



⚠ CAUTION!

TRUBLESHOOTING SHOULD BE PERFORMED BY A QUALIFIED HVAC TECHNICIAN.

⚠ WARNING!

ELECTRICAL SHOCK HAZARD: ELECTRICAL POWER MUST BE PRESENT TO PERFORM SOME TESTS. THESE TESTS SHOULD BE PERFORMED BY A QUALIFIED SERVICE PERSON.

⚠ WARNING!

120 VOLTS MAY CAUSE SERIOUS INJURY FROM ELECTRIC SHOCK. TURN OFF CIRCUIT BREAKER BEFORE STARTING INSTALLATION OR SERVICING, AND LEAVE CIRCUIT BREAKER OFF UNTIL INSTALLATION OR SERVICE IS COMPLETED.

Symptom	Possible Reason	Troubleshooting Procedure
Poor dehumidification performance and evaporator coil is covered in ice or frost.	<ol style="list-style-type: none"> Defrost sensor or connection is defective Poor airflow Low refrigerant charge 	<ul style="list-style-type: none"> Check circuit board connection for loose plug or wires. Press and hold both arrow buttons for >5 seconds to display the defrost sensor temperature, replace the sensor if the reading is an error. See diagnostic - Error code "1" Verify airflow over the coils is not blocked or restricted, clean filter and/or coils as required. Note that sealed system is not generally field serviceable See diagnostic - Error code "3"
Poor dehumidification performance, compressor is running and evaporator coil is not cooling.	<ol style="list-style-type: none"> Failed compressor or low compressor 	<ul style="list-style-type: none"> See diagnostic - Error code "3" Note that the sealed system is not generally field serviceable.
A leak or standing water in the drain pan.	<ol style="list-style-type: none"> Kink in the drain line Drain line clogged Clog in small vinyl tubing that connects the drain pan to the drain port 	<ul style="list-style-type: none"> Verify there are no kinks in the drain line. Verify there are no clogs in the drain line. If clogged pour a mixture of household vinegar (diluted 1:3) with water directly into the front edge of the drain pan. Verify no clogs in the small vinyl tubing that connects the drain pan to the drain port by pouring a small amount of water into the front edge of the drain pan to make sure it flows through the drain port. If water does not come through verify MD33 is plumb and not leaning forward or out of level.



Symptom	Possible Reason	Troubleshooting Procedure
Neither blower nor compressor is running and the display is off.	<ol style="list-style-type: none"> 1. No power to the unit, circuit breaker tripped 2. Power board wiring or connector loose 3. Control board wiring or connector loose 4. Circuit board failure 	<ul style="list-style-type: none"> • Locate circuit breaker and reset if necessary. • Check all circuit board connections for loose plugs or wires. • Replace the control board and power board.
Neither blower nor compressor is running and the display is on.	<ol style="list-style-type: none"> 1. No call for dehumidification. 2. Wiring or connectors loose 	<ul style="list-style-type: none"> • Press down arrow until setpoint reads "00", wait 1 minute, fan and compressor should run. • Check wiring and connectors for damage or loose connections.
The blower is running and the compressor is cycling on and off while ambient humidity is high.	<ol style="list-style-type: none"> 1. Unit is defrosting 2. Ambient temperature is too low 3. Defrost sensor malfunction 4. Poor airflow 5. Failing compressor relay 6. Compressor or sealed system failure 	<ul style="list-style-type: none"> • Check setpoint: If the setting is "00" increase setpoint to 55%. • Cold ambient conditions will cause the unit to go in and out of defrost (this is normal). • Press and hold both arrow buttons for >5 seconds to display the defrost sensor temperature, replace the sensor if the reading is in error. • Verify airflow over the coils is not blocked or restricted, clean filter and/or coils as required. Replace power board. • Note that the sealed system is not generally field serviceable.
The blower is not spinning humidity is high and the compressor is running.	<ol style="list-style-type: none"> 1. Wiring or connectors loose 2. Blower relay failure 3. Blower capacitor failure 4. Blower failure 	<ul style="list-style-type: none"> • Check wiring and connectors for damage or loose connections. • Check power to blower circuit, replace power board if no power is detected. • Replace blower capacitor if failed. • Replace blower (note requires the unit be removed from installation).
The blower is running and the compressor is off while ambient humidity is high (the evaporator coil is warm).	<ol style="list-style-type: none"> 1. Wiring or connectors loose 2. Compressor relay failure 3. Compressor capacitor failure 4. Compressor failure 	<ul style="list-style-type: none"> • Check wiring and connectors for damage or loose connections. • Check power to compressor circuit, replace power board if no power is detected. • Replace compressor capacitor if failed. • Note that the sealed system is not generally field serviceable.



The Santa Fe UltraMD33 has an illuminated display, user selectable setpoint, and a power ON / OFF button located behind the diffuser. The diffuser is fastened with tamper resistant screws to limit access to the control. The diffuser can also be fastened with the included Phillips screws if limiting access to the control is not needed.

When turning power on for the first time, the set point will be at the factory setting of 55% RH. In the event of a power outage, the dehumidifier restarts at the previous set point when power is restored.

Pressing the middle button (the power button), the control will toggle the Santa Fe UltraMD33 to turn ON or OFF.

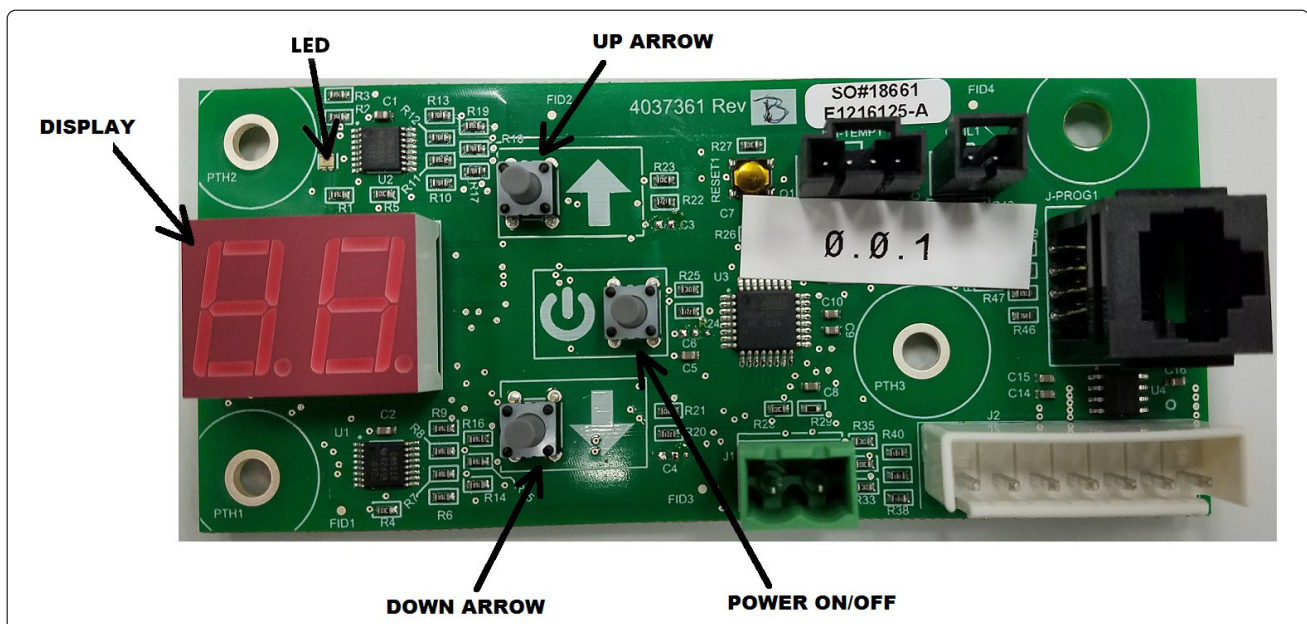
If the unit is on and power button is pressed, control will turn compressor and fan off. As a result, both DISPLAY and LED will go off.

If the unit is off and power button is pressed, control will turn fan on. As a result, both DISPLAY and LED will go on.

If there is an error, the unit will shut down and indicator LED will turn to red and display will show an error code (see page 13 for error codes).

1. Sequence of Operation

- Press the ON / OFF button to turn the dehumidifier control on. The display will show "00" for a couple of seconds and then it will display the RH level of the room and the dehumidifier blower will turn on to start sampling the air for one minute. Indicator LED, located above display, will be green, showing the unit is operating normally.
- Pressing either of the arrow keys will cause the DISPLAY to flash and indicate the current set point. The RH set point can be adjusted from a minimum of 35% to a maximum of 99% in 1% increments. Adjust the humidity set point as desired. The recommended initial setting is 55%.
- Pressing the DOWN arrow key below the 35% set point on the control will cause the display to read "00" and the Santa Fe UltraMD33 will run continuously. After 10 seconds, it will go back to display room RH level.
- Ten seconds after making an adjustment, from either UP or DOWN arrow keys, the display will go back to show the room RH level.
- If the sensor detects a reading above the set point, it will run the fan to sample the return air for a period of one minute. The sampled humidity of the return air will be compared to the RH setting. If the humidity is above the setting, the dehumidifier compressor turns on. The compressor remains on until the measured humidity falls 3% below the RH setting. If the sampled humidity is below the setting, the compressor and blower turn off and the display returns to showing the RH setting. The dehumidifier will sample again every 15 minutes.





2. Diagnostic, Maintenance and Servicing

Error codes:

- "1" = Prompting a bad RH sensor.
- "2" = Condensate pump or external float switch is installed in the drain line and is detecting a closed switch.
- "3" = The delta temperature between ambient and evaporator coil not wide enough to reflect a normal operating condition. Unit will turn off and try to restart after an hour.

3. Evaporator Temperature Mode

To enter evaporator temperature mode, press and hold both arrow buttons for >5 seconds and the LED will change to Blue.

The display will flash at twice the rate of "set point" mode and display the evaporator coil temperature.

Press any button to exit evaporator temperature mode.

4. Ambient Temperature Mode

To enter ambient temperature mode, press and hold the up arrow and power buttons for >5 seconds and the LED will change to Purple.

The display will flash at twice the rate of "set point" mode and display the ambient temperature.

Press any button to exit ambient temperature mode.

