

DSG-SoLID R&D Meeting Minutes

Date: April 15, 2021

Time: 11:00 – 12:00

Attendees: Mary Ann Antonioli, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Marc McMullen, Tyler Lemon, and Amrit Yegneswaran

1. Reviewed Hall A SoLID Magnet Control Systems meeting minutes from April 14, 2021
DSG

2. A00000-16-03-0401 Voltage Taps Cable Diagram

Mary Ann Antonioli and Pablo Campero

1. Connector requirements
 - Rated for 600 V and ~1 A
 - Minimum of 11 pins
 - A 16-pin CPC connector is a possibility
2. Magnet temperature sensor cables requirements
 - Quantity of 14
 - Minimum of 10 conductors
 - 70-80 ft
 - Rated for a ~100 μ A and ~ 10 V
3. Voltage taps cable requirements
 - Quantity of one
 - Minimum of 11 conductors
 - 70-80 ft
 - Rated for 600 V
4. Terminal block supports cable gauges of 10 to 26 AWG
5. Procure spare cables

3. Temperature sensor specifications

Pablo Campero

1. Generated table showing specifications for each type of temperature sensor used in the magnet (radiation screens and coil shell), cryo control reservoir (CCR), turret, and current leads
2. Found part numbers for diode and PT-102 temperature sensors
3. Reviewed specifications of Lakeshore's # DT-470-SD-13-SMOD-4-DT36-15 diode temperature sensor located in the CCR
 - The DT-470 series of diode temperature sensors have been discontinued; Lakeshore recommends series DT-670 silicon diodes