

# **GAS FRY TOPS ELECTRIC FRY TOPS SERIES 70**

**INSTALLATION, USE  
AND MAINTENANCE**

<b>286401</b>	<b>286409</b>	<b>2854011</b>	<b>2856021</b>
<b>286402</b>	<b>286603</b>	<b>2854021</b>	<b>2856051</b>
<b>286403</b>	<b>288401</b>	<b>2854031</b>	<b>2894011</b>
<b>286404</b>	<b>288402</b>	<b>2854041</b>	<b>2894021</b>
<b>286405</b>	<b>288403</b>	<b>2854051</b>	<b>2894031</b>
<b>286406</b>	<b>288405</b>	<b>2854061</b>	<b>2894051</b>
<b>286407</b>	<b>288406</b>	<b>2854071</b>	<b>2896021</b>
<b>286408</b>	<b>288602</b>	<b>2854081</b>	

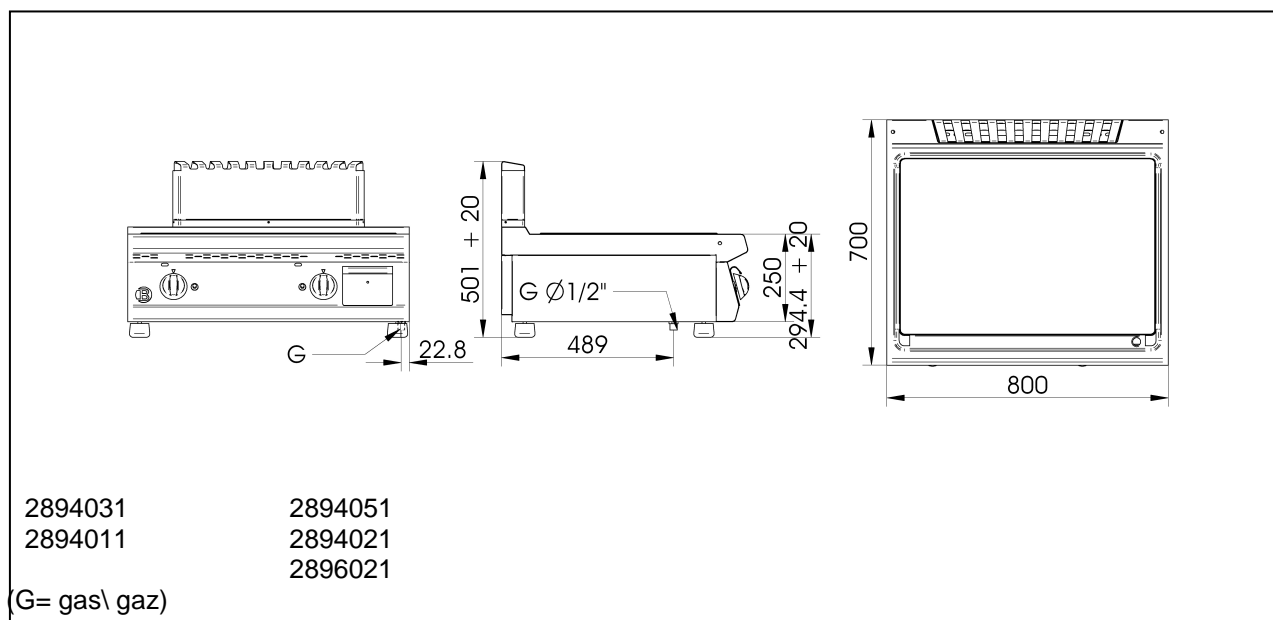


Fig. – Abb. 1: Dimensioni \ Dimensions \ Floor space dimensions \ Raumbedarfsmasse \ Espacio máximo necesario

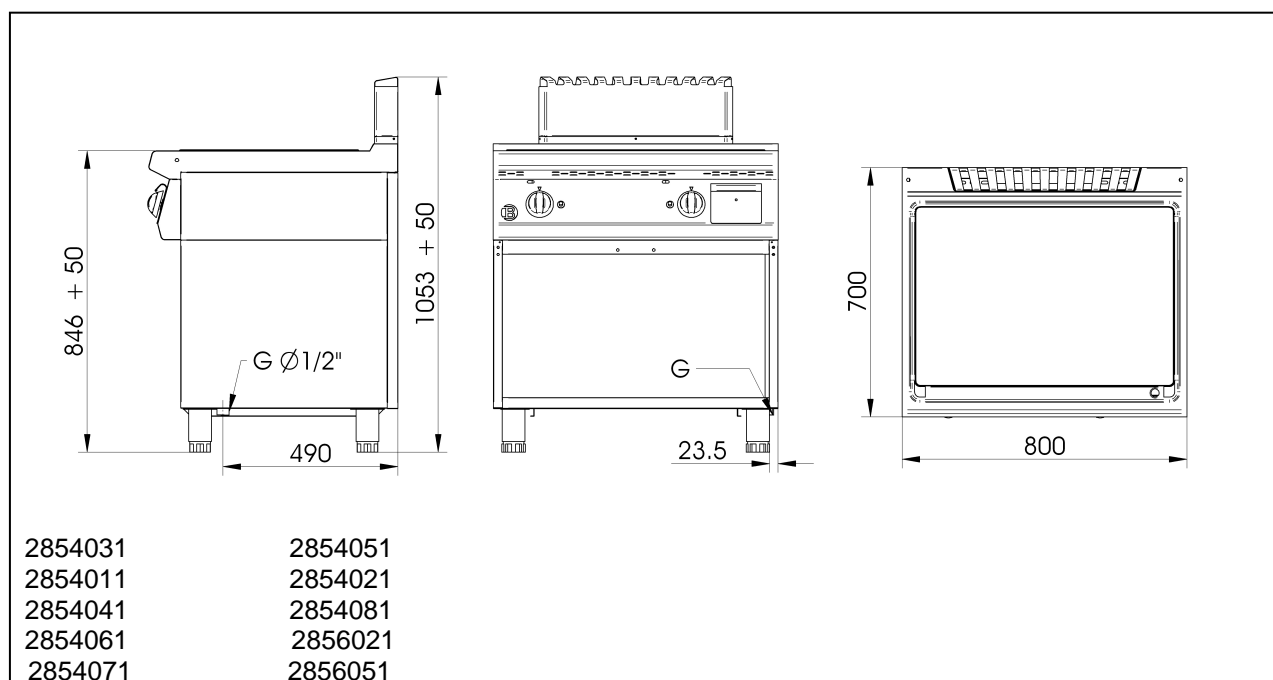
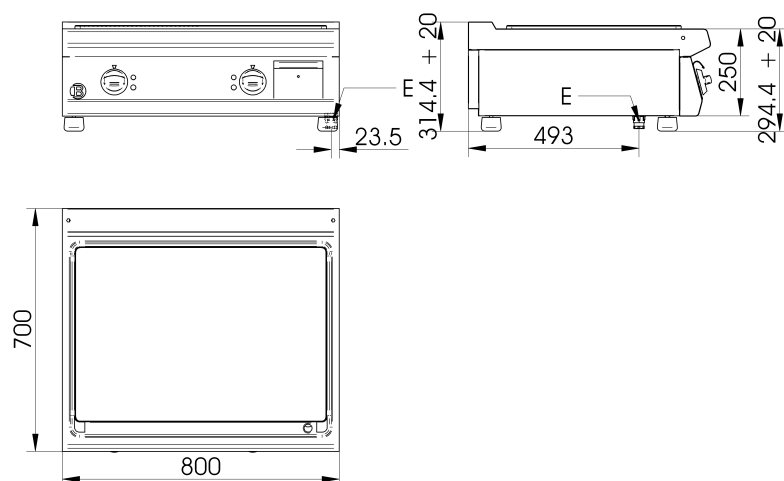


Fig. – Abb. 2: Dimensioni \ Dimensions \ Floor space dimensions \ Raumbedarfsmasse \ Espacio máximo necesario

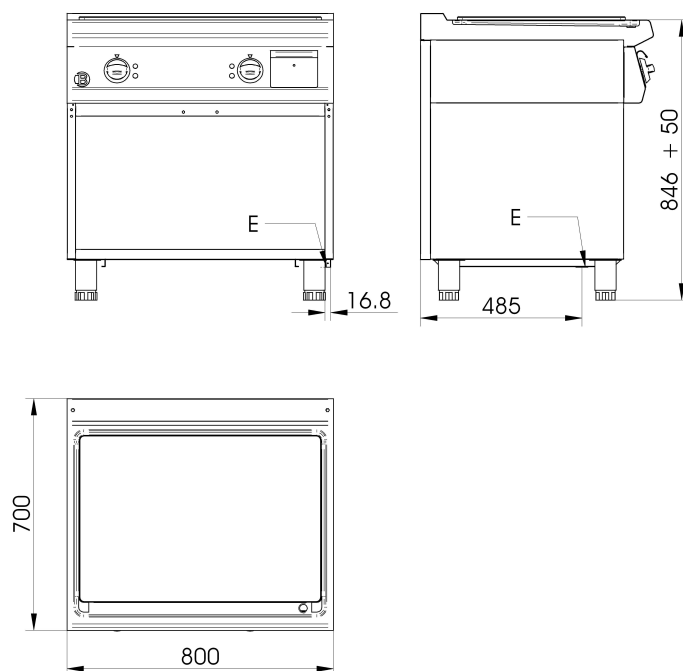


288403  
288401

288405  
288402  
288602

(E= elettrico \ électrique \ electric\ Elektrisch \ eléctrico)

Fig. – Abb. 3: Dimensioni \ Dimensions \ Floor space dimensions \ Raumbedarfsmasse \ espacio máximo necesario



286403  
286401  
286404  
286406  
286407

286405  
286402  
286408  
286409  
286602

(E= elettrico \ électrique \ electric\ Elektrisch \ eléctrico)

Fig. – Abb. 4: Dimensioni \ Dimensions \ Floor space dimensions \ Raumbedarfsmasse \ espacio máximo necesario



				CAT/KAT	GAS/GAZ	G30	G31	G20	G25	G25.1	G110	G120	Made in E.U.				
				I <sub>2</sub> H	p mbar	-	-	20	-	-	-	-	-	LV			
				I <sub>3</sub> P	p mbar	-	37	-	-	-	-	-	-	IS			
				I <sub>3</sub> B/P	p mbar	28-30	28-30	-	-	-	-	-	-	CY	MT		
				II <sub>2</sub> E+3P	p mbar	-	37	20	25	-	-	-	-	LU			
				II <sub>2</sub> E+3+	p mbar	28-30	37	20	25	-	-	-	-	FR	BE		
 XXXX Nr.	II <sub>2</sub> H3+	p mbar	30	37	20	-	-	-	-	IT	PT	GR	GB				
	II <sub>2</sub> H3+	p mbar	28	37	20	-	-	-	-	ES	IE	CH					
TIPO/TYPE	A	II <sub>2</sub> E3P	p mbar	-	37	20	-	-	-	-	-	PL					
MOD.		II <sub>2</sub> ELL3B/P	p mbar	50	50	20	20	-	-	-	-	DE					
ART.		II <sub>2</sub> H3B/P	p mbar	50	50	20	-	-	-	-	-	AT	CH	CZ	SK		
N°.		II <sub>2</sub> H3B/P	p mbar	28-30	28-30	20	-	-	-	-	-	FI	LT	BG			
	kW      B m³/h     C kg/h     D	II <sub>2</sub> H3B/P	p mbar	28-30	28-30	20	-	-	-	-	NO	SK	RO				
		II <sub>2</sub> H3B/P	p mbar	28-30	28-30	20	-	-	-	-	EE	SI	HR	TR			
II <sub>2</sub> HS3B/P		p mbar	28-30	28-30	25	-	25	-	-	HU							
kW      E      V ~      F Hz        G	II <sub>2</sub> L3B/P	p mbar	30	30	-	25	-	-	-	NL							
	III <sub>1</sub> ab2H3B/P	p mbar	28-30	28-30	20	-	-	8	8	SE							
	III <sub>1</sub> a2H3B/P	p mbar	28-30	28-30	20	-	-	8	-	DK							
Predisposto a gas-Prévu pour gaz-Voreinstellung für Gas-Predisposto a gás-Voorzien van gas-Set for use with gas-Preparado para gas- Ment for å brukes med gass-Avsett för att användas med gas-Tarkoitettu käytettäväksi kaasulla-Forberedt til brug af gas-Προετοιμασμένο για λειτουργία με αέριο- Zařízení na plyn - Toimib gaasi põhjal - A berendezés gáz használatára előkészített – Sagatavota darbam ar gáz – Przystosobione na gas – Numatyta dumjos - Nastavený na plyn – Pripravljeni za plin													G20 20mbar (H)				

Fig. – Abb. 5: targhetta caratteristiche \ Plaques des caractéristiques \ data plate\ typenschild \ Chapa características

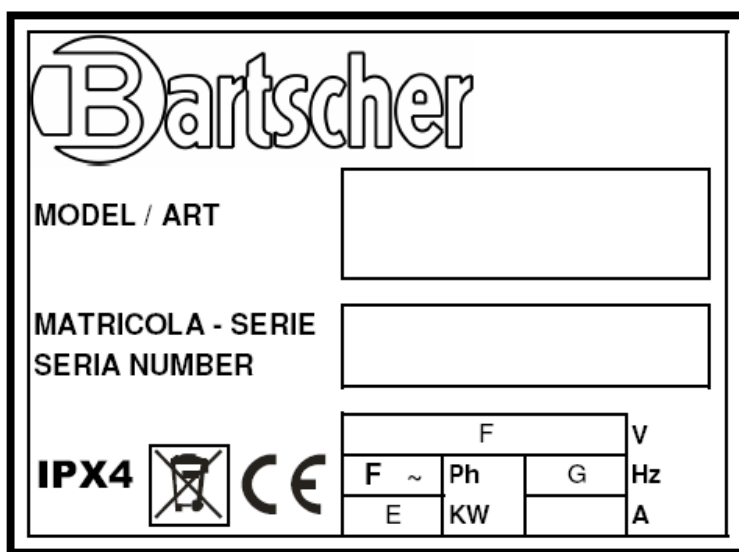


Fig. – Abb. 6: targhetta caratteristiche \ Plaques des caractéristiques \ data plate\ typenschild

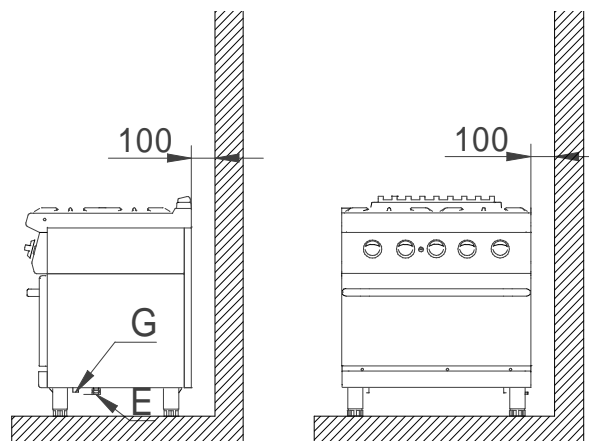


Fig. – Abb. 7: Installazione \ Lieu d'installation \ Place \ Installationsort \ Lugar

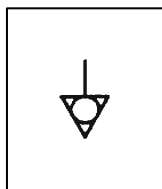


Fig. – Abb. 8: Simbolo equipotenziale \  
Symbole equipotenzial \  
Equipotenziale label \ Symbol  
Potenzialausgleich \  
Equipotencial símbolo

Fig. – Abb. 9: 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 \ Comprobación de la estanqueidad y de  
la presión de alimentación

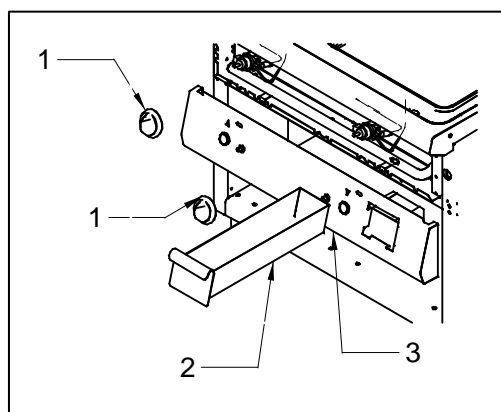
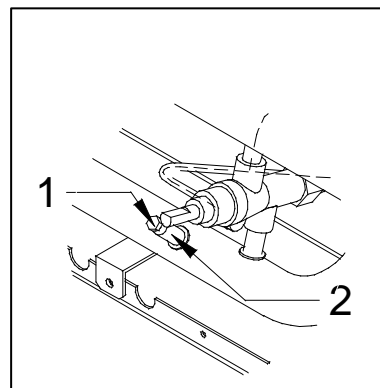


Fig. – Abb. 11 : Regolazione dell'aria primaria bruciatore  
\ Réglage de l'air primaire du brûleur \ Regulating the  
primary air of the burner \ Primärluftregelung des  
Hauptbrenners \ Regulación del aire primario quemador

Fig. – Abb. 10 : Sostituzione ugello bruciatore \  
Changement du gicleur du brûleur \ Substituting the  
burner nozzle \ Austausch der Hauptbrennerdüse \  
Cambio boquilla quemador

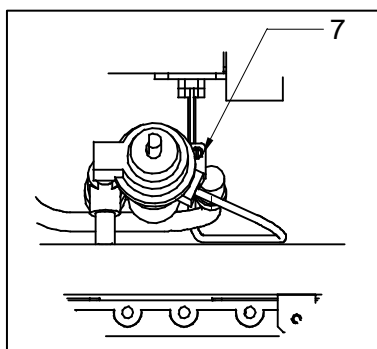
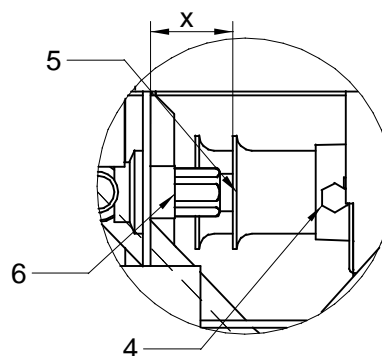


Fig. – Abb. 12 : Sostituzione del By-Pass \  
Changement du by-pass \ Substituting the By-Pass \  
Austausch des By-Pass \ Cambio del by-pass

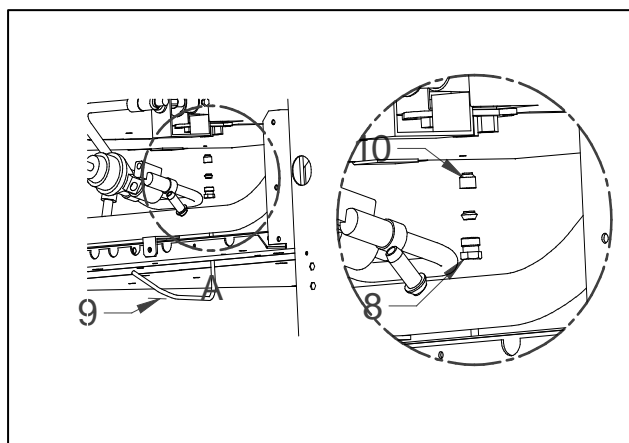


Fig. – Abb. 13 : Sostituzione dell'ugello  
bruciatore pilota \  
Changement du gicleur du brûleur veilleuse \  
Substituting the pilot burner nozzle \  
Austausch der Zündbrennerdüse \  
Cambio de la boquilla del quemador  
piloto

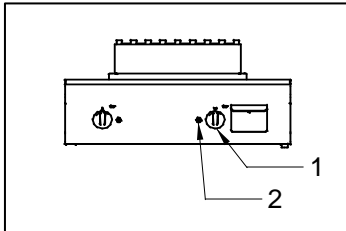


Fig. – Abb. 14 : Istruzioni uso (Fry top a gas)\ Instructions d'utilisation (Fry top a gaz)\ Instruction for use (Gas fry tops )\ Bedienungsanleitungen (Griddleplatten) \ Instrucciones de uso (Fry top a gas)

Fig. – Abb. 15 : Istruzioni uso (Fry top elettrici)\ Instructions d'utilisation (Fry top a électriques)\ Instruction for use (Electric fry tops )\ Elektrische (Griddleplatten) \ Instrucciones de uso (Fry top a eléctricos)

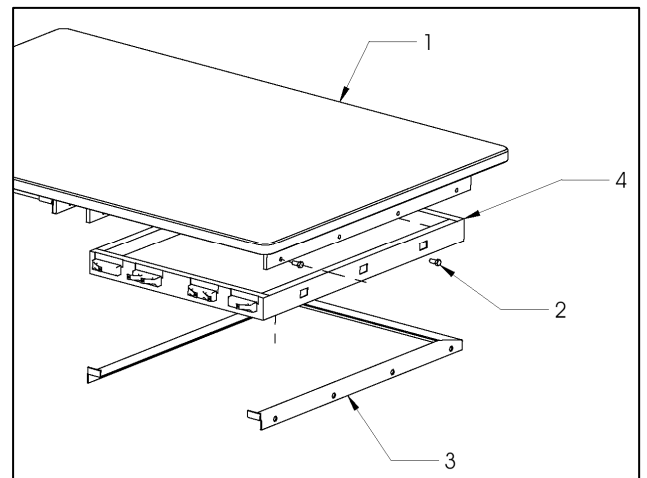
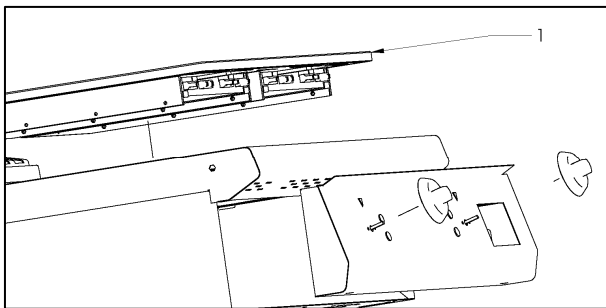
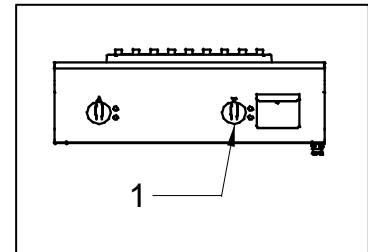


Fig. – Abb. 16, 17 : Sostituzione delle resistenze \ Changement du Résistances Substituting the Elements \ Austausch der Widerstände \ Cambio motor del Resistencias

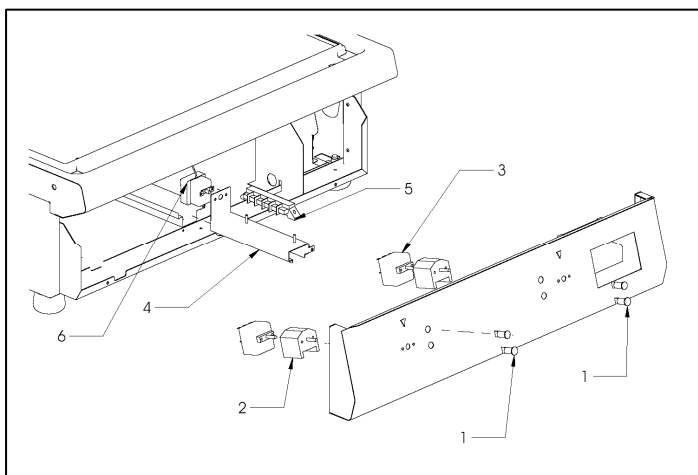


Fig. – Abb. 18 : Sostituzione componenti elettrici di comando\ Remplacement composants électriques de contrôle \ Replacement of electric components \ Ersetzen von elektrischen Komponenten der Steuerung \ Sustitución componentes eléctricos de control

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

Model	Description	Dimensions LxPxH [mm]	Gas Output (B) [Kw]	Type (A)	Consumption LPG (G30) (D) [Kg/h]	Consumption METHANE (Natural) (G20) (C) [m3/h]	Aria for comb. [m3/h]	Gas fitting	Elect. Pot. (E) [Kw]	Tension (F) [V]	Freq. (G) [Hz]	Cable type H07 RN-F [mm2]	Smooth hotplate	Ridged hotplate	½ Ridged hotplate	Soft steel hotplate	Compound hotplate
2894031	½ module Top Fry top gas	400x700x295	7	A1	0.552	0.740	14	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	-	x
2894051	1 module Top Fry top gas	800x700x295	14	A1	1.104	1,481	28	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	-	x
2894011	½ module Top Fry top gas	400x700x295	7	A1	0.552	0.740	14	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	x	-
2894021	1 module Top Fry top gas	800x700x295	14	A1	1.104	1,481	28	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	x	-
2896021	1 module Top Fry top gas	800x700x295	14	A1	1.104	1,481	28	UNI-ISO 7/1 R ½	-	-	-	-	-	-	x	x	-
2854031	½ module Fry top gas + compartment	400x700x845	7	A1	0.552	0.740	14	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	-	x
2854061	½ module Fry top gas + compartment	400x700x845	7	A1	0.552	0.740	14	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	-	x
2854051	1 module Fry top gas + compartment	800x700x845	14	A1	1.104	1,481	28	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	-	x
2854081	1 module Fry top gas + compartment	800x700x845	14	A1	1.104	1,481	28	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	-	x
2854011	½ module Fry top gas + compartment	400x700x845	7	A1	0.552	0.740	14	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	x	-
2854021	1 module Fry top gas + compartment	800x700x845	14	A1	1.104	1,481	28	UNI-ISO 7/1 R ½	-	-	-	-	x	-	-	x	-
2854041	½ module Fry top gas + compartment	400x700x845	7	A1	0.552	0.740	14	UNI-ISO 7/1 R ½	-	-	-	-	-	x	-	x	-
2854071	½ module Fry top gas + compartment	400x700x845	7	A1	0.552	0.740	14	UNI-ISO 7/1 R ½	-	-	-	-	-	x	-	x	-
2856021	1 module Fry top gas + compartment	800x700x845	14	A1	1.104	1,481	28	UNI-ISO 7/1 R ½	-	-	-	-	-	-	x	x	-
2856051	1 module Fry top gas + compartment	800x700x845	14	A1	1.104	1,481	28	UNI-ISO 7/1 R ½	-	-	-	-	-	-	x	x	-
288403	½ module Top Fry top elect.	400x700x295	-	-	-	-	-	-	5,0	230 1 – 400 3N	50	3x4 – 5x1,5	x	-	-	-	x
288405	1 module Top Fry top elect.	800x700x295	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	x	-	-	-	x
288401	½ module Top Fry top elect.	400x700x295	-	-	-	-	-	-	5,0	230 1 – 400 3N	50	3x4 – 5x1,5	x	-	-	x	-
288402	1 module Top Fry top elect.	800x700x295	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	x	-	-	x	-
288602	1 module Top Fry top elect.	800x700x295	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	-	-	x	x	-
286403	½ module Fry top elect. + compartment	400x700x845	-	-	-	-	-	-	5,0	230 1 – 400 3N	50	3x4 – 5x1,5	x	-	-	-	x
286406	½ module Fry top elect. + compartment	400x700x845	-	-	-	-	-	-	5,0	230 1 – 400 3N	50	3x4 – 5x1,5	x	-	-	-	x
286405	1 module Fry top elect. + compartment	800x700x845	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	x	-	-	-	x
286407	1 module Fry top elect. + compartment	800x700x845	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	x	-	-	-	x
286401	½ module Fry top elect. + compartment	400x700x845	-	-	-	-	-	-	5,0	230 1 – 400 3N	50	3x4 – 5x1,5	x	-	-	x	-
286402	1 module Fry top elect. + compartment	800x700x845	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	x	-	-	x	-
286404	½ module Fry top elect. + compartment	400x700x845	-	-	-	-	-	-	5,0	230 1 – 400 3N	50	3x4 – 5x1,5	-	x	-	x	-
286407	½ module Fry top elect. + compartment	400x700x845	-	-	-	-	-	-	5,0	230 1 – 400 3N	50	3x4 – 5x1,5	-	x	-	x	-
286602	1 module Fry top elect. + compartment	800x700x845	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	-	-	x	x	-
286409	1 module Fry top elect. + compartment	800x700x845	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	-	-	x	x	-
286603	1 module Fry top elect. + compartment	800x700x845	-	-	-	-	-	-	10,0	400 3N	50	5x2,5	-	-	x	-	x

**(Table 2) BURNER FEATURES (IS - CAT. I<sub>3P</sub>)**

Gas type	Nominal capacity [kW]	Reduced capacity [kW]	Diameter of main injectors [1/100 mm]	By-Pass diameter [1/100 mm]	Pilot injectors [N]	Air regulation "x" [mm]
FRY TOP BURNER ½ module						
Liquid Gas LPG (G31)	7.00	3.00	AL130	90	30	25.0
FRY TOP BURNER 1 module						
Liquid Gas LPG (G31)	7.00x 2	3.00 x 2	AL130 x 2	90 x 2	30 x 2	25.0

**(Table 3) BURNER FEATURES (GB, IE, GR - CAT. II<sub>2H3+</sub>)**

Gas type	Nominal capacity [kW]	Reduced capacity [kW]	Diameter of main injectors [1/100 mm]	By-Pass diameter [1/100 mm]	Pilot injectors [N]	Air regulation "x" [mm]
FRY TOP BURNER ½ module						
Liquid gas LPG (G30-G31)	7.00	3.00	AL130	90	30	25.0
Natural Methane gas (G20)	7.00	3.00	AL195	125	51	20.0
FRY TOP BURNER 1 module						
Liquid gas LPG (G30-G31)	7.00 x 2	3.00 x 2	AL130 x 2	90 x 2	30 x 2	25.0
Natural Methane gas (G20)	7.00 x 2	3.00 x 2	AL195 x 2	125 x 2	51 x 2	20.0

**(Table 4) BURNER FEATURES (CY, MT - CAT. I<sub>3B/P</sub>)**

Gas type	Nominal capacity [kW]	Reduced capacity [kW]	Diameter of main injectors [1/100 mm]	By-Pass diameter [1/100 mm]	Pilot injectors [N]	Air regulation "x" [mm]
FRY TOP BURNER ½ module						
Liquid Gas LPG (G30-G31)	7.00	3.00	AL130	90	30	25.0
FRY TOP BURNER 1 module						
Liquid Gas LPG (G30-G31)	7.00x 2	3.00 x 2	AL130 x 2	90 x 2	30 x 2	25.0

**Table 5) BURNER FEATURES (LV - CAT. I<sub>2H</sub>)**

Gas type	Nominal capacity [kW]	Reduced capacity [kW]	Diameter of main injectors [1/100 mm]	By-Pass diameter [1/100 mm]	Pilot injectors [N]	Air regulation "x" [mm]
FRY TOP BURNER ½ module						
Natural Methane gas (G20)	7.00	3.00	AL195	125	51	20.0
FRY TOP BURNER 1 module						
Natural Methane gas (G20)	7.00 x 2	3.00 x 2	AL195 x 2	125 x 2	51 x 2	20.0



**(Table 6) BURNER FEATURES (NL - CAT. II<sub>2</sub>L3B/P)**

Gas type	Nominal capacity [kW]	Reduced capacity [kW]	Diameter of main injectors [1/100 mm]	By-Pass diameter [1/100 mm]	Pilot injectors [N]	Air regulation "x" [mm]
<b>FRY TOP BURNER ½ module</b>						
Liquid gas LPG (G30-G31)	7.00	3.00	AL130	90	30	25.0
Natural Methane gas (G25)	7.00	3.00	AL200	125	51	20.0
<b>FRY TOP BURNER 1 module</b>						
Liquid gas LPG (G30-G31)	7.00 x 2	3.00 x 2	AL130 x 2	90 x 2	30 x 2	25.0
Natural Methane gas (G25)	7.00 x 2	3.00 x 2	AL200 x 2	125 x 2	51 x 2	20.0

**(Table 7) BURNER FEATURES (HU - CAT. II<sub>2</sub>HS3B/P)**

Gas type	Nominal capacity [kW]	Reduced capacity [kW]	Diameter of main injectors [1/100 mm]	By-Pass diameter [1/100 mm]	Pilot injectors [N]	Air regulation "x" [mm]
<b>FRY TOP BURNER ½ module</b>						
Liquid gas LPG (G30-G31)	7.00	3.00	AL130	90	30	25.0
Natural Methane gas (G20)	7.00	3.00	AL180	125	51	20.0
Natural Methane gas (G25.1)	7.00	3.00	AL210	150	51	20.0
<b>FRY TOP BURNER 1 module</b>						
Liquid gas LPG (G30-G31)	7.00 x 2	3.00 x 2	AL130 x 2	90 x 2	30 x 2	25.0
Natural Methane gas (G20)	7.00 x 2	3.00 x 2	AL180 x 2	125 x 2	51 x 2	20.0
Natural Methane gas (G25.1)	7.00 x 2	3.00 x 2	AL210 x 2	150 x 2	51 x 2	20.0

**(Table 8) BURNER FEATURES (SE, DK, FI CZ,SK,FI, LT, BG, NO, RO, EE, SI, HR, TR - CAT. II<sub>2</sub>H3B/P)**

Gas type	Nominal capacity [kW]	Reduced capacity [kW]	Diameter of main injectors [1/100 mm]	By-Pass diameter [1/100 mm]	Pilot injectors [N]	Air regulation "x" [mm]
<b>FRY TOP BURNER ½ module</b>						
Liquid gas LPG (G30-G31)	7.00	3.00	AL130	90	30	25.0
Natural Methane gas (G20)	7.00	3.00	AL195	125	51	20.0
<b>FRY TOP BURNER 1 module</b>						
Liquid gas LPG (G30-G31)	7.00 x 2	3.00 x 2	AL130 x 2	90 x 2	30 x 2	25.0
Natural Methane gas (G20)	7.00 x 2	3.00 x 2	AL195 x 2	125 x 2	51 x 2	20.0

**Table 9) BURNER FEATURES (PL - CAT. II<sub>2E3P</sub>)**

Gas type	Nominal capacity [kW]	Reduced capacity [kW]	Diameter of main injectors [1/100 mm]	By-Pass diameter [1/100 mm]	Pilot injectors [N]	Air regulation "x" [mm]
<b>FRY TOP BURNER ½ module</b>						
Liquid gas LPG (G31)	7.00	3.00	AL130	90	30	25.0
Natural Methane gas (G20)	7.00	3.00	AL195	125	51	20.0
<b>FRY TOP BURNER 1 module</b>						
Liquid gas LPG (G31)	7.00 x 2	3.00 x 2	AL130 x 2	90 x 2	30 x 2	25.0
Natural Methane gas (G20)	7.00 x 2	3.00 x 2	AL195 x 2	125 x 2	51 x 2	20.0

## 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 must only be used by trained personnel and only for the intended use.*
- *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 be blocked.*

**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.*

## TECHNICAL FEATURES

The following instructions for set up and functioning refer to gas and mixed appliances belonging to categories I<sub>3B/P</sub>, II<sub>2H3+</sub>, II<sub>2H3B/P</sub>, II<sub>2HS3B/P</sub>, III<sub>1ab2H3B/P</sub> with a power pressure for Butane/Propane (G30- G31) of 30/37 mbar, for Methane (G20- G25- G25.1) of 20/25 mbar, and for Town Gases (G110-120) of 8mbar. The data plate (fig. 5,6 – pag. 3) 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.

2006/95/CE	- Low Tension (LVD)
CEE 2004/108	- Electromagnetic Compatibility (EMC)
90/396/EEC	- Gas Appliances
98/37/EC	- Appliance to the directives

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 fry top**

Sturdy structure in steel placed on four feet which make it possible to regulate the height in the version with cabinet. The outside finishing is in stainless steel with Chromium-Nickel 18-10.

It is provided with a thermostatic safety gas tap which enables the regulation of the temperature in a range from 180° C inclusive to 360° inclusive; safety is ensured by means of a thermocouple which is kept active by the flame of the pilot burner. The 800 wide versions are provided with two separate cooking areas, with independent temperature regulating controls.

The hotplate is in thick steel, covered with a protective layer. The chamber is heated by means of a Chromium-plated steel tubular burner, suitable for proper functioning at the high temperatures to which it is exposed. For some versions is a plate of compound foreseen.

### **ElectricFry Top**

Sturdy structure in steel placed on four feet which make it possible to regulate the height in the version with cabinet. The outside finishing is in stainless steel with Chromium-Nickel 18-10.

It is provided with a thermostat which makes it possible to regulate the temperature in a range from 150° C inclusive to 350° C inclusive, and with a selector for selecting the type of cooking-only ceil, only floor or both. The 800 wide versions are provided with two separate cooking areas, with independent temperature regulating controls.

The hotplate is in thick steel, covered with a protective layer. The heating is done by means of protected elements. For some versions is a plate of compound foreseen.

### **Neutral cabinet**

The floor installations are equipped with open cabinet or with doors in order to have a neutral cabinet. There are also racks available for inserting GASTRONORM bowls.

## PROVISIONS FOR INSTALLATION

### **Place (fig.7 – pag.3)**

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**

These appliances are Type “A1” and 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. If this is not possible, the use of an extractor fan connected directly to the external environment with a capacity no lower than what is stated in table 1 (pag.30) is acceptable. This value must be increased by the air exchange necessary for the well-being of the operators, in accordance with the norms in force. (approximately a total of 35 m<sup>3</sup>/h per KW of gas output installed).

# 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

Before connecting the appliance, it is necessary to check that the voltage of the power supply available corresponds to the voltage the appliance has been set for. In the event that they do not correspond, it is necessary to modify the connection as shown in the electric diagram, if voltage change is provided for. The terminal blocks are situated behind the instrument board and they can be removed unscrewing the 2 screws that fix the support and pulling out the same and the terminal blocks. Furthermore, the efficiency of the earth connection must be checked, and also that the earth conductor on the connecting side is longer than the other conductors, and that the connecting cable has a wire bunch adequate for the power absorbed by the appliance and is at least type H05 RN-F. **As in international provisions, before installing the appliance a unipolar device must be installed with a contacts opening of at least 3mm which must not interrupt the YELLOW-GREEN earth wire.** The device must be installed near the appliance, it must be approved and have adequate capacity for the absorption of the appliance (see technical features).

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 8 (pag.4).

By using a safety thermostat for breakdown tensions there must observe what follows:

- According to the ruling normative law, the leakage of electric power for these kind of appliances can have a value of 1 mA without limitations for the maximum for each kW of installed power. Besides, there must take care that all the switches for breakdown found on

the market have a tolerance for the operating tension of less than the 50%; that's why there must be chosen a suitable switch.

- Connect only a single appliance for each switch
- In some cases it is possible that the appliance after long periods of inactivity or in case of a new installation, switches off during working. Most of the times the main reason is the moist produced during the isolation. The problem can be easily resolved with a short pre-heating bypassing the safety thermostat.

### Checking gas tightness and pressure (fig.9 – pag.4)

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 <sub>n</sub> [mbar]	P <sub>min</sub> [mbar]	P <sub>MAX</sub> [mbar]
G20 (Methane)	20	17	25
G20 (Methane)*	25	20	30
G25 (Methane)	25	20	30
G25.1 (Methane)*	25	20	30
G30 (Butane)	30	20	35
G31 (Propane)	37	25	45

(\*These gases belong to II<sub>2HS3B/P</sub> 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.31-33). 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 2-9 (pag.31-33). 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).

Then, modify the technical sheet (fig. 5, page 3) and place in the position H the sheet relevant to the new gas delivered as standard equipment.

### Substituting the burner nozzle (fig.10, 11 – pag.4)

To substitute the nozzle of the burner, first of all it is necessary to remove the knob (1), the drip pan (2), and the control panel (3). After clearing the work area, loosen the screw which blocks the primary air regulating bush (5) and open it completely; unscrew the nozzle (6) with a spanner and substitute it with a suitable nozzle for the type of gas used, shown in tables 2, 9 (pag.31-33). Reassemble the nozzle, tightening it well and proceed with regulating the primary air, as indicated in the next paragraph. When all this is done, replace the parts removed previously.

### Regulating the primary air of the burner (fig. 11 – pag.4)

After having substituted the burner nozzle, the primary air must be regulated; to do this, loosen the screw (4) which fixes the bush (5), bring value X to the correct measurement, referring to tables 2-9 (pag.31-33), tighten the screw (4) and check the accuracy of value X.

### Substituting the By-Pass (fig. 10, 12 – pag.4)

To substitute the by-pass, firstly the knobs (1) must be removed and then the drip pan (2). When the work area is clear, unscrew the by-pass (7) with a screwdriver and substitute it with the by-pass

suitable for the type of gas to be used, shown in tables 2-9 (pag.31-33). Reassemble the by-pass and tighten it well.

Put back the control panel, the drip pan and the knobs.

#### Substituting the pilot burner nozzle (fig.10,13 – pag.4)

To substitute the nozzle of the pilot burner, first of all, the knobs (1) must be removed, the drip pan (2) and the control panel (3), as in figure 14. Unscrew the fitting (8) which fixes the gas supply pipe of the pilot (9) and remove the nozzle (10). Substitute it with the nozzle suitable for the type of gas to be used, shown in tables 2-9 (pag.31-33). Then proceed to assemble the new nozzle, reposition the pipe and tighten the fitting fully. When all this has been done, put back the parts removed previously.

## INSTRUCTIONS FOR USE

### **Gas fry top (fig. 14 – pag.5)**

To light the burner of the fry top, proceed in the following way:

- turn the knob (1) from the off position ● into the on position ★;
- press down to the bottom;
- push 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; this can be checked through the slit in the control panel;
- light the main burner, positioning the knob in one of the eight possible positions, choosing the one most suited to the type of cooking desired, considering that they correspond indicatively to the temperatures shown below:

Position [N°]	1	2	3	4	5	6	7	8
Temperature [°C]	180	205	230	255	285	310	335	360

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

### **Electric fry top (fig. 15 – pag. 5)**

To light the fry top, proceed in the following way:

- Turn the knob (1) of the thermostat into the position which corresponds to the cooking temperature desired; the two lights come on, the green light stays on all the time to show that there is tension, whilst the orange one goes off as soon as the hotplates reach the desired temperature.

To turn off the hotplate turn the knob into the 0 position.

**ATTENTION! Only use the appliance under surveillance. Never let the hotplates function with nothing on them.**

### **Abnormal functioning**

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



## CARE AND MAINTENANCE OF THE APPLIANCE

### Cleaning

**ATTENTION! Before doing any cleaning, make sure that the appliance is disconnected from the electric mains and 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 which, 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. 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 appliance is disconnected from the electric mains and 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;
- 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 that the appliance is disconnected from the electric mains and that the gas cutoff valve is closed.**

### *Thermocouple*

To substitute the thermocouple of the fry top, it is necessary to remove the knobs, the drip pan and 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.

### *Elements (fig.10,16, 17 – pag.4, 5)*

To substitute the elements, firstly it is necessary to remove the knobs, the drip pan and the control panel, as shown in figure 10 (pag.4); then remove the hotplate fixing plates and the bulb fixing plates situated below the hotplate; after that, lift up the front part of the hotplate (fig. 16) by about 5 cm, move it slightly forward so that the lever which blocks the hotplate at the back, comes out; then turn it over towards the right. Next, unscrew the fixing screws of the covering (2), remove the covering (3) and disconnect the element (4) to be substituted, then remove it.

### *Electric components of the electric frytop (fig.10, 18, page 4, 5)*

For the replacement of the selector (4), of the thermostat (5) of the safety thermostat (6), of the lamps (1), and of the main terminal board (5) of the electric frytop, it is necessary to unscrew the fixing screws of the control board (as shown at fig.10 on page 4), remove it, then disconnect the electric cables of the component and replace it. After the replacement, connect the electric cables following the instructions of the wiring diagram.

**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 are 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.**