Induction Built-In Module-Line
RTCSmp® Dual/Quad Cooktops

Installation, Operation and Maintenance Manual
This manual is updated as new information and models are released. Visit our website for the latest manual.
**WARRANTY**

Our warranty statements for induction products are available on-line. Please visit our website at www.garland-group.com/minisite/service to download the latest revision. If you might have any questions, please contact Garland.

**UNPACKING and PACKING SLIP**

The packing slip attached to the shipment contains detailed information on all components. Please retain this packing slip for future reference.

**USING THIS MANUAL**

PLEASE READ ALL SECTIONS OF THIS MANUAL AND RETAIN FOR FUTURE REFERENCE.

This manual contains important information regarding safety, installation, operation, maintenance, and troubleshooting. They must be read entirely and carefully by the installers and operators before the equipment is installed and taken into operation. This manual must always be available for reference at the place of operation. Throughout this manual, the induction unit type “RTCSmp Built-In Module Line Dual/Quad Cooktops” is referred to as “induction unit”.

Users are cautioned that maintenance and repairs must be performed by a Garland authorized service agent using only genuine Garland replacement parts. Garland will have no obligation with respect to any product that has been improperly installed, adjusted, operated or not maintained in accordance with national and local codes and/or installation instructions provided with the product or any product that has its serial number defaced, obliterated or removed, and/or which has been modified or repaired using unauthorized parts or by unauthorized service agents. For a list of authorized service agents and/or genuine replacement parts, please visit our website at www.garland-group.com for USA and Canada. For international customers, please visit www.manitowocfoodservice.com. The information contained herein, including design and part specifications, may be superseded and is subject to change without notice.

**DESCRIPTION OF WARNING SYMBOLS**

- **This symbol alerts you to a hazardous situation that WILL or COULD cause serious bodily harm or death. Be alert and implement relevant safety precautions.**
- **CAUTION**
  - This symbol alerts a hazardous situation, which if not avoided, COULD cause minor to moderate personal injury or property damage. The relevant safety precautions MUST be implemented at all times.
- **This dangerous voltage warning symbol indicates a risk of electric shock and hazards from dangerous voltage.**
- **Electromagnetic field.**
- **Warning: Risk of fire or electric shock**
  - Do not open
  - To reduce the risk of fire or electric shock, do not remove or open cover. No user serviceable parts inside. Refer servicing to qualified personnel.
# Table of Contents

## 1 Safety Requirements
- 1.1 Important Electrical & Installation Requirements .......................................................... 5
- 1.2 Risk Involved By Disregarding Safety Information .......................................................... 5
- 1.3 Safety Instructions for Operator ...................................................................................... 5
- 1.4 Improper Use of the Equipment ...................................................................................... 6
- 1.5 Unauthorized Modification and Use of Spare Parts ......................................................... 6
- 1.6 Pan Detection ................................................................................................................ 7
- 1.7 Cooking Zone Monitoring ............................................................................................. 7

## 2 Components and Features
- 2.1 Application ..................................................................................................................... 8
- 2.2 Components and Features ............................................................................................. 8

## 3 Dimensions and Technical Specifications
- 3.1 Rating Plate ..................................................................................................................... 10
- 3.2 Nomenclature and Models ............................................................................................ 10
- 3.3 Dimensions .................................................................................................................... 10
- 3.4 Models and Components Charts .................................................................................. 10
- 3.5 Electrical Specifications ............................................................................................... 11
- 3.6 Operating Conditions ................................................................................................... 12
- 3.7 Compliances ................................................................................................................ 12

## 4 Installation
- 4.1 Important Safety & Electrical Requirements ................................................................. 13
- 4.2 Installation Overview and Installation Clearance .......................................................... 13
  - 4.2.1 Installation Overview ............................................................................................... 13
  - 4.2.2 Installation Clearance ........................................................................................... 15
- 4.3 Induction Generator ....................................................................................................... 15
  - 4.3.1 Location ................................................................................................................ 16
  - 4.3.2 Ventilation ............................................................................................................ 16
  - 4.3.3 Dimensions .......................................................................................................... 16
- 4.4 Control Unit and Operation Unit (Power Switches) ........................................................ 17
  - 4.4.1 Location ................................................................................................................ 17
  - 4.4.2 Ventilation ............................................................................................................ 17
  - 4.4.3 Mounting Methods ............................................................................................... 18
  - 4.4.4 Dimensions – Control Unit .................................................................................. 18
  - 4.4.5 Dimensions Guide (Holes/Studs) ......................................................................... 19
- 4.5 Coil Carrier Sheet, Ceran Glass and Mounting Frame ................................................... 20
  - 4.5.1 Location & Ventilation Requirements for Coil Carrier Sheet Installation ............. 20
  - 4.5.2 Countertop Cut-outs Dimensions ........................................................................ 20
  - 4.5.3 Correct Orientation – Coil Carrier, Glass and Frame ........................................... 20
  - 4.5.4 Mounting Frames ................................................................................................. 21
    - 4.5.4.1 Dimensions – Mounting Frame [for glasstop size 360x360mm] .................. 22
    - 4.5.4.2 Dimensions – Mounting Frame [for glasstop size 755x650mm] ............... 22
    - 4.5.4.3 Dimensions – Mounting Frame [for glasstop size 650x650mm] .............. 23
    - 4.5.4.4 Dimensions – Mounting Frame [for glasstop size 360x720mm] ............. 23
    - 4.5.4.5 Dimensions – Mounting Frame [for glasstop size 720x720mm] ............. 24
  - 4.5.5 Installation Steps ..................................................................................................... 25
  - 4.5.6 Custom-Built Mounting Frame .............................................................................. 28
- 4.6 Models, Components and Cable Connections .............................................................. 30
  - 4.6.1 CHART 1 – Module-Line Round Coil Dual Models .............................................. 30
  - 4.6.2 CHART 2 – Module-Line Round Coil Quad Models ............................................. 31
  - 4.6.3 CHART 3 – Module-Line Full Coil Dual Models ................................................... 32
  - 4.6.4 CHART 4 – Module-Line Full Coil Quad Models .................................................. 33
  - 4.6.5 CHART 5 – Module-Line Full and Round Coil Quad Models ................................ 34
- 4.7 Electrical Installation ................................................................................................... 35

## 5 Function Test .................................................................................................................. 37

## 6 Operating Instructions ................................................................................................... 38
- 6.1 Proper Induction Cookware .......................................................................................... 38
- 6.2 Proper Placement of Cookware .................................................................................... 39
- 6.3 Power Control ............................................................................................................. 40
- 6.4 No Pan No Heat .......................................................................................................... 41
- 6.5 When Unit is Not In Use ............................................................................................. 41

## 7 Cleaning ........................................................................................................................... 42

## 8 Maintenance .................................................................................................................... 43

## 9 Important Rules .............................................................................................................. 43
Table of Contents

RTCSmp Built-In Module-Line Dual/Quad Cooktops

10 Troubleshooting ...................................................................................................................................................... 44
  10.1 Common causes for induction unit failure ........................................................................................................... 44
  10.2 Problems and Possible Causes ........................................................................................................................................ 45
  10.3 Troubleshooting with Error Codes (for Service Technicians) .......................................................................................... 46
1 Safety Requirements

WARNING This product contains chemicals known to the State of California to cause cancer. Installation and servicing of this product could expose you to airborne particles of glass wool / ceramic fibers. Inhalation of airborne particles of glass wool / ceramic fibers is known to the State of California to cause cancer.

IMPORTANT Warning labels mounted directly on the induction unit must be observed at all times and kept in a fully legible condition.

IMPORTANT To ensure your working environment is safe, you must follow all safety instructions contained in this manual, the existing national regulations for accident prevention with electrical systems, as well as any relevant company-specific safety instructions.

The induction unit should only be used if and only if the installation of the electrical system is fitted by an approved installation contractor in accordance with specific national and local regulations.

1.1 Important Electrical & Installation Requirements

This appliance component requires additional features and components to comply with appliance and electrical standards. It is the responsibility of the customer and installer to interpret and comply with all applicable safety and electrical standards. Refer to details in section 4 Installation.

1.2 Risk Involved By Disregarding Safety Information

Disregarding the safety instructions may cause harm to people, the surroundings, and the induction unit. Garland is not responsible for any damages or personal injury caused by failure to observe the safety requirements. Risks involved when disregarding safety precautions may include:

- Death or injury caused by electric shock.
- Injury due to burns from contacting overheated cooking surface, cookware, or oil and grease.
- Damage to the induction unit caused by using unsuitable cookware.

1.3 Safety Instructions for Operator

Please follow the following rules to avoid personal injuries and property damages:

- When the unit is in use, heat transfers from the cookware to the glass-top; the glass-top can become hot. To avoid burn injuries, do not touch the heating area when the unit is in use.
- The induction unit heats up cookware and cooks food quickly. Do not leave an empty pan on the unit and do not leave the unit unattended during operation.
• If the glass-top is cracked or broken, switch off the induction unit immediately and if possible and safe, disconnect it from the power supply. Do not touch any parts inside the induction unit.

• Persons with cardiac pacemakers should consult their doctors whether they are safe near an induction unit.

• Ensure no liquid can enter into the induction unit. Do not let water or food overflow the cooking area. Do not use hoses to clean or power wash the induction unit or its vicinity.

• Do not put any other items on the glass-top except non-empty induction cookware.
  o Do not leave any object such as paper, cardboard, or cloth between the cookware and the cooking surface, as this might start a fire.
  o Do not place any metallic objects other than cookware on the induction unit. Metallic objects (such as closed cans, aluminum foil, cutlery, jewelry, or watches) are heated up very quickly when placed on the induction unit while the unit is in use.
  o Do not place credit cards, phone cards, tapes, or any objects sensitive to magnetism on the cooking surface.
  o Do not place plastic vessels and aluminum objects such as aluminum foil on the glass-top.

• The induction unit has an internal air-cooling system. Do not block the air inlet and outlet slots with objects such as containers. Any air obstruction could cause the unit to be overheated and to switch off.

• Use only induction suitable cookware with proper sizes and made of proper material. The induction suitable cookware should also be in good condition without any uneven, arched or partially detached bottoms.

• Switch the unit OFF if you take the cookware away for a while. This will prevent the heating process to start automatically and unintentionally when a pan is placed back on the heating area. If any person needs to use the induction unit, he/she will have to turn the unit ON intentionally.

1.4 Improper Use of the Equipment

The reliability of the induction unit can only be guaranteed when it is used properly. The induction unit must always be operated within the limits provided in the technical specifications. Please refer to section 9 Important Rules of using induction equipment.

1.5 Unauthorized Modification and Use of Spare Parts

Please contact Garland if you intend to make any changes on the induction unit. For safety reasons, always use genuine parts and accessories approved by Garland. Any unauthorized modification as well as any installation of unapproved components will void all warranty.
1.6 Pan Detection

When a temperature is chosen, the induction unit only transmits energy when a pan is placed in the heating zone. If you remove the pan from the heating zone, power transfer to the pan stops immediately. If the pan is put back in the heating zone, power is transferred to the pan again.

After switching off the unit, there is no heat retained inside the unit.

NOTE: Pan with a bottom diameter smaller than 5” (12 cm) is not detected by the system.

1.7 Cooking Zone Monitoring

Each cooking zone is monitored by multiple temperature sensors beneath the glass-top. The sensors can detect overheated empty pans or overheated oil and grease. When this occurs, the system stops the energy supply to the pan. You must turn the unit off and let it cool down before restarting it.

CAUTION To avoid burn injuries, do not touch the unit when a pan is overheated and take all the necessary precautions when removing the overheated pan.
2 Components and Features

2.1 Application

The unique RTCSmp Module-Line Cooktops are specially engineered for building the most flexible kitchen operation. The Module-Line Family offers a wide selection of cooking surfaces: single, dual, quad cooktops with round, full or a combination of round and full induction coils. In addition, griddle, braising pan, and wok cooking options are also available.

These RTCSmp units provide numerous great features including fast heat up time, precise temperature monitoring and control, temperature consistency, ease of use and maintenance. To guarantee the induction units’ reliability and performance, please observe all safety, installation, and operation requirements mentioned in this manual.

2.2 Components and Features

Built with a robust construction, the RTCSmp Induction Module-Line Cooktop is modular and powerful with the revolutionary RTCSmp-Technology (Realtime Temperature Control System with Multi-Point sensing). The RTCSmp Technology monitors the energy supply, the state of the induction coil, power board, CPU, and the cooking zone in realtime. RTCSmp also limits the energy supply during peak load and its special control eliminates interference noises.

The module-line models include a number of components which allow for optimal flexibility in designing an efficient kitchen. The unique features of each component are outlined below. See also chapter 3 Dimensions and Technical Specifications.

Each built-in Module-Line concept consists of: induction generator(s), control unit(s), coil carrier sheet(s) with coils and sensors, operation unit(s) with rotary switch(es), 6mm thick Ceran glass-top(s), mounting frame(s) with silicone gaskets, and cables.

<table>
<thead>
<tr>
<th>Induction Generator:</th>
<th>Can be installed up to 10 feet away from other components.</th>
<th>All electrical connections can be accessed externally through plug connections.</th>
<th>Closed aluminum housing with an integrated cooling fan to keep electronics cool.</th>
<th>Integrated air guiding system to direct exhaust air out of the housing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR</td>
<td>Versions:</td>
<td>Versions:</td>
<td>Versions:</td>
<td>Versions:</td>
</tr>
<tr>
<td></td>
<td>IN/MO 7000FL, IN/MO 14000FL, IN/MO 7000, IN/MO 10000</td>
<td>IN/MO 7000FL, IN/MO 14000FL, IN/MO 7000, IN/MO 10000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control Unit:</th>
<th>Information and diagnostic hub for the whole induction unit.</th>
<th>IR interface with diagnostic system for service.</th>
<th>Connections to other unit components via plug connections.</th>
<th>Compact design and easy to install using special installation tabs/brackets.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Versions:</td>
<td>Versions:</td>
<td>Versions:</td>
<td>Versions:</td>
</tr>
<tr>
<td></td>
<td>IN/MO7000/10000, IN/MO7000/14000</td>
<td>IN/MO7000/10000, IN/MO7000/1400</td>
<td>IN/MO7000/10000, IN/MO7000/1400</td>
<td>IN/MO7000/10000, IN/MO7000/1400</td>
</tr>
</tbody>
</table>
**Coil Carrier Sheet:**

Multiple options available: round or full coil in single, dual, quad, or combination of round/full coil configurations. | Compact and low profile design.

**Full Coil (FL):** Rectangular in shape. Several large or small pans can be placed on one surface at the same time.

**Round Coil:** One pan is used for each heat-zone. Round coils have higher power density and energy efficiency.

Visual differences between full and round coil carrier sheets and the corresponding glass-tops:

<table>
<thead>
<tr>
<th></th>
<th>Full Coil</th>
<th>Round Coil</th>
</tr>
</thead>
<tbody>
<tr>
<td>coil carrier sheet (coils + sensors)</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>Glass Top</td>
<td>![image]</td>
<td>![image]</td>
</tr>
</tbody>
</table>

**Glass-Top:** 6mm thick Ceran glass-top. | Easy to clean and maintain. | Glass-top patterns match the corresponding coil versions underneath: Full-Coil or Round-Coil.

Versions:
- Dual: 360x360x6mm; 650x375x6mm; 720x360x6mm
- Quad: 650x650x6mm; 720x720x6mm

**Installation Frame:** Installation/mounting frame is supplied for flush mounting the coil carrier sheet(s) and glass-top. | Silicone gaskets (not shown) included.

Five Sizes of Frames:
- For -360 or -360FL dual models with 360x360x6mm glassstop
- For -650 or -650FL dual models with 650x375x6mm glassstop
- For -720 or -720FL dual models with 720x360x6mm glassstop
- For -650 or -650FL quad models with 650x650x6mm glassstop
- For -720 or -720FL quad models with 720x720x6mm glassstop

**Operation Unit:** The power switch (Operation Unit) regulates the temperature in power levels 1 to 12. | Simple to operate; adjust the temperature setting simply by turning the knob. | LED light indicator (not shown) signals the ON/OFF state, pan detection process and error codes. | Pre-assembled with plastic knob, LED light and cable (1-meter).

**Cable Kit:** 2.5-meter cable kit(s) for 208V or 400V is included. Each kit includes cables for induction coils, sensors, and CAN/BUS connections. Fan cables are included where applicable. Induction coil cable std. length, 2.5m/98”; sensor cable, 1m/39”; CAN/BUS cable, std. 3m/118”.

Optional:
- 4-meter Cable Kit (208V);
- 4-meter Cable Kit (400V);
- 6-meter Cable Kit (208V);
- 6-meter Cable Kit (400V)
3  Dimensions and Technical Specifications

3.1  Rating Plate

The rating plate specifies important information such as model number, serial number, and electrical specifications. The rating plate is affixed to the side of the induction generator, next to the mains connection.

3.2  Nomenclature and Models

<table>
<thead>
<tr>
<th>Series</th>
<th>Style/Function</th>
<th>Power (Watt)</th>
<th>Glass Size (mm)</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO</td>
<td>module-line</td>
<td>7000</td>
<td>360 x 360</td>
<td>MO DU 7000-360, MO DU 10000-360</td>
</tr>
<tr>
<td></td>
<td>DU = Dual</td>
<td>10000</td>
<td>650 x 375</td>
<td>MO DU 7000-650, MO DU 10000-650</td>
</tr>
<tr>
<td></td>
<td>DU = Dual</td>
<td>7000</td>
<td>360 x 360</td>
<td>MO DU 7000-360FL, MO DU 14000-360FL</td>
</tr>
<tr>
<td></td>
<td>DU = Dual</td>
<td>14000</td>
<td>650 x 375</td>
<td>MO DU 14000-650FL</td>
</tr>
<tr>
<td></td>
<td>QU = Quad</td>
<td>14000</td>
<td>650 x 650</td>
<td>MO QU 14000-650, MO QU 20000-650</td>
</tr>
<tr>
<td></td>
<td>QU = Quad</td>
<td>20000</td>
<td>720 x 720</td>
<td>MO QU 14000-720, MO QU 20000-720</td>
</tr>
<tr>
<td></td>
<td>QU = Quad</td>
<td>21000</td>
<td>650 x 650</td>
<td>MO QU 21000-720</td>
</tr>
<tr>
<td></td>
<td>QU = Quad</td>
<td>24000</td>
<td>720 x 720</td>
<td>MO QU 24000-720</td>
</tr>
<tr>
<td></td>
<td>QU = Quad</td>
<td>28000</td>
<td>650 x 650</td>
<td>MO QU 28000-650FL</td>
</tr>
<tr>
<td></td>
<td>QU = Quad</td>
<td>28000</td>
<td>720 x 720</td>
<td>MO QU 28000-720FL</td>
</tr>
</tbody>
</table>

3.3  Dimensions

For the dimensions of the components, please refer to the technical drawings in section 4 Installation.

3.4  Models and Components Charts

Models and Components Charts are provided in section 4 Installation. For each model, a list of components and their electrical connections are shown. Quantities are specified on the charts.
### 3.5 Electrical Specifications

<table>
<thead>
<tr>
<th>Model - DUAL</th>
<th>Voltage</th>
<th>Power</th>
<th># Circuits</th>
<th>Conductor Size</th>
<th># Coils</th>
<th>#Cook-Zones</th>
<th>Conductors</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO DU 7000 360 FL</td>
<td>208 V AC/ 3Ph/ 60Hz</td>
<td>7000W(2x3500 W)/ 22A</td>
<td>1</td>
<td>AWG 10</td>
<td>2</td>
<td>1</td>
<td>rectangular coils</td>
</tr>
<tr>
<td></td>
<td>400 V AC/ 3Ph/ 50Hz</td>
<td>7000W(2x3500 W)/ 11A</td>
<td>1</td>
<td>1.5mm²</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>440 V AC/ 3Ph/ 50Hz</td>
<td>7000W(2x3500 W)/ 10A</td>
<td>1</td>
<td>1.5mm²</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO DU 7000 360</td>
<td>208 V AC/ 3Ph/ 60Hz</td>
<td>7000W(2x3500 W)/ 22A</td>
<td>1</td>
<td>AWG 10</td>
<td>2</td>
<td>1</td>
<td>round coils</td>
</tr>
<tr>
<td>MO DU 7000 650</td>
<td>400 V AC/ 3Ph/ 50Hz</td>
<td>7000W(2x3500 W)/ 11A</td>
<td>1</td>
<td>1.5mm²</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO DU 7000 720</td>
<td>440 V AC/ 3Ph/ 50Hz</td>
<td>7000W(2x3500 W)/ 10A</td>
<td>1</td>
<td>1.5mm²</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO DU 10000 360</td>
<td>208 V AC/ 3Ph/ 60Hz</td>
<td>10000W(2x5000 W)/ 30A</td>
<td>1</td>
<td>AWG 8</td>
<td>2</td>
<td>1</td>
<td>round coils</td>
</tr>
<tr>
<td>MO DU 10000 650</td>
<td>400 V AC/ 3Ph/ 50Hz</td>
<td>10000W(2x5000 W)/ 16A</td>
<td>1</td>
<td>2.5mm²</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO DU 10000 720</td>
<td>440 V AC/ 3Ph/ 50Hz</td>
<td>10000W(2x5000 W)/ 15A</td>
<td>1</td>
<td>2.5mm²</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO DU 14000 360 FL</td>
<td>208 V AC/ 3Ph/ 60Hz</td>
<td>14000W(4x3500 W)/ 22A</td>
<td>2</td>
<td>AWG 10</td>
<td>4</td>
<td>1</td>
<td>round coils</td>
</tr>
<tr>
<td>MO DU 14000 650 FL</td>
<td>400 V AC/ 3Ph/ 50Hz</td>
<td>14000W(4x3500 W)/ 11A</td>
<td>2</td>
<td>1.5mm²</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO DU 14000 720 FL</td>
<td>440 V AC/ 3Ph/ 50Hz</td>
<td>14000W(4x3500 W)/ 10A</td>
<td>2</td>
<td>1.5mm²</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model - QUAD</th>
<th>Voltage</th>
<th>Power</th>
<th># Circuits</th>
<th>Conductor Size</th>
<th># Coils</th>
<th>#Cook-Zones</th>
<th>Conductors</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO QU 14000 650</td>
<td>208 V AC/ 3Ph/ 60Hz</td>
<td>14000W(4x3500 W)/ 22A</td>
<td>2</td>
<td>AWG 10</td>
<td>4</td>
<td>1</td>
<td>round coils</td>
</tr>
<tr>
<td>MO QU 14000 720</td>
<td>400 V AC/ 3Ph/ 50Hz</td>
<td>14000W(4x3500 W)/ 11A</td>
<td>2</td>
<td>1.5mm²</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO QU 20000 650</td>
<td>440 V AC/ 3Ph/ 50Hz</td>
<td>14000W(4x3500 W)/ 10A</td>
<td>2</td>
<td>1.5mm²</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO QU 20000 720</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model - QUAD</th>
<th>Voltage</th>
<th>Power</th>
<th># Circuits</th>
<th>Conductor Size</th>
<th># Coils</th>
<th>#Cook-Zones</th>
<th>Conductors</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO QU 2100 720</td>
<td>208 V AC/ 3Ph/ 60Hz</td>
<td>21000W(Round Coil 2x3500W + Full Coil 4x3500 W)/ 22A</td>
<td>3</td>
<td>AWG 10</td>
<td>2</td>
<td>1</td>
<td>rectangular coils</td>
</tr>
<tr>
<td>MO QU 2400 720</td>
<td>400 V AC/ 3Ph/ 50Hz</td>
<td>21000W(Round Coil 2x3500W + Full Coil 4x3500 W)/ 11A</td>
<td>3</td>
<td>1.5mm²</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO QU 2400 720</td>
<td>440 V AC/ 3Ph/ 50Hz</td>
<td>21000W(Round Coil 2x3500W + Full Coil 4x3500 W)/ 10A</td>
<td>3</td>
<td>1.5mm²</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO QU 2400 720</td>
<td>208 V AC/ 3Ph/ 60Hz</td>
<td>24000W(Round Coil 2x5000W + Full Coil 4x3500 W)/ 30A</td>
<td>3</td>
<td>(1x) AWG 10 (2x) AWG 10</td>
<td>2</td>
<td>1</td>
<td>rectangular coils</td>
</tr>
<tr>
<td>MO QU 2400 720</td>
<td>400 V AC/ 3Ph/ 50Hz</td>
<td>24000W(Round Coil 2x5000W + Full Coil 4x3500 W)/ 16A</td>
<td>3</td>
<td>(1x) 2.5mm² (2x) 1.5mm²</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>MO QU 2400 720</td>
<td>440 V AC/ 3Ph/ 50Hz</td>
<td>24000W(Round Coil 2x5000W + Full Coil 4x3500 W)/ 15A</td>
<td>3</td>
<td>(1x) 2.5mm² (2x) 1.5mm²</td>
<td>2</td>
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<td></td>
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<tr>
<td>MO QU 28000 650 FL</td>
<td>208 V AC/ 3Ph/ 60Hz</td>
<td>28000W(8x3500 W)/ 22A</td>
<td>4</td>
<td>AWG 10</td>
<td>8</td>
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<td>rectangular coils</td>
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<td>MO QU 28000 720 FL</td>
<td>400 V AC/ 3Ph/ 50Hz</td>
<td>28000W(8x3500 W)/ 11A</td>
<td>4</td>
<td>1.5mm²</td>
<td>4</td>
<td></td>
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<tr>
<td>MO QU 28000 720 FL</td>
<td>440 V AC/ 3Ph/ 50Hz</td>
<td>28000W(8x3500 W)/ 10A</td>
<td>4</td>
<td>1.5mm²</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.6 Operating Conditions

| **Max. Tolerance of Nominal Supply Voltage** | +6/-10% |
| **Network Impedance (Zmax.)** | 0.25Ω |
| **Supply frequency** | 50/60 Hz |
| **Amperage Nominal Value — 400V, 3Ph** | 10A for the 7kW generator (4 x 1.5mm²) |
| | 15A for the 10kW generator (4 x 2.5mm²) |
| | 2 x 10A for the 14kW generator (2 x (4 x 1.5mm²)) |
| **Amperage Nominal Value — 208V, 3Ph** | 20A for the 7kW generator (4x AWG 10) |
| | 29A for the 10kW generator (4x AWG 8) |
| | 2 x 20A for the 14kW generator (2 x (4 x AWG 10)) |
| **Ingress Protection class** | IP X0 (Protection by customer is required.) |
| **Maximum Ambient Temperature** | In Storage -4°F to +158°F (-20°C to +70°C) |
| | In Operation +41°F to +104°F (+5°C to +40°C) |
| **Maximum Relative Air Humidity** | In Storage 10% to 90% |
| | In Operation 30% to 90% |
| **Temperature/Power Regulator** | Potentiometer 10 kOhm |
| **LED Indicator Lamp** | 24VDC / max. 40mA (Green) |
| **Clearance from materials for generator** | Min. 1.57”(40mm) for air intake and exhaust openings |
| | Min. 0.39”(10mm) for side clearance |
| **Min. Induction Cooking Pan Diameter** | 5” (12cm) |
| **Max. Air Flow of Fan is 70.63 cfm (120 m³/h), Fresh Air Inlet Opening of 10.08 sq. in. (6500 mm²) is required.** |

3.7 Compliances

- **North American models:**
  ETL recognized* in compliance with UL 197, CSA C22.2 No.109, NSF-4. Complies with FCC part 18, ICES-001

- **CE models** comply with the latest European Norms:
  EN 60335-1, EN 60335-2-36, EN 62233 (EMC/EMV)

*see section 4.1.
4 Installation

4.1 Important Safety & Electrical Requirements

- This appliance component requires additional features and components to comply with appliance and electrical standards. It is the responsibility of the customer and installer to interpret and comply with all applicable safety and electrical standards.
  - This product requires the addition of:
    - A suitable non-flammable electrical enclosure; a means to conceal and protect components and wiring.
    - Grounding and bonding to the enclosure.
    - Markings to show appliance ratings and end manufacturer information.
    - Investigation by local electrical authority. Warning and caution labels and other markings required by electrical and safety standards could be provided by local authority.
  - Depending on the application and configuration of this product, consider the addition of:
    - Field supply connection terminals (terminal block).
    - Branch circuit protection (breakers).
    - Fans, ventilation or cooling systems and controls.
- The installation, including electrical installation, must be carried out by registered installation contractors only. The contractors are responsible for interpreting all instructions correctly and performing the installation in compliance with national and local regulations. The warning signs and rating plates on the cooking equipment must strictly be followed.
- Read ALL SECTIONS carefully, comply with all requirements listed and ensure all inspection is done by qualified personnel.
- Refer to the technical data given in chapter 3 Dimensions and Technical Specifications.
- Induction equipment that is not installed correctly will have warranty voided. See Warranty, p.2.

4.2 Installation Overview and Installation Clearance

4.2.1 Installation Overview

To protect the induction unit and wiring, we recommend isolating the generator, the coil carrier sheets, and the wires in separate electrical compartments inside the cabinet (Figure B). The illustration also shows a simplified representation of an installation.

**IMPORTANT** To ensure reliability of the induction unit, the cabinet/ compartments must have sufficient ventilation for the exhaust. Buildup of hot exhaust air will cause the unit to reduce power or to switch-off. See 3.5 Operating Conditions.
Figure (A) All components are installed inside one single compartment and the wires are exposed.

Figure (B) The interior space of the cabinet is divided. The coil carrier sheet, the control unit and their wiring are protected inside the upper compartment; the generator and its wiring are protected inside the lower compartment. Extra storage space can also be created.

(C) **IMPORTANT** Fresh air intake. It is recommended to isolate the fresh air intake from the exhaust air via an air intake duct, an air outlet duct or both. Filter the intake air with a removable air filter (right, an example).

(D) Hot air exhaust from the induction generator.

(E) **IMPORTANT** Air exhaust opening installed on the cabinet. It is highly recommended to install a fan or fans on the cabinet to pull hot exhaust air away from the electronic equipment. Buildup of hot exhaust air will cause the induction unit to reduce power or to switch-off.

(F) **CLEARANCE** Minimum clearance, see section 4.2.2.

(G) A Coil Carrier Sheet and Mounting Frame.

(H) **CLEARANCE** Minimum clearance, see section 4.2.2.

(I) Maximum distance between the control unit and the coil carrier sheet is 80 cm/31.5”. See (M).

(J) Control Unit.

(K) **RJ45 CAN/BUS cable, standard length= 3m / 118”,** to connect the control unit to the generator.

(L) **Power switch cable, length= 0.9m / 36”,** to connect the operation unit (power switch) to control unit. Maximum distance between the control unit and the operation unit: 80 cm/31.5”.

(M) **Sensor cable, length= 1m / 39”,** to connect the sensors on the coil carrier sheet to the control unit.

(N) **Induction coil cable, standard length= 2.5m / 98”,** to connect the induction coils on the coil carrier sheet to the generator.

**IMPORTANT** Always route sensor and communication cables separately and away from the coil cables.

(O) Main power cable (not provided).
4.2.2 Installation Clearance

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Induction Generator</strong></td>
<td>127mm / 5&quot;</td>
<td>40mm / 1.57&quot;</td>
<td>10mm / 0.39&quot; (sides, top, and bottom)</td>
</tr>
<tr>
<td><strong>Control Unit</strong></td>
<td>70mm / 2.75&quot;</td>
<td>--</td>
<td>38mm / 1.5&quot; (for service interface)</td>
</tr>
<tr>
<td><strong>Coil Carrier Sheet</strong></td>
<td>127mm / 5&quot;</td>
<td>--</td>
<td>100mm / 3.94&quot; (below coil carrier sheet)</td>
</tr>
<tr>
<td><strong>Operation Unit</strong></td>
<td>12.7mm / 0.5&quot;</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

4.3 Induction Generator

**IMPORTANT**

- The maximum operating temperature for the induction unit must not exceed 104°F (40°C).
- Buildup of hot exhaust air around the induction unit will cause the unit to reduce power or to switch-off.
- **Recommended**: At an appropriate location on the cabinet, install an exhaust fan to force hot air out the cabinet and away from the induction unit. Consult an electrical or installation expert for the most appropriate location to install a cabinet exhaust fan.
- **Recommended**: Filter the intake air with an air intake filter. Kitchen air often contains grease laden vapors. Grease deposits inside the generator may cause overheating. Failure to provide clean fresh cooling air may void warranty.
- NOTE: Additional fans and cooling controls are the responsibility of the customer and installer.
- Refer to the data in section 3.5 Operating Conditions.
### 4.3.1 Location

- It is possible to install the induction unit near heat-producing or steam-producing equipment such as an oven or a fryer. However, use an external fan to pull hot air, greasy fume, and moisture away from the induction unit.
- If the generator is installed directly under the induction coil or in the same chamber of as the coil, ensure the ventilation system will keep the ambient temperature below 104°F (40°C).
- Keep all combustible materials, vapors or liquids away from the generator.
- Ensure the installed location of the generator is safe from any ingress of liquid into the immediate vicinity.
- The generator can be mounted in any orientation as long as:
  - the equipment and cable connections are accessible for maintenance and service.
  - the fresh air intake and exhaust air outlet are not blocked.

### 4.3.2 Ventilation

- Maximum air flow of the fan is 70.63 cfm (120 m³ per hour) and therefore a minimum opening of 10.08 sq. in. (6500 mm²) is required around the fresh air intake.
- An optimal air circulation and air flow must not be restricted by installation.
- The in-take air and exhaust air must not mix. **Recommended:** To avoid build-up of hot exhaust air inside the cabinet, use a fan to draw the exhaust air out, or provide a separate exhaust air plenum. Note that additional fans and cooling controls are the responsibility of the customer and installer.

### 4.3.3 Dimensions

**Models:** MO DU 7000/10000  MO QU14000/20000/21000/24000

![Diagram of the installation dimensions and clearances for the induction unit and generator.](image)
4.4 Control Unit and Operation Unit (Power Switches)

4.4.1 Location

- Distance of the control unit from the coil carrier sheet: MAX 800mm / 31.5”.
- Distance of the control unit from the operation units (power switches): MAX 800mm / 31.5”.
- Keep the Service Interface window on the control unit accessible for service.
- Ensure the equipment and cable connections are accessible for maintenance and service.

4.4.2 Ventilation

- It is possible to install the induction unit near heat-producing or steam-producing equipment such as an oven or a fryer. However, use an external fan to pull hot air, greasy fume, and moisture away from the induction unit.
- The maximum operating temperature for the induction unit must not exceed 104°F (40°C).
4.4.3 Mounting Methods

- Control Unit:
  - Installation brackets are provided to mount the control unit. See “Mounting Version” in section 4.4.4 Dimensions – Control Unit.
  - Mount the control unit directly onto the cabinet compartment wall/shelf, or
  - Stud-mount the control unit onto the back of the cabinet front panel. Use the dimensions provided in section 4.4.5 Dimensions Guide as a template to install the control unit, the operation units (power switches) and the LED Indicator lights.
  - Keep the Service Interface window on the control unit accessible for service.

- IMPORTANT: To prevent the operation units (power switches) from rotating during operation, secure these units onto the panel with two (2) M4 screws. See section 4.4.5 Dimensions Guide.

4.4.4 Dimensions – Control Unit
4.4.5 Dimensions Guide (Holes/Studs)
Dimensions in mm [inch]

- Opening LED field 1/2:
  - Holes for rotary knob fixation field 1/2:
  - Control unit with or without EMI:
  - Backside stove cover:
  - Welding bolts M4 / M5

- Detail A:
  - Welding bolts, for mounting version 1, 2, 3
  - Welding bolts, for mounting version 4

Dimensions:
- Min. 27 [1.06]
- Min. 226 [8.96]
- Min. 125 [4.92] without EMI
- Min. 155 [6.1] with EMI
- Min. 57 [2.24] with EMI
4.5 Coil Carrier Sheet, Ceran Glass and Mounting Frame

4.5.1 Location & Ventilation Requirements for Coil Carrier Sheet Installation

- A Coil Carrier Sheet houses the induction coil and sensor assemblies, which are installed directly under the glass-top.
- Distance from the control unit to the coil carrier sheet: MAX. 31.50” / 800mm.
- Clearance below the coil carrier sheet: MIN. 3.94” / 10 cm. This clearance must be maintained for installation and service. Ensure this area can be easily accessible for maintenance and service.
- MUST NOT install or store any metallic objects or components below the induction coils.
- When placed in the vicinity of other coils, objects/components that are made of steel must be non-magnetic.
- Prevent moisture, hot ambient air or greasy fume being drawn into the installation compartment, especially when the appliances are near a fryer or oven.
  - Maintain ambient temperature below 104°F (40°C) for proper functioning of the unit.
  - Install extra fan in the compartment to remove any hot air away from the induction unit.
- Keep all the combustible materials, vapors or liquids away from the coil carrier sheets.

4.5.2 Countertop Cut-outs Dimensions

**NOTE:** The cut-out dimensions are specified in the drawings of the mounting frames. These dimensions include widths for silicone sealant, 4mm on each side.

A line of silicone sealant of 4mm wide must be applied around the glass perimeter to prevent any ingress of liquid into the unit.

4.5.3 Correct Orientation – Coil Carrier, Glass and Frame

When designing a kitchen layout with quad models, ensure to orient the mounting frame correctly to allow for ease of installation and service. See section 4.5.5 **Installation Steps**.

The orientation of the frame needs to match the orientations of the glass and the coil carrier sheets. Follow the chart below to ensure the correct placement is incorporated into the kitchen design and installation.
4.5.4 Mounting Frames

Mounting Frame for countertop thickness of 1.5mm to 3mm / 16- to 10-gauge (Typ.):

Specific mounting frame is provided with your unit for a typical installation. Refer to sections 4.5.4.1 to 4.5.4.5 for frame and countertop cut-out dimensions. See section 4.5.5 for installation instructions.

Mounting Frame for countertop thickness of 20-30mm / 1”:

For an application with countertop thickness about 1” or 20 – 30 mm, a custom built mounting frame is required to flush-mount the glasstop and install the coil carrier sheet properly. For an example of a custom built frame, refer to section 4.5.6 Custom-Built Mounting Frame.
4.5.4.1 Dimensions – Mounting Frame [for glasstop size 360x360mm]

4.5.4.2 Dimensions – Mounting Frame [for glasstop size 375x650mm]
4.5.4.3 Dimensions – Mounting Frame [for glasstop size 650x650mm]

4.5.4.4 Dimensions – Mounting Frame [for glasstop size 360x720mm]
4.5.4.5  Dimensions – Mounting Frame [for glasstop size 720x720mm]
4.5.5 Installation Steps

**IMPORTANT**

- **COUNTERTOP CUT-OUT DIMENSIONS**, see section **4.5.4 Mounting Frames**.
- When installing two coil carrier sheets on the same frame, you must install a **non-magnetic steel partition plate** in between them. This will isolate the magnetic fields and prevent the fields from interfering each other.

**IMPORTANT**
To protect the induction unit from water penetration, you must apply and bond the silicone adhesive properly to create a water-tight seal. Before you begin the installation, it is very important to use isopropyl alcohol (minimum 70%) or equivalent to clean the flanges/edges and the counter surfaces where the silicone adhesive will be applied.

To install the mounting frame and Ceran glass:

A. Orientation: The mounting frame assembly has a set of retaining rails that are hinged at the BACK of the frame. The rails can drop down at the FRONT for installing the coil carrier sheet. Ensure to install the frame in the correct orientation according to the design/layout plan.

B. Secure the mounting frame to the underside of the counter surface. Stud-mounting method is shown in illustration.
C. **NOTE:** BEFORE applying any silicone adhesive, CLEAN glass, silicone gaskets, frame, and tops with isopropyl alcohol or equivalent.

Apply a line of silicone adhesive PACTAN onto the bracket before placing the silicone gaskets/stripes (provided). After placing the silicone stripe onto the bracket, apply silicone adhesive on top of the silicone stripe. PACTAN is not provided (part number = 70000015).

D. Examine the Ceran glass before installation.
   
i. Then carefully lower the glass onto the silicone stripe.
   
   **NOTE:** When installing multiple glass-tops side by side, ensure to orient all the logos on the glass-tops the same direction.

   ii. Align the edges of the glass with the edges of the countertop cut-out.

E. Level the glass by adjusting the screws.

F. To provide a water tight seal, apply silicone sealant completely around, filling any gaps between the glass and the counter-top surface.

   **IMPORTANT** Let the silicone adhesive to cure properly before installing the coil carrier sheet.

**To install the coil carrier sheet:**

**NOTE:** Before installation, check the kitchen plan and coil layout (orientation) to ensure the side with the plug connectors on the coil sheet is oriented correctly for wiring and service.

G. Loosen the two screws to free the retaining rails. The rails are hinged at the hooks at the back.
**H.** Guided by the retaining rails, carefully insert the back end of the coil carrier sheet into the frame. The coil and sensor connectors should be facing the front. The retaining rails provide additional support to the coil carrier sheet.

**I.** While holding the coil carrier sheet together with the retaining rails, swing the rails back into the original position and tighten the screws.

**J.** The coils and temperature sensors installed on the coil carrier sheet must exert a constant pressure of 5mm to the Ceran glass. This pressure ensures the temperature monitoring to work properly. Do not allow any gap between the temperature sensors and the glass. You MUST set the pressure correctly.

**To adjust the pressure correctly:**

i. Bolts of the coil carrier sheet must protrude **5mm** from the coil carrier sheet.

ii. Distance from the underside of the coil carrier sheet to the Ceran glass: **50mm +/- 2mm**.

iii. When extra compression is required, install M4 screws (not provided) to the retaining rails. Tighten or loosen the M4 screws to adjust to the correct pressure.
4.5.6 Custom-Built Mounting Frame

Mounting Frame for countertop thickness of 1.5mm to 3mm / 16- to 10-gauge (Typ.): See section 4.5.4.

Mounting Frame for countertop thickness of 20-30mm/ 1”:

For an application with countertop thickness about 1” or 20 – 30 mm, a custom-built mounting frame is required to flush-mount the glasstop and install the coil carrier sheet properly. When designing an appropriate frame, use the design criteria and the example below as your guide.

**NOTE:** You may re-use existing parts from the mounting frame provided.

**NOTE:** Refer to section 4.5.4 and 4.5.5 for cut-out dimensions and recommended installation procedure.

**NOTE:** Please contact Garland if you would require assistance on designing a proper frame. CAD files for the example shown in this section are available upon request.

**Mounting Frame Design Criteria**

- The coil carrier sheet(s) should be easily removable for service/maintenance without taking out the glass-top.
- Height-adjustable feature for leveling the unit during installation is desirable.
- Use 10- to 14-gauge metal (typ. 12-gauge) for the mounting frame.
- When installing two coil carrier sheets on the same frame, you must install a non-magnetic steel partition plate in between them. This will isolate the magnetic fields and prevent the fields from interfering each other.
- The mounting frame has to support the total weight of the glass, the coil carrier sheet(s), the cookware, and food product.
- Critical dimensions:
  - Countertop cut-out dimension, see section 4.5.4.
  - Distance from the underside of the coil carrier sheet to the Ceran glass after installation: 50mm +/- 2mm.
  - Thickness of glass + silicone gasket + silicone seal = 6mm + 3mm + approx. 0.5mm = total approx. 9.5mm. See section 4.5.5 steps C to F.
Custom-Built Mounting Frame Example

A Support bar for strengthening the countertop and securing the mounting frame.

B A NON-MAGNETIC steel partition plate between two coil carrier sheets for quad models.

C Support/Leveling plates for securing/leveling the glass and the coil carrier sheet(s).

D Cross-bar for attaching the retaining rails and partition plate.

E A lip/flange for the glass to sit on.

F Retaining rails hook and hinge at the back. (see (G))

G Retaining rails secured to taps with screws. Easy to insert or remove coil carrier sheet for maintenance and service by removing screws and dropping at the front. (see (F))

H Tabs, attached to cross bar, to hold the retaining rails.

I Holes for screws to compress further the coil carrier sheet to the glass.

Cross Section View (simplified)

Silicone Seal
Silicone Gasket
Ceran Glass Top
Countertop, Retaining Rail
Countertop Support Bar Shown
Assembly View

Welded structure recommended.

Tabs, attached to cross bar, to hold the retaining rails.

Holes for screws to compress further the coil carrier sheet to the glass.

Retaining rails secured to taps with screws. Easy to insert or remove coil carrier sheet for maintenance and service by removing screws and dropping at the front. (see (F))

Cross Section View (simplified)
4.6 Models, Components and Cable Connections

4.6.1 CHART 1 – Module-Line Round Coil Dual Models

<table>
<thead>
<tr>
<th>ROUND COILS, DUAL MODELS</th>
<th>GLASS</th>
<th>MOUNTING FRAME</th>
<th>GENERATOR</th>
<th>COIL CARRIER SHEET (coils + sensors)</th>
<th>CONTROL UNIT</th>
<th>OPERATION UNIT</th>
<th>CABLE KIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODU 7000 360</td>
<td>MODU 7000 360</td>
<td>MODU 7000 360</td>
<td>MODU 7000 360</td>
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<td>(2x) 344 x 355 mm Round Coil, Each 3.5 kW</td>
<td>(2x) 344 x 355 mm Round Coil, Each 3.5 kW</td>
<td>(2x) 344 x 355 mm Round Coil, Each 3.5 kW</td>
<td>(2x) 344 x 355 mm Round Coil, Each 3.5 kW</td>
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<td>(1x) 319 x 624 mm, Round Coil, Each 3.5 kW</td>
<td>(1x) 319 x 624 mm, Round Coil, Each 3.5 kW</td>
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<tr>
<td>(1x) 354.5 x 689 mm Round Coil, Each 5.0 kW</td>
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<td>(1x) 354.5 x 689 mm Round Coil, Each 5.0 kW</td>
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<tr>
<td>MODU 10000 720</td>
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<td>MODU 10000 720</td>
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<tr>
<td>(1x) 375 x 720 x 6 mm</td>
<td>(1x) 375 x 720 x 6 mm</td>
<td>(1x) 375 x 720 x 6 mm</td>
<td>(1x) 375 x 720 x 6 mm</td>
<td>(1x) 375 x 720 x 6 mm</td>
<td>(1x) 375 x 720 x 6 mm</td>
<td>(1x) 375 x 720 x 6 mm</td>
<td>(1x) 375 x 720 x 6 mm</td>
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<tr>
<td>Frame for 375 x 720 mm glass</td>
<td>Frame for 375 x 720 mm glass</td>
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<td>Frame for 375 x 720 mm glass</td>
<td>Frame for 375 x 720 mm glass</td>
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<tr>
<td>(1x) 354.5 x 689 mm Round Coil, Each 5.0 kW</td>
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<td>(1x) 354.5 x 689 mm Round Coil, Each 5.0 kW</td>
</tr>
</tbody>
</table>

Notes:
- Installation
- MODU
- Cable Kit (Options: 4-meter or 6-meter Kit)
- CAN/BUS
- Sensor connection
- Mains connection
- Coil connection
- Splitter (included)
### 4.6.2 CHART 2 – Module-Line Round Coil Quad Models

<table>
<thead>
<tr>
<th>ROUND COIL QUAD MODELS</th>
<th>GLASS</th>
<th>MOUNTING FRAME</th>
<th>GENERATOR</th>
<th>COIL CARRIER SHEET (coils + sensors)</th>
<th>CONTROL UNIT</th>
<th>OPERATION UNIT</th>
<th>CABLE KIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOQU 14000 650</td>
<td>(1x)</td>
<td>(1x) Frame for 650 x 650mm glass</td>
<td>(2x) IN/MO7000</td>
<td>(2x) 319 x 624 mm Round Coil Each 3.5 kW</td>
<td>(2x) IN/MO 7000/10000 Cable Kit, 2.5-meter (Options: 4-meter or 6-meter Kit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOQU 14000 720</td>
<td>(1x)</td>
<td>(1x) Frame for 720 x 720mm glass</td>
<td>(2x) IN/MO7000</td>
<td>(2x) 354.5 x 689 mm Round Coil Each 3.5 kW</td>
<td>(2x) IN/MO 7000/10000 Cable Kit, 2.5-meter (Options: 4-meter or 6-meter Kit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOQU 20000 650</td>
<td>(1x)</td>
<td>(1x) Frame for 650 x 650mm glass</td>
<td>(2x) IN/MO10000</td>
<td>(2x) 319 x 624 mm Round Coil Each 5.0 kW</td>
<td>(2x) IN/MO 7000/10000 Cable Kit, 2.5-meter (Options: 4-meter or 6-meter Kit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOQU 20000 720</td>
<td>(1x)</td>
<td>(1x) Frame for 720 x 720mm glass</td>
<td>(2x) IN/MO10000</td>
<td>(2x) 354.5 x 689 mm Round Coil Each 5.0 kW</td>
<td>(2x) IN/MO 7000/10000 Cable Kit, 2.5-meter (Options: 4-meter or 6-meter Kit)</td>
<td></td>
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</tr>
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</table>

**Diagram:**
- **CAN/BUS**
- **mains connection field 1 + 2**
- **field 1 + 2**
- **field 3 + 4**
- **field 1 + 2**
- **field 3 + 4**
- **coil connection Field 1 + 2**
- **field 1 + 2**
- **field 3 + 4**
- **sensor connection (field 2)**
- **sensor connection (field 1)**
- **sensor connection (field 4)**
- **sensor connection (field 3)**
### 4.6.3 CHART 3 – Module-Line Full Coil Dual Models

<table>
<thead>
<tr>
<th>FULL COIL, DUAL MODELS</th>
<th>GLASS</th>
<th>MOUNTING FRAME</th>
<th>GENERATOR</th>
<th>COIL CARRIER SHEET (coils + sensors)</th>
<th>CONTROL UNIT</th>
<th>OPERATION UNIT</th>
<th>CABLE KIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODU 7000 360FL</td>
<td>(1x) 360 x 360 x 6 mm</td>
<td>(1x) Frame for 360 x 360mm glass</td>
<td>(1x) IN/MO7000FL</td>
<td>(1x) 344 x 355 mm 2 Rectangular Coils Each 3.5 kW</td>
<td>(1x) IN/MO7000FL</td>
<td>(1x) IN/MO7000/14000</td>
<td>(1x) IN/MO7000FL-360 Cable Kit, 2.5-meter (Options: 4-meter or 6-meter Kit)</td>
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<tr>
<td>MODU 14000 360FL</td>
<td>(2x) 360 x 360 x 6 mm</td>
<td>(2x) Frame for 360 x 360mm glass</td>
<td>(1x) IN/MO14000FL</td>
<td>(2x) 344 x 355 mm 2 Rectangular Coils Each 3.5 kW</td>
<td>(1x) IN/MO14000FL</td>
<td>(2x) IN/MO14000/14000</td>
<td>(1x) IN/MO14000 Cable Kit, 2.5-meter (Options: 4-meter or 6-meter Kit)</td>
</tr>
<tr>
<td>MODU 14000 650FL</td>
<td>(1x) 375 x 650 x 6 mm</td>
<td>(1x) Frame for 375 x 650mm glass</td>
<td>(1x) IN/MO14000FL</td>
<td>(1x) 319 x 624 mm 4 Rectangular Coils Each 3.5 kW</td>
<td>(1x) IN/MO14000FL</td>
<td>(2x) IN/MO14000/14000</td>
<td>(1x) IN/MO14000 Cable Kit, 2.5-meter (Options: 4-meter or 6-meter Kit)</td>
</tr>
<tr>
<td>MODU 14000 720FL</td>
<td>(1x) 360 x 720 x 6 mm</td>
<td>(1x) Frame for 360 x 720mm glass</td>
<td>(1x) IN/MO14000FL</td>
<td>(1x) 354.5 x 689 mm 4 Rectangular Coils Each 3.5 kW</td>
<td>(1x) IN/MO14000FL</td>
<td>(2x) IN/MO14000/14000</td>
<td>(1x) IN/MO14000 Cable Kit, 2.5-meter (Options: 4-meter or 6-meter Kit)</td>
</tr>
</tbody>
</table>

**7000 360FL Installation**

- **Poti/LED connection**
- **Field 1**
- **Field 2**
- **CAN/BUS**
- **Mains connection**
- **Sensor connection (field 1)**
- **Sensor connection (field 2)**
- **Ventilation (fan) cable connection**
- **Coil connection**

**14000 360FL Installation**

- **Poti/LED connection**
- **Field 1**
- **Field 2**
- **CAN/BUS**
- **Mains connection**
- **Sensor connection (field 1)**
- **Sensor connection (field 2)**
- **Ventilation (fan) cable connection**
- **Coil connection**

**14000 650FL Installation**

- **Poti/LED connection**
- **Field 1**
- **Field 2**
- **CAN/BUS**
- **Mains connection**
- **Sensor connection (field 1)**
- **Sensor connection (field 2)**
- **Ventilation (fan) cable connection**
- **Coil connection**

**14000 720FL Installation**

- **Poti/LED connection**
- **Field 1**
- **Field 2**
- **CAN/BUS**
- **Mains connection**
- **Sensor connection (field 1)**
- **Sensor connection (field 2)**
- **Ventilation (fan) cable connection**
- **Coil connection**
4.6.4 CHART 4 – Module-Line Full Coil Quad Models

<table>
<thead>
<tr>
<th>FULL COIL, QUAD MODELS</th>
<th>GLASS</th>
<th>MOUNTING FRAME</th>
<th>GENERATOR</th>
<th>COIL CARRIER SHEET (coils + sensors)</th>
<th>CONTROL UNIT</th>
<th>OPERATION UNIT</th>
<th>CABLE KIT</th>
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<tr>
<td>MOQU 28000 650FL</td>
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<td>(1x)</td>
<td>650 x 650 x 6 mm</td>
<td>(2x)</td>
<td>319 x 624 mm 4 Rectangular Coils Each 3.5 kW</td>
<td>(2x)</td>
<td>(4x)</td>
</tr>
<tr>
<td>MOQU 28000 720FL</td>
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<td>(1x)</td>
<td>720 x 720 x 6 mm</td>
<td>(2x)</td>
<td>354.5 x 689 mm 4 Rectangular Coils Each 3.5 kW</td>
<td>(2x)</td>
<td>(4x)</td>
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# 4.6.5 CHART 5 – Module-Line Full and Round Coil Quad Models

<table>
<thead>
<tr>
<th>FULL &amp; ROUND COILS COMBINED, QUAD MODELS</th>
<th>GLASS</th>
<th>MOUNTING FRAME</th>
<th>GENERATOR</th>
<th>COIL CARRIER SHEET (coils + sensors)</th>
<th>CONTROL UNIT</th>
<th>OPERATION UNIT</th>
<th>CABLE KIT</th>
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<td>(1x)</td>
<td>(1x)</td>
<td>(1x) IN/MO14000FL</td>
<td>(1x) 354.5 x 689 mm 4 Rectangular Coils Each 3.5 kW</td>
<td>(1x) IN/MO 14000</td>
<td>(1x) IN/MO 14000</td>
<td>(1x) IN/MO14000 Cable Kit, for Full Coils Connections, 2.5-Meter Kit AND (1x) IN/MO 7000/10000 Cable Kit, for Round Coils Connections, 2.5-Meter Kit Options: 4-Meter or 6-Meter Cable Kits</td>
</tr>
<tr>
<td>MOQU 24000 720</td>
<td>(1x)</td>
<td>(1x)</td>
<td>(1x) IN/MO14000FL</td>
<td>(1x) 354.5 x 689 mm 2 Round Coil Each 3.5 kW</td>
<td>(1x) IN/MO 10000</td>
<td>(1x) IN/MO 10000</td>
<td>(1x) IN/MO14000 Cable Kit, for Full Coils Connections, 2.5-Meter Kit AND (1x) IN/MO 7000/10000 Cable Kit, for Round Coils Connections, 2.5-Meter Kit Options: 4-Meter or 6-Meter Cable Kits</td>
</tr>
</tbody>
</table>

**Diagram**

21000 720
24000 720
Installation
4.7 Electrical Installation

All electrical connections must be carried out by a certified electrical contractor, who is responsible for the correct rating and installation of the induction unit. The contractor has to comply with all legal safety regulations.

IMPORTANT

- This appliance component requires additional features and components to comply with appliance and electrical standards. It is the responsibility of the customer and installer to interpret and comply with all applicable safety and electrical standards. Refer to details in section 4.1 Important Safety and Electrical Requirements.

- Refer to the electrical specifications in chapter 3 Dimensions and Technical Specifications AND the rating plate/instruction labels on the unit. Always refer to the rating plate/instruction labels on the unit to verify the electrical data. The rating plate/label information overrides the information listed in this manual.

- Ensure the supply voltage and the line current match the specifications given on the rating plate. A stable mains supply must be provided.

CAUTION Wrong voltage will damage the induction unit. Follow strictly the specifications on the rating plate.

- The electrical installation must satisfy the national and local electrical codes.

- If ground fault current protective switches are used, they must be provided with selective activation and designed for a minimum fault current of 30mA. Multiple generators with a mains connection must not be connected to a single fault current protective switch.

- The electrician must equip the generator with a mains cable in accordance with the applicable regulations. Ensure the mains cable connection is absolutely correct.

- The electrician must ensure the induction unit can always be disconnected from the power supply by a switch, in accordance with the applicable regulations.

- All cables must be routed / protected and tension free.

- Always route sensor and communication cables separately and away from the coil cables.

- To manage electromagnetic interference, excess cable length can be dressed and tied in a serpentine or S pattern, NOT coiled.

- Put the control knob in the 0 (OFF) position BEFORE connecting the unit to the electrical supply.
To setup the unit for operation:

1. Ensure the control knobs are at the OFF-Position.
   - **ON-Position**: Any position where “0” is not pointing to the LED light. The light is on.
   - **OFF-Position**: “0” points to the LED light. The light is off.

2. Remove all objects from the glass-tops.

3. Review the components and cable connections charts in section 4.6 Models, Components and Cable Connections.

   **IMPORTANT:**
   - Always connect the cables according to the labels affixed next to the connectors and on the cables.
   - The cables—coils, sensors, CAN/BUS, mains—must be connected correctly.
   - Ensure the insertion tongues of the RJ-45 cable (CAN/BUS) are fully engaged.
   - The coil and sensor cables must be routed separately and MUST NOT rest on one another.
   - The sensor and RJ45 cables must be routed separately and MUST NOT rest on one another.
   - Ensure ALL coil/sensor connectors are connected correctly before turning on the unit.

4. Connect the unit to the power supply.
5. Perform the Function Test. See chapter 5 Function Test.
5 Function Test

IMPORTANT

<table>
<thead>
<tr>
<th>CAUTION</th>
<th>When the unit is in use, the cookware will warm up the glass-top. To avoid burn injuries, do not touch the glass-top.</th>
</tr>
</thead>
</table>

- Remove all objects from the glass-top and verify that the glass-top is not cracked or broken.

<table>
<thead>
<tr>
<th>CAUTION</th>
<th>Do not continue if the glass-top is cracked or broken. Immediately switch off the unit and if possible and safe, disconnect it from the power outlet. Contact a Factory Authorized Service agency.</th>
</tr>
</thead>
</table>

- Before carrying out the function test, the user must understand how to operate the unit.
- Always use a pan suitable for induction cooking, having a bottom diameter of at least 5”(12cm). See 6.1 Proper Induction Cookware and 6.2 Proper Placement of Cookware on Dual Hobs.
- NEVER LEAVE AN EMPTY PAN ON AN INDUCTION HOB.

To perform a function test:

1. Put some water in the pan and place it in the center of the heating zone.
2. Turn the control knob to a position between 1 and 12. The LED indicator lamp is bright and the water is heated.

   **ON-Position**
   Any position where “0” is not pointing to the LED indicator light. The LED is on.

   **OFF-Position**
   “0” points to the LED indicator light. The LED is off.

3. Take the pan away from the hob. Power transmission stops and the indicator lamp starts to blink.
4. Place the pan back on the heating area. The LED indicator lamp lights up continuously again and the heating process resumes.
5. Turn the control knob to the OFF/“0”-position. The heating process stops; the indicator lamp goes off.

**NOTE:** The green indicator lamp illuminates continuously when energy is being transferred to the pan.

If the indicator lamp remains off, check:

- Is the induction unit connected to the power supply?
- Is the control knob in an ON-Position?

If the indicator lamp keeps blinking and a pan is placed in the heating zone:

- Are you using a suitable pan? See chapter 6.1 Proper Induction Cookware.
- Is the pan placed in the center of the heating zone? See chapter 6.2 Proper Placement of Cookware.

For further assistance, see chapter 10 Troubleshooting or call a Factory Authorized Service agency.
6 Operating Instructions

IMPORTANT

- Induction units are more powerful, heat up pans quicker, and cook food faster than conventional cooking equipment. Your induction unit will require different use and care than other conventional equipment. Do not operate the induction equipment without reading this manual and follow all safety requirements. Refer to chapter 1 Safety Requirements.
- This appliance is for professional use and shall be used only by qualified personnel.

CAUTION

Do not put any empty cookware on the heating area when the induction unit is ON. The induction unit heats up empty pans very quickly. Overheated empty pan can cause personal injury and damages to cookware and the induction unit. See Warranty, p.2.
To avoid overheating, always put food products or oil into the pan before turning the induction unit on.

- Induction unit offers short cooking time. When you turn the power level up, the temperature of the pan and its contents is changed quickly. Therefore especially when you heat up oil or grease, check the cooking process frequently to prevent the oil or grease from overheating and burning.

- BROIL-DRY PROTECTION
The RTCSmp electronic temperature control monitors overheating at the pan base. When an overheated pan (overheated oil, empty pan) is detected, energy transfer from the generator to the pan will be stopped immediately. You must turn the unit off, let it cool down before re-starting the unit.

6.1 Proper Induction Cookware

IMPORTANT Using unsuitable cookware on the induction unit can cause the unit to fail prematurely, void your warranty, or incur high service costs. Refer to Warranty, p.2.

- IMPORTANT: CONDITION OF COOKWARE
Pans with layer separation (outward and inward bubbles), arching or partially detached bottoms must be replaced. When these pans are used, the sensors under the glass-top cannot detect temperature correctly. These pans will overheat the sensors below and eventually will damage them. Shown below are examples of good and bad pans in cross-sections.

- Material
Use cookware made of conductive and magnetic materials. If the pan bottom attracts a magnet, the pan is suitable for induction cooking. Use cookware that is labeled “suitable for induction” or is marked with an induction compatible symbol.
Boil Test
To verify the performance of a pan for induction cooking: Add one liter of cold water into the pan and bring it to boil. The time needed to boil one liter of water should be:

- Coil with 3500W, approximately 140 seconds
- Coil with 5000W, approximately 85 seconds

If the time to boil exceeds the above guideline, then the pan material is not suitable for achieving optimal efficiency. Please contact your supplier to purchase suitable induction pans.

- Size

Minimum size: The bottom of the cookware must have a diameter of at least 5” (12cm). Otherwise, the sensors will not detect the pan properly.

Do not use oversized pans on the induction unit. The bottom of the pan must fit the glass. When a hot, oversized pan covers the silicone joint underneath, the heat from the pan may dry out the silicone over time and cause this water tight seal to break. The induction unit may fail eventually due to penetration of liquid through the broken silicone seal.

6.2 Proper Placement of Cookware

The RTCSmp Module-Line model has one or more cooking zones. Each cook-zone is equipped with the latest RTCSmp sensor technology which enables temperature controls in realtime. To obtain the optimal results from the sensors, you must always place the pan in the center of the hob, which is indicated by the markings on the glass.

CAUTION

Pans and pots must not cover more than one cooking zone at a time. Otherwise, electronic components of the induction unit can be damaged.

Quad configuration is shown in the photos. Same principle applies to other RTCSmp Module-Line models.

NEVER put a single pot across multiple cook-zones (Round or Rectangular Coils)

NEVER put multiple pans on a single ROUND coil.
CORRECT. One pan for each ROUND coil. Each pan is placed in the center of the cook-zone.

CORRECT. One large pan is placed in the center of a cook-zone for RECTANGULAR coils.

CORRECT. Multiple pans are placed within one cook-zone for RECTANGULAR coils. IMPORTANT: When multiple pans are used on rectangular coils, do not let the pans touch each other as the pans might fuse if there is excessive heat.

6.3 Power Control

Set the desired power level by turning the control knob and the unit is immediately ready for operation. When the green indicator lamp lights up, energy is being transferred to the cookware.

ON-Position
Any position where “0” is not pointing to the LED light. The light is on.

OFF-Position
“0” points to the LED light. The light is off.

Set and adjust the power level by turning the control knob:
• Position (1) indicates minimum power.
• Position (12) indicates maximum power.

The following Power Diagram shows:
• The difference in power output between two higher power levels is much larger than that between two lower power levels.
• The settings from (1) to (9) span the lower 50% of the total Power Output; the settings from (10) to (12) cover the 50% to 100% output range.

This power level and output relationship provides a fine simmer-rate control in the low power range, and instant response in the high power range.
6.4  No Pan No Heat

When a temperature is chosen, the induction unit only transmits energy when a pan is placed in the heating zone. If you remove the pan from the heating zone, power transfer to the pan stops immediately. If the pan is put back in the heating zone, power is transferred to the pan again.

Note the signals given by the green indicator light:

- The green indicator light flashes when the unit is ON but without any pan placed on the hob; the unit is in pan detection mode.
- As soon as a pan is put on the hob, the heating process is engaged and the indicator light stops flashing and remains bright. However, the indicator light will keep flashing if the unit is unable to detect any pan or an unsuitable pan is placed on the glass-top.

After switching the unit off, there is no heat retained inside the unit.

**NOTE:** Pan with a bottom diameter smaller than 5”(12 cm) is not detected by the system.

6.5  When Unit is Not In Use

**Best Practice:** If the induction unit is not in use, ensure the control knob is in the 0 (OFF) position.

- Switch the unit OFF if you take the cookware away for a while. This will prevent the heating process to start automatically and unintentionally when a pan is placed back on the heating area. If any person needs to use the induction unit, he/she will have to turn the unit ON intentionally.
Cleaning

The cleaning of the Ceran glass is identical to cleaning other similar glass surfaces. You may use any regular glass cleaning products available from a hardware store.

**CAUTION**

Ensure NO LIQUID CAN ENTER into the induction unit. Do not let water or food overflow the cooking area. Do not use hoses to clean or power wash the induction unit or its vicinity.

**IMPORTANT**

- **DO NOT USE** corrosive or abrasive cleaning agents, such as grill sprays, oven sprays, stain removers, rust removers, scouring powder, and rough sponges.
- Let the Ceran glass-top cool down before cleaning.
- Ensure to remove all residues of cleaning agents from the glass-top. Use a clean moist cloth to wipe off any such residues.

**IMPORTANT - Air Intake Filter**

We recommend using an air intake filter in your installation. A dirty, blocked air intake filter can cause electronic damage to the induction unit. Ensure you check and clean the filter at least once a week or as often as required. Wipe the filter dry before inserting it back into the holder.

**Glass and Body Cleaning**

1. Use razor blade scraper or non-scratching sponge to remove all residues on the glass.
   - When scraping, ensure you angle your razor blade scraper at about 20° to 30° from the glass.

2. Wipe the glass clean with a damp cloth.
3. To clean the stainless steel body, use regular stainless steel cleaners available from a hardware store.

**Visual Inspection of Silicone Seal**

Check the silicone seal around the glass. Call service as soon as possible if you notice:

- Cracks on the silicone seal.
- The silicone seal comes away from the glass or moves when you press down on the seal.

**When the silicone seal is broken, water penetration can cause the induction unit to fail and the malfunction can cause personal harm.**
8  Maintenance

CAUTION

Maintenance and servicing work other than cleaning as described in this manual must be done by an authorized service personnel.

Do not open the induction unit – dangerous electric voltage inside!
The induction unit may only be opened by an authorized service personnel.

A good maintenance of the induction unit requires regular cleaning, care and servicing. The operator has to ensure all components relevant for safety are in perfect working order at all times.

**Best Practice:** Have the induction unit examined once a year by an authorized technician.

9  Important Rules

**Six Simple rules to ensure reliable and repeatable performance of your induction unit:**

- Keep kitchen temperature below 105°F (40°C).
- Never place your induction units next to any grease generating or heat generating equipment.
- Clean the air intake filter at least once a week or as often as required.
- Use only pans that fits the glass, do not use oversized pans. Current circulating in the bottom of the pan will arc against metal frame and damage the electronics.
- Never pre-heat the pan. Place the pan on the hob only when you are ready to cook.
- Use “induction ready” pans with magnetic bottom and do not use dented pans, which will damage the electronics.
10 Troubleshooting

**CAUTION**
Do not open the induction unit – dangerous electric voltage inside! The induction unit may only be opened by an authorized service personnel.

**STOP and DO NOT USE** the induction unit if any part of the unit is cracked or broken. Turn off the induction unit immediately and if possible and safe, disconnect the unit from the power supply. Do not touch any parts inside the unit.

10.1 Common causes for induction unit failure

One or more of the following conditions may affect the function or contribute to the failure of the induction unit:

- Using unsuitable cookware such as non-induction pans or oversized pans.
- High ambient temperature.
- Inadequate ventilation causing hot air to re-enter through the air intake slots.
- Dirty air intake filter.
- Empty pans are left on the cook-top while the unit is ON.

**Symptoms**

When a malfunction occurs, the induction unit may be in one of the following states:

- The induction unit stops working immediately.
- The induction unit continues to work in a power reduction mode.
- The induction unit continues to work as usual.

The green indicator light may also blink at regular intervals.

**Corrective steps**

Use the following sections to locate the problem area(s) and to take only the corrective action(s) indicated. Ensure you exercise safety precautions at all time.

Only an authorized service technician would have the training and correct tools to diagnose the internal components accurately and thoroughly. Contact a Factory Authorized Service agency for assistance. For a list of Garland authorized service agencies, please visit our website www.garland-group.com.
## 10.2 Problems and Possible Causes

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Causes</th>
<th>Action To Take By Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan does not heat, green LED lamp is OFF (dark)</td>
<td>No power supply.</td>
<td>Check main power supply, e.g. power cable plugged into the wall socket.</td>
</tr>
<tr>
<td>Control knob is in OFF-position.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defective induction unit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pan does not heat, green LED lamp is blinking. If LED lamp blinks at intervals, see next section.</td>
<td>Pan is too small.</td>
<td>Use a suitable pan with bottom diameter larger than 5” (12cm).</td>
</tr>
<tr>
<td>Pan is not placed in the center of the heating zone; pan is not detected by sensor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsuitable pan.</td>
<td>Select a pan recommended for the induction unit.</td>
<td></td>
</tr>
<tr>
<td>Defective induction unit.</td>
<td>Ensure knob is in OFF-position and if possible and safe, disconnect the unit from the power supply. Contact your authorized service agency.</td>
<td></td>
</tr>
<tr>
<td>Poor heating, green LED lamp is ON (shining)</td>
<td>Air-cooling system obstructed.</td>
<td>Verify that air inlet and outlet are not blocked.</td>
</tr>
<tr>
<td>Ambient temperature is too high; the cooling system is not able to keep the induction unit in normal operating conditions.</td>
<td>Verify that no hot air is sucked in by the fan. Reduce the ambient temperature. The intake air temperature must be lower than 104°F (40°C).</td>
<td></td>
</tr>
<tr>
<td>One phase is missing (for units with three phase supply only).</td>
<td>Check main power supply.</td>
<td></td>
</tr>
<tr>
<td>Defective induction unit.</td>
<td>Ensure knob is in OFF-position and if possible and safe, disconnect the unit from the power supply. Contact your authorized service agency.</td>
<td></td>
</tr>
<tr>
<td>Pan used is not ideal.</td>
<td>Select a pan recommended for induction cooking. Then compare results of different pan used.</td>
<td></td>
</tr>
<tr>
<td>Unit does not react to control knob positions</td>
<td>Defective control switch.</td>
<td>Ensure knob is in OFF-position and if possible and safe, disconnect the unit from the power supply. Contact your authorized service agency.</td>
</tr>
<tr>
<td>Power/heating level seems to be reduced, fan is working</td>
<td>Air-cooling system is blocked. Internal fan is dirty.</td>
<td>Verify that air inlet and outlet are not obstructed. Contact your authorized service agency.</td>
</tr>
<tr>
<td>Power/heating level seems to be reduced, fan does not work</td>
<td>Defective fan or fan control.</td>
<td>Ensure knob is in OFF-position and if possible and safe, disconnect the unit from the power supply. Contact your authorized service agency.</td>
</tr>
<tr>
<td>After a longer continuous operation, Power/heating level seems to be reduced</td>
<td>Overheated induction coil; cooking area is too hot. Overheated oil in pan. Pan is empty.</td>
<td>Switch the unit off. Safely remove pan. Wait until the heating zone has cooled down before turning the unit ON again.</td>
</tr>
<tr>
<td>Small metallic objects (e.g. spoon) are heated on the heating area.</td>
<td>Pan detection mode is set incorrectly.</td>
<td>Ensure knob is in OFF-position and if possible and safe, disconnect the unit from the power supply. Contact your authorized service agency.</td>
</tr>
</tbody>
</table>
**NOTE:** The fan starts when the ambient temperature in the control area exceeds 131°F/55°C. At heat temperatures higher than 158°F/70°C, the controller automatically reduces the power to keep the unit in normal operating conditions. The cooker operates audibly irregular.

### 10.3 Troubleshooting with Error Codes (for Service Technicians)

The indicator lamp flashes to signal a specific problem area. Counting the number of short flashes after each long flash will give the possible causes. Example: “— …. — …. ” The LED gives a long flash for 0.6 seconds. Then it gives 4 short flashes. And it repeats until the error is cancelled.

To obtain the internal data and error code for troubleshooting, you need an IR Adapter, proper connectors, and software. The table below is a reference guide. For further information and assistance, please contact Garland Technical Service.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>#Flashes</th>
<th>Reason</th>
<th>Things To Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>E01</td>
<td>1</td>
<td>Hardware overcurrent. Induction coil not detected. (3)</td>
<td>Check cooking pan material. Check pan placement on cooking zone. Check wiring and connection on induction coil.</td>
</tr>
<tr>
<td>E02</td>
<td>2</td>
<td>High coil current. Software overcurrent. (3)</td>
<td>Check cooking pan material.</td>
</tr>
<tr>
<td>E03</td>
<td>3</td>
<td>Heat sink (KK) temperature too high. (1)</td>
<td>Check installation/air flow (supply of cool air). Check fan operation.</td>
</tr>
<tr>
<td>E04</td>
<td>4</td>
<td>Cook zone temperature too high. Failure of sensor unit or sensor unit not connected. (1)</td>
<td>Check sensor unit. Pan empty.</td>
</tr>
<tr>
<td>E05</td>
<td>5</td>
<td>Rotary power switch error. Defective potentiometer or broken cable. (1)</td>
<td>Check potentiometer and its wiring.</td>
</tr>
<tr>
<td>E06</td>
<td>6</td>
<td>Internal temperature too high “generator”. (1)</td>
<td>Check installation/air flow (supply of cool air).</td>
</tr>
<tr>
<td>E10</td>
<td>10</td>
<td>Communication BUS error. (1)</td>
<td>Check all wiring.</td>
</tr>
<tr>
<td>E12</td>
<td>No Flash</td>
<td>High heat sink (KK) temperature. (2)</td>
<td>Check installation/air flow (supply of cool air). Check fan operation.</td>
</tr>
<tr>
<td>E20</td>
<td>No Flash</td>
<td>High internal temperature. (2)</td>
<td>Check installation/air flow (supply of cool air).</td>
</tr>
<tr>
<td>E21</td>
<td>8</td>
<td>Heat sink (KK) temperature sensor error. (1)</td>
<td>Check wiring. Check heat sink sensor. Contact Garland.</td>
</tr>
<tr>
<td>E24</td>
<td>8</td>
<td>Board sensor error. (1)</td>
<td>Check temperature sensor. Contact Garland.</td>
</tr>
<tr>
<td>E29</td>
<td>7</td>
<td>Coil connection error. Empty pan detected or sensor error. (1)</td>
<td>Check cooking pan. Check sensors.</td>
</tr>
<tr>
<td>E30</td>
<td>6</td>
<td>CPU temperature too high. (1)</td>
<td>Check installation/air flow (supply of cool air).</td>
</tr>
<tr>
<td>E41</td>
<td>4</td>
<td>Sensor 1 overheated or defect. (1)</td>
<td>Check cook zone (coil) sensor 1.</td>
</tr>
<tr>
<td>E42</td>
<td>4</td>
<td>Sensor 2 overheated or defect. (1)</td>
<td>Check cook zone (coil) sensor 2.</td>
</tr>
<tr>
<td>E43</td>
<td>4</td>
<td>Sensor 3 overheated or defect. (1)</td>
<td>Check cook zone (coil) sensor 3.</td>
</tr>
<tr>
<td>E44</td>
<td>4</td>
<td>Sensor 4 overheated or defect. (1)</td>
<td>Check cook zone (coil) sensor 4.</td>
</tr>
<tr>
<td>E45</td>
<td>4</td>
<td>Sensor 5 overheated or defect. (1)</td>
<td>Check cook zone (coil) sensor 5.</td>
</tr>
<tr>
<td>E46</td>
<td>4</td>
<td>Sensor 6 overheated or defect. (1)</td>
<td>Check cook zone (coil) sensor 6.</td>
</tr>
</tbody>
</table>

(1) The induction unit stops working immediately.  
(2) The induction unit continues to work in power reduction mode.  
(3) The induction unit continues to work as usual.
CORRECT DISPOSAL OF THIS PRODUCT

This marking shown on the product indicates that the product should not be disposed as household waste or regular commercial waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed correctly, you will help prevent potential harm to the environment or human health, which could otherwise be caused by inappropriate waste handling of this product.

For more detailed information regarding recycling of the product, please contact your local city office, your waste disposal service or your equipment dealer.

IMPORTANT Induction units, sent for disposal, can be brought back into operation and their use should be avoided.

NOTE The unit is built with common electrical, electromechanical, and electronic parts. No batteries are used.

NOTE The owner and operator are responsible for the proper and safe disposal of the induction unit.
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