DSG-SoLID Magnet Controls Meeting Minutes

Date: August 18, 2021
Time: 11:00 – 12:00

Attendees: *Aaron Brown, Peter Bonneau, Pablo Campero, Brian Eng, George Jacobs, Tyler Lemon, Steven Lassiter, Marc McMullen, and Whit Seay*

1. **Completed drawings reviewed**
   Mary Ann Antonioli and Pablo Campero
   1. Will modify A00000-16-03-0240 *Radial Strain Gauges Measurement Wiring Diagram*
      - Need to remove line that is crossing the drawing
      - Change labels for excitation and signal readout connections
   2. Will modify A00000-16-03-0312 *PLC Relay Module, Remote B, Slot 2 Wiring Diagram*
      - Need to add a wire for 24 VDC supply for heaters

2. **Completed drawings**
   Mary Ann Antonioli and Pablo Campero
   1. A00000-16-03-0307 *PLC ADC Module, Remote A, Slot 7 Wiring Diagram*

3. **Drawings in progress**
   Mary Ann Antonioli and Pablo Campero
   1. A00000-16-03-0241 *Axial Load Cells Measurement Wiring Diagram*
   2. A00000-16-03-0308 *PLC ADC Module, Remote A, Slot 8 Wiring Diagram*
   3. A00000-16-03-404 *Axial Load Cell Cable Diagram*

4. **Cables for SoLID magnet instrumentation**
   Pablo Campero, Brian Eng, and Marc McMullen
   1. Reviewed *Cable List* spreadsheet
   2. Ordered cables to connect strain gauge sensor to terminal strip, signal conditioning module and PLC
   3. Ordered cables to connect load cell sensor to terminal strip, signal conditioning module and PLC
   4. Need cables to connect MFCs, He pressure transducer, N_2 pressure transducer, and vacuum gauge sensors to terminal strip, signal conditioning module and PLC module
      - Confirmed that 16-conductor cable can be used to connect readout signals for N_2 pressure transducer, He pressure transducer, vacuum gauge, and MFCs from signal conditioning breakout board to PLC terminal strip
      - Cable to connect vacuum gauge from its controller, RJ-45 connector to terminal strip at rack # 1 will be 8-conductor.
        - Cable will be terminated with a RJ-45 connector on one end and ferrules on the other
      - Will order cable to connect MFCs from its Mini-DIN connector to terminal strip
        - Will order Mini-DIN male connector

5. **Current lead heaters**

Whit Seay, Pablo Campero, Brian Eng

1. Cartridge heaters of 400 W were used for CLEO II
2. There is a temperature sensor (J series, type 22, PN: CJS-PL120A) located near each heater
3. Drawing with approximate locations of heaters was provided; could not locate part number for heaters in the drawing
4. Cartridge heater will be controlled by an independent temperature controller external to the PLC