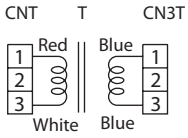
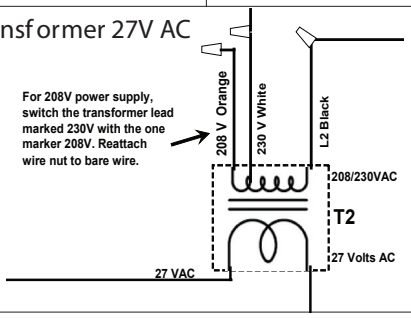
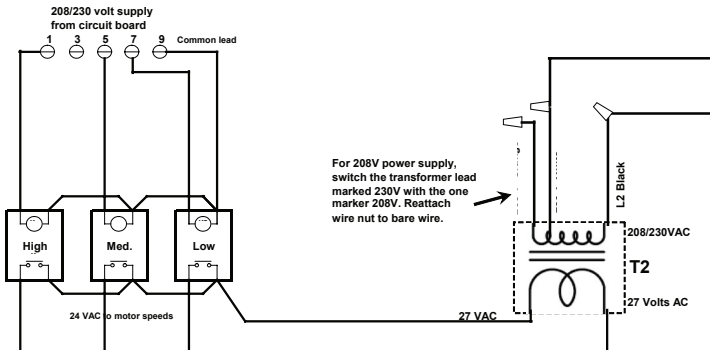
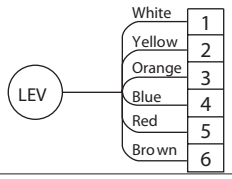
7 TROUBLESHOOTING

7-1. How to check the parts

<table>
<tr><th>Parts name</th><th>Check points</th></tr>
<tr><td>Room temparature thermistor (TH21)
Liquid pipe thermistor (TH22)
Gas pipe thermistor (TH23)</td><td>Disconnect the connector, then measure the resistance using a tester.
(Sorrounding temperature 10°C~30°C[50°F~86°F])
<table><tr><th>Normal</th><th>Abnormal</th></tr><tr><td>4.3k ~9.6k</td><td>Open or short</td></tr></table>(Refer to the thermistor)</td></tr>
<tr><td>Transformer 24V
 
</td><td>Disconnect the connector and measure the resistance using a tester.
<table><tr><th></th><th>Normal</th><th>Abnormal</th></tr><tr><td>CNT(1)-(3)</td><td>App.45</td><td rowspan="2">Open or short</td></tr><tr><td>CN3T(1)-(3)</td><td>App.1</td></tr></table></td></tr>
<tr><td>Transformer 27V AC
 
</td><td>Make sure the proper transformer lead is connected for the proper supply voltage. See diagram at left.

Measure the supply voltage to the transformer. The supply voltage should be between 187 and 229 volts if the transformer is connected to a 208 volt power supply. The reading should be between 207 and 253 volts if connected to a 230 volt power supply.

With the proper supply voltage, the transformer output voltage should be approximately 27 volts. If no voltage is measured, replace the transformer.</td></tr>
<tr><td>Fan Relays
 
</td><td>There are 3 fan relays. One relay for each high, medium and low speed operation.
The fan relays have a 208/240 V AC coil that is energized by the circuit board. The relay switches a 24 V AC circuit, which provides the speed signal for the motor. The relay energized will be determined by which speed is selected at the controller .
To check operation:
Make sure power to the system is on and the unit is not in stand by mode.
1. Select high, medium or low speed at the controller .
2. At the corresponding relay based on the speed selected, check the voltage across the relay coil which is supplied from the circuit board.
3. If 208/230 V is measured, go on to step 4. If no voltage is measured, replace the circuit board .
4. If there is voltage present, the relay contact should be closed.
5. To check the contact. Turn power off. Remove the 24 V wires from relay contact.
6. Reapply voltage and select the fan speed. Check the continuity across the contact. If there is no continuity across the contact, replace the relay. If there is continuity across the contact, the relay is OK. Refer to the motor troubleshooting section.</td></tr>
<tr><td>Linear expansion valve
 
</td><td>Disconnect the connector then measure the resistance valve using a tester.
Refer to the next page for a detail.
<table><tr><th colspan="4">Normal</th><th>Abnormal</th></tr><tr><td>(1)-(5)
White-Red</td><td>(2)-(6)
Yellow-Brown</td><td>(3)-(5)
Orange-Red</td><td>(4)-(6)
Blue-Brown</td><td rowspan="2">Open or short</td></tr><tr><td colspan="4">150 10%</td></tr></table></td></tr>
</table>