

# INSTALLATION, USE AND MAINTENANCE MANUAL



## **GTF SERIES**

*MOD. 220*  
*30 kW*

*MOD. 300*  
*34kW*

*MOD. 400*  
*34kW*

*MOD. 500*  
*34kW*

*MOD. 800*  
*34kW*



## **GTF SOL SERIES**

*FOR USE WITH A  
SECOND ENERGY SOURCE*

*MOD. 220*

*MOD. 300*

*MOD. 400*

*MOD. 500*

*MOD. 800*



*Storage gas water heaters with forced  
and sealed combustion chamber, assisted gas fan*



# DESCRIPTION OF THE APPLIANCE

## 1 D.H.W. HEATER CATEGORY

These devices are classified as generator of hot water with sealed combustion chamber and atmospheric burner.

They are classified in the category II2H3+, it means that they can be used with the gas of second class: natural, methane H and of third class Lpg butane, propane.

As for the European norm EN 483 they are identified referring with the system for air aspiration and fumes drain C13,C23,C53.

## 2 PACKAGING

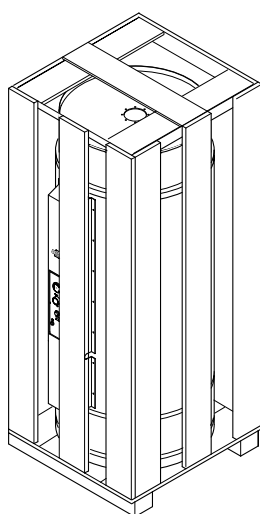


Fig. 01

Mod.	N. pack	Dimensions (h x l x p) (mm)	Weight (Kg)
220	1	1650 x 780 x 780	160
300	1	2000 x 780 x 780	187
400	1	1800 x 820 x 820	200
500	1	2080 x 820 x 820	232
800	1	2150 x 1100 x 1100	335

The water heater is supplied in a case of wood, with one envelope, in the frontal containing the present manual and the certificate of guarantee.

## 3 DESCRIPTION OF THE WATER HEATER

The water heater is composed from a water tank lodged over to a combustion chamber where the heat necessary is developed in order to heat the water.

The produced smoke therefore yields their heat to the water in their fireplace towards the outside, passing through the tubes, the exchanger dipped in the water.

On the high part a canopy collects the fumes from the exchanger and drives them to the drainage system. A fan is situated in the upper cap it, supplies the feeding of the air and the evacuation of the products of combustion. The tank is constructed in sturdy sheet iron and guarantees a remarkable resistance to pressure it's moreover glass lined at 860°. This concurs to obtain an optimal unassailable chemical resistance (from organic solvent and from chemical substances), an optimal thermal stability; the enamel resists until 500° The inner inspection and cleaning from the incrustations is possible through the flange 120 mm diameter.

The combustion chamber is placed in the low part of the water heater and it contains the atmospheric burner and flame probes. Combustion chamber is completely sealed from the place where it is installed.

### Control Panel

The control panels contains all the components in order to adjust the normal operation of the water heaters: thermostat, ignition device, luminous release button, thermometer etc..

### KIT OF SMOKE DRAINAGE (supplied separately)

As for the different requirements of Installation it can be:

- Concentric with drainage and aspiration to the wall
- Concentric with drainage and aspiration to the wall
- Divided with drainage and aspiration to the wall, to the roof or in a fume pipe.

## 4 TEST OF THE WATER HEATER AND SECURITY

### Electronic ignition card

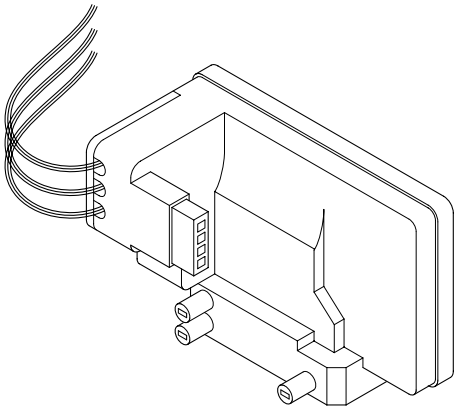


Fig. 02

It controls the opening of the gas valve and the burner ignition. Since when it receives the electrical feeding from the thermostat it initially checks that the contacts of the pressostat are in position of operation otherwise there is no ignition; on the contrary, subsequently, it makes a pre ventilation cycle of the combustion chamber and the ignition spark, if during this cycle it does not find the flame of ignition in the pre fixed time, it is placed in block position; in it this case please wait some second and then press the luminous reset key.

The survey of the flame happens for ionization through appropriate probe on the burner, CE Homologated EN 298.

### GAS VALVE

It is made of one multifunctional multigas valve with double safety B class for silent operation.

The valve is equipped of pressure regulator and device for the slow ignition, with adjustable gas capacity (factory pre setted) Homologated as for norms EN 126.

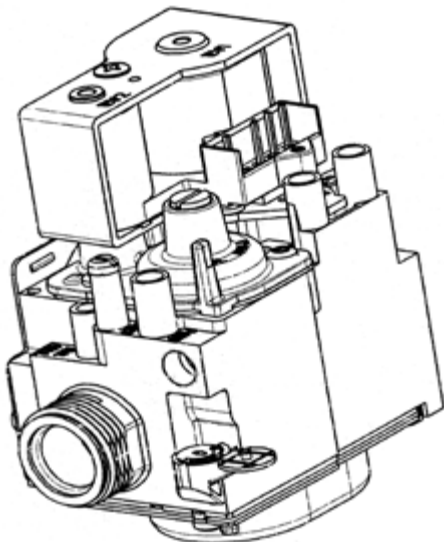


Fig. 03

The body is in fused aluminium it is supplied of inlet and outlet gas connection 1/2". The unit is supplied of inlet gas filter.

The two electro valves are connected in series on the main pipe of the gas and are fedded by co a single tripolar connector, to avoid wrong connections. All the operations of calibration and regulation

must be executed from qualified staff.

In case of replacement of the valve be sure that the flow of the gas is in compliance with the arrow on the body of the valve and that during the assembly operations external substances do not enter.

### AIR PRESSOSTAT

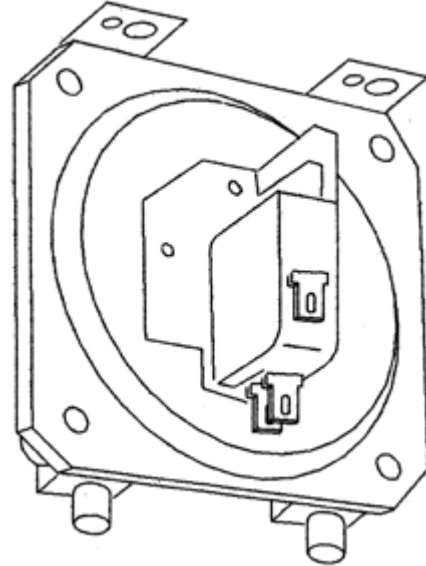


Fig. 04

The function of this device is to control the combustion, interrupting the operation of the burner in case of insufficient capacity of the fan.

The device has 3 contacts,( two positions, one normally in open position NA, the other normally closed NC.

### MAGNESIUM ANODE

Magnesium anode is important to protect the water heater from corrosion and galvanic currents. It is suggested to replace the anode once every year, the anode is placed in the inspection flange, in the frontal part of the tank.

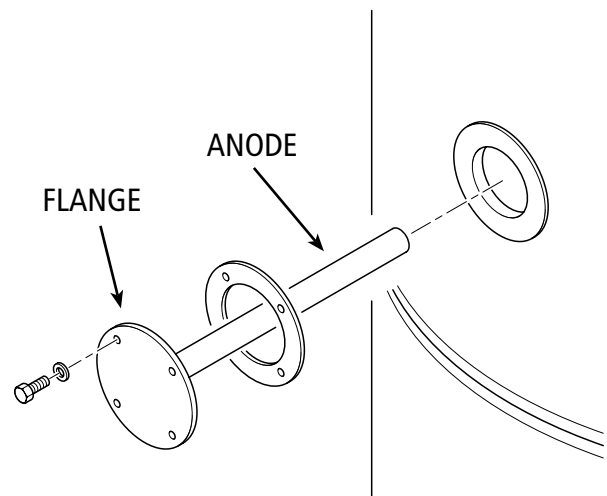


Fig. 05

## OVER PRESSURE VALVE

The function of this device is to permit the water flow out from the drain hole of the valve in case that pressure inside the tank increases.

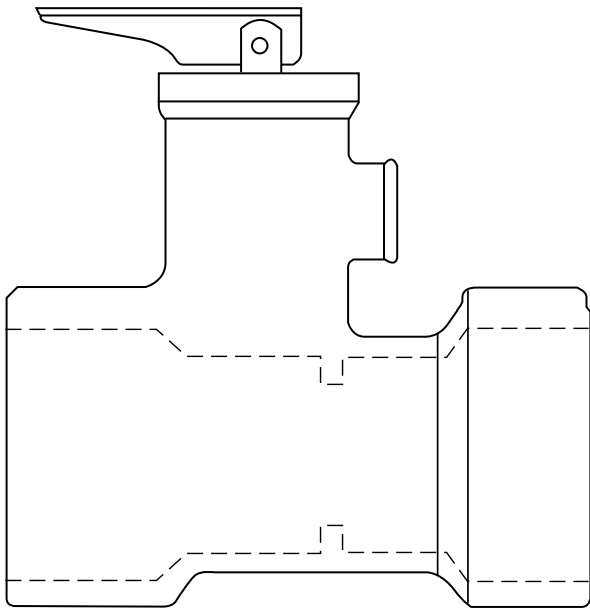
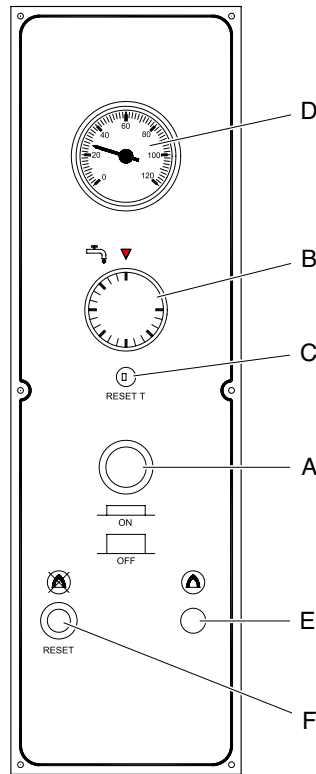


Fig. 06

## 5 CONTROL PANEL



- A Switch on/off key
- B Adjustment thermostat
- C Safety thermostat
- D Thermometer
- E Working signal green
- F Block and reset key

Fig. 08

## 9 WORKING AND LIMIT THERMOSTATS

The two thermostats are included in the same body. The operation thermostat adjusts the operation of the generator commanding the ignition and the switching off of the burner, in function of the wished temperature of the water.

It is a capillary thermostat with expansion of liquid probe. The limit thermostat interrupts the operation of the burner in case of overheating of the water, caused from the bad operation of adjustment thermostat. It is a thermostat capillary with expansion of liquid probe with manual reset, once the cause is found manual intervention is necessary. The maximum temperature is factory regulated at 95°C.

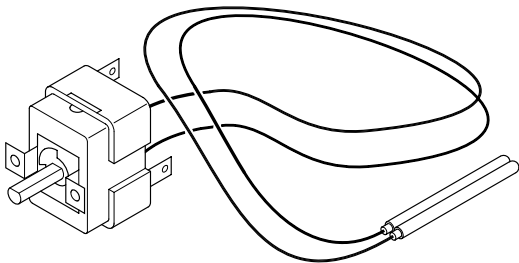


Fig. 07

## 6 WATER HEATER DIMENSIONS, WATER AND GAS CONNECTIONS

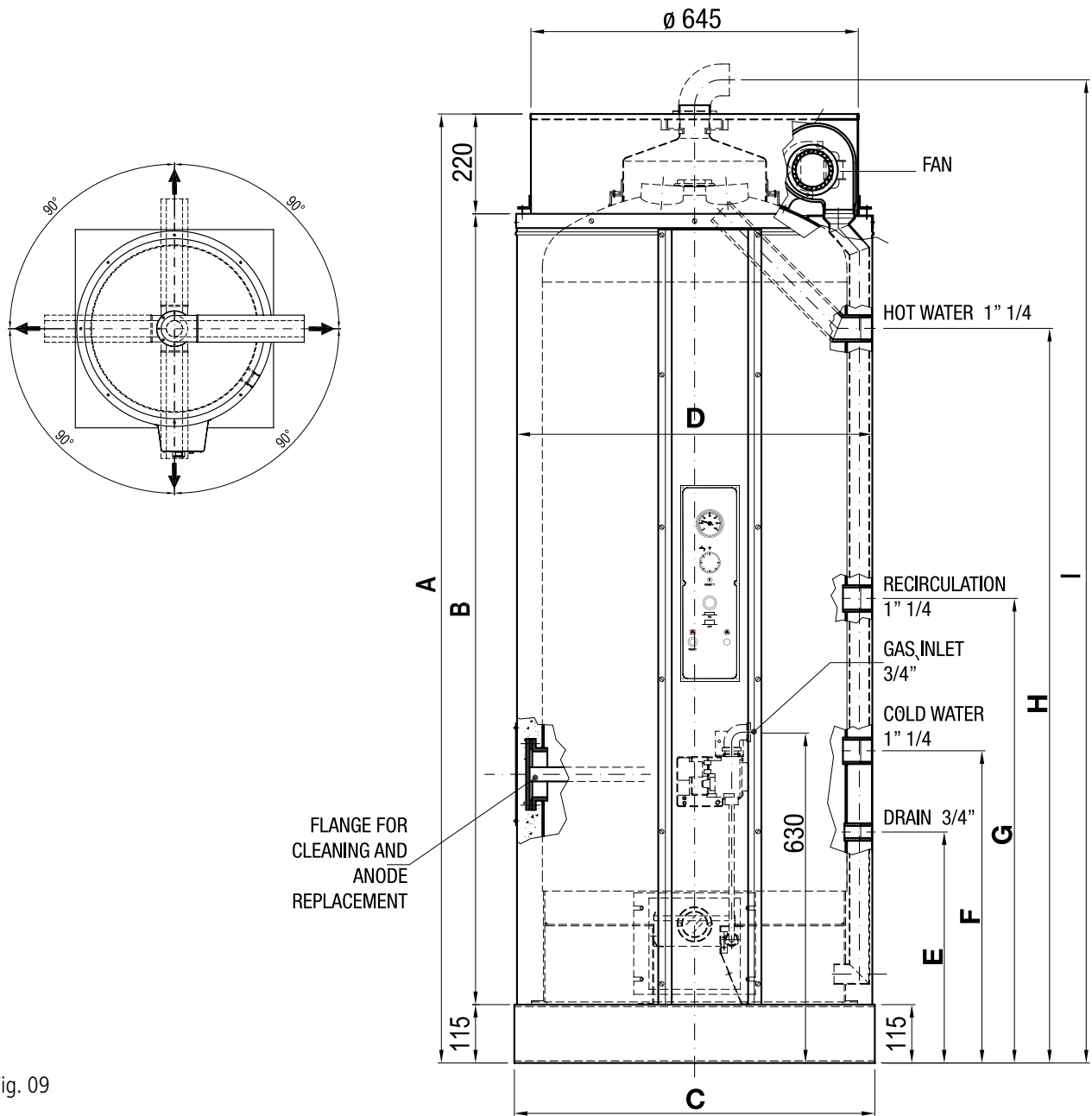


Fig. 09

GTF-GTF SOL			220	300	400	500	800	
A	Total height	mm	1600	1950	1766	2036	2146	
B	Height of body	mm	1265	1615	1430	1700	1810	
C	Base width	mm	710	710	810	810	1010	
D	Water heater diameter	mm	700	700	800	800	1000	
E	Water drain	3/4"	mm	480	480	460	460	545
F	Cold water inlet	1" 1/4	mm	645	645	625	625	645
G	Recirculation	1" 1/4	mm	890	950	1026	1026	990
H	Hot water outlet	1" 1/4	mm	1170	1460	1325	1595	1604
I	Outlet axle fumes	Ø 60/100	mm	1700	2050	1866	2136	2246

## 7 FLUE GAS VENTS

### WALL COAXIAL KIT

Cod. A 01.001.000648

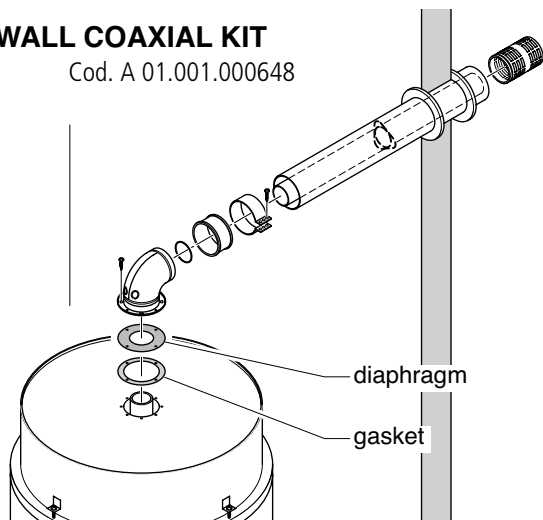


Fig. 10

### HORIZONTAL COAXIAL DRAIN KIT C13

1 mt kit includes:

- 1 coaxial pipe Ø 60/100
- 1 flanged elbow Ø 60/100
- 1 ring with gaskets Ø 100
- 2 wall plugs Ø 100

### Accessories:

PRODUCT NO.	DESCRIPTION
A 01.001.000278	Coaxial extension pole Ø 60/100 1 mt
A 01.001.000276	Coaxial elbow Ø 60/100 90° not flanged
GTF 068	Air diaphragm Ø 74 (mod 220)
GTF 069	Air diaphragm Ø 80 (mod 300-400-500-800)

To increase the length it's necessary to buy the extension poles, max 3 mt.

It's possible to place inside the fume pipe up to 2 elbows 90°. Reduce the length of 1 mt for each elbow.

### HALVED KIT

Cod. A 1011 276

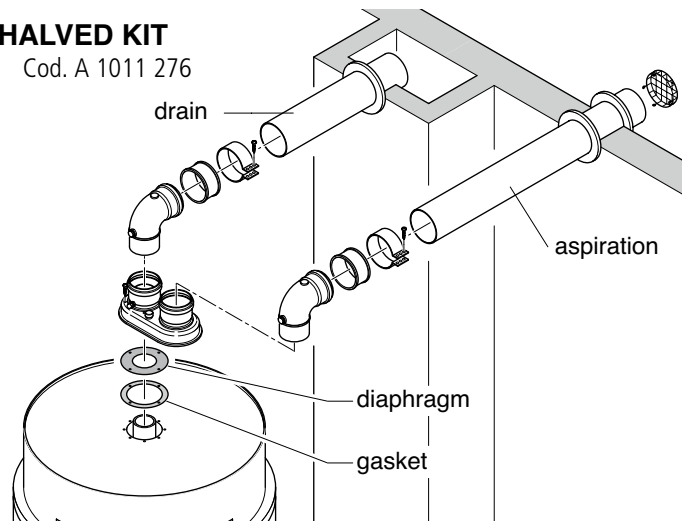


Fig. 11

### HALVED KIT

Standard kit 1 mt contains:

- Divided with gaskets
- 2 pipes Ø 80 1 mt long
- 2 wall plugs Ø 80
- 1 Terminal for air aspiration
- 2 drain fumes terminals
- 2 elbows Ø 80 at 90°

### Accessories:

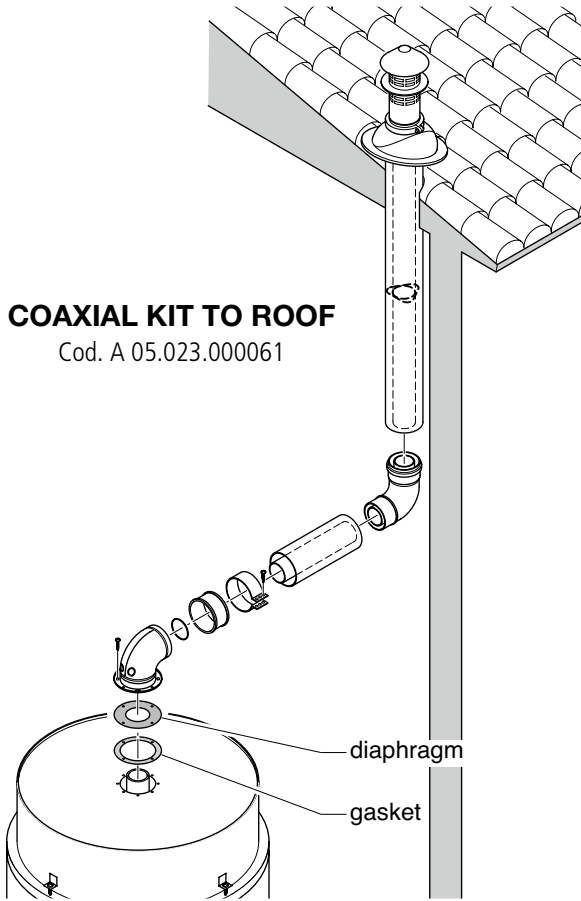
PRODUCT NO.	DESCRIPTION
A 01.011.000122	Elbow Ø 80 90°
A 01.011.000004	Extension pole Ø 80 1 mt long
GTF 067	Air diaphragm Ø 71 (mod 220)
GTF 068	Air diaphragm Ø 74 (mod 300-400-500-800)

To increase the length it's necessary to buy the extension poles, max 20 mt.

It's possible to place inside the fume pipe some elbows 90°. Reduce the length of 1 mt for each elbow.

### COAXIAL KIT TO ROOF

Cod. A 05.023.000061



### Accessories:

CODE	DESCRIPTION
A 01.001.000278	Coaxial extension pole Ø 60/100 1 mt
A 01.001.000276	Coaxial elbow Ø 60/100 90° smooth ended
A 03.001.000602	Flanged Coaxial elbow Ø 60/100 90° for connection with the water heater
GTF 068	Air Diaphragm Ø 74 (mod 220)
GTF 069	Air Diaphragm Ø 74 (mod 300-400-500-800)

### VERTICAL DRAIN KIT C33

1 mt standard kit contains:

- 1 vertical terminal Ø 607/100 1 mt
- 1 ring with washers Ø 100

To increase the length it's necessary to buy the extension poles, max length is 2 extension poles 1 mt\*2 elbows 90°.

Fig. 12

### AIR DIAPHRAGM

Using horizontal and vertical 60/100 drain of length up to 1 m and divided drain 80/80 mm of length up to 4 mt (drain and aspiration) it's necessary to place an air control diaphragm as for the figure below.

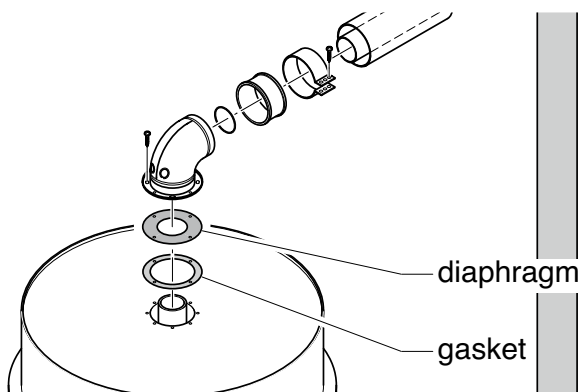


Fig. 13

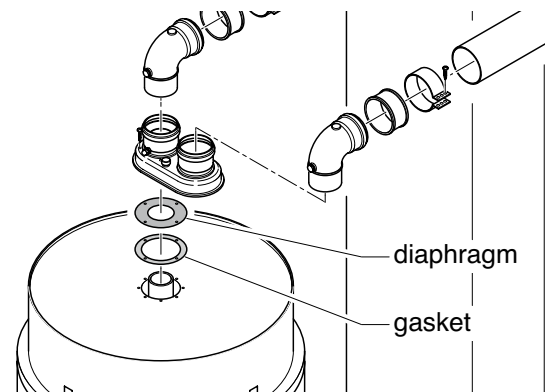


Fig. 14

### Air diaphragm for GTF. Methane and LPG

GTF	CONCENTRIC Ø 60/100 DIVIDED		DIVIDED Ø 80/80	
	Up to 1m.	Over 1m.	Up to 4m.	Over 4m.
220	74	NO	71	NO
300	80	NO	74	NO
400	80	NO	74	NO
500	80	NO	74	NO
800	80	NO	74	NO



**8 TECHNICAL DATA****TECHNICAL DATA FOR GTF GAS WATER HEATER**

MODEL	unit	220	300	400	500	800
CAPACITY	litres	212	310	410	510	810
NOMINAL THERMIC CAPACITY	kW	30	34	34	34	34
NOMINAL THERMIC POWER	kW	26,8	30,6	30,6	30,6	30,6
COMBUSTION EFFICIENCY	%	92	93	93	93	94
OPERATING TIME AT 25°	min	15	17	23	29	46
OPERATING TIME AT 45°	min	28	31	41	52	82
SINGLE WATER DRAWING AT 25°C	litres	484	660	880	1100	1760
SINGLE WATER DRAWING AT 45°C	litres	268	366	488	611	977
CONTINUOUS WATER PRODUCTION/HOUR AT 25°C	litres/hour	921	1052	1052	1052	1052
CONTINUOUS WATER PRODUCTION/HOUR AT 45°C	litres/hour	512	585	585	585	585
CONTINUOUS WATER PRODUCTION/HOUR AT 30°C	litres/hour	768	877	877	877	877
METHANE CONSUMPTION G20	m <sup>3</sup> /h	3,17	3,60	3,60	3,60	3,60
METHANE NOZZLE DIAM	mm	1,30	1,30	1,30	1,30	1,30
METHANE NOZZLE DIAM	mbar	11,40	13,80	13,80	13,80	13,80
LPG CONSUMPTION G30/31, INLET 29/37 MB	kg/h	2,13	2,50	2,50	2,50	2,50
LPG DIAMETER NOZZLE	mm	0,72	0,75	0,75	0,75	0,75
NOZZLES	nbre	15	15	15	15	15
NOZZLES	V-Hz	220-240 V ~ 50 Hz (IP 20)				
POWER	Watt	60	60	60	60	60
MAX WATER PRESSURE	bar	6	6	6	6	6
WEIGHT EMPTY	kg	142	166	177	207	300
WIEIGHT FULL	kg	354	476	587	717	1110

## 9 ELECTRIC DIAGRAM

While connection the cable to the electric power respect the polarity of the net /phase-neutral). In case of wrong connection or polarity the water heater does not work.

COMPONENT		UNITS	CABLES COLOUR
V	Air fan	① Air case	B white
P	Pressostat		BLU blue
EA	Ignition electrode	② Ignition card	G/V yellow/green
ER	Electrode flame		GR grey
PA	Ignition key	③ Control panel	M brown
SV	Green light burner		R red
SB	Block red light		V green
PS	Reset key		
ST	Power light		
T	Adjustment and safety thermostat		

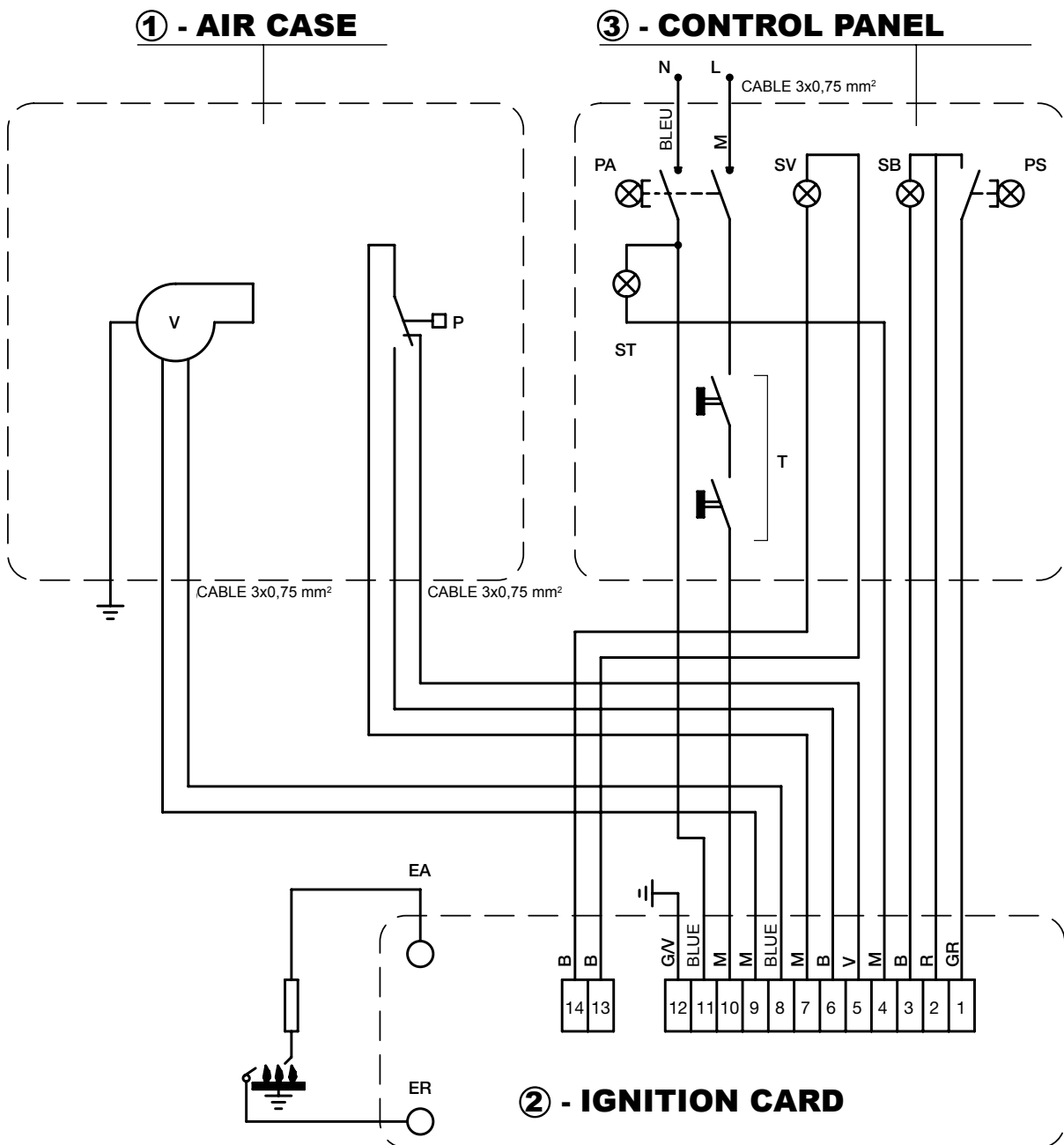


Fig. 15

**10 PARTS SCHEME**

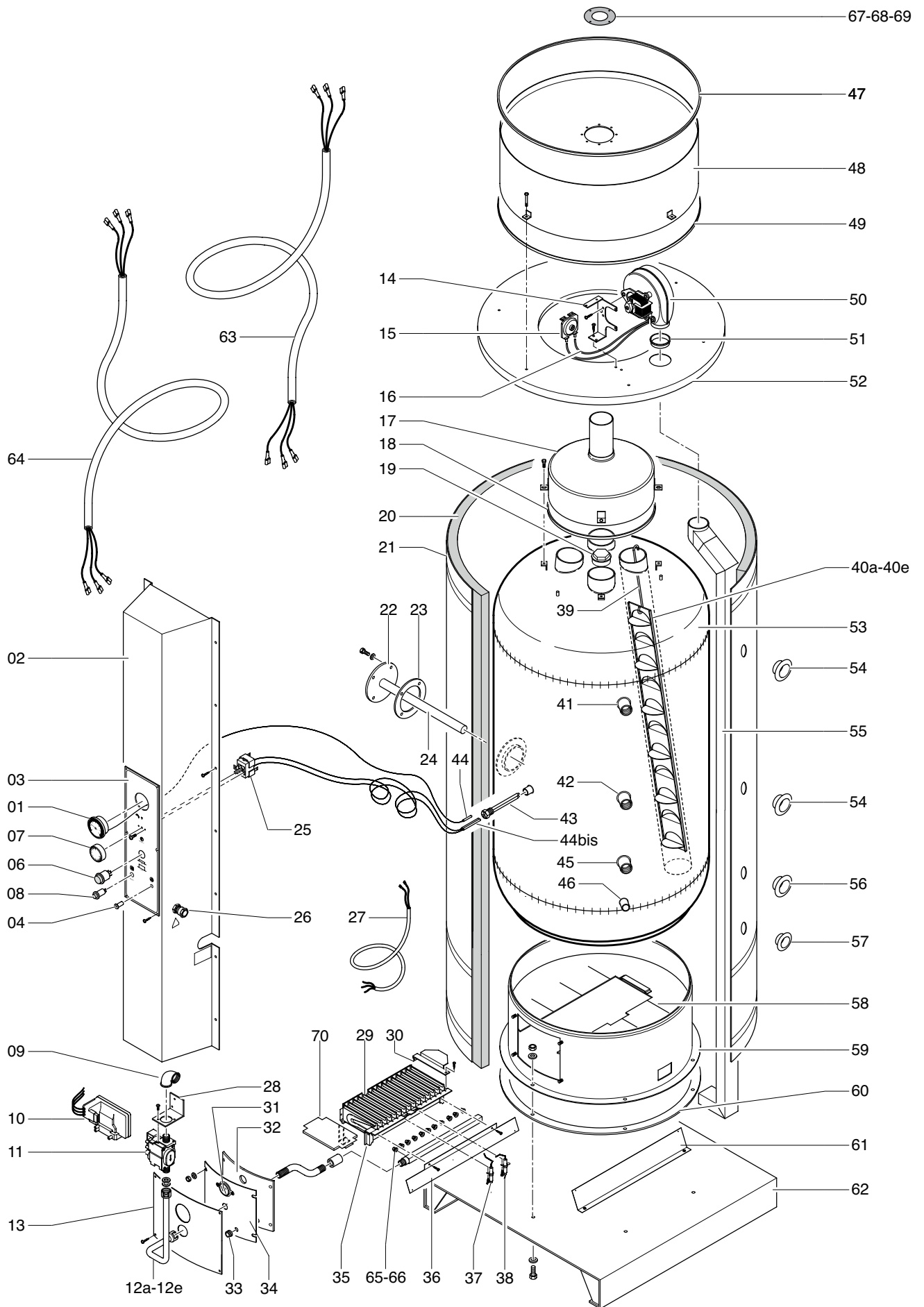


Fig. 16

## LIST OF COMPONENTS

POS	CODE	DESCRIPTION	QTY
01	GTF001	Thermometer with probe	1
02	GTF002	Carter	1
03	GTF003	Control panel	1
04	GTF004	Green light operation	1
06	GTF006	Ignition key	1
07	GTF007	Thermostat knob	1
08	GTF008	Red light with reset	1
09	GTF009	Inlet gas 3/4"	1
10	GTF010	Ignition card	1
11	GTF011	Gas valve 840.030	1
12a	GTF012-2	Burner pipe mod. 220L	1
12b	GTF012-3	Burner pipe mod. 300L	1
12c	GTF012-4	Burner pipe mod. 400L	1
12d	GTF012-5	Burner pipe mod. 500L	1
12e	GTF012-8	Burner pipe mod. 800L	1
13	GTF013	Front closing	1
14	GTF014	Fan bracket	1
15	GTF015	Air pressostat	1
16	GTF016	Pressostat tube	2
17	GTF017	Fumes canopy	1
18	GTF018	Fumes canopy gasket	1
19	GTF019	Plug 1 1/4"	1
20	GTF020	Tank insulation	1
21	GTF021	External cover	1
22	GTF022	Inspection flange	1
23	GTF023	Inspection flange gasket	1
24	GTF024	Magnesium anode	1
25	GTF025	Adjustment and security thermostat with probes	1
26	GTF026	Cable bracket	
27	GTF027	Power cable	1
28	GTF028	Bracket for gas valve	1
29	GTF029	Burner	1
30	GTF030	Burner bracket	1
31	GTF031	Inspection	1
32	GTF032	Door chamber gasket	1
33	GTF033	Silicon cable protection	1
34	GTF034	Combustion chamber door	1
35	GTF035	Nozzles collector	1
36	GTF036	Upper air blade	1

POS	CODE	DESCRIPTION	QTY
37	GTF037	Electrode	1
38	GTF038	Ignition electrode	1
39	GTF039	Turbolator bracket	4
40a	GTF040-2	Turbolator 220L	4
40b	GTF040-3	Turbolator 300L	4
40c	GTF040-4	Turbolator 400L	4
40d	GTF040-5	Turbolator 500L	4
40e	GTF040-8	Turbolator 800L	4
41	GTF041	Hot water outlet ø 1 1/4"	1
42	GTF042	Recirculation ø 1 1/4"	1
43	GTF043	Probes sheath	1
44	GTF044	Thermometer probe	1
44bis	GTF044	Thermostat probes	2
45	GTF045	Cold water inlet ø 1 1/4"	1
46	GTF046	Probes sheath ø 3/4"	1
47	GTF047	Air case profile	1
48	GTF048	Air case	1
49	GTF049	Air case gasket	1
50	GTF050	Fan	1
51	GTF051	Fan gasket	1
52	GTF052	Support disc	1
53	GTF053	Tank	1
54	GTF054	Red plastic ring ø 45	2
55	GTF055	Adduction air tube	1
56	GTF056	Blue plastic ring ø 45	1
57	GTF057	Blue plastic ring ø 30	1
58	GTF058	Combustion chamber disc	1
59	GTF059	Combustion chamber	1
60	GTF060	Sealant gasket	1
61	GTF061	Sealant gasket	1
62	GTF062	Base	1
63	GTF063	Pressostat cable	1
64	GTF064	Fan cable	1
65	GTF065	Methane nozzles set	15
66	GTF066	LPG nozzles set	15
67	GTF067	Diaphragm ø 71	1
68	GTF068	Diaphragm ø 74	1
69	GTF069	Diaphragm ø 80	1
70	GTF070	Front burner bracket	1

## 12 FOR THE INSTALLER

The installation must be made from qualified staff as for the regulation in force, in a position to assuring the starting and the test. Pay attention to the choice of the model is for of the requirements of water production, see the values of water production in the scheme of the technical data.

The modifications of the connections and the TAMPERING of the components provoke the decay of the guarantee.

Before every operation to detach the power. This product is included in group C and it can be installed in whichever premises; the passage hole through the wall do not have to be obstructed.

These water heater must be installed on the floor leaving space for being able to make the connections and to make the maintenance. In order to avoid infiltrations it suggested to incline towards the bottom of the aspiration and fumes pipes, leave in high part at least 20 cm space.

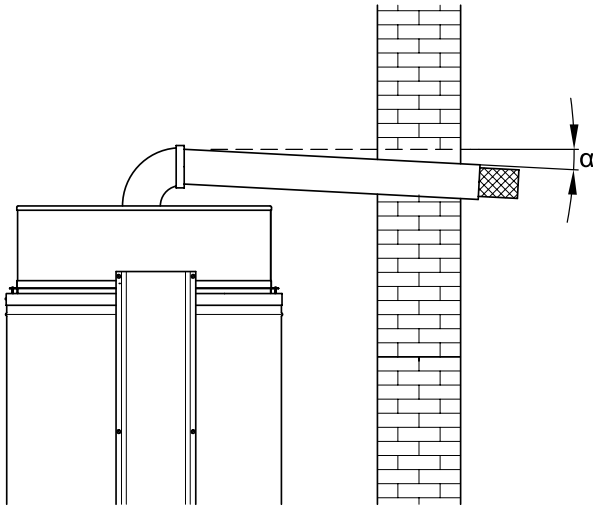


Fig. 17

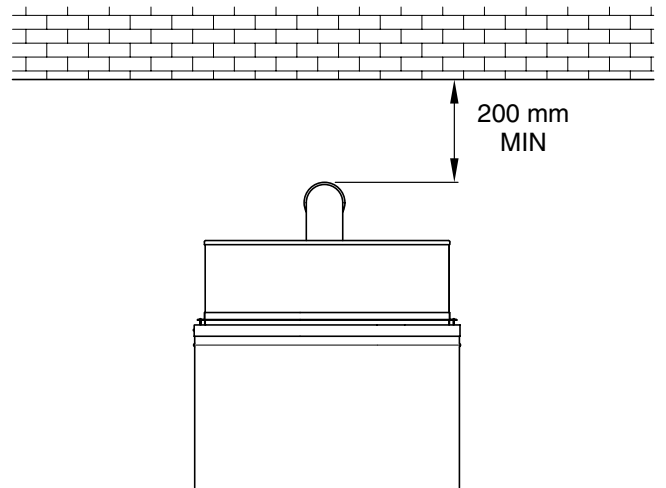


Fig. 18

Consider the following distance in case of wall drain

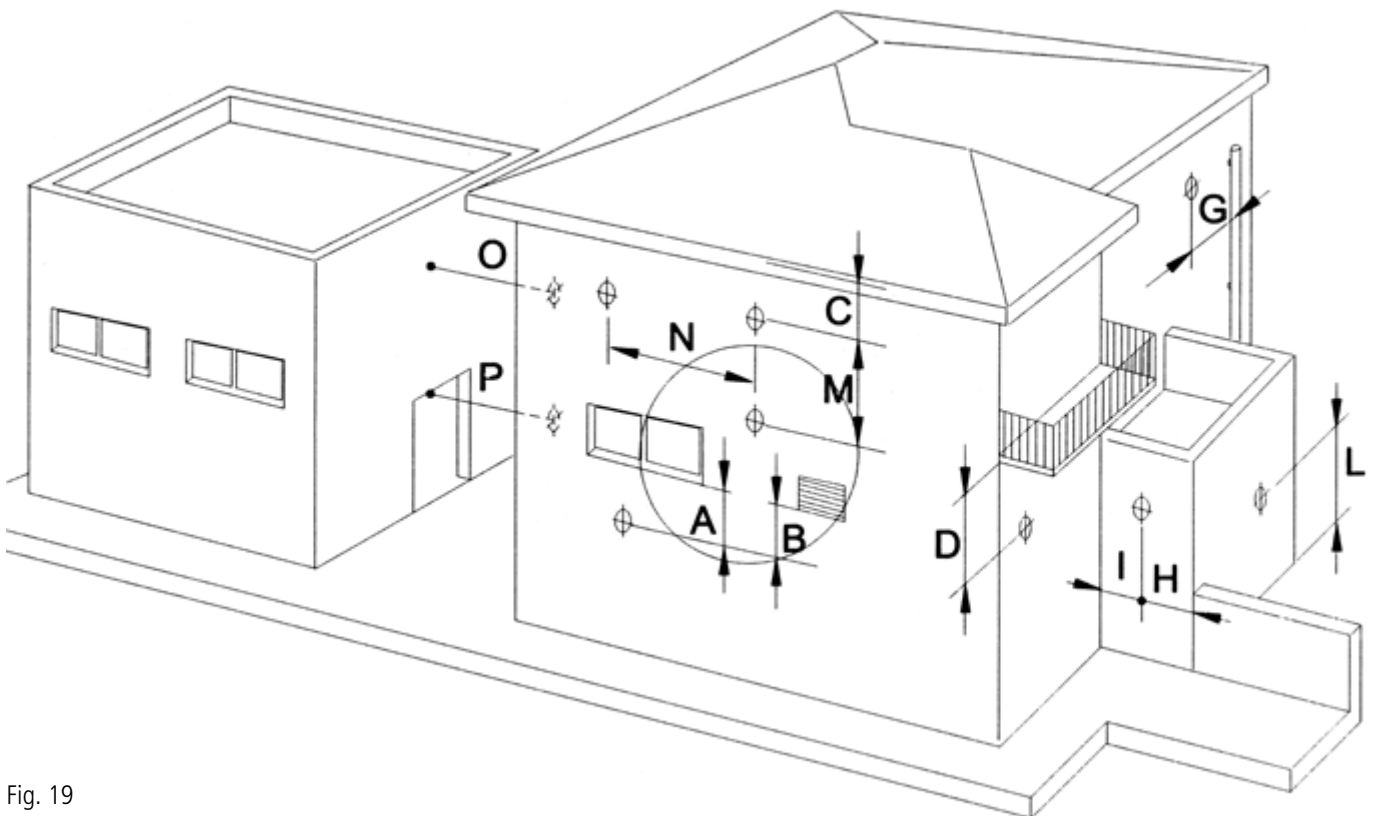


Fig. 19

TERMINAL DISTANCES		mm
A	Under window	600
B	Under ventilation opening	600
C	Under the eaves	300
D	Under the balcony	300
E	From adjacent window	400
F	From opening of adjacent ventilation	600
G	From pipes	300
H	From pipes	300
I	From a recess	300
L	From the floor	2500
M	Between two vertical terminals	1500
N	Between 2 horizontal terminals	1000
O	From a front surface without opening or terminals in a 3 mt ray from fumes outlet	2000
P	As above	3000

### 13 PLUMBING CONNECTIONS

MODEL	COLD WATER INLET	HOT WATER OUTLET	RECIRCULATION	DRAIN
220	1" 1/4	1" 1/4	1" 1/4	3/4"
300	1" 1/4	1" 1/4	1" 1/4	3/4"
400	1" 1/4	1" 1/4	1" 1/4	3/4"
500	1" 1/4	1" 1/4	1" 1/4	3/4"
800	1" 1/4	1" 1/4	1" 1/4	3/4"

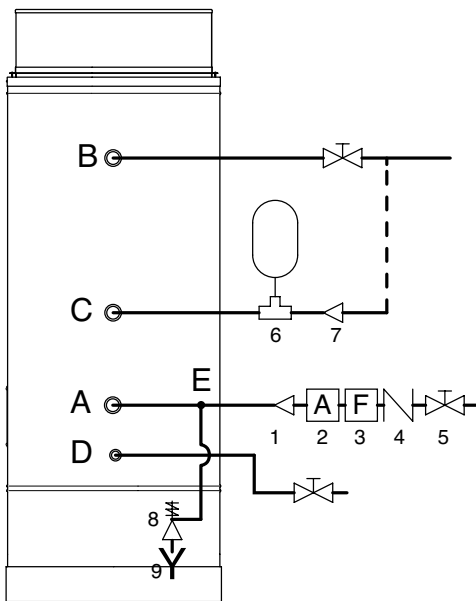


Fig. 20

#### A Cold water inlet use as follows:

1. Check valve
2. Purifier for hard water
3. Filter against: sand, mud, on request
4. Pressure reducer (suggested)
5. Closing tap

#### B Hot water outlet to connect with sanitary water, use a closing tap.

#### C Recirculation:

6. Use a TEE to connect with an expansion tank, not lower than 5% of the storage water.
7. Non return valve (optional) Recirculation is compulsory for mod 300-400-500-800.

#### D Drain: Use a drain tap

#### E Connection for safety valve:

8. Safety valve (supplied)
9. Drain siphon

**WARNING:** Do not replace the safety valve supplied with a no return valve.

## 14 GAS CIRCUIT

Connect the gas with the threaded connection using a rigid connector that can be disassembled.

Verify the seal that must be in compliance with the norms for gas installations.

For installation with Lpg it is necessary to use a pressure reducer (first stage) in proximity of the tank, in order to reduce the pressure to 1,5 bars. In proximity of every generator must be used a pressure reducer (second stage) in order to reduce the pressure to 29/37 to mbarr.

### GAS REGULATION

The product is factory adjusted as mentioned below and on the packing.

Methane or H or G20

- inlet pressure: 20 mbar
- Burner pressure as below

LPG or methane propane or G30/31

- inlet pressure: 29/37mbar
- Burner pressure as below

### NOZZLES SCHEME-FLOW-PRESSURE

METHANE						
Model		220	300	400	500	800
Thermal power	kW	30	34	34	34	34
Ø nozzle	mm	1,30	1,30	1,30	1,30	1,30
Nozzle pressure	mbar	11,40	13,80	13,80	13,80	13,80
Methane pressure regulator		on	on	on	on	on

LPG						
Model		220	300	400	500	800
Ø nozzle	mm	0,72	0,75	0,75	0,75	0,75
Inlet pressure LPG	mbar	29/37	29/37	29/37	29/37	29/37
LPG pressure regulator		off	off	off	off	off

In order to verify the pressure to the burner, insert the tube of a water column gauge in the connection B, after to have removed the closing screw.

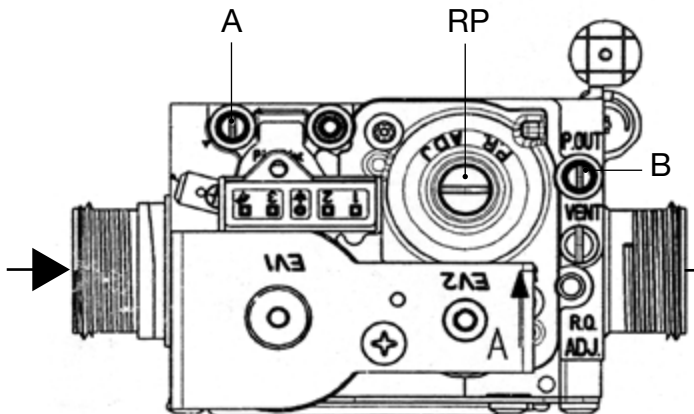


Fig. 21

### Burner calibration pressure with methane

While the product is in function, use a screw driver to turn the screw RP to obtain the pressure as below.

Stop the burner and switch on it after some seconds.

### Burner calibration with LPG

In this case the pressure regulator is excluded, the screw RP must strongly be screwed. The pressure that arrives to the burner is the boost pressure as for the European norm EN 437 the pressure of gas valve depends from the gas in the bottle G 30 pure butane 29 mbar, G 31 pure propane 37 mbar d of gas.

### ATTENTION

As soon as the operation is finished please verify:

1. Electrical isolation
2. Gas seal
3. Closing of A and B screws
4. That product works properly

## 15 GAS CHANGEMENT

To change the kind of gas use the kit supplied from the producer; this operation must be made from professional staff.

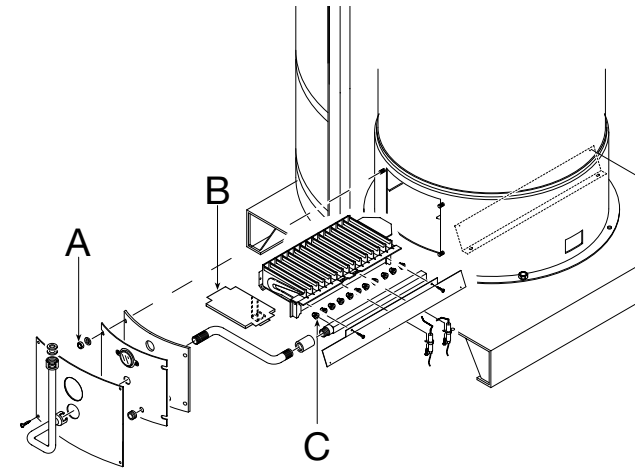


Fig. 22

### Modification from methane to LPG

1. Verify that diameter of the injector supplied in the kit corresponds to the model for LPG.
2. Close the gas interception tap and switch off the electricity.
3. Remove the burner unscrewing the fixing bolts A and remove the front support B, unscrew before the gas tube and disconnect the cables of the electrodes.
4. Unscrew the injectors C and replace them with the units inside the kit.
5. Exclude the pressure regulator of the gas valve screwing the RP screw.
6. Switch on the generator and verify that inlet pressure from the valve A is right for the kind of Lpg used (see the scheme).
7. Place the new label on the body to indicate a different gas.
8. Verify with special spray the gas seal on the threads, gaskets.

### ATTENTION

If the product is used with Lpg it's necessary to use a pressure reducer "first stage" near the tank to reduce the pressure up to 1,5 bar. Install near the product a second pressure reducer "second stage" to reduce the feed pressure to 29 mbar (pure butane G 30) or 37 mbar (pure propane G31).

### Modification from LPG to methane

1. Verify that diameter of the injector supplied in the kit corresponds to the model for LPG.
2. Close the gas interception tap and switch off the electricity.
3. Remove the burner unscrewing the fixing bolt A, unscrew before the gas tube and disconnect the cables of the electrodes.
4. Unscrew the injectors B and replace them with the units inside the kit.
5. Rotating the RP screw adjust the pressure of the injector up to the pressure for methane.
6. Switch on the generator and verify that injector pressure is right for methane gas.
7. Place the new label on the body to indicate a different gas.
8. Verify with special spray the gas seal on the threads, gaskets etc.

### 16 CONNECTION WITH ELECTRICITY

The unit must be connected to single phase electric net plus a ground; use a bipolar device near the unit.

**THE MANUFACTURER IS NOT RESPONSIBLE FOR DAMAGES DUE TO WRONG CONNECTION.**

### 17 MORE UNIT CONNECTED TOGETHER

If more unit must be connected it is important that each one can work singularly, all at the same time or only some units.

This is possible using some sluice taps in the hydraulic circuit in order to decide the qty of unit that must use as for the required qty of water; it's suggested the following types of systems:

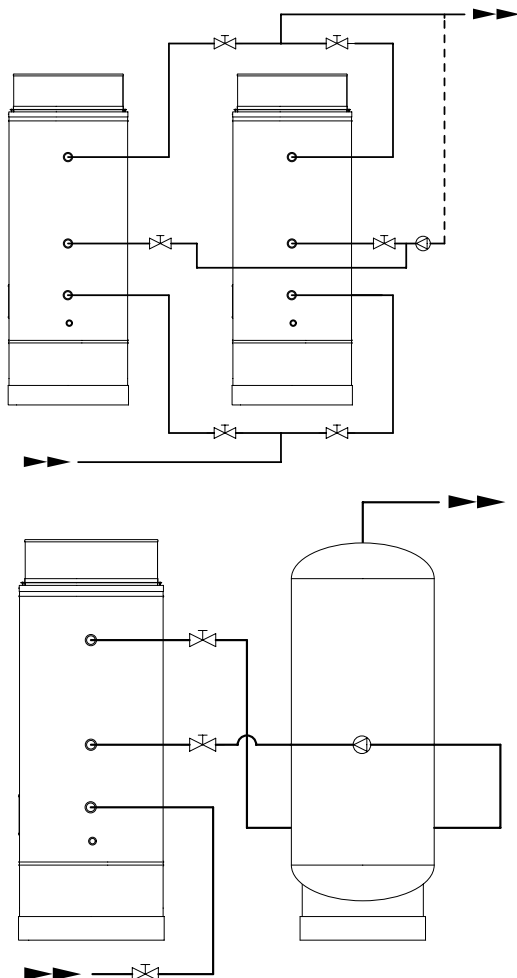


Fig. 24

### 18 ANOMALOUS OPERATION

**The control equipment goes in block without to command to the ignition.**

- The survey flame circuit is out of order and the auto check does not allow the end of the cycle.
- The survey electrode flame has a dispersion.

**At the end of the phase of pre ventilation the ignition electrode does not make any spark and the equipment goes in block.**

- The ignition transformer is out of order, the connection of the electrode of ignition with the card is interrupted.

**At the end of the phase of pre ventilation the ignition electrode makes spark, but the flame doesn't take shape and the apparatus goes in block.**

- Lacks of gas power or is present air in the tubes.
- The valve of the gas does not open why the coils are out of order or the electrical connection is interrupted.

**At the end of the phase of pre ventilation the flame takes shape but the apparatus goes in block.**

- The flame is not become stabilized why the pressure is low.
- The electrode of survey of the gas is correctly placed and it is not in contact with the flame.
- The electrical connection of the electrode is interrupted the equipment goes in block during the operation.

**The apparatus goes in block while it's operating.**

- The feeding of the gas has been interrupted even if temporarily; the device not finding the gas presence has gone in block.

**Even if the thermostat works correctly has an intermittent operation.**

- The thermostat is defective and the pressostat stops the burner because the capacity of the fan is insufficient.

**The device in not in block but it remains in pre ventilation.**

- The tubes are clogged with dust.
- The pressostat one does not give the consent because it is out of order or the electrical connection is interrupted.

**The control unit is not in block but the cycle does not start.**

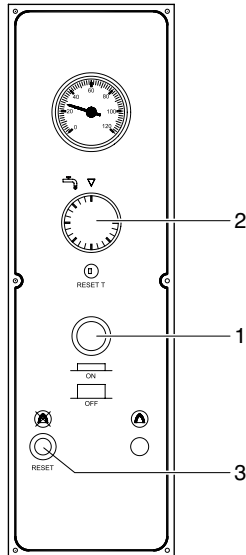
- During the verification the contacts of pressostat was in switched off position or glue or due to a wrong calibration of the pressostat and so is not given the consent to end the cycle.

For safety and warranty reasons, it is recommended, when replacing fault components, to use only genuine components and to contact authorised service centres.



## 19 IGNITION

1. Press the button of ignition
2. Turn the index of the thermostat of regulation 2 on the value of desired temperature of water.
3. Verify that the red luminous button of block 3 is dark, if it is red press the button in order to unblock the control equipment and the luminous button stops itself.



From this moment begins the cycle of ignition of the generator. The pressure created from the expulsion fan fumes closes the contacts of the pressostat and the control unit gives the consent of pre ventilation phase, at the end it commands the opening of the valve gas and the spark of the electrode. At the moment of the ignition the flame is noticed within 10 second otherwise it goes in block, it can easily happens in a new installation as there is air inside the pipes.

## 20 TO SWITCH OFF THE WATER HEATER

In order to switch off the generator for a short period turn the knob up to the minimum position and press the push-button.

In order to switch off the generator for a long period turn the knob of the thermostat up to the minimum position and press the push-button:

- Disconnect the power
- Close the tap of the gas
- In case of long inactivity in places not heated is advised to drain the tank

*The present*

# ***Generator of Hot Water***

*is conform to the European norms*

***73/23/EEC (LOW VOLTAGE)***

***89/336/EEC***

***(ELECTROMAGNETIC COMPATIBILITY)***





