

SoLID Magnet Controls Meeting Minutes

Date: May 26, 2021

Time: 11:00 – 12:00

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

1. Completed drawing modifications

Mary Ann Antonioli and Pablo Campero

1. A00000-16-03-0210 *Magnet Temperature Sensors Wiring Diagram*
2. A00000-16-03-0211 *CCS Boards for Magnet Temperature Sensors Wiring Diagram*

2. Electrical drawings in progress

Mary Ann Antonioli and Pablo Campero

1. A00000-16-03-0402 *JT Valve Controls Cable Diagram*
 - Added description for female LVDT and Motor connectors at the actuator valve end
 - Will add description of cable once it is selected
 - Will check that actual selected cable colors match cable colors shown in drawing
2. A00000-16-03-0260 *LVDT Transducers Wiring Diagram*
 - There are 32 used and four new Macro Sensors LVC-2412 Signal Conditioners on hand; only nine are required
 - Need to change labels for signal conditioner modules in drawing
 - Will change pin number labels to show correct connections from primary and secondary core to signal conditioner module
 - Will change pin number labels to show correct connections for voltage and current output on the signal conditioner modules
 - One cable could be used to wire each signal conditioner's output current channel to PLC input module's channel
 - Discussed model for 4–20 mA transmitter to be used for the EB valve (helium warm return)
 - Will send picture for confirmation
3. A00000-16-03-0406 *PT-102 and Diode Temperature Sensors Cable Diagram*
 - Need to add specifications for current leads temperature sensors cable once it is selected. Cable connects socket connector with terminal strip
 - Need to add specifications for heat exchanger temperature sensors cable once it is selected. Cable will connect 10-pin vacuum feed-through connector with terminal strip

3. Cables and connector research

Pablo Campero, Brian Eng, and Marc McMullen

1. Ordered cables for voltage taps and magnet temperature sensors; CCR temperature sensors cables were placed in the physics storage building
 - Picture with the location will be sent
2. Connectors for voltage tap cables are in hand
3. Two cables for current lead temperatures sensors and heat exchanger temperature sensors will have the same specifications
 - 100' long
 - Low voltage and current ratings
 - Minimum of eight conductors
4. Researching cable to connect each motor drive signal from JT valve actuator connector to terminal strip at instrumentation rack; nine required
 - Determined specifications for each cable
 - 100' long
 - Voltage rating: 24 V
 - Current rating: 2.2 A
 - Minimum of four conductors
 - The part number for male connector on the JT valve actuator is GOB-12-88 PN
 - The part number for female connector on the valve actuator end is UT06128SH
5. Researching cables to connect each LVDT signal conditioner's signals from JT valve actuator connector to terminal strip at the instrumentation rack; nine required
 - Determined specifications for each cable
 - 100' long
 - Low voltage
 - Low current
 - Minimum of four conductors
 - The part number for male connector on the JT valve actuator is MS-3120E10-6P
 - The part number for female connector on the valve actuator end is MS3126F10-6S
6. JTV motor driver and LVDT connectors are not in hand; DSG will order them

4. Motor Controller Board

Mindy Leffel, and Marc McMullen

1. Ordered replacement resistors (2.4-K Ω) for LEDs
 - During testing, the channel LEDs were too bright