

4000 Watt, Variable Output, High Voltage (240-385Vdc), Commercial Grade Power Supply

Product Description

This unit is a 4000 watt, high voltage, variable output, (240-385Vdc), single output, commercial grade dc to dc converter designed for electronic systems utilizing higher voltage DC. It is fan cooled providing for a 0° to +50° C operating temperature range. This highly reliable design provides a variable output up to 385Vdc. This 4000 watt high voltage unit is programmable and offers a wide variety of options to customize it to specific applications.



Product Features

- Output Voltage Range: 240V to 385Vdc
- Input Options: 60-110Vdc
- Size: 5" x 5" x 15.5"
- Fully Floating Output
- Operating Temp. Range 0° to +50° C (at Full Load)
- No Minimum Load Required

Input:

- Nominal Input: 75Vdc
- Input Voltage Range: 60V to 110Vdc
- Input Current: 95A for minimum input at full load
- Inrush Current: >60A for 5.6ms

Output Selection Guide

- Maximum Output Power: 4000 watts

Model #:	Voltage	Max Current
PM3328B-XX	240-385Vdc	16.7 Amps at 240Vdc

Note: Alternate output voltages are available, consult factory for availability.

DC Output Characteristics

- Static Line Regulation: $\pm 0.5\%$ typical (Over full input range).
- Static Load Regulation: $\pm 0.5\%$ typical (No load to full load; nominal input).
- Output Ripple/Noise: 1% typical (P-P; nominal input; full load; 20MHz bandwidth)
- Minimum Load: Not required.
- Set Point Accuracy: $\pm 2.0\%$ of output voltage (Nominal input; full load; 25°C)
- Transient Response: $\pm 2.0\%$ deviation for a 10% to 50% step load change with 2msec recovery.
- Overshoot: Turn-on and turn-off overshoot should not exceed 5% over nominal voltage.

Electrical Characteristics

- Efficiency: 85% Minimum (Measuring at 75Vdc and full load).
- Turn On Delay: 2 second maximum from application of DC line.
- Hold-Up Time: None
- Isolation Voltage:
 - Input to Output: 2121Vdc
 - Input to Ground: 2121Vdc
 - Output to Case: 500Vdc
- Insulation Resistance at 500Vdc: 10Mohms (Output to case).
- Temperature Regulation: \pm -2.0%/°C (\pm .005%/ °C max; over operating temp range)

Protection

- Over Current Limit: 105-115% of maximum current (Automatic recovery)
- Over-Voltage Protection: 110-120% of nominal output voltage (Latching)
- Short Circuit: Auto-Recovery after short circuit condition is removed.
- Over temperature Protection: The power supply is protected for over temperature conditions with thermal shutdown. Auto-Recovery when temperature returns to normal.

Environmental

- Operating Temperature: 0° to +50° C (Ambient)
- Storage Temperature: -10° to 70° C
- Operating Humidity: 20% to 95% RH, Non-condensing
- Storage Humidity: 10% to 95% RH, Non-condensing
- Operating Altitude: Sea-level to 20,000 ft. in pressurized environment
- Vibration: Operating from 5 to 27 Hz, 0.02 in double amplitude; from 27 Hz to 500 Hz, 0.75G, 3 Axes, 3 min per octave sweep, dwell 15 min at resonance. Non-operating: From 5 to 17 Hz, 0.10 in double amplitude, from 17 to 500Hz, 1.5G peak; 3 axes, 5 min per octave sweep; dwell 15 min at resonance.
- Shock: Operating: 5G, half sine, 11msec, 3 axes. Non-Operating: 15G, half sine, 11msec, 3 axes.
- Conducted EMI: FCC Class A & EN 55022 Class A compliant
- Safety Agency: Designed to meet cUL (UL60950-1/CSA60950-1), TUV (EN60950-1) & CE (LVD)
- Cooling: Forced air, internal fan. Airflow exits at connector end.

Mechanical

- Outline Dimensions: 5.0" X 5.0" X 15.5" (H X W X L)
- Weight: 15 lbs.
- Input Connector: Terminal Block
- Output Connector: Terminal Block
- Signal, Controls and Alarms Connector: 15 pin D-sub

Optional Control and Alarms

- Programmable Output
- Inhibit – Enable/Disable
- DC Power Fail
- DC Output Good with LED Indicator
- Constant Current Limit
- Current Monitor

Notes

- Product specifications subject to change without notice. All rights reserved.
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Outline Drawing

