

Electrolux

ELECTROLUX HOME PRODUCTS PTY LTD

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SERVICE MANUAL

IOI Gen 3 User Interface OVC5000 Power Board



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SAFETY INFORMATION

Under NO circumstances should any service work be carried out unless you are qualified and licensed as per Federal, State and Territory requirements.

General Safety

- Work should not be undertaken on any electrical appliance without first checking the earthing integrity of the appliance and electrical supply.
- A safety audit should be carried out of the work area to ensure the area has adequate room to work in and is free from any hazards that may cause any injury to yourself and any other person in the vicinity.
- After repair, product has to be reassembled as it was which complies with specification of the Manufacturer to ensure product is safe to operate both mechanically and electrically.

Electrical Safety

- Under NO circumstances should changing or repairs to parts be carried out on live appliances. Any changing or repair to parts must be done with the appliance removed from the electrical supply. Failure to do so may result in injury or death.
- After any work is completed the earthing integrity of the appliance must be checked.
- If you need to do electrical testing with the product live the following must be observed:
 - It must be on a circuit with earth leakage protection.
 - As much skin as possible should be covered to reduce the chances of coming into contact with live terminals
 - All jewellery should be removed.
 - There should not be any water/moisture on the ground.
 - A safety sign should be displayed to warn others of the danger.

Running appliances with panels/covers removed

- All the electrical safety procedures above must be observed.
- Care must be taken not to come into contact with moving parts.
- Loose clothing or jewellery that can become entrapped should not be worn.
- If handling or working near sharp edges the appropriate personal protection equipment must be used.
- Safety eyewear should be used if removing parts that may “spring and fly” if they slip off a tool. Eg removing a spring which is under compression.
- Any removed panels that have sharp edges should be placed where they do not cause any danger of injury to yourself or others.
- A safety sign should be displayed to warn others of the danger.
- If handling or working in a dusty area or with Dust Product, dust mask or appropriate PPE should be used.

Refrigeration

- Ensure you know which refrigerant is in the appliance so the correct gas handling procedures can be used. Failure to use the correct procedure may result in injury.
- If hot work needs to be done ensure all the surround area is safe and free from combustibles. Where necessary heat shielding should be used.
- Ensure pipework has cooled down before touching.
- When handling gas make sure all necessary PPE is used.
- Ensure there is enough ventilation.
- Place warnings signs so others know flames/smoking must not be in the area.

Gas Safety

- Under no circumstances should a naked flame be used, eg match, lighter etc, to try and find a gas leak, only an appropriate gas leak detector or soapy water should be used.
- When converting an appliance to another gas type, the gas type label supplied must be fitted in the appropriate area.
- Always ensure the product is connected to the correct gas type.
- When working with a gas leak place warnings signs so others know flames/smoking must not be in the area.
- After fixing a gas leak do not try and ignite the burner(s) until any remaining escaped gas has dissipated.

TOOLS

Standard tools

- Pliers;
- Side cutters;
- Long nose pliers;
- Phillips screwdriver;
- Flat blade screwdriver;
- Torx bits;
- Shifter;
- Insulation tape;
- PTFE tape
- Polishing cloth;
- Antistatic strap;

Measuring Instruments

- Multimeter
- Manometer

CONTENTS

| | |
|----------------------------------|-----------|
| SAFETY INFORMATION | 3 |
| TOOLS..... | 4 |
| ALARM CODES..... | 6 |
| FAULT FINDING | 8 |
| DEMO MODE..... | 8 |
| TEST MODE | 8 |
| FACTORY RE-SET | 9 |
| TEMPERATURE COMPLAINTS | 9 |
| OTHER POTENTIAL COMPLAINTS | 9 |
| PT500 SENSOR | 10 |
| FOOD PROBE | 11 |
| PCB LAYOUT | 12 |
| OVC5000 | 12 |

ALARM CODES

| Fault Code | Fault Code | Description | Comment | Fix |
|------------|------------|---|---|--|
| F01 or 01 | F101 | Door lock sensor alarm | This relates to a door lock failure or microswitch. | Check wiring/plugs. Replace microswitch. Replace door lock. |
| F02 or 02 | F102 | Door lock actuator alarm | | |
| F04 or 04 | F104 | Oven Probe (PT500) out of range alarm | This relates to the temperature sensing probe which may be out of tolerance, or have open/short circuit connections. | Replace probe. |
| F05 or 05 | F105 | Oven Probe (PT500) too high temperature alarm | | |
| F25 or 25 | F195 | Board Temperature Sensor (NTC) too high temperature alarm | This relates to the temperature of the powerboard and/or the temperature-sensing element (NTC) on the powerboard. | Cooling fan not working. Replace powerboard. |
| F26 or 26 | F196 | Board Temperature Sensor (NTC) out of range warning | | |
| F06 or 06 | F106 | Board Temperature Sensor (NTC) out of range alarm | | |
| F08 or 08 | F908 | Communication alarm | This relates to an error in communication between the powerboard and the IOI controller. This can occur if the IOI controller is connected while the powerboard is energised. | Reset power. (Minimum of 20 sec.) Check or replace data cable. |
| F09 or 09 | F109 | Software compatibility code alarm | This relates to a mismatch between powerboard firmware version and the IOI controller firmware version. | Ensure power board and user interface part numbers and software versions are compatible. |
| | F130 | Triac Fault | Relates to errors of small loads including cooling fans, cooking fans or lamps and associated wiring | Turn off product for 30 seconds and re-test. If still exists, check fans and lamps for faults or wiring issues. Replace powerboard. |
| | F134 | | Internal fault on powerboard | Replace powerboard |
| | F239 | Touch board alarm | Water or condensation on the touch board. | Turn off product for 30 seconds and re-test. Check steam water drawer for obstructions and ensure no water dripping from drawer. Suggest to customer not closing drawer when water still in drawer. Ensure foam seal is fitted to rear base of control panel glass. Clean and dry as required - fit back together. If only condensation, then leaving for a few hours may be enough for it to resume functionality. |
| | F241 | Rotary Control not connected | Rotary controls not connected | Check connection to rotary controls. Check resistance of controls changes with each function to ensure correct functionality. |
| F03 or 03 | F203 | EEPROM check sum alarm | Relates to the controller. | Replace Controller. |
| F14 or 14 | F214 | EEPROM compatibility code alarm | Relates to the controller. | Replace Controller. |

| Fault Code | Fault Code | Description | Comment | Fix |
|------------|------------|--------------------------------|---|--|
| F36 | F136 | Food probe configuration alarm | Only applies to models with food probe. | Reset power (minimum 30 seconds) Check the cable between the powerboard and food probe module. Replace the food probe module. Replace the powerboard. |
| F37 | F137 | Food probe communication alarm | | |
| C1 | | Telescopic runners fitted | Only applies to Pyro product | Remove both side rack/telescopic runners and re-start pyro cycle. |
| C3 | | Door open | Only applies to Pyro product. | Close door and re-start pyro cycle. |

Fault Codes Miscellaneous

| Code | Description |
|------|---|
| 111 | OVC - Meat probe out of range alarm |
| 112 | OVC - PT500 steam out of range alarm |
| 113 | OVC - Internal error alarm |
| 131 | OVC - NTC Temperature sensor alarm |
| 132 | OVC - Door lock configuration alarm |
| 133 | OVC - Data flash alarm |
| 135 | OVC - Electronic clixon alarm |
| 138 | OVC - PT500 fixed value alarm |
| 142 | OVC - Steamer NTC sensor alarm |
| 143 | OVC - Humidity sensor alarm |
| 144 | Water level sensor in tank out of range alarm |
| 191 | OVC - PT500 steam out of range warning |
| 192 | OVC - Meat probe humidity alarm |
| 193 | OVC - Humidity sensor warning |
| 194 | OVC - PT500 out of range warning |
| 197 | OVC - Steamer NTC sensor warning |
| 215 | INTERNAL - Configuration coherent alarm |
| 233 | INTERNAL - Firmware Data flash alarm |

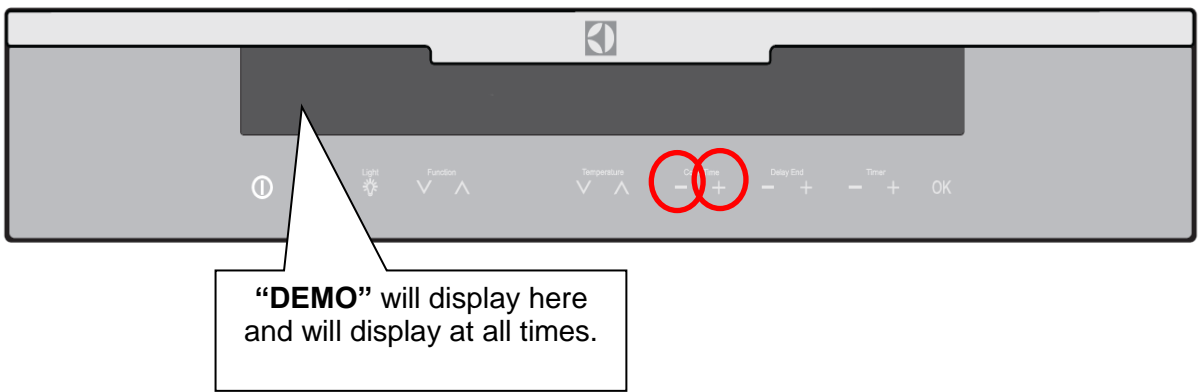
FAULT FINDING

DEMO MODE

This mode is intended to be used in retail shops to demonstrate the oven functionality without any power consumption except to the over lights.

The following instructions show how to enter and exit "DEMO" mode.

- 1) Ensure the oven is off by touching the ON/OFF symbol.
- 2) Touch and hold the ON/OFF symbol until the display turns ON then OFF. Immediately after, touch both the cook time symbols simultaneously. Hold until a triple beep sounds.



TEST MODE

- Within 10 seconds of powering up simultaneously press the cook time "+" button and delay end '+' button, this will enter 'TEST MODE' for a maximum of 5 minutes. Firstly displayed will be the software version and model N°. Then using the function '↓' and '↑' buttons scroll through individual element, light, cooking fan, cooling fan and temperature probe.
- Press **OK** to test door lock.

NOTE: On food probe models the food probe is required to complete the test.



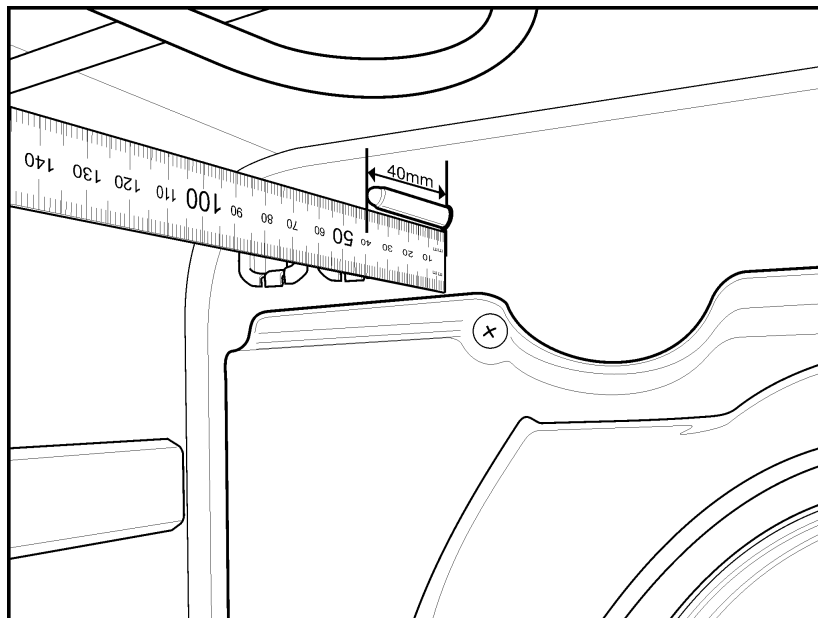
FACTORY RE-SET

The 'Settings' function gives the opportunity to 'factory re-set the oven.

- 1) Switch on the oven by touching the 'ON/OFF' symbol.
- 2) Scroll through the list by using function up \wedge or function down \vee .
- 3) Select 'SETTINGS' from the function list and touch **OK**.
- 4) Select "FACTORY SETTINGS" to reset to original factory settings.

TEMPERATURE COMPLAINTS

- 1) Check the fan baffle is screwed securely to the oven liner as hot air can be blown on to the sensor causing lower oven temperatures.
- 2) Check the door seal is fitted correctly, not perished or broken and the door is closing properly.
- 3) Check the oven sensor protrudes 40mm into the oven cavity more can result in lower temperatures.
NOTE: 1 – 2mm will result in approximately 1° difference.

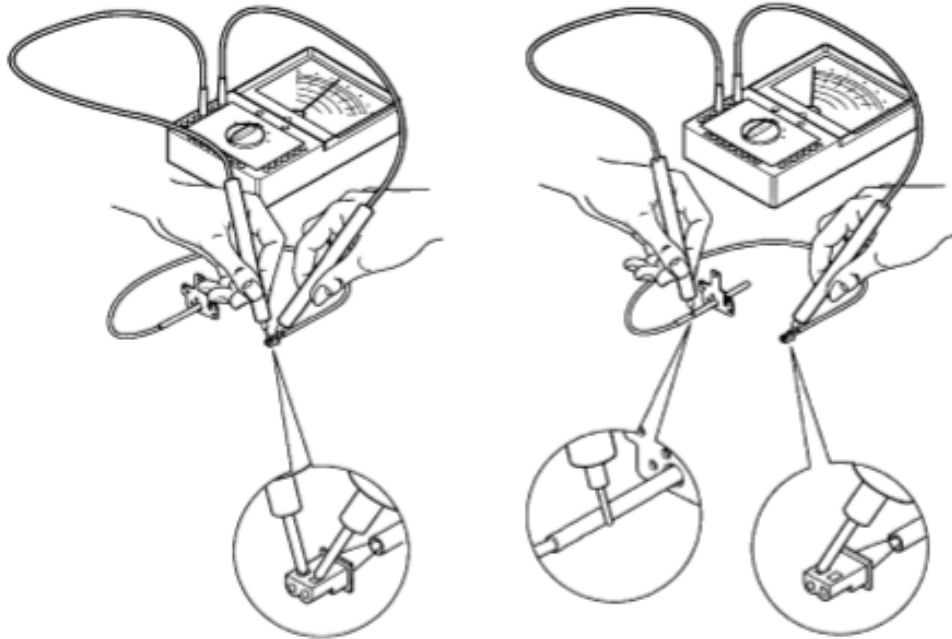


OTHER POTENTIAL COMPLAINTS

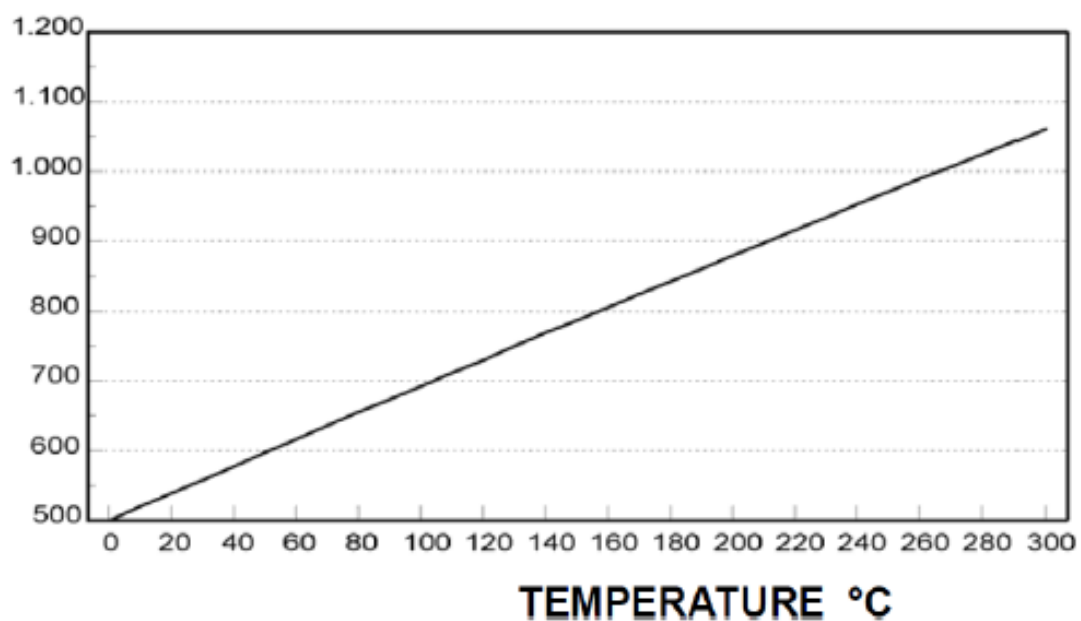
- When the door is opened the fan stops (underbench only) this is a function of the powerboard to help reduce the blast of air the customer receives when they open the door.
- When a non-fan mode is selected the fan starts. Most oven modes have a fast heat up function that uses the fan, fan element, and top (boost) element. Auto fast heat up can be overridden by selecting a temperature of 120°C or less, allowing the function to start, then increasing the temperature to the desired level.
- The light stays on when the door is closed, does not turn on when the door is open and the oven is off. The door switch is not activating due to restricted travel or broken actuator.

PT500 SENSOR

If a failure of the sensor is assumed, the resistance can be checked with an ohmmeter.
Check the resistance of the sensor - it should be between 500 Ω – 600 Ω at room temperature.
Check the insulation resistance - it should be higher than 2 M Ω .

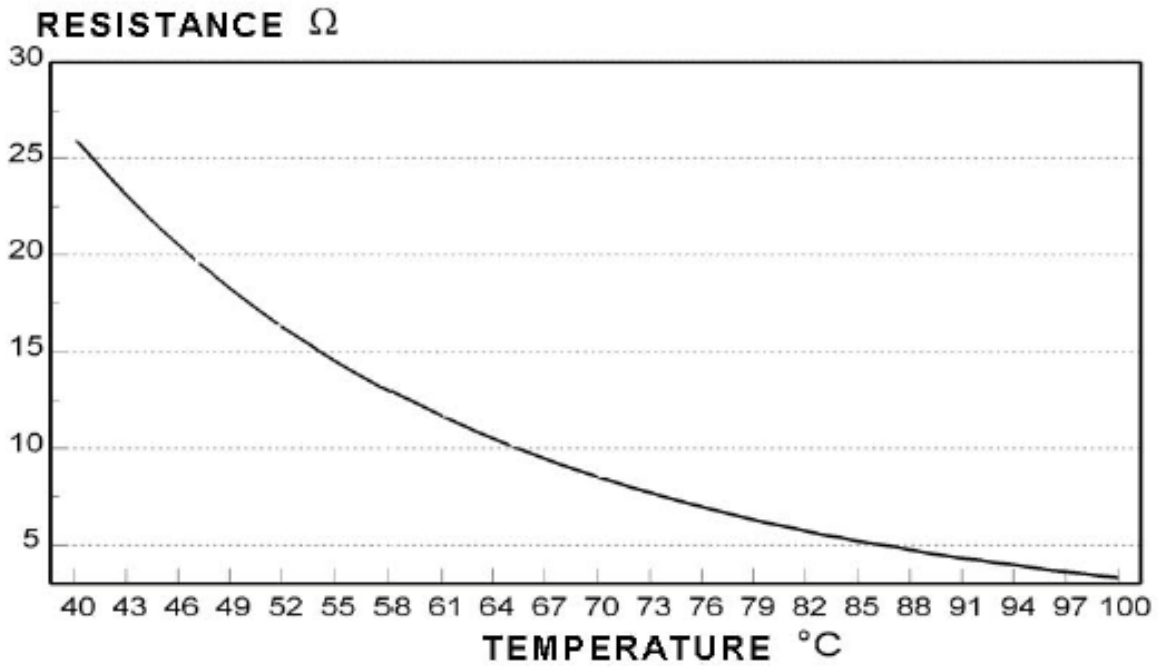


RESISTANCE Ω

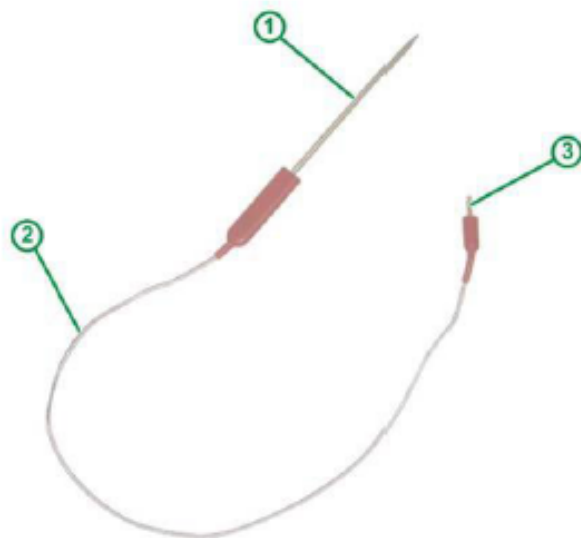


FOOD PROBE

Some models are equipped with a cooking temperature function made by a temperature probe. The probe consists of an NTC sensor placed in a metal casing with an insulated and temperature resistant cable. This probe is inserted into food to be cooked (or immersed in the liquid container to be heated). As the temperature detected by the probe rises there will be a change in the resistance of the probe.

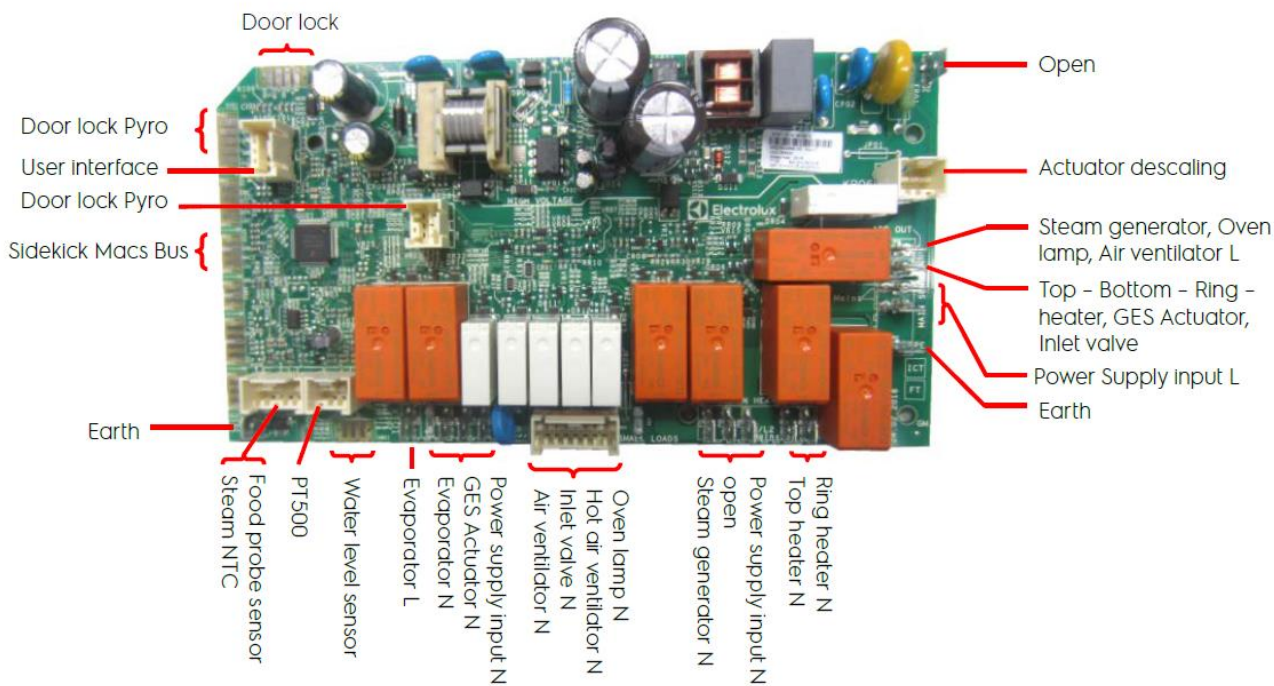
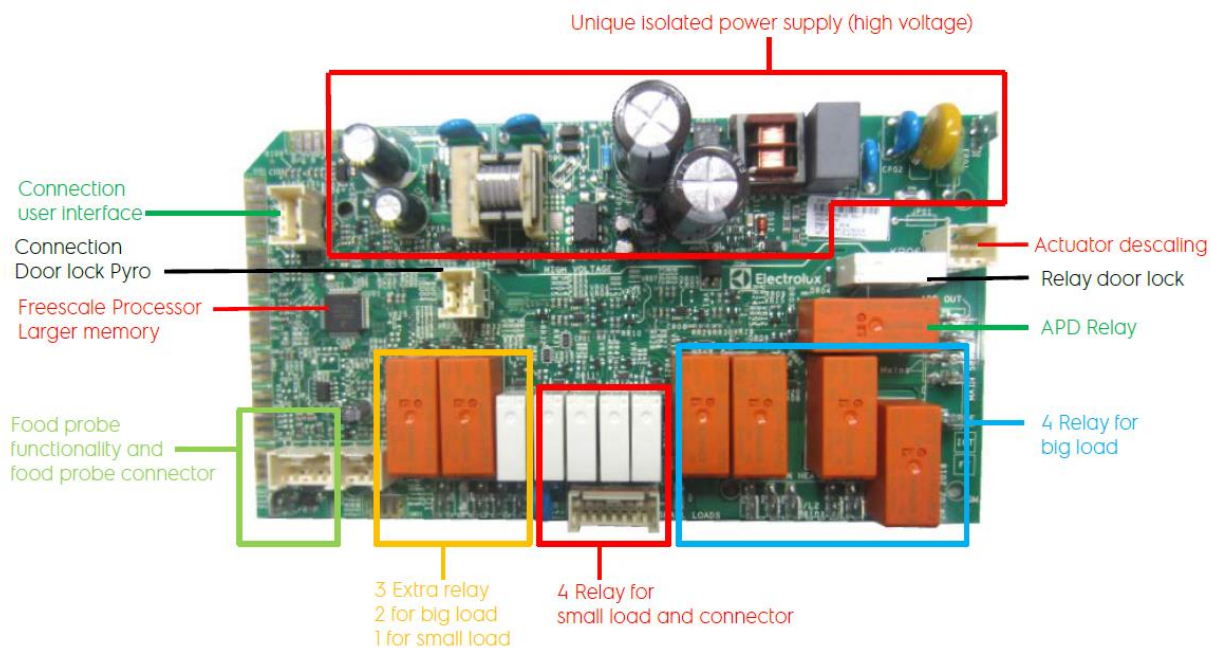


- 1 - FOOD PROBE TIP
- 2 - WIRE
- 3 - PLUG



PCB LAYOUT

OVC5000



| PUBLICATION VERSION CONTROL CHART | | |
|-----------------------------------|-------------------|---------|
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