### **INSTALLATION MANUAL**

# STG7 P GAS FIRED ROTISSERIE OVEN

#### **MODELS**

Programmable controls STG7 P

Gas types G20/25 G31



Model STG7 P Gas

#### - NOTICE -

This manual is prepared for the use of trained Service Technicians and should not be used by those not properly qualified. If you have attended a training for this product, you may be qualified to perform all the procedures in this manual.

This manual is not intended to be all encompassing. If you have not attended a training for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained technician.

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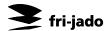




## EMPTY PAGE



General technical data	4
Technical data	4
	4
Installation procedures	
Unpacking the unit	
Removal of pallet	
Location	
Electrical supply	
Connection for gas supply	7
Gas inlet pressure	
Gas block Honeywell type VK4115V	9
Gas consumption	9
Flue gas analyser	10
Legs / Castors	10
Tethering of the unit	11
Test run	12
Extraction of the rotisserie	12
Instructions for operators	12
Maintenance	12
Placing and connecting of the units	13



#### GENERAL TECHNICAL DATA

This manual covers the STG 7 P gas fired rotisserie ovens suitable for G 20/25 (natural gas) and G 31 (Propane).

STG 7 – Oven with seven spits (28 to 35 chickens).

All of the information, illustrations and specifications contained in this manual are based on the latest product information available at the time of printing.

#### **TECHNICAL DATA**

Туре	STG 7
Power (W)	345
Fuses needed with power connection 230 V, 1N ~5060 Hz (1 phase with zero)	1x 10 A
Standard plug from factory single pole	16A
Net weight (kg)	204
Gross weight (kg)	230
Height (mm)	1025
Width (mm)	985
Depth (mm)	850

#### **Tools**

- Standard set of tools.
- Metric wrenches, sockets and hex socket key wrenches.
- Multi-meter and AC current clamp tester.
- Temperature tester.
- Insulation value tester (Megger).
- Toxicity meter.
- Gas pressure meter.
- Field Service Grounding Kit.



#### INSTALLATION PROCEDURES

- Unpacking of the unit.
- Remove the pallet under the unit with the help of a fork lift.
- Put the unit on his location.
- Check if there is enough free space around the unit (see installation drawing).
- Check the electrical supply.
- Check gas pressure control valve.
- Tethering of unit.
- Load a program in the memory and make a test run on 250°C.
- Give instructions to the operator.

#### **UNPACKING THE UNIT**

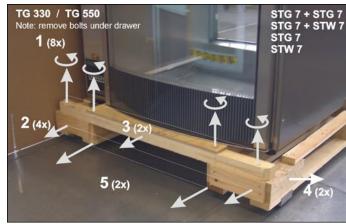
Immediately after unpacking the oven, check for possible shipping damage. If the rotisserie is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

#### **REMOVAL OF PALLET**

The standard way to remove the rotisserie from a pallet is with a fork lift. See pictures. Open door and remove the drawer. Lift the unit from pallet and put the unit in its place.



Another possibility is to disassemble the pallet. For the pallet of the STG 7 follow the procedure on the photo.

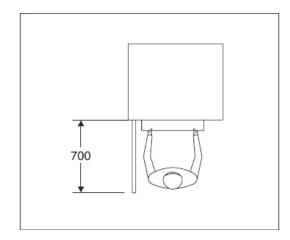




#### **LOCATION**

The rotisserie must be installed on a level surface. The installation location must allow adequate clearances for servicing and proper operation.

**IMPORTANT:** Make sure you leave sufficient space around the rotisserie to easily remove or insert the rotor. If the base has (rotating) wheels, the floor on which it rests must be level.



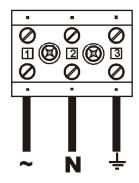
#### **CONNECTING THE ROTISSERIE**

ATTENTION: All external connections to the rotisserie must be made according local, state and national regulations by skilled installers.

#### **ELECTRICAL SUPPLY**

Prior to installation, test the electrical service to assure that it agrees with the specifications on the machine data plate located on the right side panel near the controls. The connecting cable for the unit must be equipped with an approved plug connection. If use is to be made of a permanent connection, the connecting cable must be connected to a manual on/off switch that is installed near the unit in a clear visible way.

After plugging the unit in, always check the polarity for good ignition.





#### **CONNECTION FOR GAS SUPPLY**





The gas supply inside the rotisserie is already connected and is lead to the bottom side, under the electric compartment. Here is a connection tube to connect the gas supply. This connection is ½". Separate packed with the delivery you will find a tube of 130 mm and a knee, both with 1/2" thread. With this tube and knee you can lead the gas connection to the main gas supply.



#### **GAS INLET PRESSURE**



The inlet pressure has to be according the table on next page.

The pressure can be checked on the gas block with a pressure meter (see also gas block).



<u>Rev.</u> 2	GAS-TECHNICAL DATA STG 7-GAS	PAGE 1 / 1
<u>Date</u>		'
01-02-2009		

		Gas type		Inlet pressure mbar	min pressure (Qn -Hi) mbar	Consumption
Österreich	AT	G20	I <sub>2H</sub>	20	14.5	1.51 m³/h
België Belgique	BE	G20 G31	l <sub>2E+</sub> l <sub>3P</sub>	20/25 37	14.5 14.5	1.51 m³/h 1.05 kg/h
Schweitz	СН	G20 G31		20 50	14.5 14.5	1.51 m³/h 1.05 kg/h
Czech Republic Slovakia Republic	CZ	G20 G31	l <sub>2H</sub> l <sub>3P</sub>	20 50	14.5 14.5	1.51 m³/h 1.05 kg/h
Danmark	DK	G20	I <sub>2H</sub>	20	14.5	1.51 m³/h
Deutschland	DE	G20 G25 G31	   <sub>2E</sub>   <sub>2LL</sub>   <sub>3P</sub>	20 20 50	14.5 14.5 14.5	1.51 m³/h 1.71 m³/h 1.05 kg/h
España	ES	G20 G31	I <sub>2Н</sub> I <sub>3Р</sub>	20 50	14.5 14.5	1.51 m³/h 1.05 kg/h
Suomi	FI	G20	I <sub>2H</sub>	20	14.5	1.51 m³/h
France	FR	G20 G31	   <sub>2E</sub>   <sub>3P</sub>	20/25 50	14.5 14.5	1.51 m³/h 1.05 kg/h
Greece	GR	G20	I <sub>2H</sub>	20	14.5	1.51 m³/h
United Kingdom	GB	G20 G31	I <sub>2Н</sub> I <sub>3Р</sub>	20 50	14.5 14.5	1.51 m³/h 1.05 kg/h
Magyarország	HU	G20 G31		20 50	14.5 14.5	1.51 m³/h 1.05 kg/h
Ireland	IE	G20 G31	I <sub>2H</sub>	20 50	14.5 14.5	1.51 m³/h 1.05 kg/h
Italia	IT	G20	I <sub>2H</sub>	20	14.5	1.51 m³/h
Luxembourg	LU	G20 G31	   <sub>2E</sub>   <sub>3P</sub>	20 50	14.5 14.5	1.51 m³/h 1.05 kg/h
Nederland	NL	G25 G31	   <sub>2L</sub>   <sub>3P</sub>	25 50	14.5 14.5	1.71 m³/h 1.05 kg/h
Norge	NO	G20 G31	I <sub>2H</sub> I <sub>3P</sub>	20 30	14.5 14.5	1.51 m³/h 1.05 kg/h
Portugal	PT	G20 G31	I <sub>2H</sub> I <sub>3P</sub>	20 37	14.5 14.5	1.51 m³/h 1.05 kg/h
Svirige	SE	G20	I <sub>2H</sub>	20	14.5	1.51 m³/h



#### **GAS BLOCK HONEYWELL TYPE VK4115V**

Gas inlet: Inlet of gas after gas pressure control valve (max. 60 mBar).

Gas outlet: Outlet of gas into gas mixture blower.

Coils: 2 Coils for the gas valves.

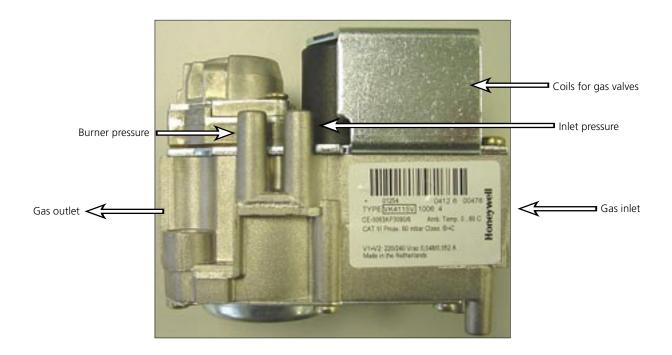
Inlet pressure: Measuring tube for gas after reduction valve. In order to measure loosen

the screw on inside of tube.

Outlet or burner pressure: Measuring tube of gas going into gas mixture blower. In order to

measure, loosen the screw on inside of tube.

You can use this measuring point also to check if the gas valves are opening.



#### **GAS CONSUMPTION**

G 20 (natural gas)	1.51 m3/h
G 25 (natural gas)	1.71 m3/h
G 31 (Propane)	0.55 m3/h
Orifice for G 20/25	4.2 mm
Orifice for G 31	3.4 mm
Air inlet for G 20/25	18.1 mm
Air inlet for G 31	16.5 mm



#### **FLUE GAS ANALYSER**

With the flue gas analyser you can measure the exhaust gas on the rotisserie for toxicity. With the use of a Testo 330-1LL you get the following measurements:

Testo 330-1LL

V1.21 01297080 100035026 G 20 06.04.2007 12:42:13 Fuel: Natural gas

O2 ref.: 3.0%
CO2 max: 11.7%
5.2 % Oxigen
8.8 % CO2
1.33 Lambda

5 ppm CO 0.01 GI 26.7 % qR

73 efficiency 54.4 °C dew point

378.6 °C Exhaust gas temp. 23.4 °C Ambient temp.



The 2 most important values are the CO2 percentage and the exhaust gas temperature.

CO2% G 20/25 between 8.8 - 9.2%

CO2% G 31 between 10.4 - 10.8%

Exhaust gas between 370 - 420 °C

#### **LEGS / CASTORS**

Each rotisserie is furnished on 50mm legs. A caster-equipped stand with convenient storage drawer is available. The rotisserie is mounted on top of the stand.



#### **TETHERING OF THE UNIT**

(For model STG 7 units when stacked or placed on base with castors)

Warning: Safety standards require that, when this appliance is properly connected to the electrical power supply using flexible conduit, adequate means be provided to limit movement of the appliance without depending on or transmitting stress to the electrical conduit. This means that, as part of the installation, the base or bottom unit of stacked models must be secured to the building structure (typically either wall or floor) to limit the movement of the appliance and, thus, helping to prevent damage to the conduit during cleaning, maintenance and service operations.

A tether bracket, as shown on the drawing below, is provided with the base or stacking kit. Based on the routing of the flexible conduit, the bracket must be installed along with the caster to one corner of the base using the hardware provided. The remaining open hole in the center of the tether bracket is to be used to secure one end of the tether (locally supplied chain, cable, etc.). The other end of the tether is to be secured to an anchoring point in the building structure.

Note: Length of tether must be shorter than the flexible conduit to make sure that during appliance movement, no stress is transmitted to the conduit.



**Warning:** Following installation, check to confirm that, when the appliance is moved to the limits of the tether in each direction, no stress is transmitted to the electrical conduit.



#### **TEST RUN**

The rotisserie must be burned in to release any odours that might result from heating the new rotisserie surfaces.

Operate the rotisserie at maximum temperature setting of 250°C for 30 minutes. Smoke with an unpleasant odour will normally be given off during this burn-in period.

#### **EXTRACTION OF THE ROTISSERIE**

The rotisserie must be placed in a ventilated space. The placing of an extraction hood can be prescribed in local rules. The STG 7 produces about 10m3 water vapour per cycle.

When placing the rotisserie under an extraction hood you have to consider the following guide lines:

- The minimum capacity of the extraction hood has to be 1000m3/h.
- The extraction hood has to extend minimum by 20 cm on all sides of the rotisserie.
- The extraction hood has to have a free height, above the rotisserie, of minimum 40 cm.
- The rotisserie has to be accessible for service purposes.

#### **INSTRUCTIONS FOR OPERATORS**

After installation of the rotisserie the operator of the unit has to be instructed.

The instruction has to cover the following subjects:

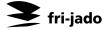
- Programming and options.
- Working of the unit.
- Free space of unit for cooling of drive motor and blowers.
- Run through the user manual.
- Periodical maintenance:
  - o Cleaning of fan plate every month.
  - o Cleaning of fans on blower every month.
- How to react for information or service calls.

#### **MAINTENANCE**

The customer should have the gas rotisserie periodically checked by a skilled technician according local, state or national regulations.

First remove the right side panel according the service manual.

- Check for gas leaks and/or bad connections of the gas supply inside and outside.
- Check the gas burner.
- Check the inlet pressure and re-adjust if necessary. For the correct value, see table page 8.
- Measure the exhaust gas with a flue gas analyzer, see page 10.
- Check the electrical supply.

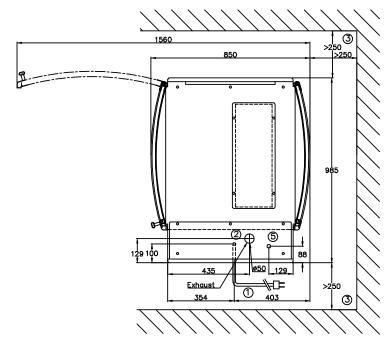


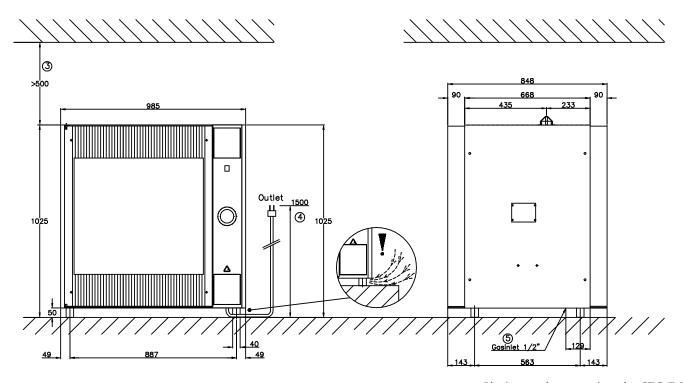
#### PLACING AND CONNECTING OF THE UNITS

#### Description belonging to the lables on the drawings

Label	Description
1	Power cable, length 2,2 meters *
2	Exhaust opening
3	Space between a rotisserie and a wall or ceiling
4	Location for socket
5	Gas connection

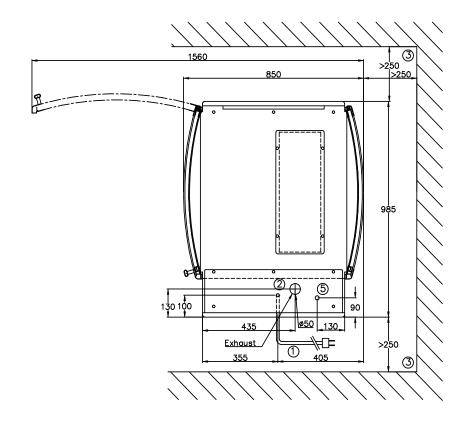
<sup>\*)</sup> length is measured from the point where the cable comes out of the unit

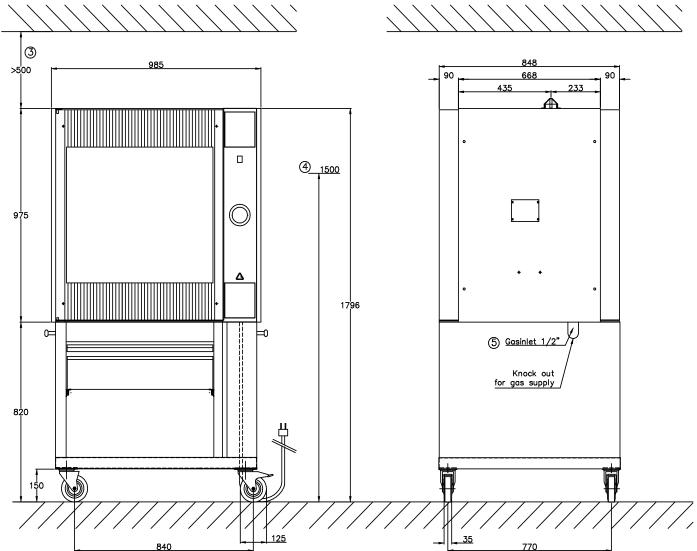




Placing and connecting the STG 7 P Gas







Placing and connecting the STG7 P Gas on underframe



### EMPTY PAGE



