



Rectifiers / DC Power supplies

P5500 SERIES

PRIMAX P5500 Rectifiers / DC Power Supplies are designed to provide reliable DC power for use with all types of DC loads. The P5500 series are convection cooled, modular designed, inherent current limited and voltage regulated.

The P5500 high current rectifiers are available up to 50 kA using 6,12...24 phase patented design. That reduces the losses and eliminates the need for interphase transformers or semiconductor matching.

Redundant Forced air cooling can also be ordered to increase available output power.

Features

- Phase sequence independent
- Proven design
- 2 year warranty
- Completely automatic
- Listed to UL1012
- Approved to CSA C22.2 C107.1
- Convection cooled
- Quiet operation
- Reliable, 20 year design life
- Complete input/output isolation
- Full wave rectification
- Precise output regulation
- Fully protected against spikes, surges and overloads

Applications

- Electroplating
 - Metal
 - Printed Circuit Boards
- Mining
- Cranes, Traction and Railway
- Mining
- Electrolysis
 - Aluminum
 - Chloride and Related products
 - Hydrogen
- Static DC generation stations
- Hybrid systems
- Large DC Drives (single or 4 quadrant)
- Large AC Drives Input Stage

Input

Standard Voltages	110, 120, 208, 240, 380, 480, 550, 575 and 600 VAC +/- 10%
Phases	1 and 3 phase - 60 Hertz +/- 5% (50Hz optional) – nominal 0.75 (1 P), 0.80 (3 P)
Efficiency at full load	75% (1 Phase input), 80% (3 Phase input)

Output

Standard Voltages	12, 24, 36, 48, 72, 125, 250, 480, 600 VDC
Current	From 10 A up to 200 kA and more
Static Regulation	1% for simultaneous variations of +/-10% input voltage, +/- 5% input frequency and 100% load
Dynamic regulation	+/-3% from 10%-100% and 100%-10% load variation (t< 25mS)

Protection

Overcurrent	Automatic current limiting circuit, Adjustable from 30% to 100% of nominal rating Input circuit breaker and output fuse
Voltage Transients	Surge suppression on input and output

Supervisory

Metering	DC Voltmeter and Ammeter Digital 1%RMS accuracy +/-1digit
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Controls

All controls and alarms are accessible via the front keyboard with the help of the LCD menu

Mechanical And Physical

Enclosure	CEMA/NEMA1, Hinged front door is provided with lock, Phosphatised and primed prior to painting ASA61, light grey
Cable Entry	Top

Environmental

Audible noise	50 to 65 dba at 1 Meter (rating dependent)
Operating temp.	-40°C to 50°C
Humidity	Up to 95% (non condensing)

Options

- Zig-Zag Topology for high power rectifiers
- Non-standard input voltage
- Phase fail alarm (for 3 phase systems)
- Input voltmeter and ammeter
- High DC volts shutdown
- Audible alarm
- Manual voltage control
- Extra output filtering
- 60Hz or 400 Kz input frequency
- Tropicalization
- Special paint
- Distribution panel