

200 WATTS POWER FACTOR CORRECTED WIDE RANGE ADJUSTABLE MULTIPLE OUTPUTS



Featuring:

- 200 W continuous 240 W peak power
- Universal input for 115 V or 230 V, 47-65 Hz, single phase AC
- Four independently isolated and regulated outputs
- Wide range of adjustable auxiliary outputs (up to 2.6:1)
- Up to 50% greater peak currents on two outputs
- Typical power factor 0.99
- Low ripple and noise on all outputs
- Typical 70% efficiency
- DC power good signal
- Remote on/off and remote sense features
- Low profile fan/cover option

STANDARD PBO SERIES

| MODEL | PWR | OUTPUT #1 | OUTPUT #2 | OUTPUT #3 | OUTPUT #4 |
|---------|-------------------------------------|--|---|--|---|
| PBO-200 | 200 W (Cont.) 240 W (Peak) | 4.75 V to 5.25 V @ 3.0 A to 30.0 A | 11.5 V to 25.2 V @ 0.4 to 4.0 A 6.0 A (Peak) | 9.5 V to 15.8 V @ 0.4 to 5.0 A 6.0 A (Peak) | 4.75 V to 12.6 V @ 0.3 A to 3.0 A |

The PBO 200 series of high-reliability, AC input power supplies are designed for computer, networking, telecommunication and industrial equipment applications. These models feature a universal power factor corrected input plus independently isolated and regulated outputs.

The auxiliary outputs are adjustable over a wide range (up to 2.6 to 1). This wide range of adjustability provides greater flexibility, especially in meeting non-standard output voltage requirements. Outputs may be connected in either polarity or stacked in series as needed. Outputs 2 and 3 accommodate up to 50% greater peak currents for applications with surge requirements. The optional cover with fan provides a low-profile cooling solution that increases the overall height by only 0.25".



SPECIFICATIONS: ALL MODELS

INPUT

AC Input: 85-264 V AC continuous range, 47 to 65 Hz. Internally fused at 6.3 A.

Power Factor: 0.99 typical at full load. Meets EN61000-3-2.

Inrush: Cold start AC current is less than 35 A at 115 Vac and 70 A at 230 Vac. Limited by a thermistor.

Brownout Protection: Holds regulation to 85 Vac.

Holdup Time: 20 ms after removal of power at nominal line and full load.

Efficiency: 75% typical

AC Power Fail: Provides TTL "0" 6 ms before output voltage goes out of regulation band upon loss of ac power. Also provides a TTL level "0" for 100 ms (minimum) at starting.

OUTPUT

- Adjustability: Output #1 is adjustable ±5%. Output #3 and 4 are wide range adjustable, (see table).
- Line & Load Reg: ±0.6% on all outputs over AC input range and loads within the ranges specified in the table.

Ripple & Noise: Less than 1% p-p or 100 mV, whichever is greater.

Remote Sense (Output #1): Compensates for 250 mV total line drop. Open sense lead protection.

Temperature Coefficient: To be determined.

Stability: 0.1% over 8 hours after 30 minutes warm-up.

Transient Response: Output voltage returns to within 1% in less than 500 µs for a 25% load change. Peak transient does not exceed 3%.

Overload Protection: All outputs are protected against overload and Input Cycling off/on is required to reset latched-off protection mode.

Overvoltage Protection (Output #1): Protects load against power supply induced overvoltage. Trip point is factory set so that output voltage cannot exceed 6.5 V.

Peak Output Current: (Outputs #2 and 3) Dual current ratings define continuous and peak currents. The peak current shown can be delivered for a maximum period of 15 seconds.

- **Remote Inhibit:** Contact closure to the negative sense line or a TTL level "0" turns off DC outputs.
- **DC Power Good:** Provides a TTL "1" open collector when output #1 is above 4.6 V nominal.
- Redundancy: External OR-ing diodes and forced current sharing on output #1 provide "N+1" capability. Remote sense (+S) compensates for additional 0.6 V diode voltage drop. When the current sharing terminal is connected between units, current sharing remains within 10% of the unit's full output current rating.

Reverse Voltage: Protected against reverse voltage up to supply current rating.

Cooling: 30 CFM required to achieve full ratings.

Enable: Contact closure in the negative output #1 terminal or a TTL level "0", turns off DC outputs.

ENVIRONMENTAL

2.00

50.8

1.50

38.0

9.00

228.6

Thermal Protection: Shuts down power supply if overheated. Automatic recovery.
Temperature Range: 0° to 40°C at full ratings.Output power linearly derated to 50% at 70°C.
Safety Agencies: UL1950; CSA 22.2 #950; VDE 0805 / EN 60950 CE markings to low voltage directive – All pending.

Conducted RFI: Meets FCC Part 151 Class B. EN 55022/B. Output Isolation: Isolated from ground 50 Vdc. Cooling: 30 CFM required to achieve full ratings.

ND. 6-32 TH'D 8PL

2 MAX, PENETRATION

OPTIONS:

Option CF: Available with enclosed cover and fan.

Consult factory for other available options.

AC INPUT (90-264 VAC Continuous Range)

| FUNCTION | 115 VAC | 230 VAC | CONNECTOR | |
|----------|---------------|---------------|------------------------------------|--|
| TB1-(L) | Line | Line 1 | Barrier strip | |
| TB1- (N) | Neutral | Line 2 | #6-32 screws 0.375 inch centers | |
| TB1- (🕀) | Safety Ground | Safety Ground | 0.375 Inch centers | |

DC OUTPUT

| FUNCTION | LOCATION | NOTES | CONNECTOR |
|-----------|----------|----------------|--------------------|
| Output #1 | TB2-1 | 4.75V to 5.25V | Bus Bars |
| | TB2-2 | Rtn (Isolated) | # 8 - 32 Screws |
| Output #2 | TB3-1 | 11.5V to 25.2V | |
| | TB3-2 | Rtn (Isolated) | |
| Output #3 | TB3-3 | 9.5V to 15.8V | Barrier strip |
| | TB3-4 | Rtn (Isolated) | #6-32 screws |
| Output #4 | TB3-5 | 4.75V to 12.6V | 0.325 inch centers |
| | TB3-6 | Rtn (Isolated) | |

STATUS AND CONTROL

| FUNCTION | LOCATION | STATUS | CONNECTOR | |
|---------------|--------------|--|---|--|
| Enable | J1-1 | Enable | Molex part # | |
| | J1-2 | Output #1 Rtn | 22 - 23 - 2041 mates with Molex part # 22 - 01 - 3047 | |
| DC Power Good | J1-4 | DC Power Good | | |
| | J1-3 | Output #1 Rtn | | |
| Remote Sense | J2-2 J2-1 | Output #1 Sense + Output #1 Sense - | Molex part # 22 - 23 - 2021 mates with Molex part # 22 - 01 - 3027 | |

Dimensions: Inches Millimeters