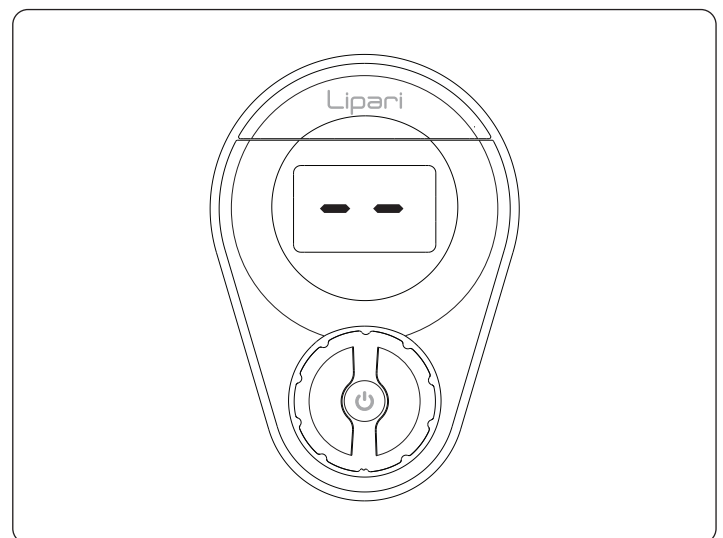
Open the water tap at the bottom of the water heater

- Press the power button
- The display shows:
 1. Software review
 2. The type of gas for which the water heater was designed **nG** (G20) - **bu** (G30) - **Pr** (G31)
 3. **LE**: Low Emission product
 4. Model: **11** (Lipari PRO Tfs 11i) - **14** (Lipari PRO Tfs 14i)
 5. Symbols test (display all on)

With the **first ignition** procedure completed, the display shows the symbols (Fig. 18).


Press the button to power the water heater; the display shows the set point temperature, the symbol (in case hot water request in progress) and the symbol (in case of burner ON) (Fig. 19).

Fig. 18 - Display appliance off (OFF)






Water temperature adjustment


The water temperature can be set between 37 and 60°C.


- Turn the ignition button clockwise to increase the temperature and counter-clockwise to decrease it. The symbol  flashes and the display shows the new temperature set for 5 seconds.

Switching off the appliance

- Hold down for about 5 seconds the water heater power off button 
- As soon as the symbols  start flashing, release the button
- The appliance will be in the OFF state and the display shows the symbols .

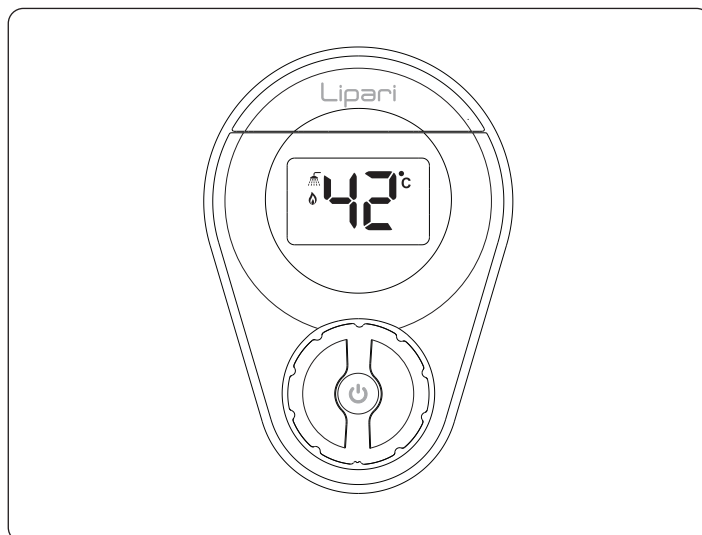
From this point forward the appliance remains inactive.

 In case of power off for lengthy periods, disconnect the omni-polar switch outside the water heater and close the gas valve upstream of the water heater

 In the event that there is a possibility that the temperature in the room could drop below 0°C, empty the water heater of the water by closing the cold water inlet valve and opening the hot water tap below the water supply network of the room.

To power the appliance, press for about 5 seconds the power button .

Fig. 19 - Display of appliance during operation



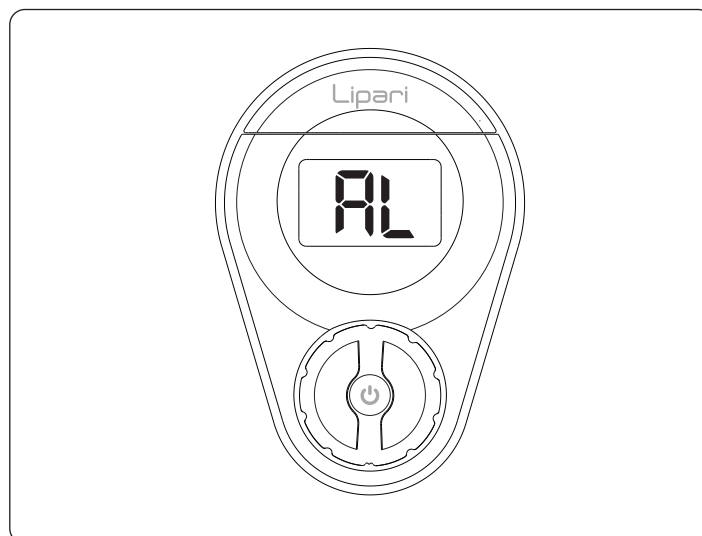
Anomalies and display views

Should the appliance shut down the display shows the letters **AL** followed by an fault code which should be consulted in relation to the shutdown.






Two types of shutdown are possible:

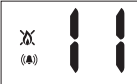









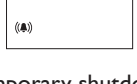




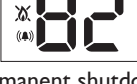

- Temporary shutdown (non-permanent). The fault code flashes, shutdown is automatically removed upon resolution of the problem that caused it. If the fault persists, shutdown switches from temporary to permanent
- Permanent shutdown (lock), the fault code is steady. In this case the appliance does not start again automatically and must only be released by the user or by the operator via the release procedure.





Fig. 20 - Display appliance shutdown



Below are listed the types of alarms, their typical display views and the solutions to reset the appliance:

Display	Alarm type	Solutions
 Permanent shutdown	Flame control module shutdown alarm Flame control electronic fault alarm	Press and hold the reset button  . As soon as the letters r 5 appear on the display, release the button. The appliance automatically restarts. If the fault persists, request the assistance of a qualified technician.
 Permanent shutdown	Limit thermostat alarm	Press and hold the reset button  . As soon as the letters r 5 appear on the display, release the button. The appliance automatically restarts. If the fault persists, request the assistance of a qualified technician.
 Permanent shutdown	Domestic water NTC fault alarm IN-OUT	Request the assistance of a qualified technician.





 <p>Temporary shutdown</p>	Parasitic flame alarm	Request the assistance of a qualified technician.
 <p>Permanent shutdown</p>	Interrupted modulator cable alarm	Press and hold the reset button  . As soon as the letters r S appear on the display, release the button. The appliance automatically restarts. If the fault persists, request the assistance of a qualified technician.
 <p>Permanent shutdown</p>	Alarm in case of 5 consecutive resets	To reset the appliance, disconnect and reconnect the electrical voltage. Press and hold the reset button  . As soon as the letters r S appear on the display, release the button. If the fault persists, request the assistance of a qualified technician.
 <p>Temporary shutdown</p>	Low Voltage Alarm	Wait until automatic reset of the water heater. If the fault persists, request the assistance of a qualified technician.
 <p>Temporary shutdown</p>	Incorrect mains frequency detection alarm	Wait until automatic reset of the water heater. If the fault persists, request the assistance of a qualified technician.
 <p>Permanent shutdown</p>	Flame loss for more than 3 consecutive times alarm	Request the assistance of a qualified technician.
 <p>Temporary shutdown</p>	Button alarm	This is displayed when you keep pressed the button for more than 30 seconds, once the button is released the fault disappears.
 <p>Permanent shutdown</p>	Valve calibration request	Request the assistance of a qualified technician.
 <p>Temporary shutdown</p>	AL70 - Inlet temperature >70°C alarm A single flashing bell is displayed The full display is only available in the alarm log	Request the assistance of a qualified technician.
 <p>Permanent shutdown</p>	Alarm as domestic water Delta T not reached upon power on	Request the assistance of a qualified technician.
 <p>Permanent shutdown</p>	Driver error alarm (software not updated)	Request the assistance of a qualified technician.
 <p>Permanent shutdown</p>	Alarm for combustion problem upon power on	Press and hold the reset button  . As soon as the letters r S appear on the display, release the button. The appliance automatically restarts. If the fault persists, request the assistance of a qualified technician.
 <p>Permanent shutdown</p>	Shutdown due to persistent poor combustion	Request the assistance of a qualified technician.
 <p>Temporary shutdown</p>	Alarm due to poor combustion	Request the assistance of a qualified technician.

 Temporary shutdown	AL84 - Poor combustion alarm A single flashing flame is displayed The full display is only available in the alarm log	Request the assistance of a qualified technician.
 Permanent shutdown	Alarm fan speed sensor	Request the assistance of a qualified technician.
 Display	High temperatures	Request the assistance of a qualified technician.
 Permanent shutdown	Software fault alarm, acheda start-up	Request the assistance of a qualified technician.

Menù SERVICE





“SERVICE MENU” ACTIVATION

It is possible to access the within which the appliance operation parameters can be modified.

- With water heater powered on, hold down the reset  (fig. 21) button for about 10 seconds, the display symbols start to flash. First the  symbol is displayed and then the  symbol
- Release the reset button
- Enter the code  by turning the knob and confirm by pressing the reset button.

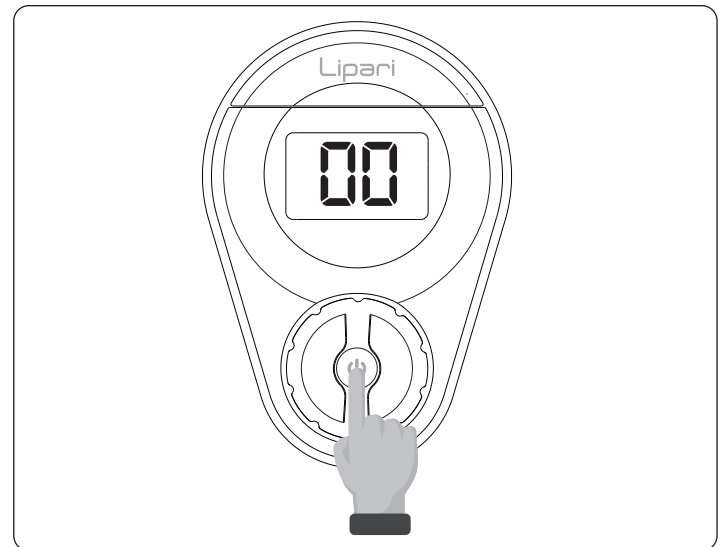
If the code is incorrect or the time set for the operation should expire, the appliance automatically returns to the standby or operating state.

Having entered the “SERVICE MENU” it is possible to select the relevant submenu by turning the knob:

-  Parameters menu
-  Calibration menu
-  Alarm history menu
-  Info menu

Hold down the reset  button to confirm the selection.

Fig. 21 - “Service Menu” Activation



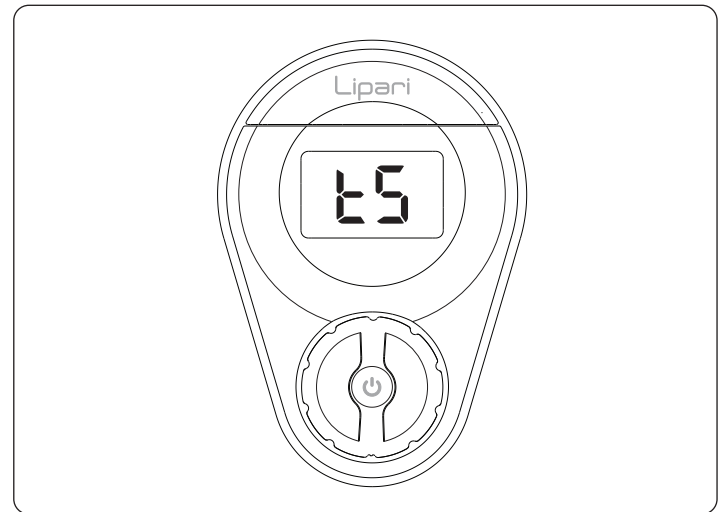
To exit the “SERVICE MENU” press the reset button until the word “MENU” flashes, release the button: the display shows last submenu selected. Press reset button until the word “MENU” flashes, release the button: the display shows the set point temperature.

Parameters menu **E5**

- The index of the first parameter will appear followed by the value set upon menu activation
- Turning the knob the subsequent parameters will be displayed
- Once the parameter to be changed has been identified press the reset button. The editable value will appear flashing and by turning the knob it will be possible to make the change
- To store the value press the reset button.

⚠ Exit from the menu automatically stops after 5 minutes of inactivity or by pressing and holding the reset button

Fig. 22 - "Parameter Menu" Activation



Below is a list of editable parameters:

NO. PARAMETER	DESCRIPTION	RANGE	DEFAULT VALUE
02	Gas type 0 = methane 1 = LPG	0 - 1	depending on the model
08	DHW off mode; 0 = fixed 1 = associated with the DHW setpoint	0 - 1	0
09	Ignition power	0 ... 40	40
10	Ignition curve	0 - 3	1
13	LPG gas type 1 = propane 2 = butane	1 - 2	1
17	Complete or partial calibration	0 ... 100	0
18	Domestic hot water modulation with flow meter 0 = modulation without flow meter 1 = modulation with flow meter	0 - 1	1
26	Water heater flow rate 0 = 11i 1 = 14i 2 = not applicable 3 = not applicable	0 - 1	depending on the model
27	Modulator reactivity	0 - 1	1
28	0 = standard water heater from 1 to 20 = solar water heater, delay (in seconds) of ignition power if requested	0 from 1 to 20	0

⚠ Any other additional parameters with respect to the table above should not be changed for any reason

Calibration menu **E8**

⚠ Pressure adjustments must be carried out by a qualified technician

⚠ Pressure adjustments must be carried out by a qualified technician

⚠ The calibration operation ends automatically after 15 minutes of inactivity or by pressing and holding the reset button or in the case of overheating (67°C)

Before calibration check the mains pressure, referring to the previous paragraph.

To calibrate the gas valve (standard procedure **MANU**: it is possible to deviate from the value set by approximately +/-1.5 mbar) carry out the following operations:

- Place the electric switch of the system to off
- Remove the casing by unscrewing the fastening screws located at the bottom of the water heater and detached the casing from the top
- Remove the cover that closes the service inlet (located on the shelf - Fig 11) and insert through the hole the silicon pressure gauge tube
- Loosen by approximately two turns the screw of the pressure tap downstream of the gas valve and connect the pressure gauge to it
- Carefully close the casing and place the electric switch of the system to on
- Access the Calibration Menu **EA**
- Open the hot water tap and wait until ignition of the burner.

Upon activation of the menu will appear first the word **Ma** and then the word **to** to compose **Manu** and **POI** will appear, indicating that the water heater is operating at maximum capacity.

- Turn the knob until visualize on the pressure gauge the maximum burner pressure (see data table)
- To store the value press the reset button
- Press the reset button to select the next lowest setting value **POO**
- Turn the knob until visualize on the pressure gauge the minimum burner pressure (see data table)
- To store the value press the reset button
- Press the reset button until MENU' flashing, release the button: the display shows **EA**
- Press again the reset button until the display shows MENU' flashing, release the button: the display shows the set point temperature
- Close the hot water tap.

⚠ The calibration operation ends automatically after 15 minutes of inactivity or in the case of overheating (67°C)

Alarm history menu **AL**

This feature allows displaying of the last 10 errors that have occurred on the appliance.

Upon activation of the menu, the figures **01** (index of the last stored error), the error code and the word **AL** (e.g.: **01** => **06** => **AL**) will appear alternately.

Turning the knob it is possible to scroll through the errors index. Display ranges from the most recent to the earliest.

If the user pauses, the display shows the letters **AL** to indicate access within the errors history menu.

Press the reset button until MENU' flashing, release the button: the display shows **AL**.

⚠ Press again the reset button until the display shows MENU' flashing, release the button: the display shows the set point temperature.

Info menu **In**

This feature allows displaying:

- Last version of software review
- Hot water temperature in direct
- Hot water quantity in direct (l/min).

This menu is active during all the production of instant hot water.

⚠ Exiting the menu takes place automatically after 15 minutes of inactivity or by pressing the reset button.

Fig. 23 - "Calibration Menu" Activation

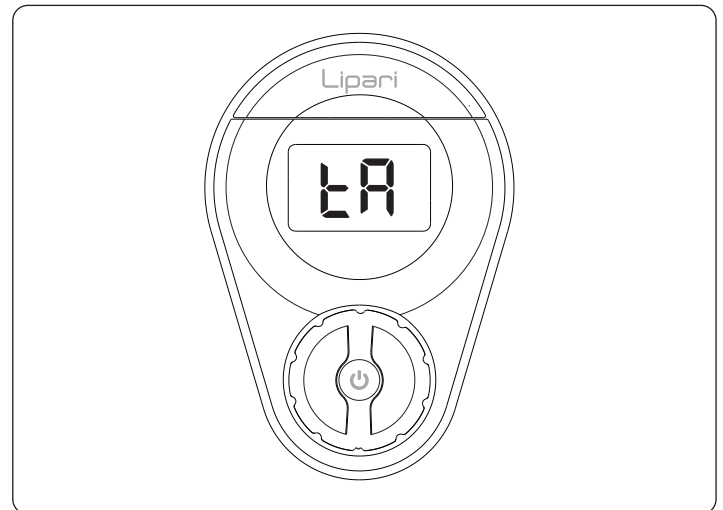


Fig. 24 - "Alarm History Menu" Activation

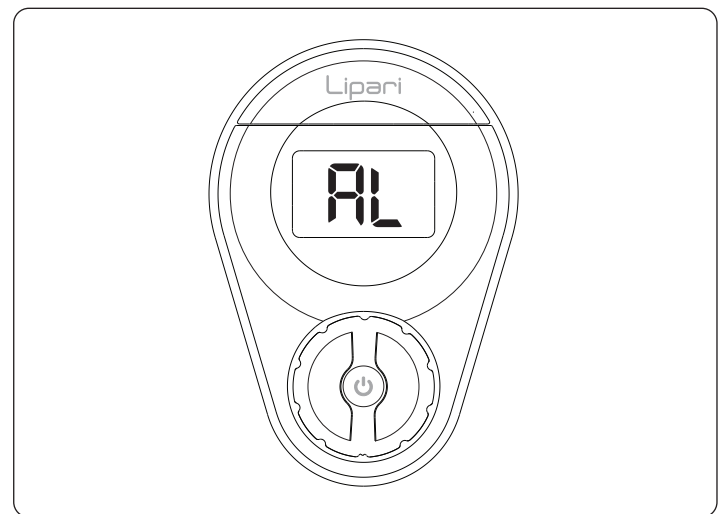
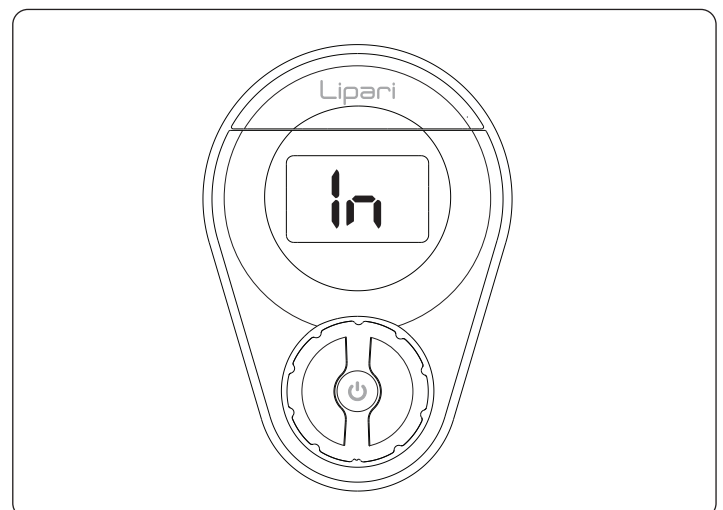


Fig. 25 - "Info Menu" Activation



Maintenance

⚠ Please have the appliance checked by qualified personnel in accordance with current regulations to guarantee correct, continuous and reliable water heater operations.

⚠ Insufficient or inadequate maintenance can compromise the safety of the appliance.

⚠ Before carrying out any cleaning or maintenance, switch off the appliance using the omni-polar switch on the power supply line and close the gas and water valves to the appliance.

External cleaning

In particular check the main components and the tightness of the gas circuit.

To clean the exterior panels use a cloth dampened with soapy water.

Do not use solvents, powders or abrasive sponges.

Do not clean the appliance and/or its parts with flammable substances (example: petrol, alcohol, oil, etc.).

Dismantling the casing (Fig. 26)

Remove the casing by unscrewing the fastening screws located on the bottom of the water heater and detaching the casing at the top.

Accessibility to the electronic board (Fig. 27)

Remove the casing by referring to the specific paragraph.

Remove the panel by unscrewing the screws that secure it to the seat of the electronic board. Disconnect the connectors.

Removing the gas valve (Fig. 28)

Remove the casing by referring to the specific paragraph.

Unscrew the screws that secure the panel to the bottom shelf.

Remove the panel without disconnecting the wiring and attach it to the bracket as shown in the figure.

Disconnect the gas valve by unscrewing the retaining screws and the nut connecting to the gas pipe.

Removing the fan (Fig. 29)

Remove the casing by referring to the specific paragraph.

Unscrew the fixing screws of the fan.

Lower the fan freeing it from the hooks and slide it to the left.

Removing the burner (Fig. 30a-30b-30c-30d)

Remove the casing by referring to the specific paragraph.

Remove the clip (detail A fig. 30a).

Disconnect and remove the gas pipe (detail B fig. 30a).

Turn the screws showed in fig. 30b and lower the plate.

Referring to fig. 30c: unscrew the nut, remove the clip and the outlet hot water pipe.

Unscrew the fixing screws (fig. 30d) and remove the burner.

Fig. 26 - Dismantling the casing

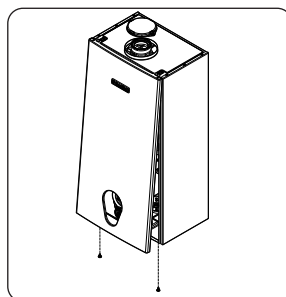


Fig. 27 - Accessibility to the electronic board

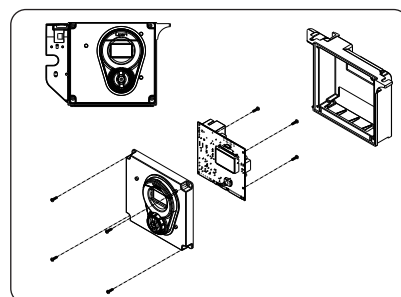


Fig. 28 - Dismantling the gas valve

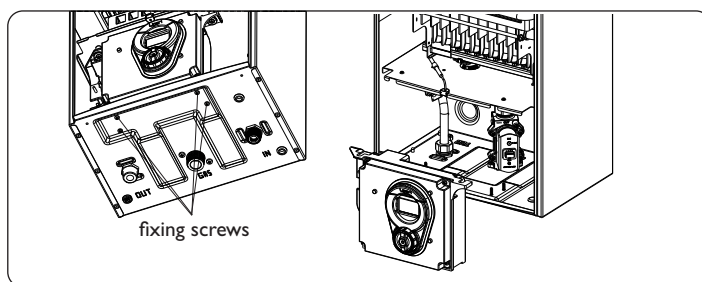


Fig. 29 - Dismantling the fan

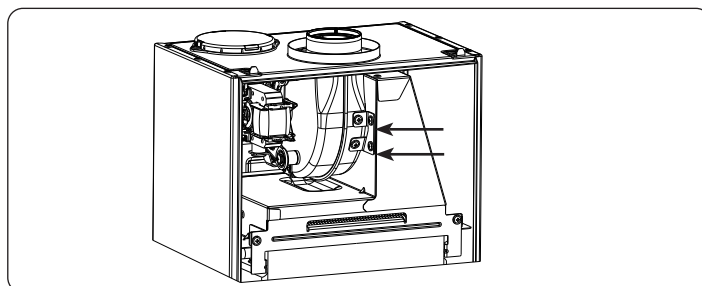


Fig. 30a - Dismantling the burner

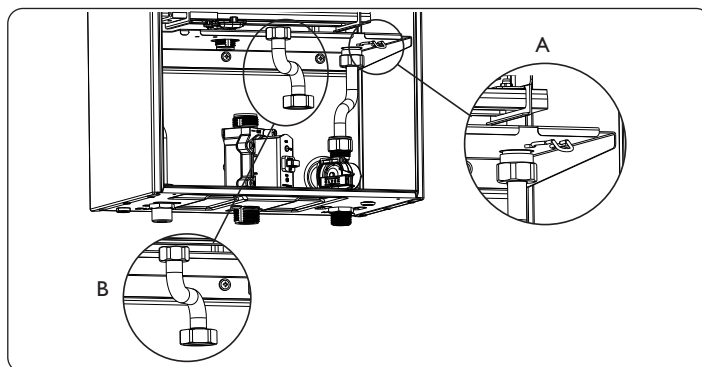


Fig. 30b - Dismantling the burner

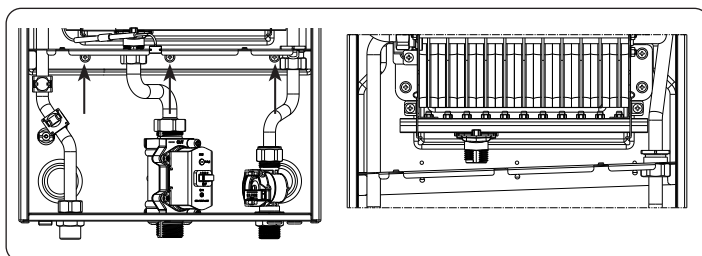


Fig. 30c - Dismantling the burner

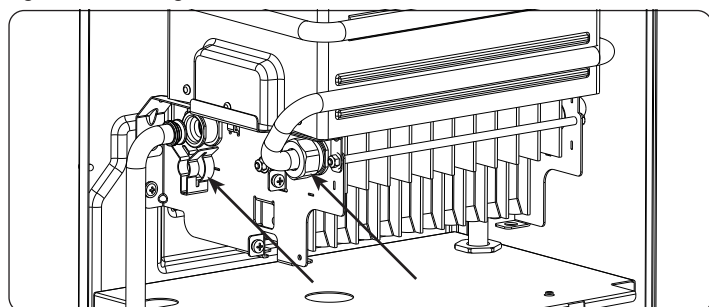
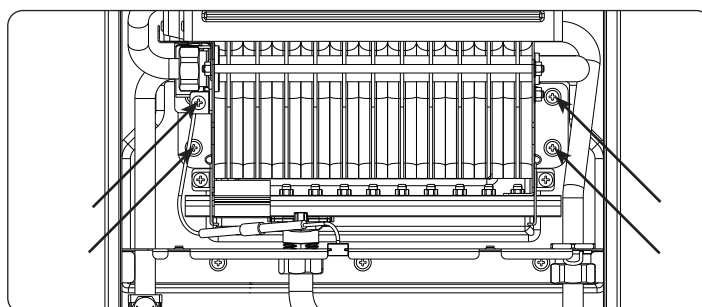


Fig. 30d - Dismantling the burner



Dismantling the heat exchanger (Fig. 31)

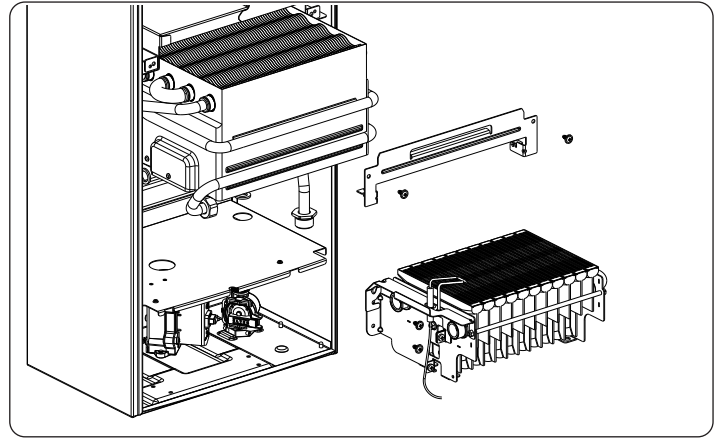
Remove the casing and the burner by referring to the specific paragraphs.

Remove the input cold water pipe.

Unscrew the fixing screws.

Remove the heat exchanger.

Fig. 31 - Dismantling the heat exchanger



General terms of warranty

The Warranty is the one provided by the regulations and laws governing the sale of consumer goods in the country of purchase. For further information contact the dealer/importer.

Warranty exclusions

The warranty is excluded with respect to damage, malfunctions and defects that may be detected on Fondital gas water heaters and caused by:

- a) Transport by third parties.
- b) Negligence in the storage and handling of the product.
- c) Inability to use the product and accessories, and failure to follow instructions and warnings outlined in the use and maintenance manual supplied.
- d) Insufficient flow rate and defective gas, water and power supplies.
- e) Tampering or work by personnel not authorised by the manufacturer.
- f) Installation of the product in an unsuitable place (internal or external) and problems arising from incorrect or improper installation.
- g) Inadequacy of flues and/or the flue gas venting pipe and combustion air intake, as well as use of components, flue pipes or heat transfer fluids that are not suitable for the type of products that are installed or are not Fondital original parts.
- h) Storage in unprotected areas of construction sites.
- i) Failure to empty the system or premature installation.
- j) Corrosion of the system and formation of limescale build-up or other deposits arising from the supply water.
- k) Failure to clean the system with suitable products whether it be new or old.
- l) Force majeure due to particular weather events (e.g., earthquakes, floods, lightning, storms, excessive precipitation, etc.), as well as fires, vandalism, theft; stray currents and/or harmful effects due to atmospheric elements.
- m) Use of inadequate fuel and/or in any case for reasons not depending on the manufacturer.
- n) Forced or prolonged suspension of product operation.

Furthermore, the warranty is considered void in the following cases:

- a) If the end user is not current with payments.
- b) If the system is not installed in full compliance with regulations and laws, as well as the instructions and warnings published in the installation, use and maintenance manual supplied with the product.
- c) In case of skipped or inadequate periodic maintenance.
- d) In case of use of non-original spare parts.

Furthermore, these operations are not covered by the warranty: plumbing, electrical, gas supply and flue connections, combustion analysis, as well as activities and operations to access the product, like disassembling furnishings or covers, preparation of scaffolding, use of platforms, cranes etc.

Moreover, the customer will bear all the expenses if service is required to rectify erroneous technical work, tampering, or, in any case, damage to the product not attributable to manufacturing defects.



0 L I B M E E N 5 3

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The manufacturer reserves the right to modify his/her products as deemed necessary, without altering the basic characteristics of the products themselves.

Uff. Pubblicità Fondital IST 03 C 1208 - 03 December 2020 (12/2020)