

Ohio Silicon Rectifiers

Ohio Magnetics' DC Power Supplies for lifting magnets are available in both a fixed voltage output (usually 230 VDC or 115 VDC) and a variable output (usually 0-230 VDC or 0-300 VDC).

Fixed voltage output type DC Power Supplies are used in most general magnet applications. Variable voltage supplies are used in applications of fanning, boost/carry, flux reduction, constant flux regulation, etc. Voltage outputs can be set via potentiometers for voltage limit-current regulation or current limit-voltage regulation.

Because the cold current of the magnet is 30% to 50% greater than the operating current, the power supply must be sized for the cold rating of the magnet at 25° C.

Standard Features

- NEMA 12 (IP-55) enclosure natural convection
- North American or international input voltages; 3 phase; 50 or 60 Hz
- 480 V or 240 VAC input voltage, 3 phase, 60Hz
- Magnetic line starter with 3-phase overload relay protection
- Adjustable taps on power transformers to match input line conditions
- Fast acting fuse protection for diode bridge
- Transient surge protection
- DC output fuses for short circuit protection
- AC power on indicator light (neon)
- Wall mounted enclosures to 10 KW, floor mounted enclosures above 10 KW
- 110/120 V (North America) or 220/240 (international) control voltage for input switching and operation of accessories
- 120 VAC control for input power switching
- Input and output power terminal blocks
- 230 V or 115 VDC output voltage (115 VDC output only to 25 KW)
- Modular diodes/scr's for easy replacement
- Convection cooled up to 6.5 KW (230 V) or 4 KW (115V); Fan cooled above 6.5 KW (230 V) or 4 KW (115 V)
- Separate 230 V supply for controllers on all variable voltage supplies



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% 2 Hours

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GENERAL INFORMATION

For Pricing Information, please supply:

1. Input voltage and frequency
2. Input line equipment desired(see options)
3. DC output voltage
4. Magnet cold current @ 25° C
5. Enclosure IEC 529 style or NEMA 12 (IP-55) Standard
6. Additional options
7. Quantity of units required

NOTE: Service, parts replacement and rebuilding are available on existing equipment. Call for cost saving details.

Optional Features

- IP32, IP66, enclosures natural convection*
- Latch lock on enclosures where possible

- 3 wire pushbutton on/off control or 2 wire selector switch type on /off control both local or remote package
- Remote meter package on all ratings, local meter package only on IP 32, IP-55
- DC output indicator light on either local or remote package
- Circuit breaker disconnect (local or remote)
- Variable voltage:
 - 0-230 V system for flux reduction, fanning, current/voltage regulation applications
 - 0-300 V systems for boost /carry, current/voltage regulation applications
- Power relay for operation of controller lift/drop coil from 110/120 (North America) or 220/240 (international) via pendant control
- Special requests available: please contact factory
 - NEMA 3R - IP32
 - NEMA 12 - IP55
 - NEMA 4 - IP66
 - NEMA 4X - IP66

DC POWER SUPPLY DATA FOR FIXED AND VARIABLE DC POWER SUPPLIES*

KW	Amps @ 230 V	Amps @ 115 V	Enclosure Size H x W x D (in/mm)	Weight/Mass (lb/kg)
2	8.7	16.6	36 x 30 x 12 915 x 760 x 305	238/110
4	17.2	33.3	36 x 30 x 12 915 x 760 x 305	265/120
6.5	28.0	54.2	36 x 30 x 12 915 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
45	194.0	N/A	60 x 36 x 20 1525 x 915 x 510	875/400
55	237.0	N/A	60 x 36 x 20 1525 x 915 x 510	950/430
65	283.0	N/A	60 x 48 x 24 1525 x 1220 x 610	1060/480
75	326.0	N/A	60 x 48 x 24 525 x 1220 x 610	1100/500
87.5	380.0	N/A	60 x 48 x 24 1525 x 1220 x 610	1145/520
100	435.0	N/A	60 x 48 x 24 1525 x 1220 x 610	1255/570

* Add 12 in. -305mm to height for leg kit on floor mount models.