# 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	(Cont.) 240 W	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	9.5 V to 15.8 V @ 0.4 to 5.0 A	4.75 V to 12.6 V @ 0.3 A to 3.0 A
	(Peak)		6.0 A (Peak)	6.0 A (Peak)	

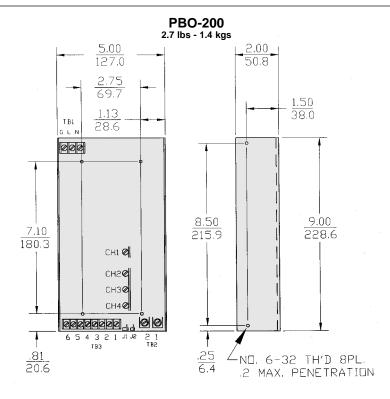
The PBO 200 series of high-reliability, AC input power supplies are designed for computer, networking, telecommunication and industrial equipment applications. These models feature a universal power factor corrected input plus independently isolated and regulated outputs.

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".

Dimensions:

Inches Millimeters



# 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).

 $\pmb{\text{Line \& Load Reg:}}\ \pm 0.6\%$  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 units 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**

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.

## **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	0.373 men centers	

## DC OUTPUT

DC COTFOT			
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 J1-2	Enable Output #1 Rtn	Molex part # 22 - 23 - 2041 mates with Molex part # 22 - 01 - 3047	
DC Power Good	J1-4 J1-3	DC Power Good 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	