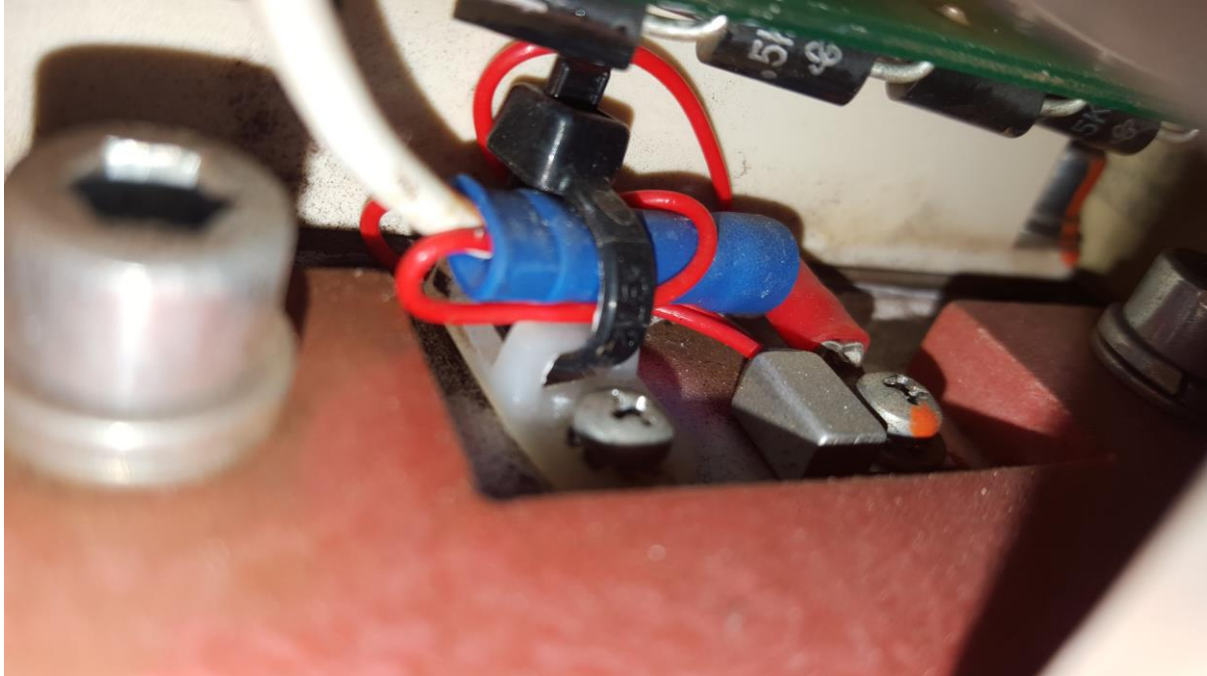


## Case Study – Power Cell Over Temperature

CHB Drives performed an investigation on a power cell with a reported over temperature fault.



Using the CHB medium voltage drive demonstrator the power cell was tested which verified the over temperature fault as reported was correct.

The over temperature circuitry on the cell control board was tested. Voltages and waveforms were recorded and compared against known expected values and waveforms. Component actual values were checked for resistors and capacitors used in the circuit to make sure they fell within specification.

A faulty thermistor was found for the overtemperature detection. The thermistor was replaced, and full functional testing was conducted using the drive demonstrator and the CHB in house developed cell tester. The power cell was run on load until a temperature that was high enough to be reported was sent back from the power cell to the cell tester. This temperature was checked against a temperature reading using an infrared heat gun for verification.

A comprehensive report was generated documenting the failure, repair and testing completed. All CHB Drives repairs come with a one-year warranty for the repair work.