

DSG-SoLID Magnet Controls Meeting Minutes

Date: August 11, 2021

Time: 11:00 – 12:00

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

1. Sorbs and current lead heaters' controls

Pablo Campero and Brian Eng

1. Researched specifications and controls for sorb heaters used for CLEO-II magnet
 - Used two heaters in series per sorb, each heater 10 W, 330 Ω , 120 VAC
 - There is a rhodium-iron temperature sensor installed in each sorb
 - Heaters and temperature sensors were monitored by *Doric Data Logger*
 - Oxford manual recommends drawing AJE-1005 for details
2. Sorbs and current leads heaters will not be used for first stage testing in the Test Lab
3. For now, wiring drawings of connections from heaters to controls rack and to PLC I/O rack instrumentation are not required

2. Completed drawing

Mary Ann Antonioli and Pablo Campero

1. A00000-16-03-0403 *Radial Strain Gauges Cable Diagram*

3. Modification for drawings in progress

Mary Ann Antonioli and Pablo Campero

1. A00000-16-03-0240 *Radial Strain Gauges Measurement Wiring Diagram*
2. A00000-16-03- 0307 *PLC Relay Module, Remote A, Slot 7 Wiring Diagram*
3. A00000-16-03-0312 *PLC Relay Module, Remote B, Slot 2 Wiring Diagram*
 - Need to change terminal strip number from 2 to 5
4. A00000-16-03-0404 *Axial Support Load Sensors Cable Diagram*

4. Cables for SoLID magnet instrumentation

Pablo Campero, Brian Eng, and Marc McMullen

1. Requesting quotes for strain gauge cables to connect
 - Tuchel 5-pin socket to terminal strip
 - Terminal strip to Dataforth signal conditioner terminals
 - Signal conditioning breakout board terminals to PLC terminal strips
 - PLC terminal strips to PLC terminal block terminals
2. Requesting quotes for load cell sensors cables to connect
 - Tuchel 5-pin socket to terminal strip
 - Terminal strip to Dataforth signal conditioner terminals
 - Signal conditioning breakout board terminals to PLC terminal strips
 - PLC terminal strips to PLC terminal block terminals
3. Ferrules and ferrule crimper ordered
 - Purchased ferrules in red, black, and white
 - For single and double conductors, 20–24 AWG and 16 AWG
4. Will research cables for the He pressure transducer, N₂ pressure transducer, and vacuum gauge connections