



**GAS
LAVASTONE
GRILL
SERIES 70**

**2856211
2856311**

**INSTALLATION, USE
AND MAINTENANCE**

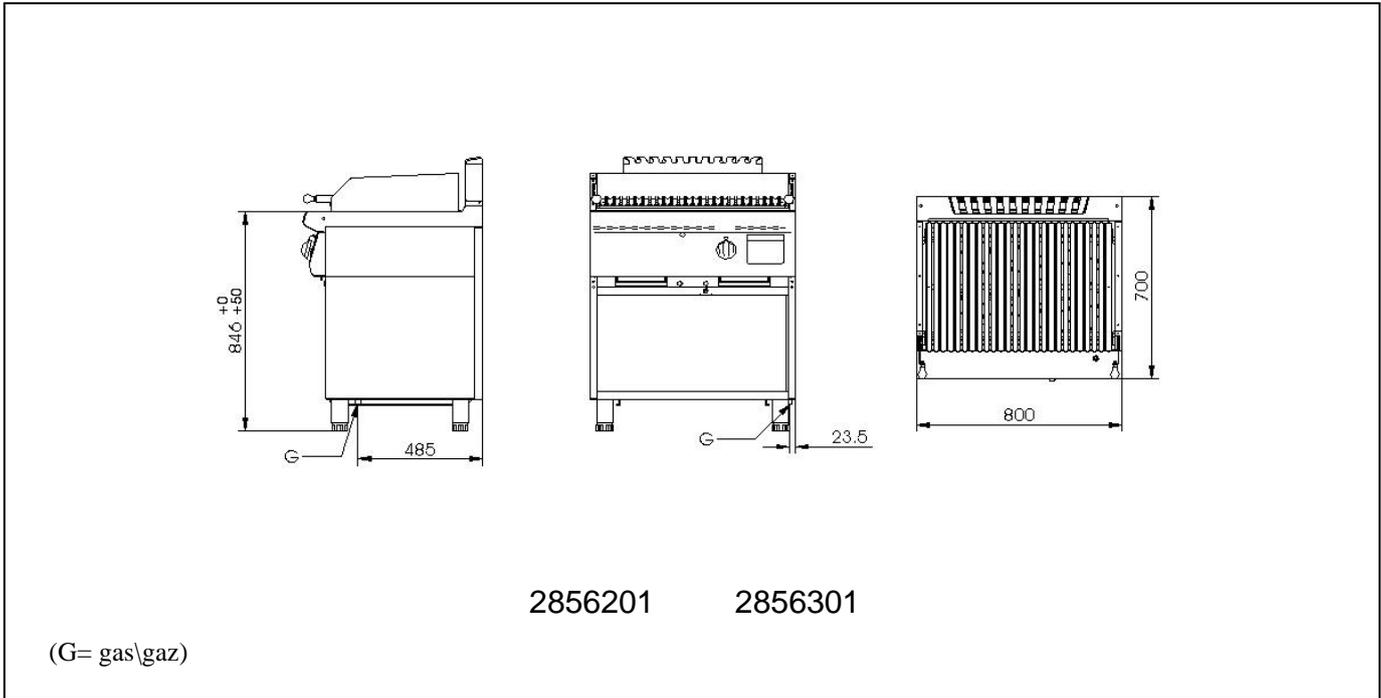


Fig. – Abb. 1: Dimensioni \ Dimensions \ Floor space dimensions \ Raumbedarfsmasse \ Espacio máximo necesario

<p>Bartscher GmbH Franz-Kleine-Straße 28 33154 Salzkotten Production year: 07/2017 Designed: 2007</p> <p>CE XX PIN 000</p> <p>TYPE A SERIE MOD. ART. SN.</p> <p>ΣQn kW B m³/h C kg/h D</p> <p>kW E V F Hz G ~ F</p>	CAT/KAT	GAS/GAZ	G30	G31	G20	G25	G25.1	G110	G120	Made in E.U.
	I _{2H}	p mbar	-	-	20	-	-	-	-	LV
	I _{3P}	p mbar	-	37	-	-	-	-	-	IS
	I _{3B/P}	p mbar	28-30	28-30	-	-	-	-	-	CY MT HU
	II _{2E+3P}	p mbar	-	37	20	25	-	-	-	LU
	II _{2E+3+}	p mbar	28-30	37	20	25	-	-	-	FR BE
	II _{2H3+}	p mbar	30	37	20	-	-	-	-	IT PT GR GB
	II _{2H3+}	p mbar	28	37	20	-	-	-	-	ES IE CH
	II _{2E3P/P}	p mbar	-	37	20	-	-	-	-	PL
	II _{2ELL3B/P}	p mbar	50	50	20	20	-	-	-	DE
	II _{2H3B/P}	p mbar	50	50	20	-	-	-	-	AT CH CZ SK
	II _{2H3B/P}	p mbar	28-30	28-30	20	-	-	-	-	FI LT BG SE
	II _{2H3B/P}	p mbar	28-30	28-30	20	-	-	-	-	NO SK RO DK
	II _{2H3B/P}	p mbar	28-30	28-30	20	-	-	-	-	EE SI HR TR
	II _{2HS3B/P}	p mbar	28-30	28-30	25	-	25	-	-	HU
	II _{2L3B/P}	p mbar	30	30	-	25	-	-	-	NL
III _{1aD2H3B/P}	p mbar	28-30	28-30	20	-	-	8	8	SE	
III _{1a2H3B/P}	p mbar	28-30	28-30	20	-	-	8	-	DK	
Predisposto a gas-Prévu pour gaz-Voreinstellung für Gas-Predisposto a gas-Voorzien van gas-Set for use with gas-Preparado para gas- Ment for å bruke med gas-Avsett for att användas med gas-Tarkoitettu käytettäväksi kaasulla-Forberedt til brug af gas- Προετοιμασμένο για λειτουργία με αέριο- Zařízení na plyn - Toimib gasi pöbjäl - A berendezés gáz használatára előkészített - Sagittavota darban ar gáz - Przyposobione na gas - Numarita dumjos - Nastavený na plyn - Pripravljeno za plin - EN 203/1										



Fig. – Abb. 2: targhetta caratteristiche \ Plaques des caractéristiques \ data plate \ typenschild

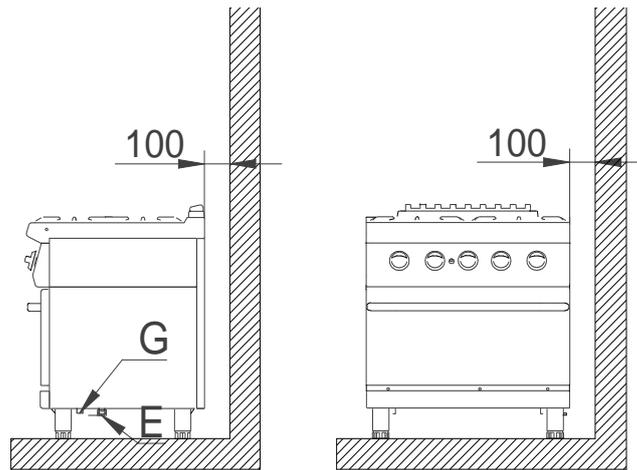


Fig. – Abb. 3: Installazione \ Lieu d'installation \ Place \ Installationsort

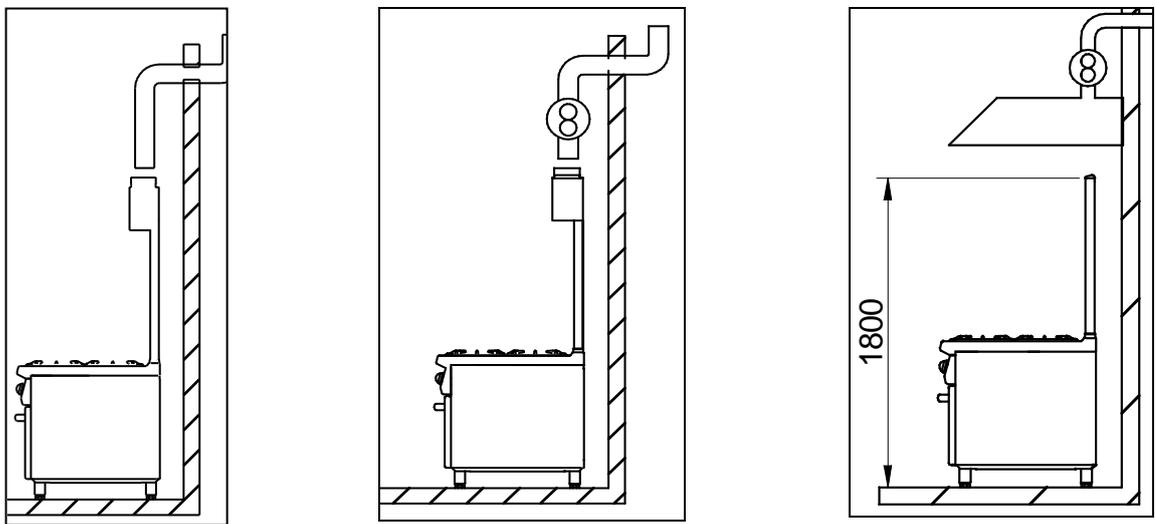


Fig. – Abb. 4, 5, 6: Scarico fumi \ Évacuation des fumées \ Fumes evacuation \ Rauchabzug

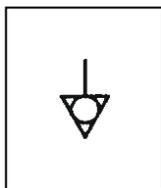
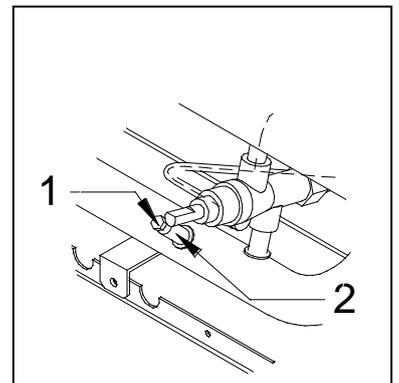
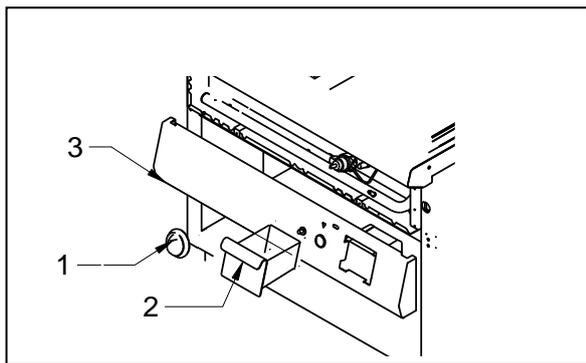


Fig. – Abb. 7: Simbolo equipotenziale \ Symbole equipotenzial \ Equipotenziale label \ quipotenzial Symbol

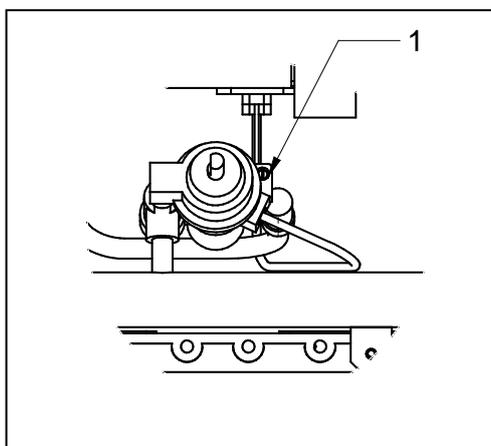
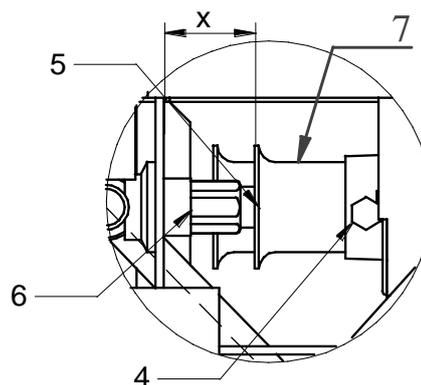
Fig. – Abb. 8: Verifica della tenuta e della pressione di alimentazione \ Contrôle de la tenue et de la pression d'alimentation \ Checking gas tightness and pressure \ Überprüfung der Dichtigkeit und des Versorgungsdrucks





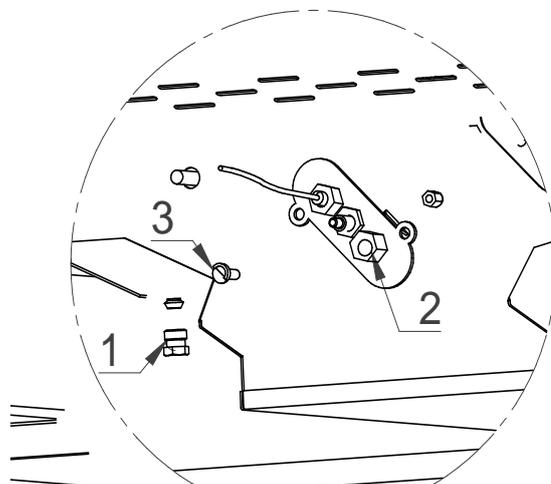
Figg.. – Abb. 9 : Sostituzione ugello bruciatore \
 Changement du gicleur du brûleur \ Substituting
 the burner nozzle \ Austausch der
 Hauptbrennerdüse

Fig. – Abb. 10 : Regolazione dell'aria primaria
 bruciatore \ Réglage de l'air primaire du brûleur \
 Regulating the primary air of the burner \
 Primärluftregelung des Hauptbrenners



Figg. – Abb. 11 : Regolazione del By-Pass \ Réglage du by-
 pass \ Regulating the By-Pass \ Regelung des By-Pass

Fig. – Abb. 12 : Sostituzione dell'ugello bruciatore pilota \
 Changement du gicleur du brûleur veilleuse \ Substituting the
 pilot burner nozzle \ Austausch der Zündbrennerdüse



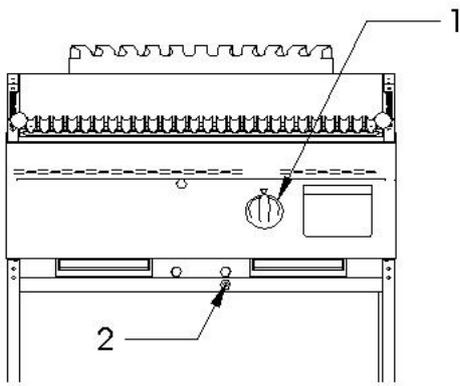


Fig. – Abb. 13 : Istruzioni uso \ Instructions d'utilisation \ Instruction for use) \ Bedienungsanleitungen

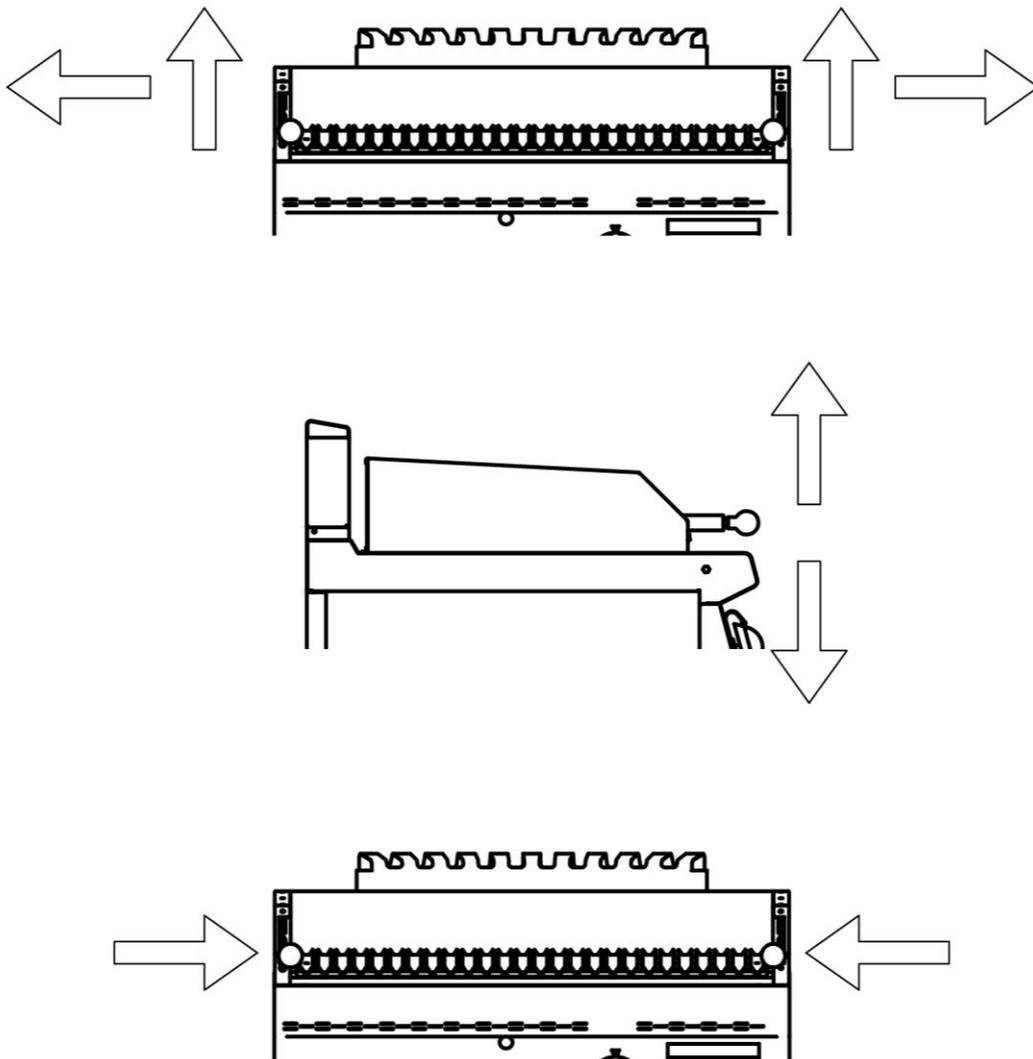


Fig. – Abb.14 : Istruzioni uso \ Instructions d'utilisation \ Instruction for use) \ Bedienungsanleitungen

(Table 1) TECHNICAL FEATURES (GB-IE-GR-CY-MT-IS-LU-NL-SE-DK-FI-CZ-SK-LT-BG-NO-RO-EE-SI-HR-TR-HU-PL)

Model	Description	Dimensions LxPxH [mm]	Gas output (B) [kW]	Type (A)	LPG Consumption (G30) (D) [kg/h]	METHANE Consumption (G20) (C) [m ³ /h]	Air for comb. [m ³ /h]	Gas fitting	Burner lavastone e 1/2M 9 kW [N°]	Burner lavastone e 1M 18 kW [N°]	Meat grill	Fisch grill	Capacity lava [Kg]
2856211	Lavastone 1/2 unit grill for meat open cabinet	400x700x845	9	A1	0,709	0,952	18	UNI-ISO 7/1 R 1/2	1	-	1	-	4,5
2856311	Lavastone 1 unit grill for meat open cabinet	800x700x845	18	A1 /B11	1,419	1,904	36	UNI-ISO 7/1 R 1/2	-	1	1	-	9

Table 2) BURNER FEATURES (GB, IE, GR - CAT. II₂H₃+))

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [L/100 mm]	By-pass Diameter [L/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL 1/2 UNIT BURNER						
Liquid Gas LPG (G30-G31)	9,00	3,50	AL150	100	14	Open
Natural Methane Gas (G20)	9,00	3,50	AL225	Reg.	27	14
LAVASTONE GRILL 1 UNIT BURNER						
Liquid Gas LPG (G30-G31)	18,00	8,50	AL215	150	14	Open
Natural Methane Gas (G20)	18,00	8,50	AL325	Reg.	27	15

(Table 3) BURNER FEATURES (CY, MT - CAT. I_{3B/P})

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [1/100 mm]	By-pass Diameter [1/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL ½ UNIT BURNER						
Liquid Gas LPG (G30-G31)	9,00	3,50	AL150	100	14	Open
LAVASTONE GRILL 1 UNIT BURNER						
Liquid Gas LPG (G30-G31)	18,00	8,50	AL215	150	14	Open

(Table 4) BURNER FEATURES (IS - CAT. I_{3P})

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [1/100 mm]	By-pass Diameter [1/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL ½ UNIT BURNER						
Liquid Gas LPG (G31)	9,00	3,50	AL150	100	14	Open
LAVASTONE GRILL 1 UNIT BURNER						
Liquid Gas LPG (G31)	18,00	8,50	AL215	150	14	Open

(Table 5) BURNER FEATURES (LV - CAT. I_{2H})

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [1/100 mm]	By-pass Diameter [1/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL ½ UNIT BURNER						
Natural Methane Gas (G20)	9,00	3,50	AL225	Reg.	27	14
LAVASTONE GRILL 1 UNIT BURNER						
Natural Methane Gas (G20)	18,00	8,50	AL325	Reg.	27	15

(Table 6) BURNER FEATURES (NL - CAT. II_{2EK3B/P})

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [1/100 mm]	By-pass Diameter [1/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL ½ UNIT BURNER						
Liquid Gas LPG (G30-G31)	9,00	3,50	AL150	100	14	Open
Natural Methane Gas (G25.3)	9,00	3,50	AL230	Reg.	27	14
LAVASTONE GRILL 1 UNIT BURNER						
Liquid Gas LPG (G30-G31)	18,00	8,50	AL215	150	14	Open
Natural Methane Gas (G25.3)	18,00	8,50	AL325	Reg.	27	15

(Table 7) BURNER FEATURES (SE, DK, FI - CAT. II₂H3B/P, III_{1ab}2H3B/P, III_{1a2}H3B/P)

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [1/100 mm]	By-pass Diameter [1/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL ½ UNIT BURNER						
Liquid Gas LPG (G30-G31)	9,00	3,50	AL150	100	14	Open
Natural Methane Gas (G20)	9,00	3,50	AL225	Reg.	27	14
LAVASTONE GRILL 1 UNIT BURNER						
Liquid Gas LPG (G30-G31)	18,00	8,50	AL215	150	14	Open
Natural Methane Gas (G20)	18,00	8,50	AL325	Reg.	27	15

Table 8) BURNER FEATURES (CZ,SK,FI, LT, BG, NO, RO, EE, SI, HR, TR - CAT. II₂H3B/P)

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [1/100 mm]	By-pass Diameter [1/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL ½ UNIT BURNER						
Liquid Gas LPG (G30-G31)	9,00	3,50	AL150	100	14	Open
Natural Methane Gas (G20)	9,00	3,50	AL225	Reg.	27	14
LAVASTONE GRILL 1 UNIT BURNER						
Liquid Gas LPG (G30-G31)	18,00	8,50	AL215	150	14	Open
Natural Methane Gas (G20)	18,00	8,50	AL325	Reg.	27	15

(Table 9) BURNER FEATURES (PL - CAT. II₂E3P)

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [1/100 mm]	By-pass Diameter [1/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL ½ UNIT BURNER						
Liquid Gas LPG (G31)	9,00	3,50	AL150	100	14	Open
Natural Methane Gas (G20)	9,00	3,50	AL225	Reg.	27	14
LAVASTONE GRILL 1 UNIT BURNER						
Liquid Gas LPG (G31)	18,00	8,50	AL215	150	14	Open
Natural Methane Gas (G20)	18,00	8,50	AL325	Reg.	27	15

(Table 10) BURNER FEATURES (HU - CAT. II₂HS3B/P,)

Gas Type	Normal Capacity [kW]	Reduced Capacity [kW]	Diam. Main Injector [1/100 mm]	By-pass Diameter [1/100 mm]	Pilot Injectors [N°]	Air Regulation "x" [mm]
LAVASTONE GRILL ½ UNIT BURNER						
Liquid Gas LPG (G30-G31)	9,00	3,50	AL150	100	14	Open
Natural Methane Gas (G20)	9,00	3,50	AL205	Reg.	27	14
Natural Methane Gas (G25.1)	9,00	3,50	AL235	Reg.	27	14
LAVASTONE GRILL 1 UNIT BURNER						
Liquid Gas LPG (G30-G31)	18,00	8,50	AL215	150	14	Open
Natural Methane Gas (G20)	18,00	8,50	AL305	Reg.	27	15
Natural Methane Gas (G25.1)	18,00	8,50	AL355	Reg.	27	15

WARNINGS

General

- *Read the instructions carefully before installation, use and maintenance of the appliance.*
- *Installation must be carried out by qualified personnel following the manufacturer's instructions in the specific manual.*
- *The appliance is only suitable for the preparation and cooking of food in industrial kitchens such as those used in restaurants, hospitals, company canteens, cooking centres, butcher's shops and food production firms. Any other type of use is not in accordance with the intended purpose and could place people and/or objects at risk.*
- *The item is an equipment suitable for grilling meat, fish, vegetables, all other uses are to be considered non-compliant.*
- *The appliance must only be used by trained personnel and only for the intended use.*
- *Due to the nature of the appliance, the temperatures required for cooking may cause various areas of the panelling, as well as kitchenware, to become hot. This is not a construction defect, but a physical phenomenon caused by the chemical and physical properties of the materials used for the construction of the appliances.*
- *In the event of breakdown or malfunctioning, switch off the appliance and call in after sales assistance only from an authorized centre.*
- *Use only original spare parts; otherwise no liability is accepted by the manufacturer.*
- *The appliance must not be washed with high pressure water sprays, neither must the openings or air fumes on heat inlets/outlets be blocked.*
- *Before connecting the device make sure that the plate specifications correspond to the electrical supply.*
- **ATTENTION:** *the minimum size of the lava stone must be at least 50 mm.*

ATTENTION! The manufacturer declines any liability for damage caused by wrong installation, tampering, making unauthorized changes, improper use, poor maintenance,

installation of non-original spare parts, not observing local norms, incorrect use or not observing the instructions in this booklet

For the installer

- *The functioning of the appliance must be explained and shown to the user. After having ensured that everything is clear, the instruction booklet must be handed over.*
- *The user must be informed that any building modification or restructuring that may in any way modify the air supply necessary for combustion, makes it necessary to carry out another check of the functionality of the appliance. In particular, every variation (additional power) in the appliances in the room may modify the balance of the gas supply in the room. That means that appliances may be fed with gas at lower gas pressure and rate than those provided for and they may give worse performance.*

TECHNICAL FEATURES

The following instructions for set up and functioning refer to gas and mixed appliances belonging to categories I_{3B/P} , II_{2H3+} , II_{2H3B/P}, II_{2HS3B/P} , III_{1ab2H3B/P} with a power pressure for Butane/Propane (G30- G31) of 30/37 mbar, for Methane (G20- G25- G25.1) of 20/25 mbar. The data plate (fig. 2 – pag.1) with all the information to refer to regarding the appliance, is situated inside the right or left side of the control panel, depending on the model.

The appliances have been checked in accordance with the European directives below.

2016/426 UE - Gas Appliances (GAR)
2006/42 EC - Machinery directive
2011/65 EC - Rohs
1935/2004/UE - Food Contact Material (MOCA)

And the particular reference norms.

Declaration of compliance

The manufacturer declares that the appliances of their production are compliant with the above mentioned EEC directives and requires that installation be done observing the norms in force, regarding particularly the system for letting out fumes and air exchange.

DESCRIPTION OF APPLIANCES

Gas lavastone grill

Sturdy structure in steel placed on four feet which make it possible to regulate the height. The outer finishing is stainless steel.

According to the model, the machine is equipped either with a fish or a meat grill. The lava stone is collected in a container under the grill. The heating is obtained through a specific burner with safe cock that allows the regulation from the maximum to the minimum temperature; the security is obtained through a thermocouple activated by the flame of the pilot burner.

Neutral cabinet

In the standing versions without oven, door are available for closing the opening and making a neutral cabinet. There are also racks available for inserting GASTRONORM wash bowls.

PROVISIONS FOR INSTALLATION

Place (fig. 3 – pag.2)

It is advisable to install the appliance in a well ventilated room or under an extractor hood. The appliance may be installed as a single unit or together with others. In both cases, if it is installed near a wall of inflammable material, a minimum distance of 100mm from the side and back walls must be observed. In the event that it is not possible to observe this distance, protective measures must be taken (e.g. use of sheets of refractory material) which ensure that the temperature of the walls is within the established safety limits.

Installation

Installation operations, gas or voltage conversions to other than the original, starting up the installation or appliance, ventilation, letting out fumes, and maintenance must be done following the manufacturer's instructions and observing the norms in force, by qualified personnel, in compliance with the following provisions (**GB**):

- Gas Safety (Installation and Use) Regulations, 1984
- Health and Safety at Work Act, 1974
- Codes of Practice, BS6173, 1982
- The Building Regulations, 1985
- The Building Standards Regulations, 1981

For others countries follow the relevant local rules for:

- Gas board rules
- Building regulations and local fire prevention provisions
- Safety norms in force
- Provisions of the Gas supplying company
- The Electrical Norms in force
- The Fire Brigade rules

Fumes evacuation

The appliances are divided into two types (see Table 1 - pag.29):

Type "A1" gas appliances

It is not necessary to connect this type of appliance directly to an evacuation pipe for combustion products. The products of combustion, however, must be directed into suitable hoods or similar devices, connected to a reliably efficient chimney, otherwise directly outside.

The use of an extractor fan connected directly to external environment with a capacity no lower than what is stated in table 1.

This value must be increased with the air exchange necessary for the well-being of the operators, in accordance with the norms in force. (approximately a total of 35 m³/h per KW of gas output

installed).

Type “B11” gas appliance

These appliances must be connected in one of the following ways:

- *Natural evacuation (fig.4 – pag.2).*
Connection to reliable chimney with natural pull, interposing a pull device, letting out the products of combustion directly outside.
- *Direct forced evacuation (fig.5 – pag.2).*
Connection to a chimney with forced pull, putting in a pull device, letting out the products of combustion directly into external environment. The energy supply to the appliance must be controlled by the system of forced evacuation and must be interrupted in the event that its capacity falls below the values prescribed by the norms in force.
It must only be possible to restart the gas supply manually.
- *Forced evacuation under hood (fig.6 – pag.2).*
In this case, the fumes evacuation device of the appliance must be brought to a height of 1,8 m from floor level, and the putlet section of the evacuation pipes for products of combustion must be placed inside the base perimeter of the hood. The energy supply to the appliance must be controlled by the system of forced evacuation and must be interrupted in the event that its capacity falls below the values prescribed by the norms in force. It must only be possible to restart the gas supply manually.

INSTALLATION

Preliminary operations

Remove the appliance from the packaging, ascertaining that it is intact and, if in doubt, do not use it but call in professionally qualified personnel. After having verified that the appliance is in good condition, the protective film may be removed. Carefully clean the external parts of the appliance with warm water and detergent using a cloth to remove all remaining residues and then dry it with a soft cloth. If there are still traces of glue residues, remove them by using a suitable solvent (e.g. acetone): For no reason use abrasive substances. After having been put into place, the appliance must be levelled by regulating the adjustable feet.

Gas Connection

Before connecting the appliance, it is necessary to check that the type of gas available corresponds to the type of gas the appliance has been set for. In the event that they do not correspond, it is necessary to proceed as described in the paragraph *“Functioning with gas different from the setting”*. The connection to the threaded coupling, having a diameter of ½ inch, situated on the bottom of the appliance, may be fixed or mobile using a compliant rapid pipe fitting. If flexible piping is used, this must be in stainless steel and compliant with the norm. All the seals on the junction threads must be in guaranteed materials certified for use with gas. Before the installation of each single appliance it is necessary to install a cutoff cock for rapid interruption of the gas supply, placed in an easily accessible position in such a way as to make it possible to turn off the gas supply when the appliance is not being used. When the connection has been completed, the tightness must be checked by using a leak-finder spray.

Electric connection

The appliance must be connected to the EQUIPOTENZIALE system. The connector is situated near the end of the electric cable and is identified by a label with the symbol shown on figure 7 (pag.2).

Checking gas tightness and pressure (fig.8 – pag.2).

Before proceeding to check the pressure, it is necessary to check the tightness of the gas installation up to the nozzle with a leak-finder spray to ensure that no damage has been done to the appliance during transportation. Then it is possible to proceed with checking the inlet pressure, which is done by means of a gauge for liquids, either a "U" gauge or an electronic gauge with a minimum definition of 0,1 mbar. To carry out the reading, the screw (1) must be removed from the pressure outlet (2) and the rubber pipe of the gauge connected. Open the gas supply valve of the appliance, check the pressure output and close the valve. Remove the pipe of the gauge and put back the screws correctly into the pressure outlet. The pressure value must be within the minimum and maximum values shown below:

Type of gas	P _n [mbar]	P _{min} [mbar]	P _{MAX} [mbar]
G20 (Methane)	20	17	25
G20 (Methane)*	25	20	30
G25.3 (Methane)	25	20	30
G30 (Butane) (3B/P)	28-30	25	35
G30 (Butane) (3+)	28-30	20	35
G30 (Butane) (3B/P)	50	42,5	57,5
G31 (Propane) (3B/P)	28-30	25	35
G31 (Propane) (3P, 3+)	37	25	45
G31 (Propane) (3B/P)	50	42,5	57,5

(*These gases belong to II_{2HS3B/P} category, which is used only in Hungary)

If the pressure reading is not within the limits of the table, find out the cause. After solving the problem, check the pressure again.

Checking the power

Normally, it is sufficient to check that the nozzles installed are the right ones and that the burners function properly. If desired, further check the power absorbed by using the "Volumetric Method". With the help of a chronometer and a counter, it is possible to read the volume of gas output to the appliance in time units. The right comparison volume [E] can be obtained with the formula shown overleaf in litres per hour (l/h) or in litres per minutes (l/min), by dividing the nominal and minimum outputs (power) shown in the table of burner features for the lowest heat capacity of the type of gas foreseen for use with the appliance. This value can be found in the norm tables or can be provided by the local gas supply company.

$$E = \frac{\text{Power}}{\text{Heat capacity}}$$

The reading must be done when the appliance is already in function.

Checking pilot burner

Check the flame of the pilot burner, which must be neither too short nor too high but must lap the thermocouple and have a sharp form; otherwise, it is necessary to check the size of the nozzle depending on the pilot version, as specified in the following paragraphs.

Checking regulation of primary air

All the main burners are provided with primary air regulation. Checking must be done observing the values shown in the air regulation column of the burner features tables (pag.30÷33). To regulate the primary air, proceed as illustrated in the following paragraphs.

ATTENTION! All the parts, protected and sealed by manufacturer may not be regulated by the installer if not specifically indicated.

REGULATIONS AND SUBSTITUTION FOR USING A DIFFERENT GAS THAN THE TYPE PROVIDED FOR

Functioning with different gas than the type provided for.

For changing to another type of gas it is necessary to substitute the nozzle in the main burners and in the pilot burner, following the indications given in the following paragraphs. The type of nozzle to install can be found in tables 2÷10. The nozzles for the main burner, marked with the relative diameter in hundredths, and the ones for the pilot burner, marked with a number, can be found in a transparent packet attached to the instruction booklet. When the conversion is completed, check the tightness of the pipe fittings and also that the ignition and functioning of both pilot burner and main burner, at both minimum and maximum, are correct. It may be necessary to check the output (power).

Substituting the burner nozzle (fig. 9, 10 – pag. 3)

To substitute the nozzle of the burner, it is necessary to remove the handles of the container of the lava stone, unscrewing with a setscrew wrench the socket head screws that fix it (for the models where it is foreseen). It is necessary to remove the knob (1), the box (2), and the control panel (3). After having cleared the work area, loosen the screw (4) which blocks the regulation of primary air (7), with a screwdriver and open it completely. Unscrew the nozzle (6) from the nozzle holder (5) with a spanner and substitute it with the nozzle suitable for the type of gas to be used, shown in tables 2÷10. After assembling the new nozzle tightening it well, proceed with regulating the primary air as indicated in the next paragraph. Finally, put back the panel and the knob.

Regulating the primary air of the burner (fig. 10 – pag.3)

After having substituted the burner nozzle, it is necessary to proceed by regulating the primary air: loosen the screw (1), bring value "x" to the correct measurement, referring to tables 2÷10, tighten the screw (1) and check the accuracy of value "x".

Regulation of by-pass (fig. 11 – pag.3)

For functioning with liquid gas, the by-pass (1) must be fully screwed and properly tightened. While for functioning with methane gas the by pass (1) must be regulated in the following way: read the value of the minimum output in tables 2÷10 and convert it into l/h by using the "Volumetric method" described previously; at this stage the appliance can be started up, following the instructions. When this has been done, it is necessary to regulate the by-pass capacity by reading

the meter, turning it clockwise to reduce the flow and anti-clockwise to increase it. After regulating, fix the position of the by-pass with a drop of red paint, suitable for this use

Substituting the pilot burner nozzle (fig. 12 – pag.3)

To substitute the nozzle of the pilot burner, it is necessary to remove the handles of the container of the lava stone, unscrewing with a setscrew wrench the socket head screws that fix it (for the models where it is foreseen). It is necessary to remove the knob and the control panel as in figure 11. After having cleared the work area, screw the fitting (1) which secures the gas supply pipe of the pilot (2) to the pilot support (4) and take out the nozzle (3); substitute it with the nozzle suitable for the type of gas to be used, shown in tables 2÷10. Then proceed with assembling the new nozzle, repositioning the pipe and tightening the fitting fully. Finally, put back the panel and knob.

INSTRUCTIONS FOR USE

Gas lavastone grill (fig. 13 – pag.4)

To light the burner of the lavastone grill, proceed in the following way:

- turn the knob (1) from the off position ● into the position ★;
- push down to the bottom;
- press the button of the piezoelectric lighter (2) ★ to light the pilot burner;
- keep the knob pressed down until the thermocouple heats up, keeping the pilot lit;
- light the main burner in the desired, going from maximum 🔥 to minimum 🔥.

To put out the main burner, it is necessary to turn the knob to the right into the position ★, to put out also the pilot, turn the knob again, into the off position ●.

Adjustment of the height of the lava stone container (for the models where it is foreseen; fig.14 – pag.4)

For a better cooking result the machine is equipped with a device that allows the adjustment of the height of the grate on 2 different positions. This device allows to obtain an optimal distance between the cooking surface and the lava stone granting a better diffusion of the heat.

It is suggested to use this device as follows:

- ❖ Clasp both levers and push them softly upwards;
- ❖ Open softly the levers outwards and move them to the desired position.
- ❖ In order to stop the grill in the upper position, push the levers softly inwards, so to hook it at the clamps. Lean the levers at full stroke for the lower position.

ATTENTION! Only use the appliance under surveillance. While working it is possible that part of the fat of the foods drops on the underneath lava stone causing sudden flames.

Abnormal functioning

If for any reason, the appliance does not start or stops working during use, check that the energy supply and the control knobs are set correctly; if all is regular, call customer service.

Some problems and their possible solutions

<i>Problem</i>	<i>Possible solution</i>
The burner does not light on	<ul style="list-style-type: none"> - Check that gas inlet pressure is the same as that shown in table TYPES OF GAS - Check that the nozzle of the burner is not blocked - Check that the igniter plug is well fixed and connected - Check that the igniter plug is intact - Check that the igniter cable is intact - Check the gas valve
High minimum	<ul style="list-style-type: none"> - Check that gas inlet pressure is the same as that shown in table TYPES OF GAS - Check the by-pass - Check the gas cock
Slow and/or inadequate heating	<ul style="list-style-type: none"> - Check that gas inlet pressure is the same as that shown in table TYPES OF GAS - Check that the nozzles installed are in accordance to tables 2-10 - Check the gas cock

CARE AND MAINTENANCE OF THE APPLIANCE

Cleaning

ATTENTION! Before doing any cleaning, make sure that the gas cutoff valve is closed. During cleaning operations, avoid using direct or high pressure sprays of water on the appliance. Cleaning must be done when the appliance is cold.

The parts in steel can be cleaned with warm water and neutral detergent, using a cloth; the detergent must be suitable for cleaning stainless steel and must not contain abrasive or corrosive substances. Do not use common steel wool or anything similar that, depositing iron particles, could cause rust from it. It is also better to avoid using sandpaper or emery paper. Only in the event of encrusted dirt, pumice stone in powder may be used but an abrasive synthetic sponge or stainless steel wool would be preferable, to be used in the direction of the grain. After washing, dry with a soft cloth.

When cleaning, abrasive powders of any type, chlorine-based detergents and bleach should all be avoided. Also avoid pouring cold liquids on appliances while they are hot, or cracks could form which could cause the appliance to become deformed or broken.

The stainless steel should not be exposed to prolonged contact with concentrated acidic substances (vinegar, condiments, spice mixtures, concentrated kitchen salt...) as these can create chemical and physical conditions that damage the passivation of the steel; it is therefore advisable to remove these substances using clean water.

If the appliance is out of use for a long time, it is advisable to turn off the gas tap. Then disconnect the main electricity supply and wipe all stainless steel surfaces with a cloth soaked in vaseline oil in order to give it a protective film and air the rooms now and again.

Maintenance

ATTENTION! Before doing any kind of maintenance or repairs, make sure that the gas cutoff valve is closed.

The following maintenance operations must be carried out at least once a year by specialized personnel. It is advisable to have a maintenance contract.

- Check for correct functioning of all control and safety devices;
- Check for correct ignition of burners and proper functioning at minimum;
- Check the tightness of the gas pipes;
- Check the condition of the power cable;
- Clean the evacuation pipes of type "B" appliances, following the prescriptions in force in the country of installation;
- The gas tap should be lubricated but this is a difficult operation and not very reliable; therefore it is advisable to substitute it;

SUBSTITUTING COMPONENTS

ATTENTION! Before carrying out any substitutions, make sure and that the gas cutoff valve is closed.

Safety cock

To substitute the cock, it is necessary to remove the handles of the container of the lava stone , unscrewing with a setscrew wrench the socket head screws that fix it (for the models where it is foreseen). It is necessary to remove the knobs and the control panel, then unscrew in sequence the pipe union of the piping which goes to the burner, the pipe union of the piping of the pilot burner, the thermocouple and finally, the pipe union of the ramp. Then substitute the part.

Thermocouple

To substitute the thermocouple, it is necessary to remove the handles of the container of the lava stone , unscrewing with a setscrew wrench the socket head screws that fix it (for the models where it is foreseen) remove the knobs and take off the control panel. It is then necessary to unscrew the fitting of the thermocouple on the cock and the one on the pilot unit, then substitute the part.

WHEN SUBSTITUTING, ONLY ORIGINAL SPARE PARTS SUPPLIED BY THE MANUFACTURER MUST BE USED. THE OPERATION MUST BE CARRIED OUT BY AUTHORIZED PERSONNEL.

ATTENTION! In the event that components of the gas installation have been substituted, it is necessary to check for tightness and the correct functioning of the various parts.

THE MANUFACTURER RESERVES THE RIGHT TO WITHOUT NOTICE MODIFY THE FEATURES OF THE APPLIANCES DESCRIBED IN THIS MANUAL.