



MAGNET SPECIFICATIONS

AMI JOB #021541-1-1 MAGNET #14432

TYPE: **CRYOGEN-FREE HORIZONTAL FIELD MAGNET SYSTEM**

MODEL: **SPLIT COIL ACCESS**

FOR: **JEFFERSON SCIENCE ASSOCIATES - JLAB**

TEST DATE: **6/17/2015**

Rated Central Field ¹ -----	50 kG [5.0 T]
Rated Current-----	93.28 amp
Field to Current Ratio-----	0.536 kG/amp
Homogeneity over 1 cm DSV-----	±1.0%
Measured Inductance-----	39.8 henrys
Ramp Rate from 0 to 85A-----	0.0254 amp/sec. (1.0 V)
Ramp Rate from 85A to 93.28A-----	0.0031 amp/sec. (0.13 V)
Room Temperature Vertical Radial Access Port-----	2.1" x 3.3"
Room Temperature Horizontal Axial Bore-----	3.0"
System Cooldown Time from 300K to 4K ² -----	~30 hours
Total Magnet/Switch Resistance ³ -----	20 ohms
Persistent Switch Heater Current-----	20.0 mA
Persistent Switch Cooldown time-----	600 sec.
Persistent Switch Heat time-----	20 sec.
Approx. System Weight.....	475.5 lbs (215.68 kg)

1. Magnet not warranted for operation above 50 kG.

2. Compressor input power: 460-480 VAC/60 Hz (3 Phase)

3. All resistance measurements made at room temperature at magnet power connectors.