



**ECO-613**

## Gas Convection Oven Models

- **ECO-613**

*Please read this manual completely before attempting to install or operate this equipment. Notify carrier of damage! Inspect all components immediately.*

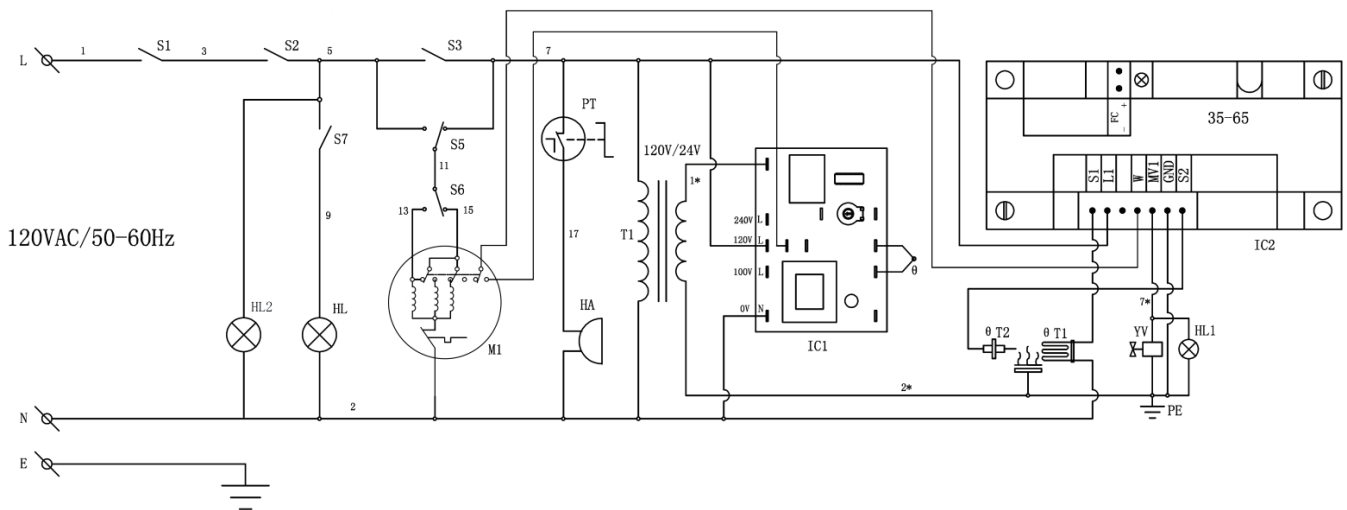
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Product Specification Sheet

MODEL	STYLE(Manual)	Volts/Gas	Frequency	Total B.T.U. per Hour
ECO-613	Gas convection oven with castor	120V / <b>NAT or LP</b>	60HZ	54,000

Wiring diagram



### WARNINGS

- Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other equipment.
- Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death.
- Read the installation and maintenance instructions thoroughly before installing or servicing this equipment.
- Have the equipment installed by a qualified installer in accordance with all federal, state and local codes.
- Do not install or use without all 4 legs.
- This equipment is for use in non-combustible locations only.
- Do not obstruct the flow of combustion and ventilation air.
- Do not spray controls or the outside of the equipment with liquids or cleaning agents
- Allow for hot parts to cool before cleaning or moving.
- This equipment should only be used in a flat, level position.
- Do not operate unattended.
- Any loose dirt or metal particles that are allowed to enter the gas lines on this equipment will damage the valve and affect its operation.
- If you smell gas, follow the instructions provided by the gas supplier. Do not touch any electrical switch; do not try to light the burner; do not use a telephone within close proximity.
- Never attempt to move grates while cooking.

### SET UP

1. Remove all packing material and tape, as well as any protective plastic from the equipment.
2. Place the equipment in the desired position and height.
3. Install the four (4) legs onto the equipment.
4. Clean and dry the equipment thoroughly before using.

### INSTALLATION:

**The installation of this equipment must conform with local codes, or with the National Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1, as applicable.**

- The equipment and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi (3.5 kPa).
- The equipment must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi (3.5 kPa).

### Clearance and positioning around the equipment:

- This equipment must be installed adjacent to non-combustible surfaces only with a minimum spacing of 6" from all sides. This equipment must be a distance of 6" from other equipment. The equipment must have the 4" legs installed and be placed on a noncombustible surface.

For an oven equipped with casters, the installation shall be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69/CSA 6.16 and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use with Gas Fuel, ANSI Z21.4/CSA 6.9. When installing the oven with casters and quick-disconnect hose, adequate means must be provided to limit the movement of the oven without depending on the connector and the quick disconnect device or its associated piping to limit the oven movement. Restraining means may be attached to the vertical portion of the base frame in the rear of the oven.

### Air Supply and ventilation:

- The area in front and around the equipment must be kept clear to avoid any obstruction of the flow of combustion and ventilation air.
- Adequate clearance must be maintained at all times in front of and at the sides of the equipment for servicing and proper ventilation.

### Gas connection:

Prior to connecting the gas supply, check the incoming line pressure. The oven can only withstand a maximum pressure of ½ PSI (14" WC). If the line pressure is beyond this limit, a step down regulator before this machine will be required.

**Electrical connection:**

Your oven is supplied for connection to a 115 volt, single phase grounded circuit. The electric motor, oven lights, indicator lights and control circuits are connected through an electric supply cord found at the rear of the oven.

**Warning:**

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. DO NOT cut or otherwise remove the grounding prong from this plug. Before making any connections to these units, check the rating plate to assure that the voltage and phase of the oven is compatible with the electrical supply. When installing, all ovens must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 (in Canada - CSA Std. C22.2). Wiring diagrams are located in the control compartment area of the oven. Standard wiring schematics are also provided with this manual.

**GAS CONVERSION**

Please check the rating plate for the gas type to be connected for operation. If the available gas is different from the gas type specified on the rating plate. A gas conversion procedure should be performed by a qualified technician. It is recommended that a trained gas service technician with the necessary tools, instruments and skills perform the conversion.

To convert the gas, following steps must be completed:

1. Remove all gas burner orifices and install the provided conversion kits
2. Change the Honeywell control valve. VR8205m2831 is for propane gas. VR8205A2800 is for natural gas use.

**Castor Installation**

- Castors are available as an option for both the single and double oven sections.
- The castors are with threading bolts. Fasten the bolt to the leg hole in the center tightly.

NOTE: The casters with locking brakes are best mounted on the front side of the oven for easier access.

- Align the leg plate holes in each leg with those in the corners of the oven bottom and secure using the provided bolts. Tighten all bolts firmly. Repeat this procedure for all legs.

NOTE: If you plan to use casters and flexible fuel gas connectors, a fixed restraint of the proper length must be incorporated to secure the oven to a non-movable surface to eliminate strain on the connector. If the oven is removed from its normal position, the restraint must then be reattached when returned.

For the stacking unit, please use a stacking bracket and connect two pieces with screw and install the stacking chimney assembly.

**Exhaust System**

The appliances must be positioned in suitable areas for the discharge of the combustion products in respect to how much is prescribed by the installation's norms. These appliances are not designed to be connected to an evacuation duct for the discharge of combustible products.

These appliances must discharge the combustible products into appropriate hoods, or similar devices, connected to a flue of proven efficiency, or they may be connected directly to an outdoor vent.

If such an arrangement is not possible, the unit may be connected to an air exhaust system that leads directly outdoors, having a capacity no lower than required; see the technical data table, plus the air exchange necessary, in order to make operators comfortable.

**Warnings**

Always supervise the appliance while being used and never let it run while empty.

The appliances do not require special adjustment assistance from specialized personnel if the adjustments are carried out by the user during the use of the appliance.

Use only the accessories recommended by the manufacturer.

During the initial uses of the appliance, an acrid or burning smell may be detected. This will disappear after two or three uses.

After use, the areas are hot for a certain amount of time (residual heat). Avoid resting your hands on them and allowing children to get too close.

These are very important regulations; if they are neglected, the appliance may not perform properly or the user may be placed at risk.

The appliance is strictly for professional use and must be used by qualified personnel.

The installation, start-up and maintenance of the appliance must be carried out by qualified personnel.

The installation work must be carried out according to the law in force. The manufacturer is not responsible for damages due to an incorrect installation, bad maintenance or incorrect use.

### Lighting, Relighting, and Shutdown Instructions

To light the oven, just switch the power switch at the top left corner of the control panel to the “ON” position. (The oven is equipped with a direct hot surface ignition system. There is no pilot to light.)

If the burners fail to ignite within four seconds, the oven will automatically shut off the gas, wait five minutes to allow the gas that was released to dissipate, and try to light the burners again. If the burners still fail to ignite after three such attempts, the oven will stop trying, even though the power switch is in the “ON” position. To continue to attempt to light the burners, turn the power switch “OFF” and then “ON” again.

To shut down the oven, switch the power switch to the “OFF” position. For a complete shutdown, also open the control panel and turn the manual shut-off valve to the “OFF” position.

**Power Switch:**  
Main power supply to this oven

**Cook Timer:**  
Turn knob to set cooking time. A buzzer would beep when pre-set time is up. Turn the knob to OFF to disable the buzzer. The timer just acts as a reminder and it is independent of the oven control

**Power Indicator:**  
It illuminates when the power is switched to ON position.

**HI/LOW Fan Speed:**  
To choose fan speed (HI or LOW) to cook different types of food.

**Fan Mode:**  
In COOK mode, the fan runs continuously with the exception of door being open. In COOL mode, the fan runs continuously even if the doors are open. This is to cool down the unit with the door open

**HEAT-ON Indicator:**  
The HEAT-ON indicator will be on when the burners are working

**Cook Temperature Control:**  
Turn the knob to desired temperature. When the pre-set temperature is reached, the HEAT ON indicator will be off. The indicator would cycle on-off

**Oven Interior Light Switch:**  
The light is controlled independently.

### Operations

Turn the oven ON and set the cooking temperature. Two additional controls are used to control the fan (as described below). The timer is a reminder of the cooking process done. The timer does not control the temperature of the oven.

To cook, do the following:

Turn the oven main power switch ON.

Choose the fan speed using the Fan Speed switch. The appropriate fan speed (HI or LOW) depends on the type of food to be cooked.

Switch the Fan Mode switch to COOK. The fan will run continuously when the oven doors are closed (the fan works independently of the gas system). (If this switch is turned to COOL, the only difference is that the fan will continue to rotate when the oven doors are open.)

Set the cooking temperature by turning the Cook Temperature Control until the indicator mark on the knob is pointed to desired cooking temperature. The HEAT ON indicator will be on when the burners are on and will remain on while the oven is heated.

Wait until the HEAT ON indicator cycles on and off for three times, the pre-set temperature has been reached. Open the oven doors, load the product into the oven, and close the doors.

You can use the Cook Timer as a reminder of the cooking process. If yes, turn the Cook Timer knob until the indicator mark points to the desired cooking time (up to 55 minutes). The timer knob will rotate counterclockwise as the timer runs down, indicating how much time remains. You can turn the knob while cooking to increase or decrease the remaining time. When the timer runs out, a buzzer will sound for a short time, and then turn itself off. (To immediately silence the buzzer, turn the Cook Timer knob to the OFF position.) The timer is a reminder to you; the timer does not control the oven.

If you open the oven doors, the burners and fan will shut off until the doors are closed. However, the timer will continue running even if the doors are open.

For ovens that are equipped with an oven interior light, to turn on the light, press and hold the switch located at the bottom of the control panel.

When the load has finished cooking, you can rapidly cool the load by opening the oven doors (which will shut off the burners) and switching the Fan Mode to COOL (which will cause the fan to run even though the doors are open). For the most rapid cooling, also switch the Fan Speed switch to HI.

After cooking is done, turn the Cook Temperature Control to the lowest setting (fully counterclockwise) and switch the Power Switch to OFF.

**CLEANING - NOTE:** To maintain cleanliness and increase service life, this item should be cleaned daily. Do not water jet to spray water directly on the unit, if liquid enters the electrical compartment it may cause a short circuit or electrical shock.

Before cleaning or attempting to move this item, always turn off, unplug and let the unit cool down completely.

Wipe the entire unit with a clean soft cloth until it is completely dry.

To avoid damage to the unit, do not use abrasive cleaners or scouring pads.

If soap or chemical cleaners are used, be sure they are completely rinsed away with clean water immediately after cleaning.

Chemical residue could damage or corrode the surfaces of the unit.

To avoid serious injury or damage, never attempt to repair or replace a damaged power cord yourself. Contact a professional technician for repair service.

### MAINTENANCE:

- A qualified service company should check the unit for safe and efficient operation on an annual basis.
- Gas piping shall be a certain size and installed to provide a supply of gas sufficient to meet the full gas input of the equipment.
- A manual shut off valve should be installed upstream from the manifold within 4 ft. (1.2m) of the equipment and in a position where it can be reached in the event of an emergency.
- Check the entire gas piping system for leaks every so often. Using a gas leak detector or soapy water solution is recommended.
- Install equipment under an efficient exhaust hood with flameproof filters with a distance of no less than 4 feet between the top of the equipment and the filters or any other combustible materials.

### Trouble shooting

Problem	Possible cause	Solution
No Heat	Ignitor defective	Call authorized Service center
No Heat	Power switch on control panel is off	Set the control panel to COOK
No Heat	Doors are open	Close doors
No Heat	Door micro switch defective	Call authorized service center
No Heat	Gas valve to oven may be in the cleared position	Turn gas valve on
Oven has not reached proper temperature	The oven has not reached preheat temperature	Wait for oven to reach pre-heat temperature
Oven has not reached proper temperature	Internal problem with main temperature control	Call authorized service center
Convection fan does not run	Oven has no electrical power	Check electrical supply
Convection fan does not run	Circuit breaker tripped	Reset the breaker
Convection fan does not run	Doors are open	Close doors
Convection fan does not run	Door Micro-switch defective	Call authorized service center
Food Browns unevenly	Improper heating temperature	Pre-heat until desired temperature is reached
Food Browns unevenly	Baking pan dark or glass	Lower oven temp by 25°F
Food dries before browning	Oven temp too high	Lower oven temp
Food dries before browning	Oven door opened too much	Stop opening oven door so much
Oven cycles 3 times and locks itself out	Flame sensor defective	Call authorized service center