

STEARNS RECTIFIERS

Stearns' DC Power supplies for electro separation magnets are available in both fixed voltage outputs (usually 230 VDC or 115 VDC) and available variable voltage output (usually 0-115 or 0-230 VDC). Fixed voltage output type DC power supplies are used in most general magnet applications. Variable voltage supplies are used in applications of flux reduction or constant flux regulation. Voltage outputs are set via potentiometers for voltage limit-current regulation. Because the cold current of a magnet is 25% to 30% greater than the operating current, the power supply must be sized for the cold rating of the magnet at 25°C.



MAGNET DC POWER SUPPLY SPECIFICATIONS

- Full Load Efficiency: 90-96%
- Power Factor: 92-95%
- Voltage Regulation: 6% or less
- Full Wave Output Ripple: 4.6%
- Power Ratings:
 - 100% continuous @ 60°C Ambient
 - 125% for 2 hrs.

DC POWER SUPPLY DATA FOR FIXED AND VARIABLE DC POWER SUPPLIES				
KW ¹	AMPS@230V	AMPS@115V	ENCLOSURE SIZE HxWxD (in/mm)	WEIGHT/MASS (lbs./kg)
4	17.2	33.3	30 x 20 x 10 915 x 760 x 305	265/120
6.5	28.0	54.2	30 x 20 x 10 915 x 760 x 305	310/140
10	43.1	83.3	36 x 30 x 12 915 x 760 x 305	355/160
15	64.7	125.0	48 x 36 x 16 1220 x 915 x 405	545/250
20	86.2	166.6	48 x 36 x 16 1220 x 915 x 405	595/270
25	109.0	208.0	48 x 36 x 16 1220 x 915 x 405	640/290
35	151.0	N/A	60 x 36 x 20 1525 x 915 x 510	800/360

Standard Features

- IP65 (NEMA) 12 Enclosure Convection Cooled (vented)
- 480 or 230V; 3 Phase, 60Hz Input (other voltage options upon request)
- 230 VDC or 115 VDC Output Voltage
- Manual Line Starter with 3 Phase Overload Protection (may be eliminated if controlled externally)
- Adjustable Taps (±10% on transformer to match input line variations)
- DC Output Fuses for Short Circuit Protection
- DC Power on Indicator (neon light)
- Wall Mounted Enclosure Up to 10kw (floor mounting kit optional)
- Input and Output Power Terminal Blocks
- Modular Diodes for Easy Replacement
- Convection Cooled Diode Bridge

Optional Features

- Local or Remote Volt and Amp Meters
- Local/Remote Start/Stop
- Under-Current Alarm
- Circuit Breaker
- NEMA 3R, 4 and 4X Enclosures

For Pricing Information, Please Supply

- Input Voltage and Frequency
- DC Output Voltage
- Magnet Cold Current Rating @ 25°C
- Additional Options