FERMILAB
ENGINEERING NOTE

SECTION	PROJECT	SERIAL-CATEGORY	PAGE
RESEARCH DIVISION			1 of 2

SUBJECT
DATA SHEET: PEI 150-5 POWER SUPPLY (ORANGE)

NAME	DATE	REVISION DATE
A. T. Visser	6/1/83	7/1/85

1. Output

Rating-150KW, 120 unfiltered with manual taps as follows:

Current-(AMP)	At Voltage (VOLT)		
5000	30	15	7.5
2500	60	30	15
1250	120	60	30

2. Input

480 VAC ± 10%, 3Ø, 60HZ
Breaker 400 AMP
Full Load Line Current 240 AMP

3. Remote Control and Readout

P.S. can be remotely programmed for current and voltage. Levels depend on selected P.S. taps as follows:

Current Regulate:

Remote Current(AMP)	Remote Reference(Volts)	Remote Readout (Volts)
5000	10	10
2500	10	10
1250	10	10

Voltage Regulate:

P.S. Output Voltage(Volts)	Remote Reference(Volts)	Remote Readout (Volts)
30	8	8
60	8	8
120	8	8

4. Regulation

Between 20% and 100% of range
Current Regulate < 0.01%
Voltage Regulate < 0.05%

5. Cooling and Heatloss

Water Cooled, 250 PSI Max.

ΔP Required	60 PSI
Flow	4 GPM
Max. Watertemp.	45°C
Max. Airtemp.	45°C
Max. Heatloss to water	7 KW
Max. Heatloss to air	2 KW
P.S. Efficiency	93% (F.L.)

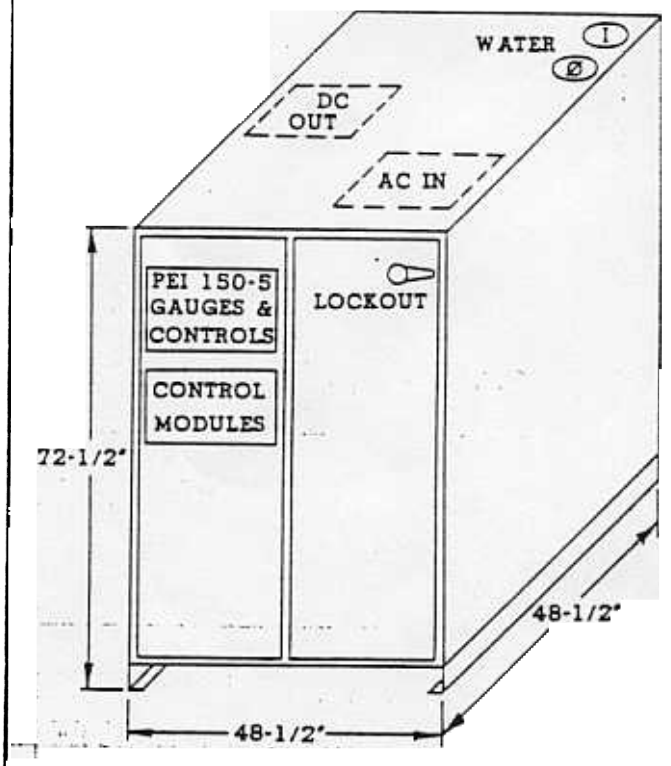
6. Application

Superconducting Loads

7. Fermi Lab Dwg. No.

See Page 2

8. Physical



Weight ∿ 3200 lbs
Full doors front and rear
Rear doors removable
All services from top
Cooling water connection at top
AC Lugs: 2-350 to 500 MCM
Cables/Phase - DNE 350 MCM

Connectors at P.S.

Ref. and Readout - Burndy G0B14-92-PNE J1
Controls Burndy G022-38-PNG J2
Burndy MS3120E-12-3S J3,4,5

(See PEI Dwg. 01-20946 for detail location of input and output connections

9. Manufacturer

Power Energy Industries (P=E1)
Model #SR-1029

10. Ref.

NAL Spec. #6005-ES-44047 150 KW P.S