

# **T-SERIES**INSTALLATION, USAGE AND MAINTENANCE INSTRUCTIONS



# **GENERAL CONSIDERATIONS**

FLAMES VLC burners are professional cooking burners fueled by second and third family gasses (butane, propane or natural gas) and are designed for heating food containers. Perfect for cooking paella or rice dishes, and for use with large pots or pans.

# READ THE INSTRUCTIONS BEFORE THE USE.

Suitable containers according to the size of the appliance should be used.

# The flames must not protrude from the base of the container.

Place the container on the appliance, resting it on the intended place.

This appliance does not require to be connected to a combustion fumes exhaust system.

Do not place the appliance on a surface without insulation, and make sure to place it on flat and level ground. When heavier containers are to be placed on top of the device, we recommend the use of additional free-standing support systems.

Do not fuel the appliance with a type of gas for which it was not designed.

The recommended container diameters (mm) for each model are:

T-180	>	Ø280	T-300	>	Ø400	T-500	>	Ø600
T-250	>	Ø350	T-380	>	Ø480	T-600	>	Ø700
G-250	>	Ø350	T-460	>	Ø560	T-700	>	Ø800

# INSTALLATION INSTRUCTIONS

The general gas installation must be carried out by a qualified technician according to the local regulations and must have a tap to cut off the gas, whenever it is needed.

The protected pieces from the manufacturer mustn't be manipulated.

This device is only suitable for outdoor use.

During connection and commissioning of the equipment: Do not smoke, do not have near any possible ignition point.

It is forbidden any modification of the appliance by any person not authorized by the manufacturer.

Do not block the ventilation openings under the container.

IMPORTANT. The device, must always be placed on an non-flammable surface and never less than 500 mm away from any indoor-outdoor wall or any item made of a flammable material. It does not require any anchorage.

# Categories, gases and pressures.

Cour	ntry	Category	<b>2H</b> G-20 (mbar)	<b>2E</b> G-20 (mbar)	<b>2E+</b> G-20+G-25 (mbar)	<b>3B/P</b> G-30/G-31 (mbar)	<b>3+</b> G-30+G-31 (mbar)	<b>3P</b> G-31 (mbar)
AT	Austria	II <sub>2H3P</sub>	20	-	-	-	-	50
BE	Belgium	II <sub>2E+3+</sub> *II <sub>2E+3P</sub>	-	-	20 - 25	-	28 - 30/37	50
BG	Bulgaria	II <sub>2H3+</sub>	20	-	-	-	28 - 30/37	-
СН	Switzerland	$\mathbf{II}_{\mathtt{2H3+}}\!\!\star\!\mathbf{II}_{\mathtt{2H3P}}$	20	-	-	-	28 - 30/37	50
CY	Cyprus	$II_{2H3B/P}^{\star}II_{2H3+}$	20	-	-	30	28 - 30/37	-
CZ	Czech Republic	$II_{2H3B/P} \star II_{2H3+} \star II_{2H3P}$	20	-	-	30	28 - 30/37	50
DE	Germany	$I_{2E}^{\star}I_{3P}$	-	20	-	-	-	50
DK	Denmark	II <sub>2H3B/P</sub>	20	-	-	30	-	-
EE	Estonia	II <sub>2H3B/P</sub>	20	-	-	30	-	-
ES	Spain	$\mathbf{II}_{2H3+}\star\mathbf{II}_{2H3P}$	20	-	-	-	28 - 30/37	50
FI	Finland	II <sub>2H3B/P</sub>	20	-	-	30	-	-
FR	France	$\mathbf{II}_{2E+3+} \star \mathbf{II}_{2E+3P}$	-	-	20 - 25	-	28 - 30/37	50
GB	United Kingdom	II <sub>2H3+</sub> *II <sub>2H3P</sub>	20	-	-	-	28 - 30/37	50
GR	Greece	II <sub>2H3+</sub>	20	-	-	-	28 - 30/37	-
HR	Croatia	II <sub>2H3B/P</sub>	20	-	-	30	-	-
HU	Hungary	II <sub>2H3B/P</sub>	20	-	-	30	-	-
IE	Ireland	$II_{2H3+}$	20	-	-	-	28 - 30/37	-
IS	Iceland	$\mathbf{II}_{2H3+}\star\mathbf{II}_{2H3P}$	20	-	-	-	28 - 30/37	50
IT	Italy	II <sub>2H3B/P</sub> *II <sub>2H3+</sub>	20	-	-	30	28 - 30/37	-
LT	Lithuania	II <sub>2H3B/P</sub> *II <sub>2H3+</sub>	20	-	-	30	28 - 30/37	-
LU	Luxembourg	$I_{2H}$	20	-	-	-	-	-
LV	Latvia	$I_{2H}$	20	-	-	-	-	-
MK	Macedonia	$II_{2H3+}$	20	-	-	-	28 - 30/37	-
MT	Malta	$II_{2H3B/p}$ $\star II_{2H3+}$	20	-	-	30	28 - 30/37	-
NL	Netherlands	$II_{2H3B/P} \star I_{2P}$	-	20	-	30	-	50
NO	Norway	II <sub>2H3B/P</sub>	20	-	-	30	-	-
PL	Poland	$\mathbf{I}_{2\mathbb{E}}$	-	20	-	-	-	-
PT	Portugal	II <sub>2H3+</sub>	20	-	-	-	28 - 30/37	-
RO	Romania	II <sub>2H3B/P</sub>	20	-	-	30	-	-
SE	Sweden	II <sub>2H3B/P</sub>	20	-	-	30	-	-
SI	Slovenia	$II_{2H3B/P}$ $\star II_{2H3+}$	20	-	-	30	28 - 30/37	-
SK	Slovakia	$II_{2H3B/P} \star II_{2H3+} \star II_{2H3P}$	20	-	-	30	28 - 30/37	50
TR	Turkey	$II_{2H3+}$	20	-	-	-	30/37	-

# Consumption and performance of the main burners.

			1- AND 2- RING MODELS								
		T-180	T-250	G-250	T-300	T-3	80	T-4	60	T-500	
						Ring Ø180 mm.	Ring Ø380 mm.	Ring Ø250 mm.	Ring Ø460 mm.	Ring Ø300 mm.	Ring Ø500 mm.
Nominal	G20 (20 mbar) kW	4,10	5,90	10,60	8,00	5,00	11,00	7,80	10,70	9,00	12,50
energy consumption. Heat input	G30 (29 mbar) G31 (37 mbar) kW	4,10	5,90	7,50	8,00	3,80	7,60	5,30	8,50	7,00	8,50
over GCV.	G31 (50 mbar) kW	-	-	12,10	-	6,20	12,00	8,80	12,70	9,00	13,00

			3- RING MODELS							
			T-600		T-700					
		Ring Ø180 mm.	Ring Ø380 mm.	Ring Ø600 mm.	Ring Ø300 mm.	Ring Ø500 mm.	Ring Ø700 mm.			
Nominal	G20 (20 mbar) kW	5,00	11,00	12,70	9,00	10,50	12,50			
energy consumption. Heat input	G30 (29 mbar) G31 (37 mbar) kW	3,80	7,60	8,50	6,50	8,00	10,40			
over GCV.	G31 (50 mbar) kW	6,80	12,00	15,30	9,00	11,00	13,00			

# Consumption of the appliances.

		T-180	T-250	G-250	T-300	T-380	T-460	T-500	T-600	T-700
Nominal	G20 (20 mbar) kW	4,10	5,90	10,60	8,00	16,00	18,50	21,50	28,70	32,00
energy consumption. Heat input	G30 (29 mbar) G31 (37 mbar) kVV	4,10	5,90	7,50	8,00	11,40	13,80	15,50	19,90	24,90
over GCV.	G31 (50 mbar) kW	-	-	12,10	-	18,20	21,50	22,00	34,10	33,00



# Air/gas ratio required for combustion.

Ensure correct supply of air/gas ratio following table recommendations.

GAS	AIR/GAS RATIO
G20	13,38 m³ air/m³ gas
G30	12,00 m³ air/kg gas
G31	12,17 m³ air/kg gas

#### FORESFEABLE RISKS

This appliance has been thoroughly tested at the factory, so there is no risk foreseeable.

For checking leaks in the connections of the appliance, use soapy water.

# Never check with fire.

This appliance must be away from flammable materials. Some parts may get very hot.

Any modification of the appliance must be carried out by qualified personnel authorized by the manufacturer. Failure to do so would be dangerous. Do not wear loose fitting or inappropriate clothing that could catch on fire. Keep the children away.

## **GAS CONNECTION**

This appliance comes with a turned nozzle over the same collector of standard features for each gas and each country.

The gas connections can be made with either rigid or flexible pipes.

In the case they are made with a rigid pipe, a gas trap must be installed as close to the appliance as possible. If flexible pipe is used, it must be of a type complying with IEC regulations.

The flexible pipe will be replaced when national conditions require it.

The flexible pipe must be approved and will be within the validity date. Its length will not exceed 1,50 meters.

Before turning on the cooker it is necessary to make sure there isn't any flame around and that **all the knobs** are in a closed position.

# TYPE OF REGULATOR

If the appliance is supplied from a bottle of **LPG**, **propane or butane**, a head pressure gas will be placed on the bottle (approved by the supplier of the bottle), with output pressure already adjusted to the pressure of consumption, 28 mbar; 37mbar.

In case that it is approved for 50 mbar, the regulator should be for 50 mbar.

When the appliance is connected to a fixed mains gas and its pressure is not pre-set, a regulator calibrated to the pressure gas output corresponding to the injector of the apparatus will be inserted (see Table "Categories, gases and pressures"), caring that the expected flow for the regulator exceeds the nominal consumption of the appliance.

#### USE AND MAINTENANCE INSTRUCTIONS

This appliance must be away from flammable materials while being used.

Do not move the appliance while working.

Close the gas tap which is on the cooking ring or the one that is on the gas bottle (LPG gas) after using it.

Do not twist the flexible pipe while installing it or while using the appliance.

When replacing the gas container, the appliance should be away from flammable materials.

Wear protective gloves when handling hot elements.

Parts protected by the manufacturer must not be manipulated by the user.

This device is intended for professional use and must be operated by professional staff with adequate training.

## **IGNITION**

- 1. Verify that all control knobs are on the off position.
- 2. Open the gas supply valve, and if using a gas bottle, the regulator tap.
- 3. Slightly press the burner control knob of the desired ring and turn 90° left as you place a flame source near the gas exit slots.
- 4. Once the burner is lit, the control knob can be turned at will between the maximum and minimum positions to achieve the desired gas consumption, as explained by the icons below:

Switch-off position.

Pictured by the dot icon.

Switch on position. Flow rate and rotation direction.
Pictured by the flame icon.

Maximum: two flames, 90° left angle.

Minimum: one flame, 160° left angle.



#### TURN-OFF

- 1. Place all ring control knobs in the off position ( ). Verify that all flames are extinguished, and that there is no gas coming out.
- 2. Close the installation gas supply valve or, if using a gas bottle, the regulator tap.

# CONSERVATION AND MAINTENANCE

The gas valve is the only piece subject to replacement. If it needs to be replaced, this can only be carried out by the manufacturer or qualified staff authorized by the former.

Pay special attention to the expiration date of the flexible pipe and replace it if necessary.

Cleaning the appliance should be made when the appliance is cold with a cloth dampened in soapy water; rising and then drying (avoid water from entering into the burners).

Any other operation done on the burner must be carried out by qualified staff only, excepted for the changing of the flexible pipe which may be changed by the user following each country regulations.

If there is a gas leak, close the gas tap on bottle or the one that is on the mains.

Use soapy water to find the leak, never use fire. Do not use caustic soda (lye), hydrochloric/muriatic acid, or drill bits which could alter the size of the slots.

These appliances require periodic cleaning of its functioning parts in order to avoid obstruction.

If the equipment is not used for a long time, have a cloth soaked in Vaseline on steel surfaces to form a protective film.

Clean often scale forming on the burners and slots.

Should be taken that the inlet primary air is always clean and clear, for it will be cleaned with a cloth or similar.

The gas injector hole, in case of obstruction will be cleaned by blowing compressed air stream, never introducing solids that can damage or change the orifice diameter.

# **REVISIONS**

This appliance should be checked every year. If there is any problem, it is advisable to revise the appliance by a qualified technician.

- The following must be verified during inspection check-ups:
   That the gas circuit is completely sealed, and gaskets are replaced as needed.
- That the flexible hose is replaced when it reaches the expiration date.

# ADAPTATION TO OTHER TYPE OF GASES

This adaptation must be carried out by the manufacturer or qualified staff authorized by the former.

Both for the change of the gas and repairs should always use original manufacturer parts.

When the appliance is adapted to a different type of gas for which it was prepared, in the supply of parts intended to adapt to another type of gas or other pressure, a sticker should be included for incorporation to the device. This label should have reaistered the nature and pressure of aas for which the device has been modified.

To change from one type of gas to another, replace the injector with that corresponding to the gas to be used and regulate the primary air intake in accordance with the positions indicated for each gas type, according to the tables on the following page:

The primary air regulated is to be fully-opened for all models and gasses, with the exception of the following models:

- T-500 for Group P (50 mbar) the opening of which shall be 20 mm for the outer ring and 13 mm for the inner ring.
- T-700 for Group P (50 mbar) the opening of which shall be 23 mm for the inner ring.

Injector Ø in mm.

		SINGLE RING MODELS						
FAMILY		T-180	T-250	G-250	T-300			
	GROUP H (20 mbar)	1,50	1,80	2,85	2,10			
SECOND	GROUP E (20 mbar)	1,50	1,80	2,85	2,10			
	GROUP E+ (20/25 mbar)	1,50	1,80	2,85	2,10			
	GROUP B/P (29 mbar)	1,00	1,20	1,35	1,45			
THIRD	GROUP 3+ (29/37 mbar)	1,00	1,20	1,35	1,45			
	GROUP P (50 mbar)	-	-	1,65	-			

	2- RING MODELS							
		T-3	80	T-4	60	T-500		
FAMILY		Ring Ø180 mm.	Ring Ø380 mm.	Ring Ø250 mm.	Ring Ø460 mm.	Ring Ø300 mm.	Ring Ø500 mm.	
	GROUP H (20 mbar)	1,65	2,65	2,20	2,85	2,15	2,85	
SECOND	GROUP E (20 mbar)	1,65	2,65	2,20	2,85	2,15	2,85	
	GROUP E+ (20/25 mbar)	1,65	2,65	2,20	2,85	2,15	2,85	
	GROUP B/P (29 mbar)	1,00	1,50	1,20	1,55	1,35	1,55	
THIRD	GROUP 3+ (29/37 mbar)	1,00	1,50	1,20	1,55	1,35	1,55	
	GROUP P (50 mbar)	1,10	1,65	1,35	1,75	1,40	1, <i>7</i> 5	

		3- RING MODELS							
		T-600		T-700					
FAMILY		Ring Ø180 mm.	Ring Ø380 mm.	Ring Ø600 mm.	Ring Ø300 mm.	Ring Ø500 mm.	Ring Ø700 mm.		
	GROUP H (20 mbar)	1,65	2,65	3,00	2,20	2,65	2,85		
SECOND	GROUP E (20 mbar)	1,65	2,65	3,00	2,20	2,65	2,85		
	GROUP E+ (20/25 mbar)	1,65	2,65	3,00	2,20	2,65	2,85		
	GROUP B/P (29 mbar)	1,00	1,50	1,55	1,35	1,50	1,70		
THIRD	GROUP 3+ (29/37 mbar)	1,00	1,50	1,55	1,35	1,50	1,70		
	GROUP P (50 mbar)	1,10	1,65	1,90	1,45	1,55	1,75		

# RISK PREVENTION

RISK	PREVENTION MEASURES	RISK	PREVENTION MEASURES	
Use of the device in enclosed areas.	The device should only be used in open air areas.	Blast in the venturi due to blockage of gas outlet slots.	Clean the burner rings after each use.	
Accident caused by an inadequate use.	Use only for cooking of foodstuff in appropriate containers.	Blast in the venturi due to alterations of gas outlet slots due to incorrect cleaning.	Cleaning of the burner rings must be done with a cloth soaked in soapy water. Never use caustic soda lye, hydrochloric or muriatic acid, or drill the	
Accident caused by the user's lack of proper	Use only by personnel trained to handle the device.		gas slots with bits which could alter their size.	
handling knowledge.		Blast in the venturi due to	Always use a pressure regulator gauge adjusted to the pressure recommended in	
Accident caused by an incorrect use of the device.	Use the device following given instructions and paying close attention to stated warnings.	incorrect gas supply pressure.	the specifications plate of the device.	
		Flame blowout or extinction due to	Always use a pressure regulator gauge	
Collapse of the support caused by excess weight.	Use free-standing supports when placing heavy cooking containers.	incorrect pressure of gas supply line.	adjusted to the pressure recommended in the specifications plate of the device.	
Container overturning due to inadequate size.	Use only containers of recommended size (in the "general considerations" section).	Blast caused by gas accumulation after flame blowout.	Use always outdoors to avoid an accumulation of gas.	
Burning of nearby flammable surfaces.	Do not place the device on uninsulated surfaces. When in use, place the device away from any flammable materials.		The user must pay affention at all times, and verify that taps are in the "off" position in the absence of flame.  Turn the device off following the instructions given in the manual, by manipulating valves	
Burns caused by contact with hot device elements.	Use protective gloves when handling hot elements.		or taps, and never by blowing out the flame or by closing the pressure regulator .	
with not device elements.	The knobs are protected by a protective case and placed at a reasonable distance from the burners to prevent their overheating.	Incorrect performance due to modification of the device.	It is forbidden to make any alteration of the device by anyone other than the manufacturer.	
		A gas leak due to blows, or incorrect maintenance and use of the device.	Possible leaks should be located using soapy	
Unpleasant smells caused Clean the burner rings after each use. by the burning of residue from previous uses.		maintenance and use of the device.	water, never use a flame source. If a Yeak '' is found, close the shut-off valve of the gas bottle regulator, or the gas supply valve.	

#### **EU COMPLIANCE STATEMENT**

Optimgas S.L. certifies that the appliances described in this manual: T-180, T-250, G-250, T-300, T-380, T-460, T-500, T-600, T-700 fulfill the requirements established by the LIE in the UE) 2016/4/1

fulfill the requirements established by the UE in the (UE) 2016/426 alignment rule regarding gas fuel burning appliances, and by UE EN 497 and UE EN 437 alignment regulations.

This certification is guaranteed by the technical documentation held by the company; any appliance alteration carried out without our consent will cancel the validity of this warranty.

The informed agency CERTIGAZ 1312 has carried out the required inspections of the appliances and CERTIGAZ 1312 has issued the certificate with the following pin numbers:

Models T-180, T-250, T-300, T-380, T-460, T-600: 1312BQ4454

Model G-250: 1312BS5089

Models T-500, T-700: 1312CQ6069

Signed in Alginet on 6th April 2022

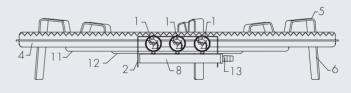
Optimgas S.L. Pol. Industrial Sur Sector P.P.V.-2; Parcela n° 29 46230 Alginet, València

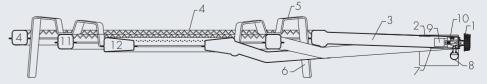
D. Francisco Beltrán Segarra Optimgas S.L. General Manager



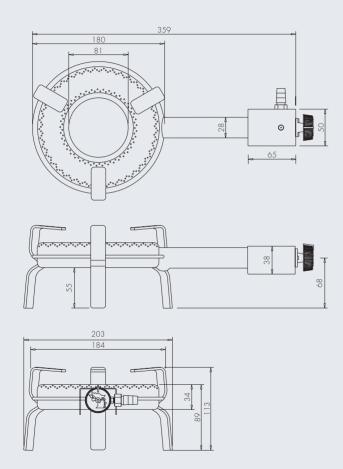
# MAIN PARTS

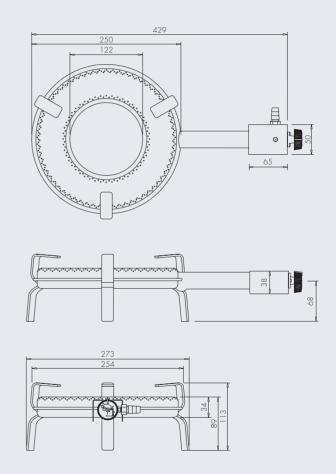
- 1- Gas valve control
- 2- Valve protection plate
- 3- Venturi tube Ø28 mm.
- 4/11/12- Burner
- 5- Vessel support
- 6- Support legs
- 7- Primary air regulator
- 8- Gas train
- 9- Injector
- 10- Gas valve
- 13- Connection nipple



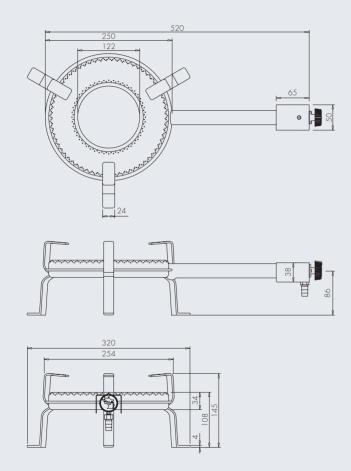


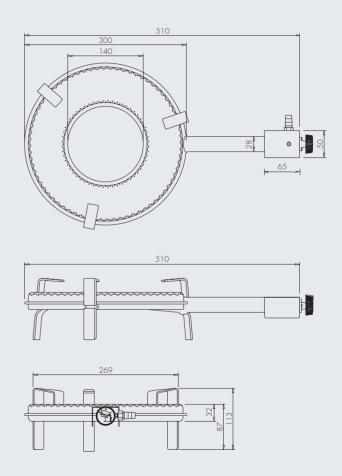
T-180 T-250





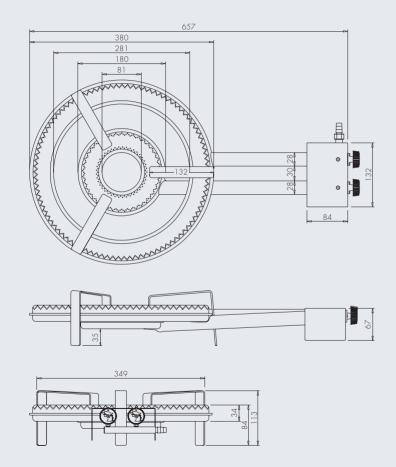
G-250

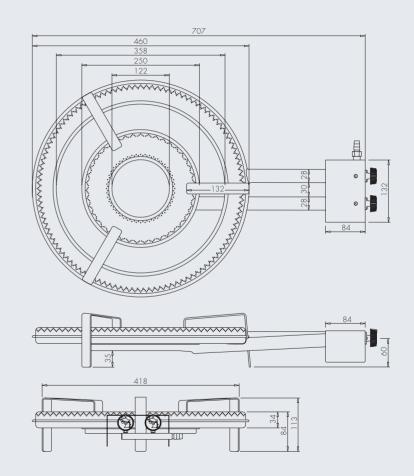




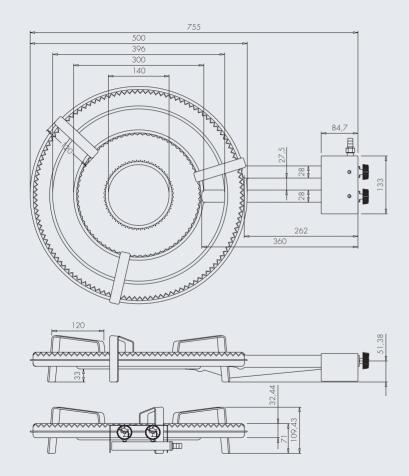
T-300

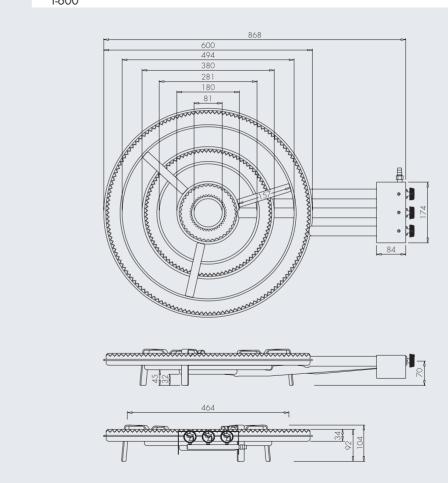
T-380 T-460

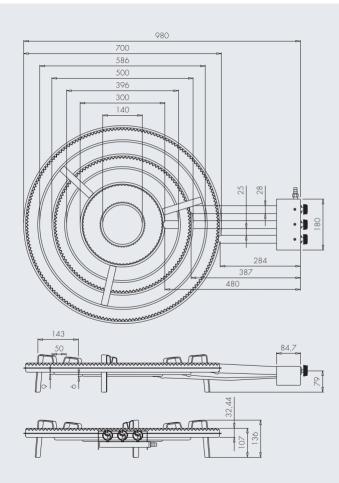




T-500 T-600







# 3 YEAR GUARANTEE CERTIFICATE

SELLER'S STAMP

MODEL	
DATE OF SALE	
NAME AND ADDRESS OF PURCHASER	



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