Troubleshooting Guide
CTTG #135

Over Temperature (AdOi, OtPc) trips

This document pertains to UNIDRIVE Size 5

WARNING
DO NOT ASSUME POWER IS OFF BECAUSE THE DRIVE DISPLAY APPEARS DEAD OR NO FANS ARE HEARD.
THE VOLTAGE APPLIED TO THIS DRIVE CAN BE LETHAL IF TOUCHED!

Background:
The UNI 5 drive employs a thermistor to detect the temperature of the top heatsink (Figure 1). It is located behind the IN96 board (Figures 1, 2). Ideally, if at any time the upper heatsink temperature becomes excessive, the IN96 board will sense it and send an OtPc trip to the keypad display with the IN96 board OVERTEMP LED lighting (Figure 3). There are two thermistors monitoring the lower heatsink behind the IGBTs but are not applicable to this note.

Problem: AdOi may be displayed without the IN96 board OVERTEMP LED lighting. A pull-up resistor associated with the overtemperature trip circuit that has too high a value may cause this anomaly. This results in the trip circuit outputting a voltage between “no trip” and “full trip” values resulting in AdOi being displayed.

Solution: Replace the IN96 board with an updated version and return the defective board for repair and upgrade.
IN96 PCB location. Heatsink is located directly behind IN96 board.

Thermistor location