



D23-TF (Mini Make-Up Air Heater Controller) :

The first step in testing the D23-TF controller is to confirm that there is 24 VAC powering the board (bottom-right connections on the board).

If stages 1 to 3 and the fan LED do not turn on, you may temporarily bypass the ON/OFF control by shorting 'T1' and 'L1'.

With the built-in temperature sensor (located in the duct) connected to 'S' and 'S', you can simply dial your set point on the blue potentiometer on the controller. Temporarily set this to max by turning fully clockwise. The amber 'W' LED should start flashing then the fan 'F' LED, followed with stages 1 to 3 sequentially with a delay of a few seconds.

If the amber LED flashes and there are still no lights for stages 1 to 3 nor the fan LED light, the temperature sensor may be at fault. To test the sensor, disconnect the wires to 'S' and 'S', then verify the sensor using an ohmmeter, which should be around 10K ohms at room temperature. Note that without a sensor connected, the fan and stages 1 to 3 will never come on, only the flashing amber 'W' LED will. Also, when reconnecting the temperature sensor, a power-up reset is required.

Finally, if all the LED lights on the board come on accordingly, it is possible other internal output circuitry on the board may be defective.

To make sure the controller is good, verify with a voltmeter that approximately 30VDC is measured across SSR1+ and SSR1-, C2+ and C2-, C3 and COM, and C4 and COM.

