

DSG-SoLID Magnet Controls Meeting Minutes

Date: September 29, 2021

Time: 11:00 – 12:00

Attendees: Aaron Brown, Peter Bonneau, Pablo Campero, Brian Eng, George Jacobs, Marc McMullen, and Whit Seay

1. Drawings in progress

Mary Ann Antonioli and Pablo Campero

1. A00000-16-03-306 *PLC IO Remote A, Slot 6 Wiring Diagram*
 - Changed cable colors on drawing to match cable selected (40-conductor cable)
 - Channel 4 of PLC relay module controls remote reset of the liquid level controller, which is connected to the voltage controller module
 - Based on specifications for voltage controller module, 15 VDC is required to reset liquid level controller unit; currently there is no 15 VDC power supply
 - Need updates on liquid level remote power reset connections

2. Changes to power distribution to instrumentation

Pablo Campero and Brian Eng

1. Completed modifications for drawing A00000-16-03-350 *Power Distribution Wiring Diagram*
 - Added 5 VDC power supply dedicated to strain gauges and load cell sensors
 - Added a terminal strip group named pow-ts-03
 - Redrew connection lines and relabeled circuit breakers as needed
2. Modified version of the drawing is available in pdf format and can be reviewed

3. Changes to Rack #2 rear layout

Pablo Campero

1. Modifying drawing A00000-16-03-0100 *Instrumentation Control Panels Front Layout*
 - Added a 5 VDC power supply for strain gauges and load cell sensors
 - Re-arranged circuit breakers
 - Added a terminal strip group with three 2nd level terminal strips for power connections
 - Need to update Parts List to match rack

4. Instrumentation cabling

Mary Ann Antonioli, Pablo Campero, Brian Eng, Mindy Leffel, and Marc McMullen

1. Thirty cables completed
2. Maintaining spreadsheet to provide information required to fabricate cables
3. DSG received the following parts:
 - 10 ribbon cables, no part number
 - 13 terminal blocks, TBCH A 1446
 - 1 SOLA power supply, SDP 5-5-100T
 - 1 bag (various sizes) side jumpers, AB 1492
 - 32 circuit breakers, AB 1489-M1C020, SER D
4. Nine of the thirteen terminal blocks were wired
5. Connection of completed cables in the racks will begin this week

5. Cable and connector procurement

Marc McMullen

1. Reviewed *Cable List* spreadsheet
2. Received 1000' of 2-conductor cable for the 24 and 5 VDC power connections
3. Ordered and received 40-conductor cable 306-01 for LL, QD, PLC fast/slow dump MPS, and CCS reset
 - Connects signals from PLC terminal strip to PLC module's terminal block
4. Received connectors for pressure transducer, MFCs, and liquid levels
5. Researching cable to connect magnet power supply to terminal strip

6. Other topics

Pablo Campero, Brian Eng, Marc McMullen, Steven Lassiter

1. Discussed drain wire connections for temperature sensors cables
 - Checked drawing A00000-16-03-0210 (e.g. cable 400-01, 210-01)
 - For now, decision will be put on hold and all drain wires will be kept and folded until final location for connection is defined