PIZZA AND CATERING EQUIPMENT PROFESSIONALS

GAS LAVA-STONE GRILLS

INSTRUCTIONS FOR INSTALLATION, USE, AND MAINTENANCE

MODEL

PLX47
PLX47M
PLX60
PLX60M
PLX80
PLX80M
PLX106
PLX106M
PLX124M

CATEGORY II2H3+

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ITALIA

INDEX

1. APPLIANCE OVERVIEW

The PLX 47 model is equipped with a 9 KW burner, the PLX model 60 is equipped with a 11,5 KW burner, the PLX 80 model is equipped with two burners of a total of 13,5 KW.

The data plate carries producer, the, serial number, year of construction, nominal heat input and connection pressure. The position of the data plate is showed on fig. 2.

Each model comes with a dripping pan.

The combustion chamber and the burner are made of stainless steel.

The appliance itself is made of stainless steel and comes with 4 adjustable feet.

The gas ramp conforms with European standards.

The control push-buttons are in made in 'Duroplast'.

The gas-taps are of a safe type and allow an adjustment of the heat input from maximum to minimum.

The tap is produced by the company PEL Pintossi, model 22S and is made up of an adjustment device and a mechanism which ensures a safe ignition, it is also possible to have a minimum adjustment.

The gas connections are of metal and perfectly sealed thanks to screw connections with double-cone rings.

The gas pipes are in galvanized slieel from the pipe fitting to the adjustment device and in copper from the adjustment device to the burner.

The ignition of the main burner is done through a pilot burner.

1.1 TECHNICAL DATA, INJECTORS TABLE, AND GAS CONNECTION CHART

FEATURE	PLX47 PLX47M	PLX60 PLX60M	PLX80 PLX80M	PLX106 PLX106M	PLX124
Dimentions W x D x H (mm)	470 x 770 x490	600 x 770 x 490	800 x 770 x 490	1060 x 770 x 490	1240 x 770 x 490
Nominal Heat Power (kW)	9	11.5	13.8	24	11.5 x 2
Minimum Heat Input (kW)	4.5	6.5	7.2	14	6.5 x 2
Gas Connection ISO 7/1	1/2 "	1/2 "	1/2 "	1/2 "	1/2 "
Category	II2H3+	II2H3+	II2H3+	II2H3+	II2H3+
Factory Adjustment	GPL	GPL	GPL	GPL	GPL
Type of Construction	A	A	A	A	A
Methane Pressure H (mBar)	20	20	20	20	20
LP Pressure (mBar)	28-30/37	28-30/37	28-30/37	28-30/37	28-30/37

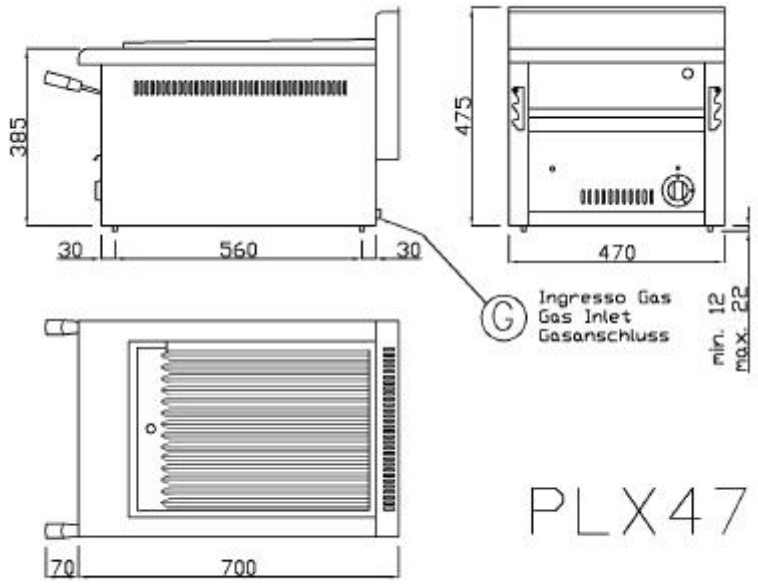
	PLX47 PLX47M		PLX60 PLX60M		PLX80 PLX80M		PLX106 PLX106M		PLX124	
	G30	G20	G30	G20	G30	G20	G30	G20	G30	G20
Pilot Burner	20	35	20	35	20	35	20	35	20	35
Main Burner	155	230	175	255	175 x 2	255 x 2	135 x 2	200 x 2	175 x 2	255 x 2
Minimum gas screw (By-Pass)	120	R	155	R	155 x 2	R	105 x 2	R	155 x 2	R

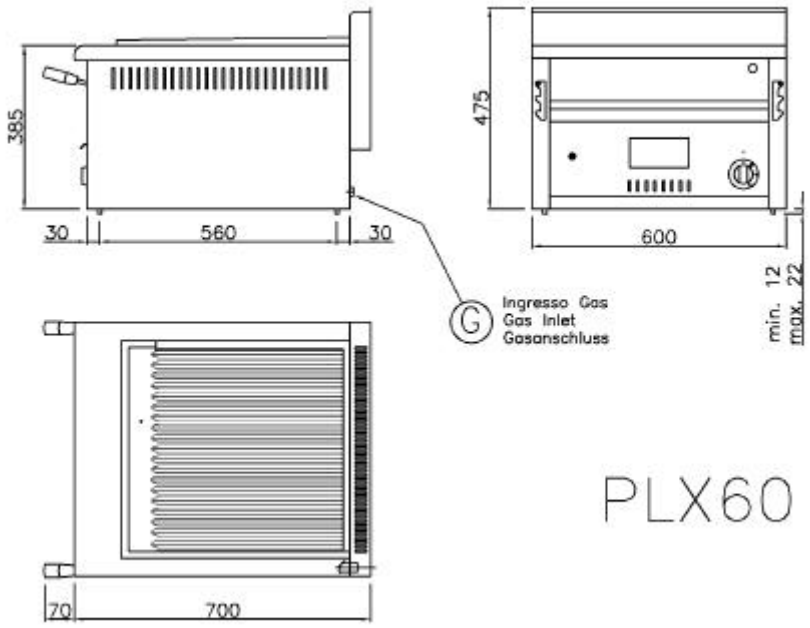
INJECTORS TABLE (R= Adjustable - En 1/100 mm)

GAS TYPE	PLX47 PLX47M	PLX60 PLX60M	PLX80 PLX80M	PLX106 PLX106M	PLX124
L.P. (PCI=12.87 kWh/Kg)	0.71 Kg/h	0.91 Kg/h	1.09 Kg/h	1.89 Kg/h	0.91 x 2 Kg/h
Methane H (PCI=9.45 kWh/m3)	0.95 m3/h	1.22 m3/h	1.46 m3/h	2.54 m3/h	1.22 x m3/h

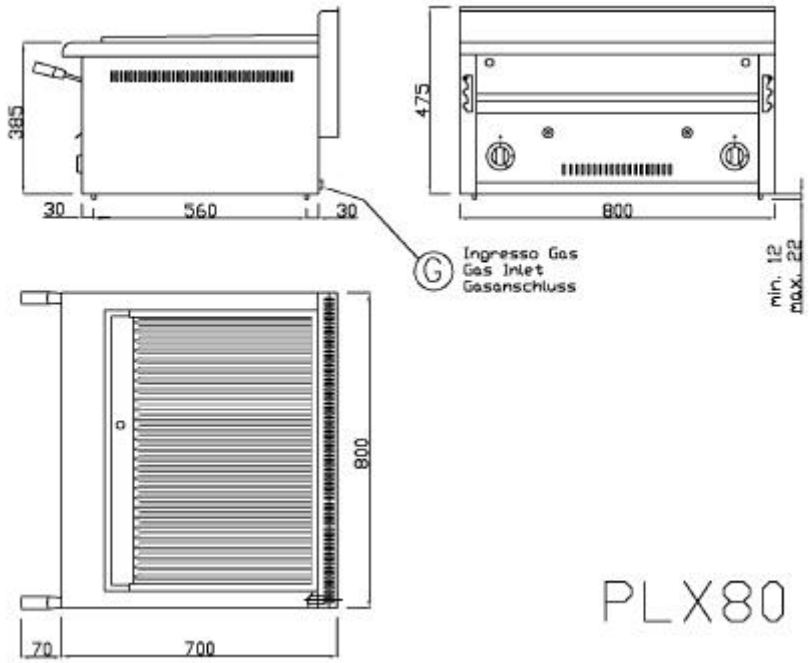
GAS CONNECTION CHART

1.2 APPLIANCE DRAWINGS

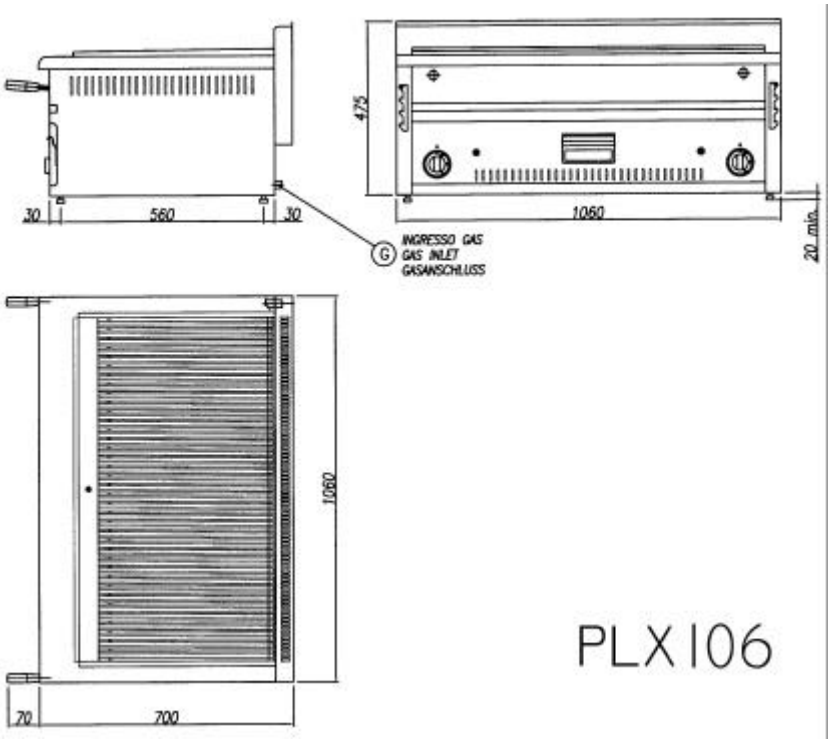


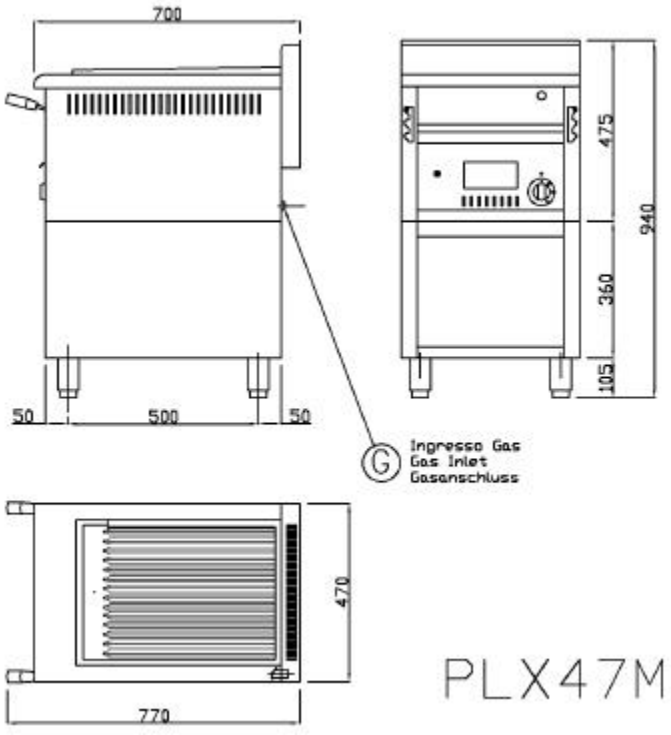

385
30
560
30
475
600
min. 12
max. 22
G
Ingresso Gas
Gas Inlet
Gasanschluss
70
700

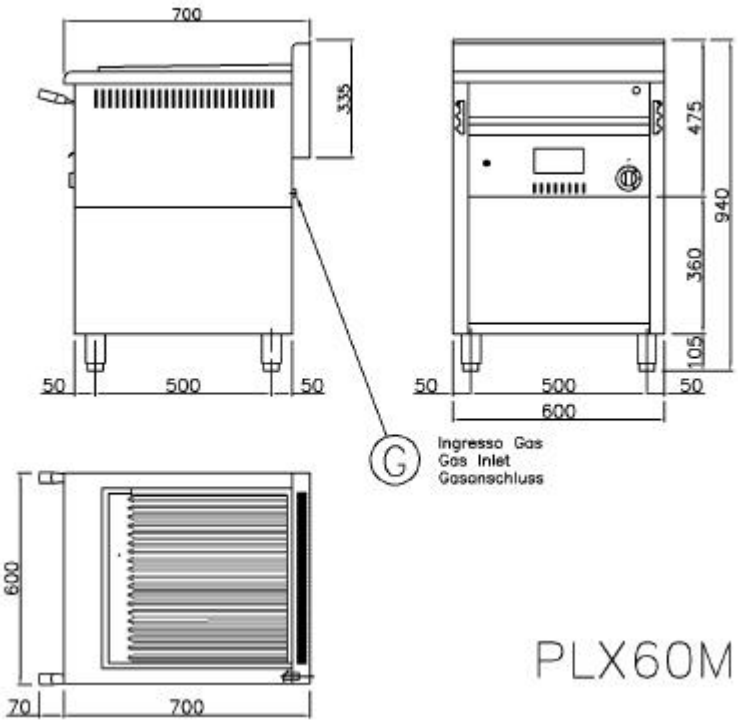
PLX60


385
30
560
30
475
800
min. 12
max. 22
G
Ingresso Gas
Gas Inlet
Gasanschluss
800
70
700

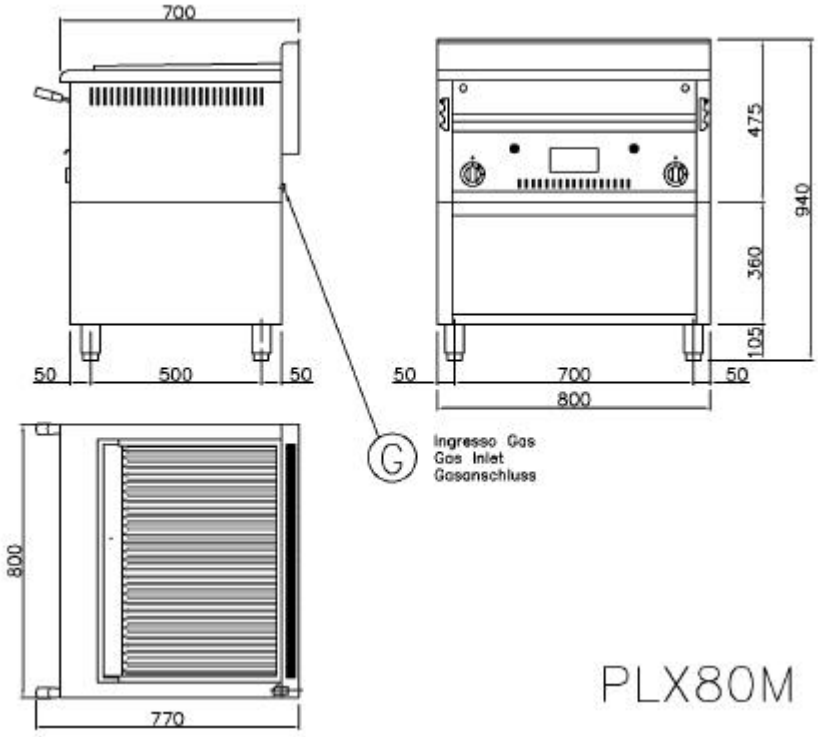
PLX80


30
560
30
475
1060
20 min.
G
INGRESSO GAS
GAS INLET
GASANSCHLUSS
1060
70
700
PLX106

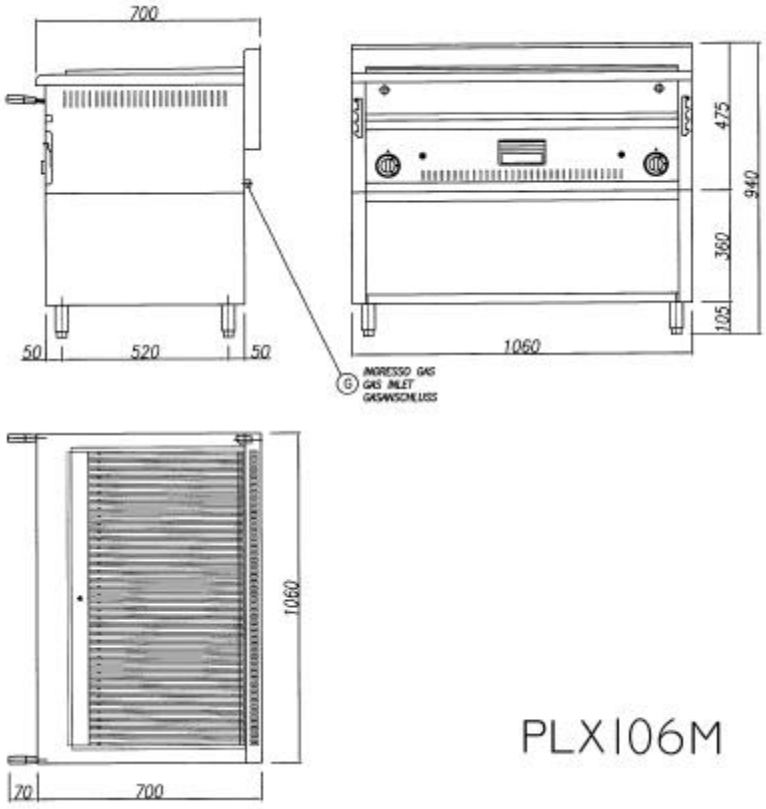

700
475
940
360
105
50
500
50
G
Ingresso Gas
Gas Inlet
Gasanschluss
470
770
PLX47M



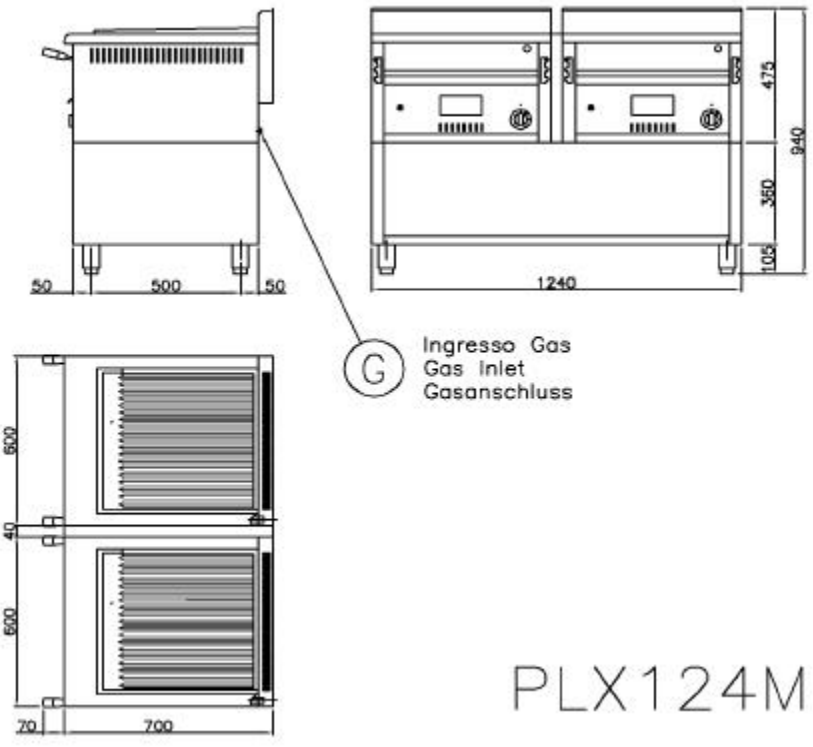
PLX60M



PLX80M



PLX106M



PLX124M

1.3 DATA PLATE AND ADDITIONAL LABEL

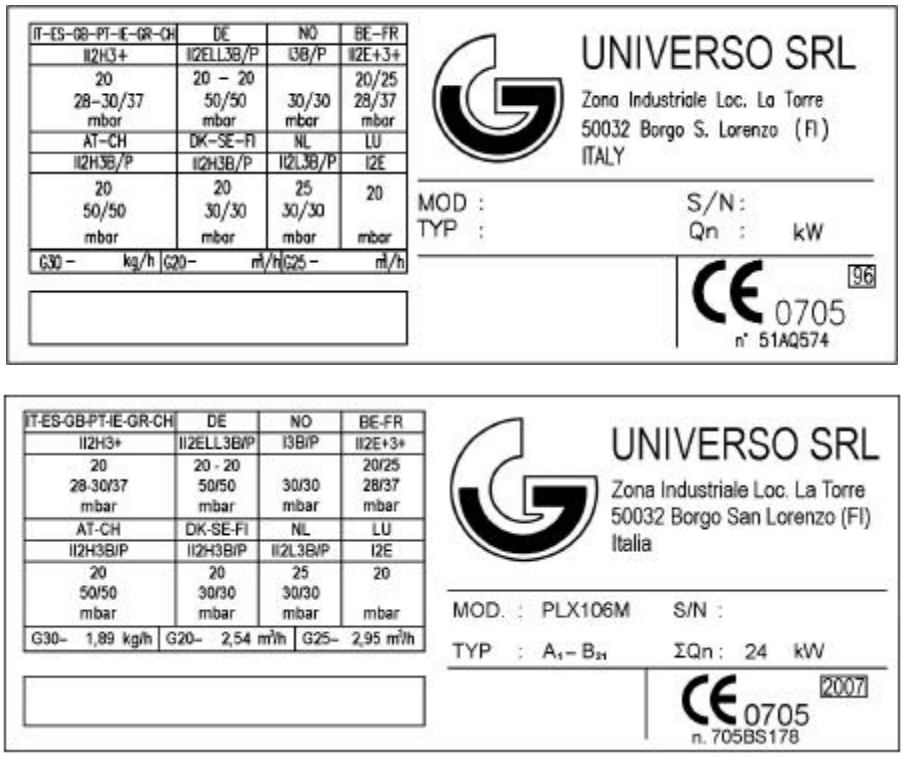
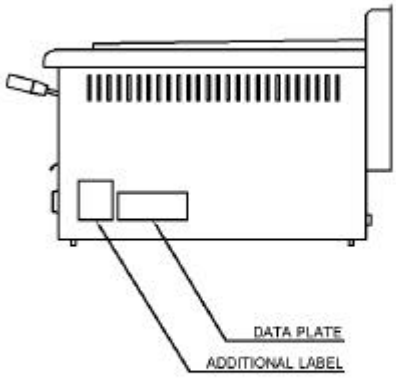
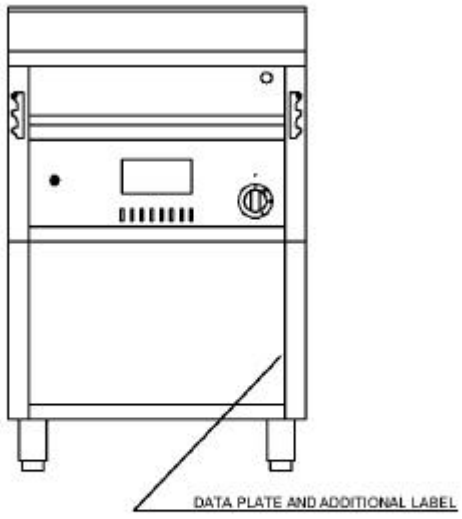


Fig. 1 – Data plat



MODELS PLX47 PLX60 PLX80 PLX106



MODELS PLX47M PLX60M PLX80M PLX106M PLX124M

Fig. 2 - Data plate and additional label position

IT	Questo apparecchio deve essere installato conformemente alle regolamentazioni in vigore e utilizzato soltanto in un luogo ben aerato. Consultare le istruzioni prima di installare e di utilizzare questo apparecchio.
GB IE MT CY	This appliance must be installed according to the regulations in force and used only in a well aired place. Consult the instructions before installing and using this appliance.
DE AT LU CH	Dieses Gerät soll gemäss den geltenden Vorschriften installiert und nur in einem gut belüfteten Raum benutzt werden. Vor Installierung und Benutzung dieses Gerätes bitte die Bedienungsanweisungen durchlesen.
FR LU CH BE	Cet appareil doit être installé conformement aux règlements en vigueur et il doit être utilisé seulement dans locaux bien aérés. Consulter les instructions avant de l'installation et de l'utilisation de cette appareil.
ES	Esto aparato debe ser instalado conforme a las normas vigentes y se tiene que utilizar solo en locales bien aireados. Consultar las instrucciones antes de instalar y utilizar esto aparato.
PT	Este aparelho deve ser instalado conforme as regulamentações em vigor e utilizado somente em local bem ventilado. Consultar as instruções antes de instalar e utilizar este aparelho.
GR CY	Η συσκευή αυτή πρέπει να εγκατασταθεί σύμφωνα με τους ισχύοντες κανονισμούς και να χρησιμοποιηθεί μόνο σε χώρο καλά αεριζόμενο. Συμβουλευτείτε τις οδηγίες πριν την εγκατάσταση και χρήση της συσκευής αυτής.
IS	Uppsetning tækisins verður að vera í samræmi við gildandi reglur á hverjum stað og það má aðeins nota í vel loftræstu rými. Lesið leiðbeiningarnar fyrir uppsetningu og notkun.
NO	Dette apparatet må installeres i overensstemmelse med gjeldende regler og må kun brukes i rom som er ventilert på egnet måte. Les instruksjonene før du installerer og bruker dette apparatet.
SE	Denna apparat ska installeras i enlighet med gällande bestämmelser och får endast användas i ett väl ventilerat utrymme. Läs anvisningarna innan du installerar och använder apparaten.
FI	Tämä laite tulee asentaa voimassa olevien määräysten mukaan. Sitä tulee käyttää ainoastaan hyvin ilmastoidussa tilassa. Tutustu ohjeisiin ennen laitteen asennusta ja käyttöä.
DK	Dette apparat skal installeres med overholdelse af de gældende standarder og må kun benyttes på et sted med passende udluftning. Læs brugsanvisningen inden installation og brug af dette apparat.
NL	Dit apparaat moet worden geïnstalleerd conform de geldende voorschriften, en alleen worden gebruikt in een goed geventileerde ruimte. Raadpleeg vóór dit apparaat te installeren en in gebruik te nemen eerst de instructies.
TR CY	Bu cihaz yürülükte olan kurallara göre monte edilmeli ve çok iyi havalandılmış bir mekanda kullanılmalıdır. Montaj ve kullanımdan önde talimatları okuyunuz.
SI	Ta aparat mora biti priključen v skladu z veljavnimi predpisi, uporablja pa se lahko le v dobro prezračevanih prostorih. Pred priključitvijo in uporabo aparata upoštevajte navodila.
HU	Ezt a berendezést az előírtaknak megfelelően kell üzembe helyezni, illetve csak jól szellőztethető helyiségben használható. Üzembe helyezés és használat előtt figyelmesen olvassa el a használati útmutatót.
CZ	Toto zařízení musí být nainstalováno v souladu s platnými předpisy a používáno pouze na dobře větraném místě. Před instalací a použitím tohoto zařízení si přečtěte příslušné pokyny.
BG	Този уред трябва да се инсталира съгласно действуващия регламент и трябва да се използува само в добре проветрено място. Прочетете указанията преди да го инсталирате и преди употребата на уреда.
EE	See aparaat peab olema monteeritud kehtivate normide kohaselt ja kasutatud ainult hästi tuulutatud ruumis. Lugeda tähelepanelikult eeskiri enne aparaadi monteerimist ja kasutamist.
LV	Šis įrenginys turi būti instaliuotas pagal galiojančius normatyvus ir naudojamas tik gerai vėdinamoje patalpoje. Prieš įrenginio instaliavimą ir naudojimą perskaityti instrukciją.
LT	Šī ierīce jāuzstāda saskaņā ar spēkā esošajiem normatīvajiem aktiem, un to drīkst izmantot tikai labi vedināmās telpās. Izlasiet instrukciju pirms šīs ierīces uzstādīšanas vai tās izmantošanas.
PL	Urzadzenie musi zostać zainstalowane zgodnie z obowiazujacymi przepisami, i moze byc uzywane wylacznie w dobrze wietrzonych pomieszczeniach. Przeczytac instukcje obslugi przed instalacja i uzyciem urzadzenia.
RO	Acest aparat trebuie instalat în conformitate cu reglementările în vigoare şi utilizat numai în locuri bine aerisite. Consultaţi cu atenţie instucţiunile înainte de instalarea şi utilizarea acestui aparat.
SK	Toto zariadenie musí byť nainštalované v súlade s platnými predpismi a používané len na dobre vetranom mieste. Pred inštaláciou a použitím tohto zariadenia si prečítajte príslušné pokyny.

Fig. 3 - Additional label

2. PLACE OF INSTALLATION

- The appliance must be installed in a well ventilated area.
- The appliance can be installed by itself or in series with other appliances.
- A distance of at least 10 cms. from the side walls and the back walls must be observed. If such distance cannot be observed, it is important to provide protection against thermal irradiation.
- Before connecting the appliance, it is important to verify the data stated on the additional label (fig. 3) whether the appliance is pre-set and type approved for the existing type of gas. In case the type of gas indicated on the label does not correspond to the existing type of gas, go back to the paragraph 6 "Trasformation or adaption to a different type of gas".

2.1 TECHNICAL REGULATIONS AND PROVISIONS OF LAW

Upon installing the appliance must be observed relative local safety standards in force.

WARNING !

All installation, start up and maintenance operation, in particular the gas connection and start up must only be done by authorized technicians or by authorised installers and the standards in force must be observed.

3. GAS CONNECTION

The connection to the gas feeding system must be carried out according to the current norms.

The gas connection must be made where a tap is placed in an easily accessible position. It can be mounted or movable, with an intervention of a gas tap which corresponds to the operating norms.

Using a flexible security tube which must be made of metal. It is important to make sure that this does not pass through an overheated area and that it is connected freely.

After the installation has been carried out, undergo a sealing test to check that the installation is free of leaks. Use a leak seeking spray or another foaming substance to make sure that there is no corrosion.

4. START UP

4.1. NOMINAL HEAT INPUT

The nominal heat input of the appliance must be checked according to the indications given here by an authorized installer or by the gas supply company.

The control of the nominal heat input must take place in case of new installations or in case of transformation or adaption to another type of gas, and during all maintenance interventions.

The nominal heat input, the minimal heat input as well as the connection pressure can be obtained from paragraph 1.1.

The sealed components (for example with varnish) must not be tampered with.

4.2 VOLUMETRIC METHOD

The estimated nominal heat input is obtained by using the correct injectors according to the injectors chart (page 4) and is based on the gas pressure. If another control of the nominal heat input is desired this can be done by using the volumetric method. This control can be carried out by using a counter and a chronometer.

The correct gas volume which is to pass through the appliance at a precise time interval can be found on paragraph 1.1. This value should be held within a tolerance of ± 5%. In case of deviation it is necessary to check that the injectors have been put on correctly.

4.3 CONTROL OF THE INLET PRESSURE

Before starting the appliance it is necessary to verify by looking at the data plate and the additional plate if the type of appliance (cathegory and gas type) corresponds to the type and the gas family.

The inlet pressure must be measured with a pressure measurer for liquids (for example a manometer "U", min. solution 0,1 mbar).

Remove the sealing screw on the coupling to measure the inlet pressure and connect the flexible tube of the manometer tube "U" (fig. 4).

Measure the inlet pressure; if the inlet pressure is not included in the range indicated in the following chart it is in no case possible to start the appliance. The company in charge of the gas output must be informed.

MBAR PRESSURE

TYPE OF GAS	NORM.	MIN.	MAX.
METHANE H	20	17	25
LIQUID GAS	28-30/37	20/25	35/45

After measuring the inlet pressure remove the "U" manometer and tighten the seal screw.

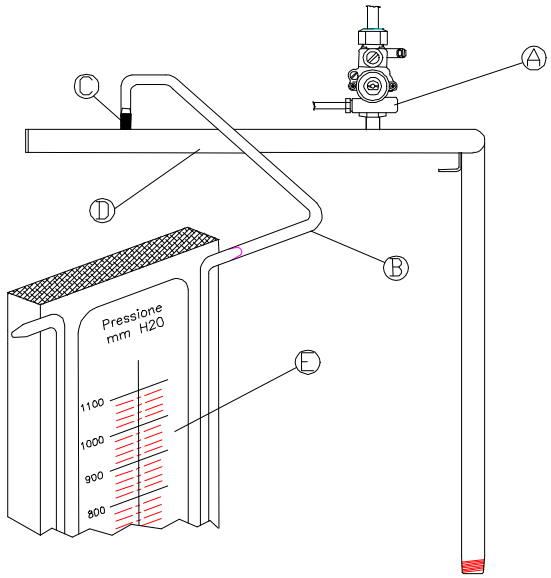


Fig. 4

Control of inlet pressure

A = Gas tap
B = Flexible tube
C = Control point
D = Gas
E = U manometer

4.4 CONTROL OF THE PRIMARY AIR

The primary air is regulated in an exact way when it can be safely assured that the flame does not cut out with a cold burner and does not return with a hot burner. To adjust the primary air, after having removed the front panel of the appliance, proceed in the following way (fig. 5):

- Loosen screw V and regulate the ferrule B according to the following indications at the distance H:

  Liquid Gas H = mm 41
  Methane Gas H = mm 14

- Then retighten screw V.

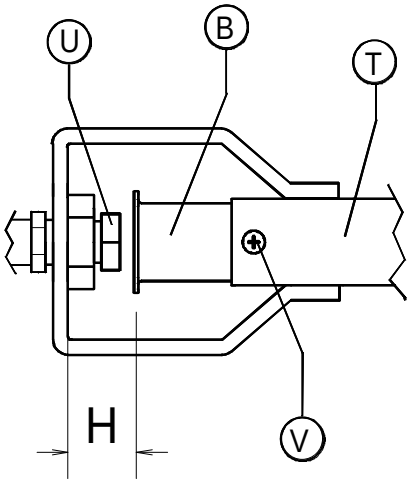


Fig. 5

Main Burner

U = Injector
B = Ferrule
T = Venturi tube
V = Tightening screw

4.5 CHECKING THE HEAT INPUT WITH LIQUID GAS

Make sure that what is labelled on the installed injectors corresponds with the indications given by the producer. It is also important to check that the appliance is regulated to the preset pressure and that it has a pressure exit according to the chapter (control of the additional name plate, pressure measuring).

5. FUNCTIONING

- Put the appliance into functioning according to the instructions for use.
- Then verify the seal of the appliance.
- Verify the flame formation in the positions for maximum and minimum regulations.
- Control the interignition and the regular position of the burner flame, also the minimum.
- Verify the correct regulation of the pilot flame. (Use of the correct injectors).

5.1 INSTRUCTIONS FOR THE USER

The use of the appliance is explained with the help of this manual. It is advisable to stipulate a maintenance contract with a qualify agent.

6. TRANSFORMATION OR ADAPTION TO A DIFFERENT TYPE OF GAS

Whenever it is necessary to pass from one type of gas to another, for example from liquid gas to methane H or viceversa one must replace the injectors on the main burner (see the chart on page 4). The diameter of the injector is given in hundredths of mm on the injector itself.

6.1 REPLACING THE INJECTORS ON THE MAIN BURNER

- Remove the knobs.
- Remove the dripping pan.
- Remove the lower panel on the appliance by unscrewing the correct screws.
- Unscrew the injector and substitute it with the right type for the gas in use (see the chart) .
- The diameter on the injector is given hundredths of mm on the injector itself.

6.2 REGULATION OF THE MINIMUM HEAT INPUT

- Remove the knobs.
- Remove the lower panel by unscrewing the screws which holds it in place.
- Unscrew the injector in order to regulate it to a minimum (fig. 6) and substitute it with the right type of the gas in use (see chart), retighten it again to the bottom.
- With methane gas the regulation of the heat input to the minimum comes through the screw for minimum “A” (fig. 6), according to the volumetric method (paragraph 4.2).
  - Clockwise rotation = decrease of gas flow
  - Counterclockwise rotation = increase of gas flow
- Activate the appliance according to the instructions for use and make it work for 10 minutes on the maximum position, then turn the knob to the minimum position and regulate the value “E” according to the chart.
- When the adjustment has been done check that there is no flame lift when the burner is cold and no lightback when the burner is hot.

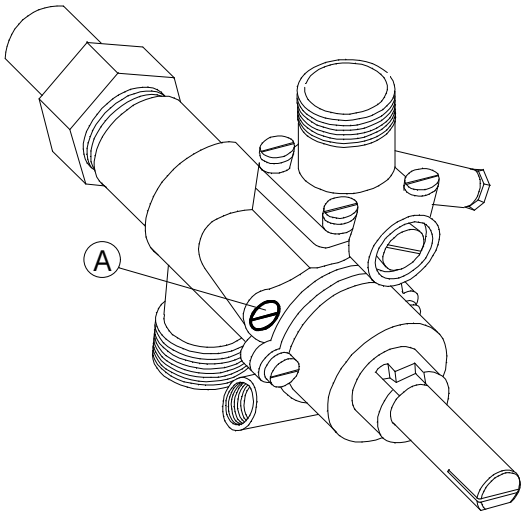


Fig. 6

Gas tap

A = Adjusting by-pass screw

6.3 REPLACING THE PILOT BURNER INJECTOR

The pilot burner flame must be such to guarantee sufficient heat of the thermal element and perfect ignition of the main burner. Proceed as following (fig. 8):

- Remove the lower control panel by unscrewing the screws which hold it in place.
- Unscrew screw-cap "B" and proceed to the replacement of screw "A".
- Once screw "A" is substituted remount everything by following the inverse proceedings.

NB: Retighten screw "A" to the bottom. For the corresponding diameter of screw "A" see Injectors Table on page 4.

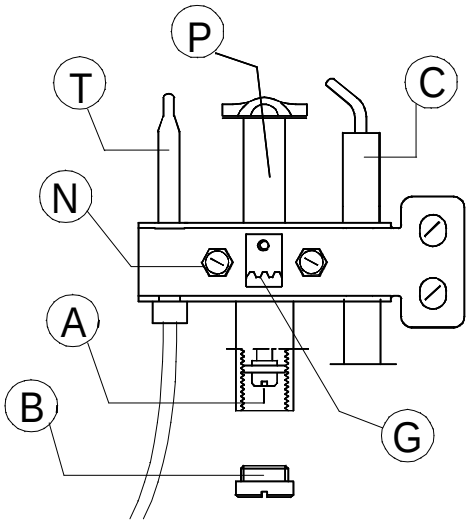


Fig. 8

Pilot Burner

A = Injector
B = Screw-cap
C = Lighting electrode
G = Air regulating ring
N = Tightening screw
P = Pilot burner
T = Thermocouple

7. MAINTENANCE

Every maintenance intervention must only be carried out by qualified personnel.

It is advisable to let the appliance undergo periodical controls (once a year) and in also to have a stipulated maintenance contract.

8. REPLACING SOME COMPONENTS

The replacement of the parts should only be carried out by authorized intallers. Before every operation close the gas feeding system.

Gas tap (fig. 6)

- Remove the knobs and remove the control panel by unscrewing the appropriate screws;
- Disassemble the pilot burner conductor and the one for the thermocouple;
- Disassemble the tap and substitute it with the new one, then remount the components proceeding in the inverse way;
- Verify the seal on the appliance.

Pilot burner, thermocouple

- Remove the control panel unscrewing the fixing screws;
- Dismount the components and remount them in the opposite order.

Main burner

- Remove the lower control panel by unscrewing the fastened screws;
- Remove the grill and lava stones;
- Now the main burner is accessible and can be replaced;
- Once the new burner has been inserted a seal test can be carried out.

WARNING !

THE APPLIANCE IS CONSTRUCTED FOR INDUSTRIAL USE AND MUST BE USED BY TRAINED PERSONNEL.

THE FUNCTIONING OF THIS APPLIANCE CAN ONLY BE GUARANTEED IF THESE INSTRUCTIONS ARE OBSERVED.

ALL MAINTENANCE WORK AND REPAIRS MUST ONLY BE CARRIED OUT BY AUTHORIZED INSTALLERS.

THE APPARATUS CAN ONLY FUNCTION WITH LAVA STONES !

9. INSTRUCTIONS FOR USE

The appliance must be supervised during use.

Place the stones on top of the special stainless steel grills and pay particular attention so that there is only one layer of stones in order to avoid accumulations.

The knob (fig. 7) for the regulation of the gas flow or the heat input on every burner has four positions of regulations.

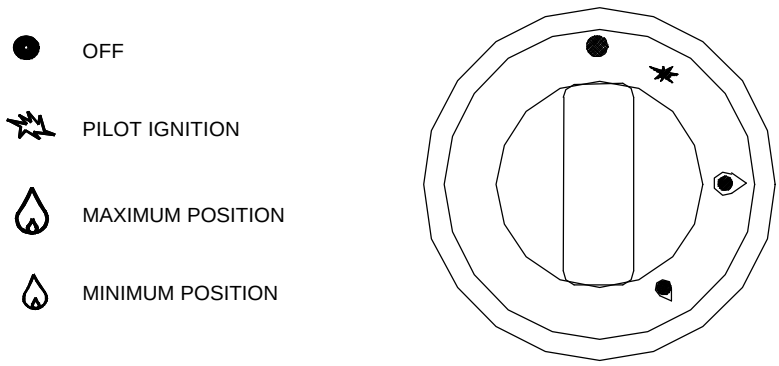


Fig. 7 – Gas control knob

10. IGNITION OF THE PILOT FLAME

- Open the gas tap which is situated upstream from the appliance.
- Push the knob and turn it from "off" position to the "pilot ignition" position on the pilot burner and keep it pushed down. The ignition is generally carried out with piezo-electric device. Once the flame is on, release the knob. (Whenever this does not work, it is necessary to repeat the operation indicated or to manually lit by using a match through the inspection hole).

10.1 IGNITION OF THE MAIN BURNER

- Turn the knob from the position "pilot ignition" to the “maximum position".
- To obtain the economy position turn the knob on the “minimum position".

10.2 SHUTTING OFF THE MAIN BURNER

- Turn the knob from the "maximum position" or "minimum position" to the position "pilot ignition".
- The pilot burner must always be ignited.

10.3 SHUTTING OFF THE PILOT BURNER

- Push the knob and turn it on the position "off".
- At the end of the day close the gas cut-off tap upstream from the appliance.

IMPORTANT NOTES

The grill can be positioned on 4 operating positions according to the type of cooking or the type of food (fig. 9).

To avoid the user from coming in contact with the hot zones of the appliance, it is advisable to use protection gloves.

To avoid possible damage to the burner or other parts of the appliance it is advisable to not let it be on for long without food cooking.

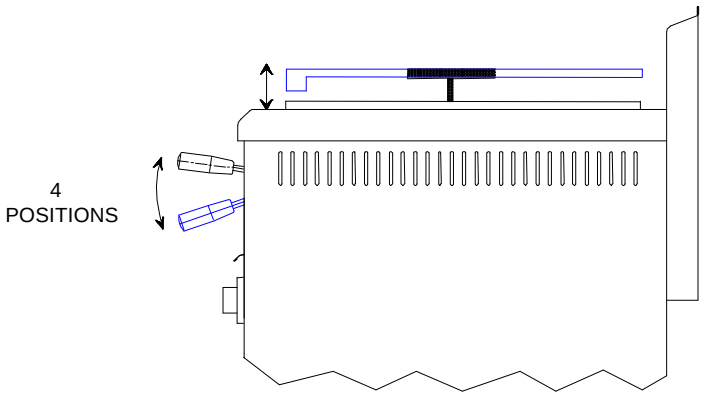


Fig. 9 – Grill height positioning

11. SHUTTING OFF IN CASE OF NORMAL FUNCTIONING

- Turn the knob from the "maximum position" or “minimum position" to the position "pilot ignition";
- For the shutting off of the pilot flame push the knob and turn it on the position "off";
- After use close the gas tap which is situated upstream from the appliance.

11.1 SHUTTING OFF IN CASE OF BREAKDOWN OR PROLONGED PERIOD OF INACTIVITY

- In case the appliance is not in use for a long period of time or in case of breakdown, close the gas cut-off tap.
- Whenever the appliance is not used for a period of time, accurately clean the stainless steel parts and put over a layer of vaseline oil.
- In case of failure contact the service assistance.
- Air out the room regularly.

12. MAINTENANCE AND CLEANING

The lava stones and the grills must be taken off at least once a week and then one must proceed to the cleaning of the burners with a soft bristle brush

The fat collecting tray must be cleaned every day.

12.1 REMOVAL AND CLEANING OF THE DRIPPING PAN

The fat collecting tray must be extracted from the appliance after every use and must be cleaned with lukewarm soapy water. One must not use substances or tools which may cause corrosion like metal brushes and so on.

WARNING !

Do not use products containing chlorine for cleaning steel (bleach, hydrochloric acid, etc.) even if diluted.

Do not use corrosive products (for example hydrochloric acid) in the cleaning of the floor underneath the appliance.

13. REPLACING PARTS

PART	MAKER	TYPE/MODEL
Burner (PLX47-47M PLX80-80M)	Flam Gas	Mod. UN_0007
Burner (PLX60-60M PLX106-106M PLX124M)	Flam Gas	Mod. UN_0008
Pilot burner	SIT	Mod. 0.100.001
Thermocouple	SKG	Mod. 9711AN
Piezo-electric igniter	Constructions Electroniques	Mod. 381
Gas tap	Pel Pintossi	Mod. 22S/O-B