



# Electrolux

## SERVICE MANUAL TASTE (Refrigerator)

FOR INTERNAL AND PARTNERS USE ONLY

Ownership Solutions - Documentation & Training Executive

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ERF1600  
Crescendo I

EN

Publication number 599834358  
Edition: 12/2019 - Rev.00



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# PURPOSE OF THIS MANUAL



The purpose of this Service Manual is to provide Service Engineers who are already familiar with repair procedures with information regarding the PCB.

The manual deals with the following topics:

- PCB general characteristics
- Disassembly

## SAFETY



- All the work to be performed inside the appliance requires specific skills and knowledge and may only be carried out by qualified and authorised Service Engineers
- Before you access internal components, take the plug out of the socket to disconnect the power supply.
- Some of the components in the mechanical part could cause injuries, so wear suitable protection and proceed with caution.

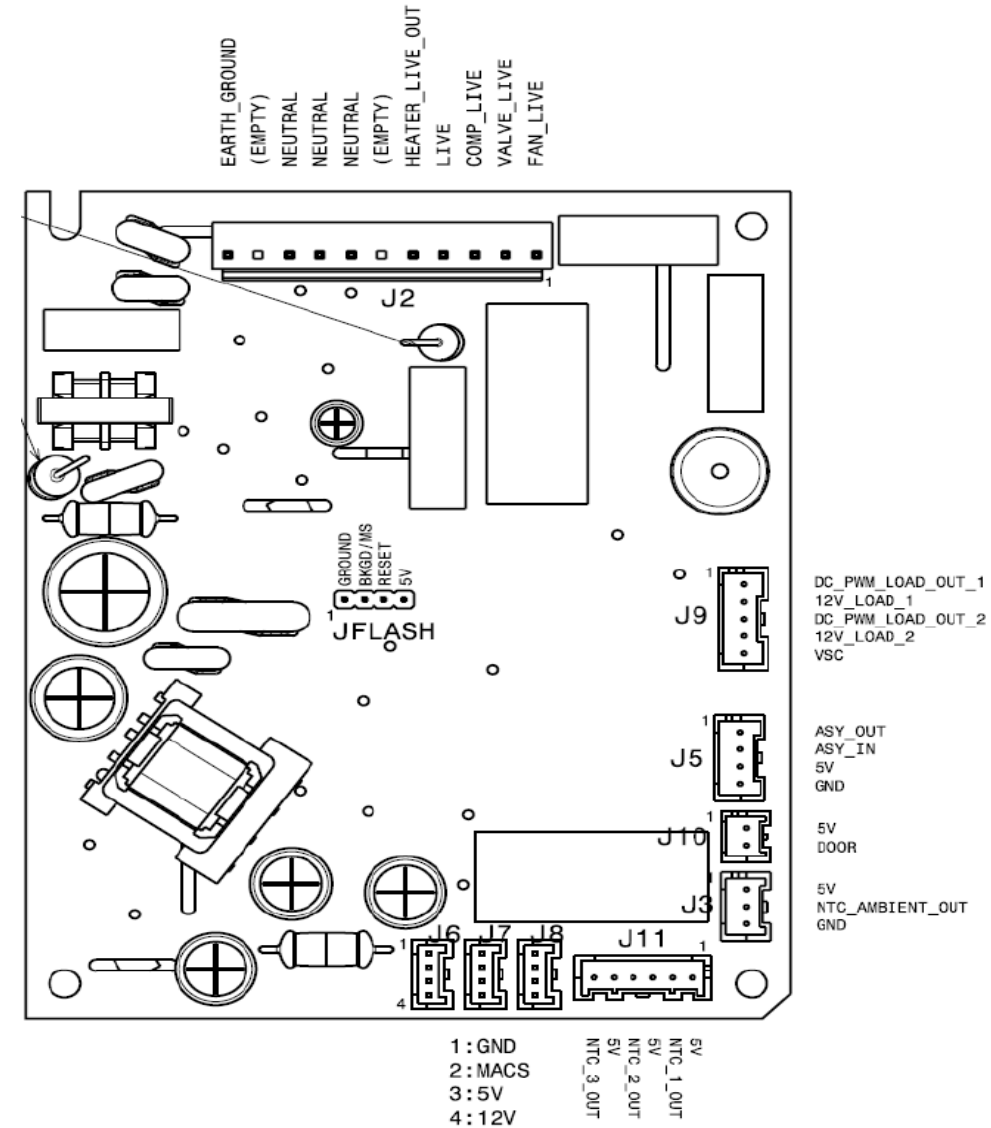
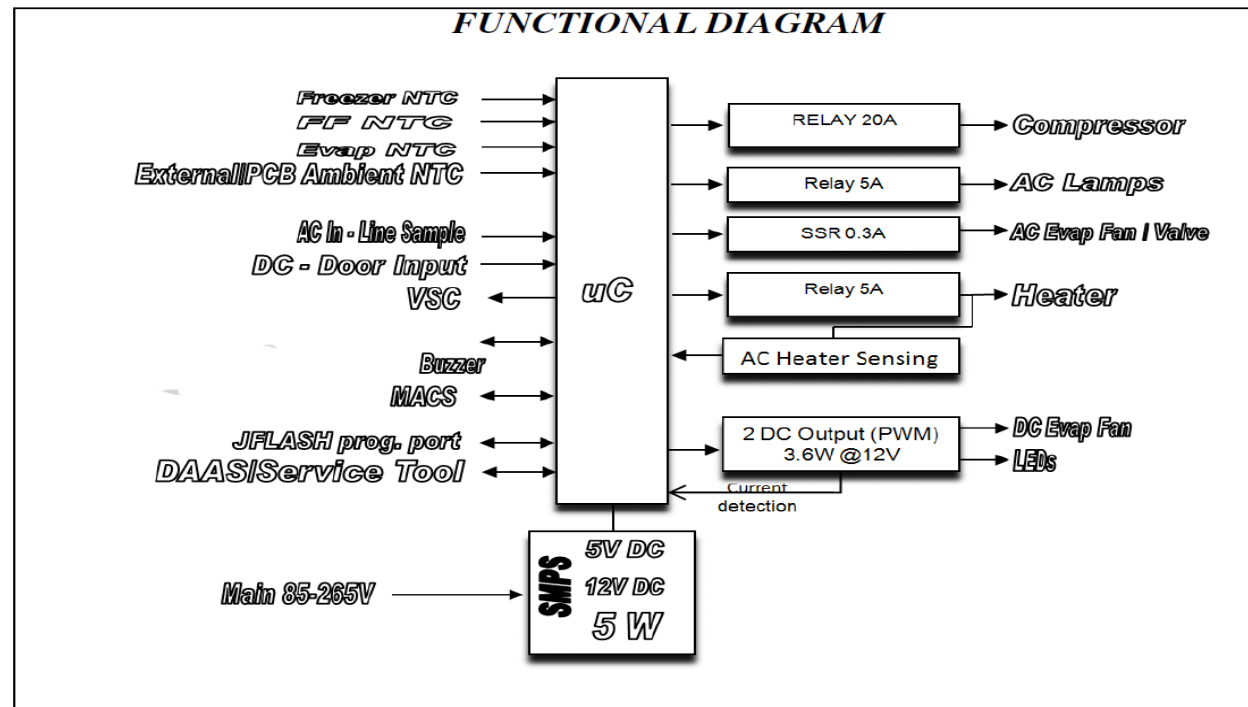
# ERF1600 GENERAL CHARACTERISTICS



The main electronics ERF1600 can be connected to different types of user interfaces. The main electronics communicates through a standard protocol based on MACS with insulated user interface via four wires.

Technical specification	
Operating voltage input	100/240 Vac
Frequency range	50-60 Hz

J2	AC Loads: AC Evap fan, AC Compressor , Defrost heater
J3/J11	Temperature sensors
J9	DC: Evap Fan, LED Board
J10	Digital Input/output - door
J5	Sidekick
JFLASH	
J6/J7/J8	Connection to UI



# SERVICE MODE

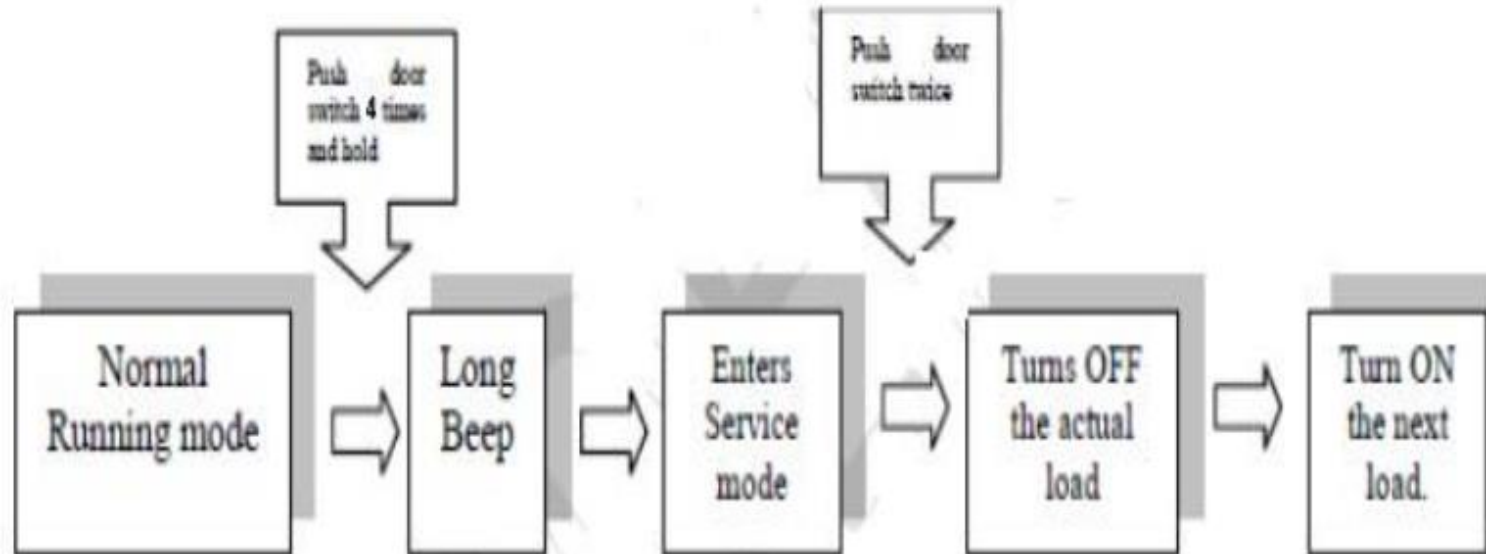


The service mode allows the technician to control all the loads independently. To enter Service mode please follow steps below.

1. In first 12secs once plug in power.
2. Push the door switch 4 (four) times in 4 seconds and hold it pressed until a long beep is heard.
  - IF followed by a SHORT double beep (BEEP BEEP) is heard then FRIDGE temperature sensor broken.
  - IF followed by a short triple beep (BEEP BEEP BEEP) is heard then Evaporator temperature sensor broken.
  - IF followed by a short 4x beep (BEEP BEEP BEEP BEEP) is heard then both temperature sensor are broken.
3. Press the door switch twice to move to Step. Two beeps will sound confirming the command acknowledgement. The steps of the Service Mode are:
  - DIAG\_ENTER 1
  - DIAG\_TEMP SENSOR 2
  - DIAG\_COMPRESSOR 3
  - DIAG\_LIGHTING 4
  - DIAG\_EVAPORATOR FAN 5
  - DIAG\_HEATER 6
  - DIAG\_END 7



Service mode diagram



The service mode will exit:

After 10 minutes of inactivity ,After turning off the unit.

By progressing through the complete diagnostic procedure. A long beep will be heard from the buzzer.

After exiting from Service Mode, the unit will always come back to NORMAL Operation.



## First time defrost

The first defrost is scheduled based on Fridge and Evaporator Temp sensor.

- Fridge Temp  $\geq 10^{\circ}\text{C}$  (or Freezer Temp  $\geq -10^{\circ}\text{C}$ ) and Evap Temp  $< 5^{\circ}\text{C}$  then Defrost immediately
- If Temp Sensor Broken then Defrost after 1hour of CRT (Compressor Run Time)
- Otherwise 6 hour of CRT (Compressor Run Time)

## Routine defrost

The defrost process is split into 4 stages.

- Fan defrost (parameter)
- Heater defrost (60min max)
- Drip time (parameter)
- Defrost compressor pull down (parameter)

The defrost is activated when Defrost Temperature Sensor is below  $0^{\circ}\text{C}$  and:

- a) The actual compressor run timer is bigger than the set Runtime.
- b) The compressor cycle is off and the actual compressor run timer is less than 30 minutes of the set runtime.



## 1<sup>st</sup> Step: Fan Defrost

For a fan defrost the compressor and condenser fan will be turned off and evaporator fan will be turned on. The fan defrost will last for the determined time before moving to a heater defrost.

	Salsa	Bottom Mount	Top Mount
Drip Time	5min	5min	5min

## 2<sup>nd</sup> Step: Heater Defrost

- For a heater defrost the compressor and fan(s) will be turned off. The defrost heater will be turned on. The heater defrost completes under two conditions.
- Reaches max defrost time of 60mins.
- Defrost Temperature Sensor reaches temperature of 10°C.

A timer will be required to measure the length of the defrost. This length will then be used to determine the next runtime.

## 3<sup>rd</sup> Step: Drip Time

Once the defrost has completed the heater will be turned off. The compressor and fan(s) will be left off for the determined time to ensure that any water on the evaporator has a chance to drip away. This will stop water refreezing on the evaporator

	Salsa	Bottom Mount	Top Mount
Drip Time	5min	5min	5min





## 4<sup>th</sup> Step: Defrost Compressor Pull Down

For compressor pull down the compressor and condenser fan are turned back on, and the evaporator fan is off for the determined amount of time to allow for the evaporator to cool down to reduce the hot air blown around the cabinet. Once completed determine defrost time and enter normal operation.

	Salsa	Bottom Mount	Top Mount
Drip Time	5min	10min	10min

## ALARMS

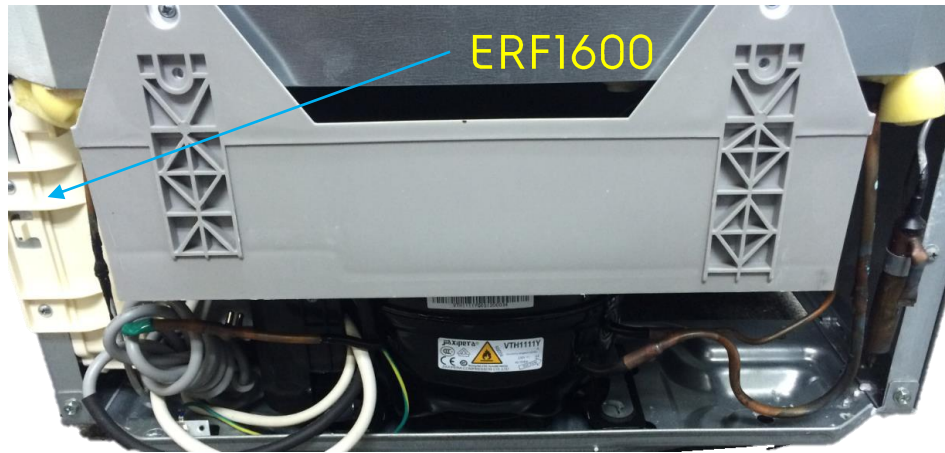
### Door alarm

If the fridge door has been opened for a total of 2 min or more then the alarm will sound. Pressing any button will silence the alarm for 8 min. If the alarm resounds then pressing the button again will silence the alarm for a further 8 min.

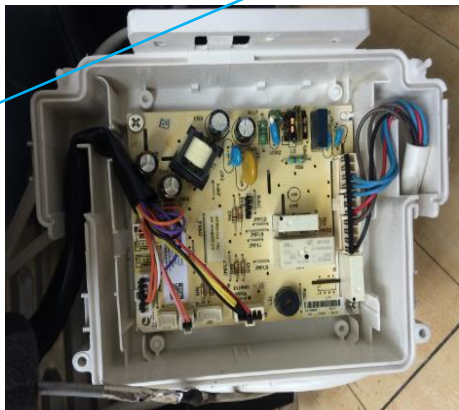
# DISASSEMBLY PART



## Disassembly PCB



Open cover PCB



Anti static Gloves



Always wear Anti static gloves during work



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