PM200 Series

200 WATTS SINGLE & MULTIPLE OUTPUT AC/DC MEDICAL



Features

- **Low safety ground leakage current.**
- **Autoranging input.**
- **Overvoltage protection.**
- **Overcurrent protection.**
- **Power fail detection (PFD) signal.**
- **Optional cover and fan assembly.**
- **100% burn-in at full rated load.**
- **Short curcuit protected with auto-recvery**

Specifications

INPUT

Input Voltage	90-130/180-264Vac (Autoranging)
Frequency	47Hz–67Hz
Input Current	4.5A (rms) for 115Vac. 2.6A (rms) for 230Vac.
Leakage current	90µA max. @ 115Vac. 60Hz. 150µA max. @ 230Vac. 50Hz.
Isolation	Input – Output: 4000VAC Input – Ground: 1500VAC Output – Ground: 500VAC
Inrush Current	20A @ 115V, 40A @ 230V

OUTPUT

Output Voltage	See table
Output Voltage Adjustment	V1 ±10%
Output Current	See table
Ripple & Noise	2% peak to peak
Line Regulation	±0.5% maximum at full load.
Load Regulation	See table
Transient Response	Max. deviation 4% recovering to 1% within 500µs after 25% load charge
Overvoltage Protection	Provided on V1 only. Set at 110%–132% of nominal
Overcurrent Protection	All outputs protected for short circuit conditions
Temperature Coefficient	All outputs ±0.04% per °C
Holdup Time	Typically 12mS at 110VAC
PFD Signal	Power fail detection signal. TTL logic low upon loss of input power.

OPERATING

MTBF	450,000 hrs @ 25°C
Efficiency	70% minimum.

ENVIRONMENTAL

Operating Temperature	0°C to 70°C
Derating	Derate to 50% at 70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5%–95% non-condensing
Cooling	25 CFM forced air, provided on "C" version, to be provided for "B"version by user.

STANDARDS AND APPROVALS

Safety standards	UL2601-1, CSA C22.2, TUV EN60601-1
C-Tick	AS/NZS CISPR11 Group 1, Class A
EMC standards	EN60601-1-2: 2001,EN61000-3-2, -3, EN61000-4-2, -3, -4, -5, -6, -8, -11
EMI standards	EN55011 Class B, FCC Class B, VCCI Class B

MECHANICAL

Dimensions	229x127x65mm
Weight	1.4Kgs for "B" version. 1.6Kgs for "C" version.

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Selection Table

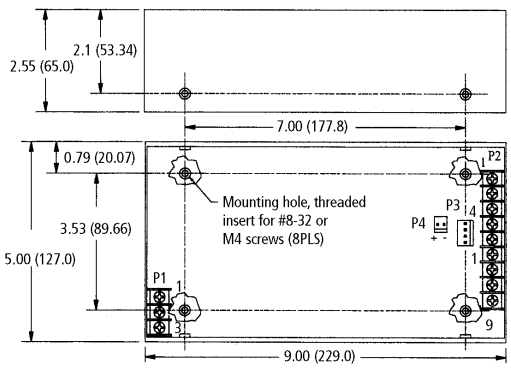
MODEL	OUTPUT #1				OUTPUT #2 (2)				OUTPUT #3				OUTPUT #4 (3)				MAX. OUTPUT
NUMBER(1)(5)(6)	VNOM	IMIN	IMAX	TOL	VNOM	IMIN	IMAX	TOL	VNOM	IMIN	IMAX	TOL	VNOM	IMIN	IMAX	TOL	POWER (4)
PM200-10	5V	3.0A	40A	2%													200W
PM200-12	12V	1.2A	16.7A	2%													200W
PM200-13	15V	1.0A	13.4A	2%													200W
PM200-14	24V	0.6A	8.4A	2%													200W
PM200-16	30V	0.5A	6.7A	2%													200W
PM200-18	48V	0.5A	4.2A	2%													200W
PM200-23	+5V	3.0A	30A	2%	+12V	0A	8A	4%									200W
PM200-24	+5V	3.0A	30A	2%	+15V	0A	6A	4%									200W
PM200-25	+5V	3.0A	30A	2%	+24V	0A	4A	4%									200W
PM200-30	+5V	3.0A	30A	2%	+12V	0A	8A	4%	-5V	0A	6A	4%					200W
PM200-31	+5V	3.0A	30A	2%	+12V	0A	8A	4%	-12V	0A	4A	4%					200W
PM200-32	+5V	3.0A	30A	2%	+15V	0A	6A	4%	-15V	0A	4A	4%					200W
PM200-33	+5V	3.0A	30A	2%	+15V	0A	6A	4%	-12V	0A	4A	4%					200W
PM200-40	+5V	3.0A	30A	2%	+12V	0A	8A	4%	-12V	0A	4A	4%	5V	0A	6A	4%	200W
PM200-41	+5V	3.0A	30A	2%	+15V	0A	6A	4%	-15V	0A	4A	4%	24V	0A	4A	4%	200W
PM200-42	+5V	3.0A	30A	2%	+12V	0A	8A	4%	-12V	0A	4A	4%	12V	0A	4A	4%	200W
PM200-44	+5V	3.0A	30A	2%	+12V	0A	8A	4%	-15V	0A	4A	4%	15V	0A	4A	4%	200W
PM200-45	+5V	3.0A	30A	2%	+12V	0A	8A	4%	-12V	0A	4A	4%	24V	0A	4A	4%	200W

NOTES: (1) Add suffix "B" for U-bracket format and "C" for enclosed format.
(2) Peak current is 12A on +12V, 9A on +15V and 6A on +24V.
(3) Output #4 is floating. It can be connected externally for positive or negative output.
(4) 200 watts for "C" version with a cover and fan assembly 150 watts for "B" version without moving air (maximum current of ouput #1 & #2 derated to 70%), or 200 watts with 25 CFM forced air provided by user.
(5) When the remote Sense facility is not used, +Sense must be connected to +V, and -Sense to Return, on P2 connector.
(6) All models may be operated at no-load. At no-load, output voltage tolerance increases to 10%.

Pin Chart

		P1			P2						P3			
MODEL/PIN		1	2	3	1,2	3,4,5	6	7	8	9	1	2	3	4
PM200-10 PM200-13 PM200-16	PM200-12 PM200-14 PM200-18	AC Live	AC Neutral	AC Ground	-Sense	RET.	Output 1	Output 1	Output 1	+Sense	Fan	COM RET.	COM RET.	P.F.D.
PM200-23 PM200-25	PM200-24	AC Live	AC Neutral	AC Ground	Output 1	COM RET.	Output 2	N.C.	N.C.	N.C.	Fan	COM RET.	COM RET.	P.F.D.
PM200-30 PM200-32	PM200-31 PM200-33	AC Live	AC Neutral	AC Ground	Output 1	COM RET.	Output 2	Output 3	N.C.	N.C.	Fan	COM RET.	COM RET.	P.F.D.
PM200-40A PM200-42A PM200-45-1A	PM200-41 PM200-44	AC Live	AC Neutral	AC Ground	Output 1	COM RET.	Output 2	Output 3	Output 4 Return	Output 4	Fan	COM RET.	COM RET.	P.F.D.

Technical Illustration



NOTES
1. Dimensions shown in inches (mm)
2. Tolerance 0.02 (0.5) max
3. Input connector mates with Beau Inc. P/N 72-5-03C
   output connector is Beau Inc. P/N 72-5-09C
   Screws are #6-32 on 0.375 inch centres
4. Connector P3 mates with Molex housing 22-01-1043
   and Molex 40445 series crimp terminal
5. Connector P3 mates with Molex housing 22-01-1023
   and Molex 40445 series crimp terminal
6. P4 is for DC fan rated 24V/0.12A models PM200-14, -16, -25),
   or 12V/0.2A (other models)
7. Weight:
   1.40 Kgs (3.08 Lbs.) approx. for "B" version
   1.60 Kgs (3.52 Lbs) approx for "C" version