

SoLID Magnet Controls System Meeting Minutes

Date: April 14, 2021

Time: 10:30 – 12:00

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

1. Electrical drawings

Mary Ann Antonioli and Pablo Campero

1. A00000-16-03-0401 *Voltage Tap Cable Diagram*
 - Connector located at resistor box output could be a 15-pin connector, not a 37-pin connector; all connections of the 15-pin connector will be shown
 - Cable to connect the voltage taps between the resistor box and the terminal strip in the instrumentation rack must have a minimum of 11 conductors and be 70-80 ft
 - There are no cable-disconnected-loop conductors on the cable
 - Verified that each flux loop tap has two connections at the terminal strips, requiring two single terminal strips each
2. A00000-16-03-0406 *CCR Temperature Sensors Cable Diagram*
 - Will include cable diagram for current lead temperature sensors in this drawing; name for drawing will change
 - Requested and received latest version of A000000-16-02-0100 *CCR Controls* drawing to check labels on the 41-pin connector used for the CCR temperature sensors
 - Will show CCR redundant temperature sensor connections in drawing
 - Will keep 3-pin connectors for current lead temperature sensors
 - Terminal strips required for current lead temperature sensors can be part of the CCR-TS-01 terminal strip group; no need to create another terminal strip group
3. A00000-16-03-0212 and 0213 *PT-102 and Diode Temperature Sensors Wiring Diagrams*
 - Cable to connect temperature sensors between the CCR vacuum feedthrough and the terminal strip must have a minimum of 32 conductors and be 70-80 ft
 - Two conductors will be used for the cable-disconnected-loop
 - Two cables to connect the current lead temperature sensors between the current lead connector and the terminal strip must have a minimum of three conductors and be 70-80 ft.; one cable per lead
 - No conductors are required for the cable-disconnected-loop
 - No PLC ADC input channel needed to read voltage from CCR temperature sensor cable-disconnected-loop

4. A00000-16-03-0508 *Heat Exchanger Temperature Sensors*
 - Labels for pinout of heat exchanger (HX) temperature sensors connector are based on given information
 - Specifications for HX PT-102 temperature sensor connector are available in drawing 67122-E-56823 *SHMS Cryogenic Heat Exchanger Assembly*
 - Cable to connect HX temperature sensors between 10-pin vacuum feedthrough connector at HX and terminal strip must have a minimum of eight conductors and be 70-80 ft.

2. Temperature and voltage taps cables

Pablo Campero, Brian Eng, and Marc McMullen

1. Looking into options for multi-conductor cable required for magnet temperature sensors
2. Looking into options for multi-conductor voltage tap cable rated for 600 V