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# SERVICE MANUAL

**OVENS** 

Module: OVC5000 - Power Board

**OVC 5000** 



### PRECAUTION



All work with open appliances must be done with the mains supply disconnected.

Work on electrical equipment should only be carried out by qualified personnel.

Before working on a device, check the efficiency of the system casing using appropriate equipment. As an example, refer to the indications described / illustrated in the portal Electrolux Learning Gateway (<a href="http://electrolux.edvantage.net">http://electrolux.edvantage.net</a>).

After the work, carry out electrical safety tests and ensure that the all safety devices are working properly.

In the case of manipulation / replacement of the PCB, use the ESD kit (Code  $405\ 50\ 63-95/4$ ) to prevent electrostatic discharge damage the circuit board see SB No.  $599\ 72\ 08-09$ 

#### **Document Revisions**

Revision	Date	Description	Approved by
0.0	06/2017	Document creation	

#### 2 PURPOSE OF THIS MANUAL

The purpose of this Manual is to provide information of Ovens Power Board OVC 5000

## 3 CONTENTS

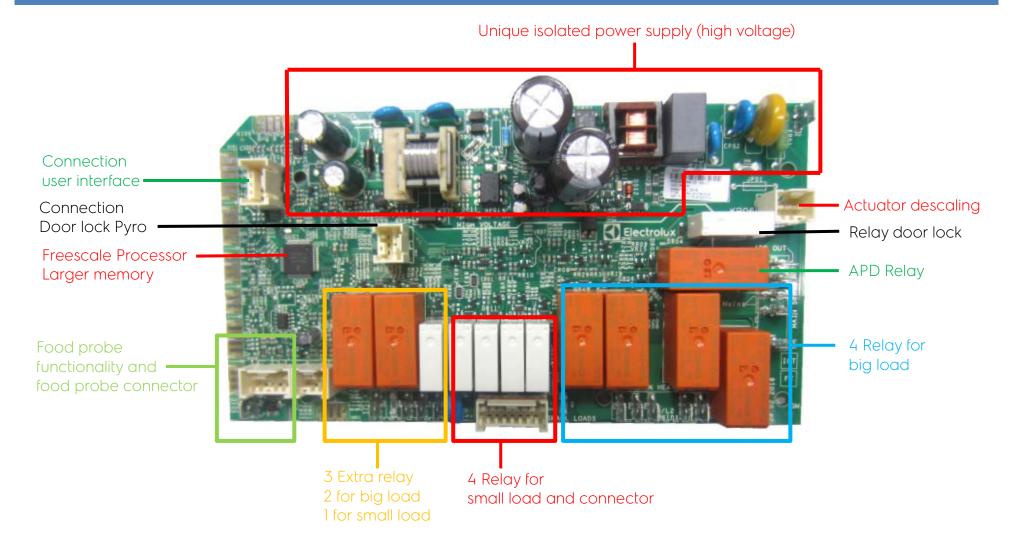
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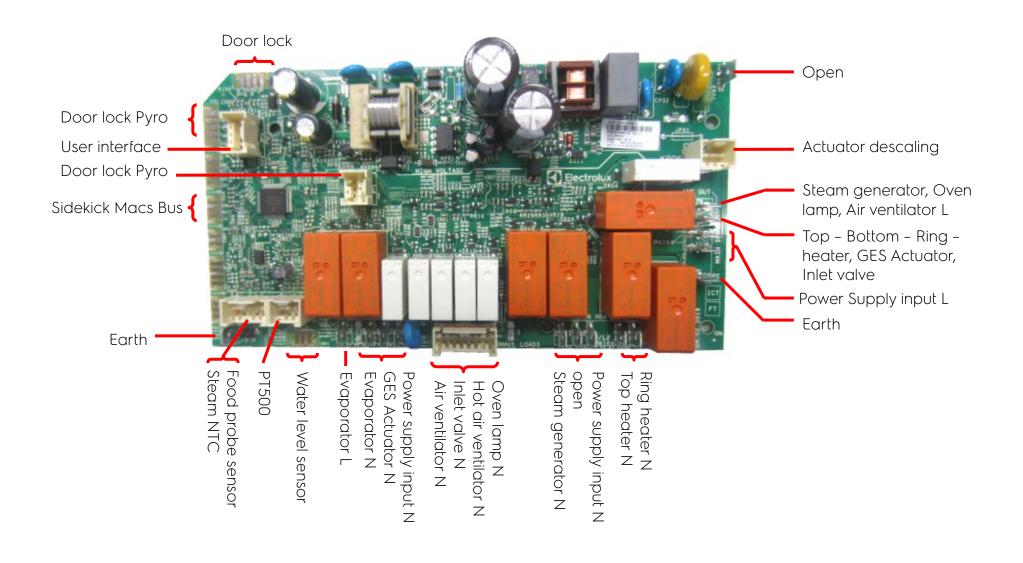
## 4 OVERVIEW OF OVC-R 5000

Used in all the Oven ranges, in future OVC 2000 and OVC 3000 with Food  $\operatorname{Pro}$ 



## 5 POWER ELECTRONIC OVC-R 5000





## 6 NEW FEATURES

- > The OVC-R 5000 power board used in appliances for single cavity only
- > Appliances with double cavity will still use the OVC2000 power board
- Last guarter in 2017, a plan for changeover to OVC-R 5000 be initiated
- > The power board operates in the voltage range of 180V until 440V
- > The power board includes a 400V protection against incorrect connection
- Includes a power supply of 4,5W (one cavity) for the relay
- ➤ Power supply for 9,0W (Oven WiFi and two cavity) is in development stage
- > OVC3000 and OVC-R 5000 have the same fixing points for spareparts assembly / replacement
- > No change of the error codes as against OVC3000, except for one Error code F138

OVC 3000		OVC 5000
OVC3000 with two Software variants:  Standard config. → for Oven, Micromat  Additional config. → for Profi Steam Step 1 and 2		All appliances are configured with one Software
External FPM electronics		FPM integrated on the power board
OVC3000	<ul><li>→ 4 Relays for big load</li><li>→ 4 Triacs for small load</li></ul>	OVC-R 5000 → 6 Relay for big load → 6 Relay for small load
FMP	<ul><li>→ 2 Relays for big load</li><li>→ 1 Relays for small load</li></ul>	
Controls ventilators for AC-power supply.		Controls ventilators for AC- and DC- with PWM (Pulse Width Modulation) power supply.

## 7 ERROR CODES

## 7.1 F38/F138: TEMPERATURE ON POWER BOARD

The temperatures from the microcontroller and the NTC sensor on the OVC R-5000 power board are compared. The behaviour in temperatures of both the electronics should have the same, increase and decrease at same time. However, if only one value remains fixed or deviate too much from the other, the fault F138 will be displayed.

OUI reaction: The OUI displayed the failure always. If the alarm is reset the OUI displayed/goes to ToD.

**Trouble-shooting:** 1. Power board defect

