

• **AUTO-RANGING INPUT**

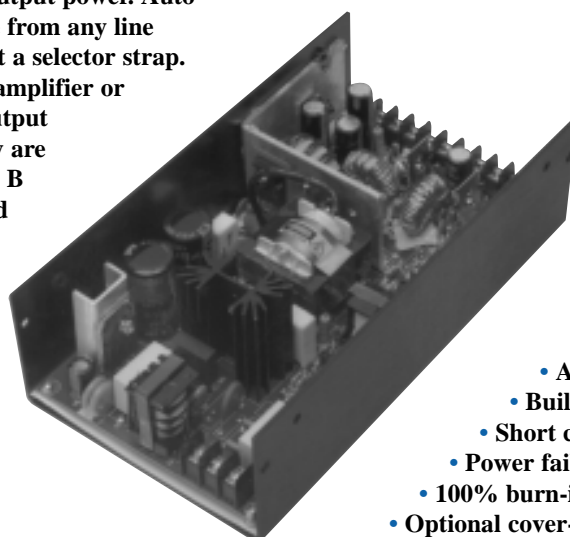
**200 WATT**

**SWITCHING  
POWER SUPPLY**



**DESCRIPTION**

The PU200 Series is comprised of single and multiple output models for 200 watts of continuous output power. Auto ranging input allows them to operate from any line voltage throughout the world without a selector strap. All auxiliary outputs have magnetic amplifier or linear regulators to maintain tight output tolerances. A cover-and-fan assembly are optional. All models meet VDE Class B and FCC Class B emission limits, and are approved to UL, CSA, and, TUV safety standards.



**FEATURES**

- Auto-ranging input
- Built-in EMI filter
- Short circuit protection with auto-recovery
- Power fail detection
- 100% burn-in at full rated load
- Optional cover-and-fan assembly
- Small size 9.0"x 5.0"x 2.55"

**OUTPUT VOLTAGE/CURRENT RATINGS CHART**

Model	Output #1				Output #2				Output #3				Output #4 <sup>2</sup>				Maximum Output Power <sup>3</sup>	
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Ipeak	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax		Tol.
PU200-10	5V	3A	40A	2%	N/A				N/A				N/A				200W	
PU200-12	12V	1.2A	16.7A	2%	N/A				N/A				N/A				200W	
PU200-13	15V	1.0A	13.4A	2%	N/A				N/A				N/A				200W	
PU200-14	24V	0.6A	8.4A	2%	N/A				N/A				N/A				200W	
PU200-16	30V	0.5A	6.7A	2%	N/A				N/A				N/A				200W	
PU200-18	48V	0.3A	4.2A	2%	N/A				N/A				N/A				200W	
PU200-23	+5V	3A	30A	2%	+12V	0A	8A	12A	4%	N/A				N/A				200W
PU200-24	+5V	3A	30A	2%	+15V	0A	6A	9A	4%	N/A				N/A				200W
PU200-25	+5V	3A	30A	2%	+24V	0A	4A	6A	4%	N/A				N/A				200W
PU200-30	+5V	3A	30A	2%	+12V	0A	8A	12A	4%	-5V	0A	6A	4%	N/A				200W
PU200-31	+5V	3A	30A	2%	+12V	0A	8A	12A	4%	-12V	0A	4A	4%	N/A				200W
PU200-32	+5V	3A	30A	2%	+15V	0A	6A	9A	4%	-15V	0A	4A	4%	N/A				200W
PU200-40	+5V	3A	30A	2%	+12V	0A	8A	12A	4%	-12V	0A	4A	4%	F 5V	0A	6A	4%	200W
PU200-41	+5V	3A	30A	2%	+15V	0A	6A	9A	4%	-15V	0A	4A	4%	F 24V	0A	4A	4%	200W
PU200-42	+5V	3A	30A	2%	+12V	0A	8A	12A	4%	-12V	0A	4A	4%	F 12V	0A	4A	4%	200W
PU200-44	+5V	3A	30A	2%	+12V	0A	8A	12A	4%	-15V	0A	4A	4%	F 15V	0A	4A	4%	200W
PU200-45	+5V	3A	30A	2%	+12V	0A	8A	12A	4%	-12V	0A	4A	4%	F 24V	0A	4A	4%	200W

**NOTE:** (1) Add suffix "B" for U-bracket or "C" for enclosed i.e. PU200-45C.  
 (2) Output #4 is floating. It can be connected externally for positive or negative output.  
 (3) 200 watts for "C" version with a cover-and-fan assembly. 150 watts for "B" version without moving air (maximum current of output #1 & #2 derated to 70%), or 200 watts with 25 CFM forced air provided by user.

## GENERAL SPECIFICATIONS

All specifications are typical at nominal line, full load, and 25°C.

Efficiency:	70% typical at 200W output
Hold-up time:	20 msec minimum at 110 VAC input
Line regulation:	±0.5% maximum at full load
Inrush current:	60A maximum at cold start
Safety ground leakage current:	0.35mA max. @ 110VAC. 60Hz 0.63mA max. @ 240VAC. 50Hz
Withstand voltage:	3000 VAC from input to output 1500 VAC from input to ground
Operating temperature:	0 to 70°C*
Storage temperature:	-40 to +85°C
Mean time between failure:	85,000 hours at full load at 25°C ambient
EMI requirements:	Meets conduction limits of a) FCC 20780 Level B b) CISPR 22 (EN 55022) Level B
Safety requirements:	Meets or exceeds: a) UL 1950 b) CSA C22.2 No. 234 c) IEC 950
Power Fail Detect (PFD SIGNAL)	TTL logic high for normal operation and TTL logic low upon loss of input power. This signal appears at least 1mS prior to 5V output dropping 5% below its nominal value. This signal also provides a minimum delay of 100 mS after +5V is within regulation.

## INPUT SPECIFICATIONS

Input voltage:	90 to 130 VAC, 180 to 264 VAC
Input frequency:	47 to 440 Hz
Input current:	4.5A (rms) for 115 VAC 2.6A (rms) for 230 VAC

## OUTPUT SPECIFICATIONS

Output voltage:	See Rating Chart
Output current:	See Rating Chart
Output power range:	See Note#3 on front of data sheet
Ripple and noise:	2% peak to peak maximum
Overvoltage protection:	Provided on output #1 only; set at 112-132% of its nominal output voltage
Overcurrent protection:	All outputs protected to short circuit conditions
Temperature coefficient:	All outputs ±0.04%/°C maximum
Transient response:	Maximum excursion of 4% or better on all models recovering to 1% of final value within 500us after a 25% step load change
Cooling:	25 CFM forced air provided on "C" version to be provided by user on "B" version.

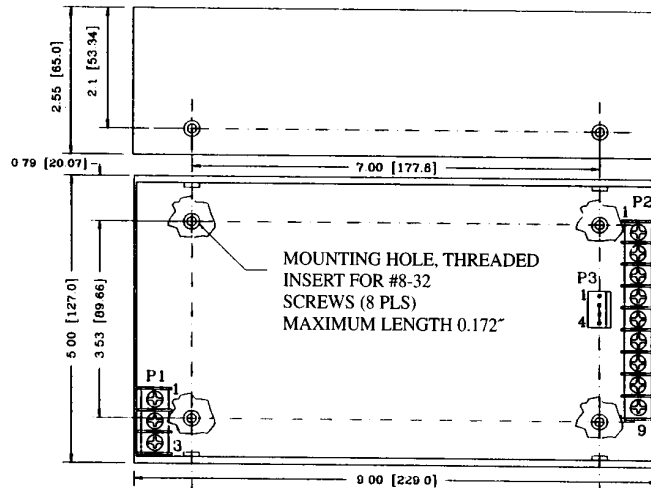
\* Derate linearly from 100% load at 50°C to 50% load at 70°C

## MECHANICAL SPECIFICATIONS

### NOTES:

- Dimensions shown in inches [mm]
- Tolerance 0.02 [0.5] maximum
- Input connector P1 is Beau Inc. P/N 72-5-03C, output connector P2 is Beau Inc. P/N 72-5-09C. Screws are #6-32 on 0.375 inch centers.
- Connector P3 mates with Molex housing 22-01-1043 and Molex 40445 series crimp terminal.
- Weight:  
1.25 Kgs (2.8 Lbs) approx. for "B" version.  
1.50 Kgs (3.3 Lbs) approx. for "C" version.

**P1**  
1-Line  
2-Neutral  
3-Ground



## PIN CHART

Model	PIN	P2						P3			
		1, 2	3, 4, 5	6	7	8	9	1	2	3	4
PU200-10, PU200-12 PU200-13, PU200-14 PU200-16, PU200-18		-SENSE	RET.	OUTPUT #1	OUTPUT #1	OUTPUT #1	+SENSE	P.F.D.	COM. RET.	COM. RET.	FAN
PU200-23, PU200-24 PU200-25		OUTPUT #1	COM. RET.	OUTPUT #2	N.C.	N.C.	N. C.	P.F.D.	COM. RET.	COM. RET.	FAN
PU200-30, PU200-31 PU200-32		OUTPUT #1	COM. RET.	OUTPUT #2	OUTPUT #3	N.C.	N.C.	P.F.D.	COM. RET.	COM. RET.	FAN
PU200-40, PU200-41 PU200-42, PU200-44 PU200-45		OUTPUT #1	COM. RET.	OUTPUT #2	OUTPUT #3	OUTPUT #4 RETURN	OUTPUT #4	P.F.D.	COM. RET.	COM. RET.	FAN



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