Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

Voltage Measurement Safety Information
When performing live voltage measurements, you must do the following:
Verify the controls are in the off position so that the appliance does not start when energized.
Allow enough space to perform the voltage measurements without obstructions.
Keep other people a safe distance away from the appliance to prevent potential injury.
Always use the proper testing equipment.
After voltage measurements, always disconnect power before servicing.

Component Specifications

**Compressor**
- **Species of parts:** 110VAC/60HZ unless noted
- **BTU/h:** Variable VESZIP heat
- **Valve:** 80/62, 113 watts
- **Current Lock motor:** 3.3 amps 15%
- **Current Full load:** 3.3 amps 15%
- **Resistor Winding resistance:** 6.4 ohms 10%
- **Resistor Start winding resistance:** 4.5 ohms 10%
- **Inverter:** 36-48 VCD, Red / White -120 VAC

**Evaporator Fan Motor**
- **Maximum cooling time:** 16 seconds
- **Temperature Rating:** 11°F to 110°F
- **RPM:** 3

**Thermistor**
- **Temperature:** 71°F to 240°F
- **Resistance:** 7964 ohms 10%
- **Current:** 3.3 amps 15%

**Condenser Motor**
- **Rotation (facing opposite end):** Clockwise
- **RPM:** 3000 RPM
- **Resistance:** 20.3 ± 25% @ 12 VDC
- **Note:** Fan blade must be fully seated on shaft to achieve proper airflow.

**Evaporator Fan Motor**
- **Rotation (facing opposite end):** Clockwise
- **RPM:** 3000 RPM
- **Resistance:** 3.3 ± 15% @ 12 VDC
- **Note:** Fan blade must be fully seated on shaft to achieve proper airflow.

**Thermal Defrost (Delay)**
- **Valve:** 1020/240 vac
- **Water:** 495 volts
- **Resistance across terminals:** 3.75 ohms 5%
- **Resistance above 46° F:** Open
- **Below 42°F:** Closed

**Evaporator Heater**
- **Valve:** 15VAC
- **Power:** 470 ohms 5%
- **Water:** @ 115VAC
- **Resistance:** 21.85 ± 15%T

**Control Board**
- **Valve:** 212VAC, 60 Hz

**Dual Water Valve**
- **Water:** 20x24 Yellow, 30x12 Sw

**Isolation Valve**
- **Water:** 20x24, 30x12

**Light Switch**
- **Type:** SPDT NO/NC
- **Volts:** 3000 RPM
- **Amperes:** 5.4 ± 15% @12 VDC
- **Current:** 4.5 ± 15% @12 VDC

**Heat Pump Diagnostics**

Control board Troubleshooting

Press any key to activate.
Service: 02 Close - If the control panel responds, remove power from the entire appliance for 10 seconds. Re-apply power wait 10 seconds, and perform the service diagnostics routine.
NOTE: The door actuator motor cycles 1 minute after the ice dispensing.

Component Switches

- **SW1 - 12V Door Switch Control**
- **SW2 - Door Switch Input**
- **SW3 - Ice Door Step Motor Switch**
- **SW4 - Water Valve ON**
- **SW5 - Water Valve OFF**
- **SW6 - Water Valve ON**

Fault Codes

- **SW1 and SW5 are used for navigation and are not displayed.**
- **SW4 and SW5 are not used.**

Service Test - 11 Dispenser Lighting

- "Press SW1 will change the dispenser lighting setting from OFF (0%) to ON (100%) to DIM (50%)" Status indicator is blank.

Service Test - 12 Accurate Light Turns on

Service Test - 13 CF Door Switch Input

- "Press the CF Door Switch in real-time on the UI display. Verify that the open and close status display correctly. (02 - Form CF Door closed)."

Service Test - 14 CF Door Close

- "Press the Ice Door stepper motor state on the UI display. Press idle paddle and verify that the mechanical operation of the stepper motor responds to the component status indicator. NOTE: door paddle will have a delay as an idle state is released. (01 - Closed, 02 - Opening, 03 - Opening, 04 - Closing)."

Service Test - 25 Water Filter Usage Rating

- "Displays in two sequential flashes the total water usage rating in gallons for the water filter on the UI display. Wait until dash is displayed and display of the number (000-999) / Example: 123 will be displayed as "123".

Service Test - 26 Water Filter Time Rating

- "Displays in two sequential flashes the total time rating in days for the water filter on the UI display. Wait until dash is displayed and display of the number (000-999) / Example: 123 will be displayed as "123".

Service Test - 27 Water Filter Time Usage

- "Displays in two sequential flashes the current water filter status in gallons used since last reset on the UI display. Wait until dash is displayed and display of the number (000-999) / Example: 123 will be displayed as "123".

Service Test - 28 Water Filter Reset

- "In the user interface display, the current water filter status is displayed on the UI display. Wait until dash is displayed and display of the number (000-999) / Example: 123 will be displayed as "123."

Service Test - 29 Water dispensing and icemaker fill test

- "Confirm icemaker fill is set in "Free". The icemaker will show icemaker fill status. Press the water pad to initiate the water dispenser.
NOTE: To initiate icemaker fill jumps icemaker thermostat T and H.

Service Test - 30 Main Control Software Version

- "Displays in three sequential flashes the main Control Software version on the UI display. NOTE: This is repeatedly displayed during all time in this step (000-999) / Example: 000/999"

Service Test - 31 Input Module Software Version

- "Displays in three sequential flashes the Dispenser UI Control software version on the UI display. NOTE: This is repeatedly displayed during all time in this step (000-999) / Example: 000/999"

Service Test - 32 Ambient Thermistor UI Control

- "Is an internal check. The board will check the Thermistor value and display the temperature on the UI display. The results are: (01 = Pass, 02 = Open, 03 = Short)."

Service Test - 33 Humidity Sensor UI Control

- "Displays in two sequential flashes the humidity sensor UI Control software version on the UI display. The results are: (01 = Pass, 02 = Open, 03 = Short)."

Service Test - 34 Vertical Mullion Heater Status

- "Displays in two sequential flashes the Vertical Mullion Heater Status on the UI display. (01 = Pass, 02 = Open, 03 = Short)."

Service Test - 35 Vertical Mullion Heater Status

- "Displays in two sequential flashes the Vertical Mullion Heater Status on the UI display. (01 = Pass, 02 = Open, 03 = Short)."

Service Test - 36 Horizontal Mullion Heater Status

- "Displays in two sequential flashes the Horizontal Mullion Heater Status on the UI display. (01 = Pass, 02 = Open, 03 = Short)."

Service Test - 37 Diaper Dispenser Operation

- "Displays in three sequential flashes the Dispenسر UI Control software version on the UI display. NOTE: This is repeatedly displayed during all time in this step (000-999) / Example: 000/999"

Service Test - 38 FLASH Control Software Version

- "Displays in three sequential flashes the FLASH Control Software version on the UI display. NOTE: This is repeatedly displayed during all time in this step (000-999) / Example: 000/999"