WMV TEST ROUTINE & FAULT CODES

Initial Test Routine (factory routine)

When the product is energized to the power supply, an Initial Tests Routine (works automatically) starts as follows:

Note: At this moment, an inner temperature check will occur in the evaporator, through the Defrost Sensor, and then the Routine will start automatically.

- Alarms are deactivated;
- Leds of the Interface Board is connected;
- A sound Alarm is activated by 1 second;
- The Defrost Heater is connected during 6 seconds;
- The Fan Motor is connected during 6 seconds;

After 12 seconds, from the result (temperature) gained from the Defrost Sensor, the Electronic Control will manage the activation of the compressor and fan motor, as follow:

If the Defrost Sensor is warm (temperature > 0º C = positive degree)

• Compressor and Fan will be energized / turned on

If the Defrost Sensor is cold (temperature < 0º C = negative degree)

• Compressor and Fan will not be energized / (will keep off).

After 322 seconds (5.4 minutes) from the beginning of the routine (product energized), an automatic check will occur for all the Sensors (Freezer & Defrost)

If any of the Sensors present failure (open or in short circuit);

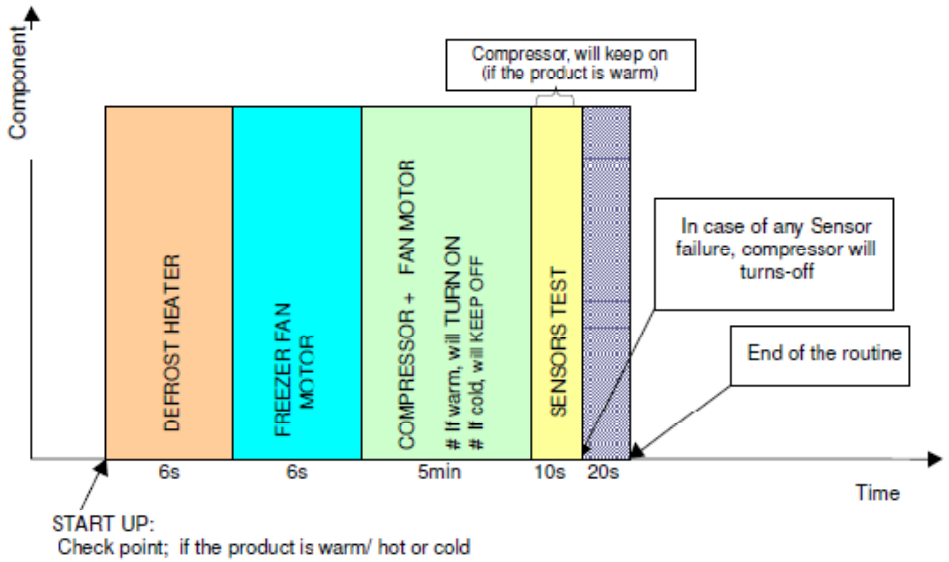
• Code regarding to the faulty Sensor will be shown on the Interface board 2 minutes later of the end of routine, it means, approximately in 462 seconds (7,7 minutos) from the start up, then the operation proceedings will follow as described in item – Alarm System.

In case of no failure is detected

• Product will abort the Automatic Routine (342 seconds/ 5,7 minutes) and starts working in normal activity, switching on the components due to the necessity (temperature freezer selection)

REMARKS
1- This routine always starts when the product is pluged in and has priority over other commands done on the Interface;
2- During this initial automatic test routine, if the Doors are open, the Fan Motor won't be deactivated;
3- If the product is in Defrosting mode, this routine will be aborted due to defrost mode has priority over all functions
The routine ending will be in 5 minutes and 42 seconds.

Summarily, the steps described above can be seen graphically.



Self-Test Routine (handled by the Technician)

This other routine must be carried out by the Technician whenever the product presents any failure. It will make possible the test of the following components:

- Electronic Control;

- Freezer Fan Motor;
- Compressor;
- Defrost heater;
- Lamps.

Test Routine

1. Place an Ammeter type Clamp on one of the defrost heater wires (inside of Electronic Control);
2. With the closed doors, disconnect and connect the power plug from the wall electrical supply;
3. Open and close the both Doors (refrigerator & freezer);
4. On the Interface board, press simultaneously the “Freezer” (temperature selection) and “Fast Freezing keys;

Notes: # At this moment all Leds should be turned off, otherwise the routine was not accepted;
The operations of items 1 to 4 must be done within 1minute for the self-test to be accepted;

5. Press the “Freezer” key, and the fan motor will switch on;

Note: # At this moment the maximum level of freezer temperature Led will light up;
Leave the fan switched on for 4 minutes, so that the system’s pressure equalizes and the Compressor may be tested in the next step.

6. Press the “Freezer” key again, and the fan motor will switch off;

Note: # At this moment the maximum level of freezer temperature Led will turn off;

7. Press the “Freezer” key, and the compressor will turn on;

Note: # At this moment the medium level of freezer temperature Led will light up;

8. Press the “Freezer” key and the compressor will switch off;

Note: # At this moment the medium level of freezer temperature Led will turn off;

9. Press the “Freezer” key again, and the defrost heater will switch on;

Note: # At this moment the minimum level of freezer temperature Led will light up;
Check on the Ammeter if the heater was switched on. If ncessary, unplug the product from the power supply and check its ohmic value according to the Defrost Heater topic.

10. Press the “Freezer” key, and the heater will switch off;

Note: # At this moment the minimum level of freezer temperature Led will turn off;

11. Press the “Freezer” key once again and the Lamps (refrigerator & freezer) will switch on;

Note: # At this moment the Fast Freezing Led will light up;

12. Press the “Freezer” key, and the Lamps (refrigerator & freezer) will switch off;

Note: # At this moment the Fast Freezing Led will turn off;

13. Press the “Freezer” key again and all Leds will light up with a long BEEP together for some seconds;

Note: # If it not occur, some failure was detected during the test routine (driver on the Electronic Control are not working properly), therefore, the sound alarm will activate (beep) and followed by one (or more) off the Leds blinking, according to the table below.
Check the interface/ load component related and proceed the routine once again, later check the Electronic Control.

Component related	Correspondent LED Blinking
Freezer Fan Motor	
Compressor	
Defrost Heater	
Lamp	

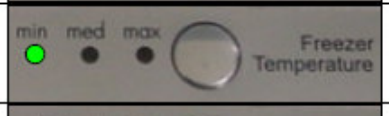
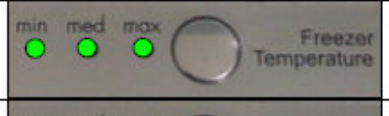
Notes: a) If there are more than one led blinking, it means, more than one driver failed
b) The related Led will blink until the routine end, after this will turn-off
c) The Alarm (visual & sound) can be reseted by pressing Alarm off key.

14. Press the “Alarm off” key and the product will cancel its test routine and return to normal operation;

Alarm System
Should the product present any irregularity (according the possibilities below), it will set off a sound (“BEEP”) and visual (3 Leds “Freezing Level “, Minimum, Medium and Maximum blinking) Alarm, through the Interface Panel and a fault code will be stored in the memory of the Interface Board, getting the diagnosis easy.
Before visiting a client requiring service, we must request that they press the Alarm Off key for a few seconds and the failure code will appear automatically on the Leds of Freezer temperature control (Interface Board)

ATTENTION
When one of these faults occur, the client must be instructed to turn off the sound alarm by pressing the Alarm Off key, however, **THE PRODUCT MUST NOT BE UNPLUGGED FROM THE WALL SOCKET.**

The Alarms can be:

Code	ALARM	LEDS Codification	Leds Presentation
01	DEFROST SENSOR		Off / On / Off
02	FREEZER SENSOR		On / Off / Off
03	TEMPERATURE ALARM		On / On / Off
04	OPEN DOOR		On / On / On
05	COMMUNICATION ERROR		Off / Off / On