AC/DC Power

Medical

PDAM240 Series
240W Power Supply

- **Open Frame or Enclosed Versions Available**
- **UL / IEC / EN 60601 3.1 Edition & UL / IEC / EN 60950 AM2 Safety Approvals**
- **4000VAC Input to Output Isolation (2x MOPP)**
- **Class I and Class II Input Configurations**
- **Suitable for BF Application with appropriate system consideration**
- **High Efficiency up to 93.5%**
- **<0.5 W No Load Input Power**

Input

Input Voltage:	90-264 VAC or 120-370 VDC
Input Frequency:	47-63 Hz
Input Current (RMS):	<3.0A @ 115 VAC; <1.5A @ 230 VAC
Power Factor:	>0.9 @ full load (230 VAC)
Inrush Current (<2ms):	<45A @ 115 VAC; <90A @ 230 VAC
Earth Leakage Current:	<100 uA max.

Output

Total Output:	240W max. See table for details.
Output Voltage:	See table.
Hold Up Time:	10ms typical at 115VAC nominal line. (Note 3)
Efficiency:	Up to 93.5%. See table for details.
Minimum Load:	0%

Protection

Overvoltage:	110-132%, Auto Recovery
Overcurrent:	105-170%, Auto Recovery
Short Circuit:	Auto Recovery

Environmental & Operating

Operating Temperature:	-30ºC to +70ºC (with derating)
Storage Temperature:	-35ºC to +85ºC
Humidity:	95% RH
Operating Altitude	<5000m for medical use
MTBF:	>160K hours per MIL-HDBK-217F at full load and 25ºC ambient

Compliance

Safety Approvals:	
USA/Canada:	UL60601-1 3.1 Ed, UL/cUL60950-1 2nd Amdt.
Europe:	IEC/EN60601-1 3.1 Ed, TUV EN60950-1 CB Report 2nd Amdt.
Isoluation:	4000VAC input to output 2x MOPP 1500VAC input to ground 1x MOPP 1500VAC output to ground 1x MOPP
EMC (IEC50501-1-2:2014):	FCC Class B Radiated & Conducted EN55011/55022 Class B Radiated & Conducted
Harmonic Currents:	IEC 61000-3-2
Voltage Flicker:	IEC 61000-3-3
Electrostatic Discharge:	IEC 61000-4-2: 15kV air, 8kV contact
Radiated Immunity:	IEC 61000-4-3: 10V/m
EFT/Burst:	IEC 61000-4-4: +/-2kV
Surge Immunity:	IEC 61000-4-5: 2005 1kV diff, 2kV com
Conducted Immunity:	IEC 61000-4-6: 10Vms
Magnetic Field:	IEC 61000-4-8: 30A/m
Dips / Interruptions:	IEC 61000-4-11: 30% reduction for 500ms, 100% reduction for 10 ms.

General

Dimensions:	2.05”W x 4.10”L x 1.087”H
Weight:	220g

Your Partners in Power…….. **Power Partners, Inc. | 43 Broad Street | Hudson, MA 01749**

Tel: (978)567-9600 | Fax: (978)567-9601

Website: www.powerpartners-inc.com

Specifications subject to change.
PDAM240: NOV 14, 2017

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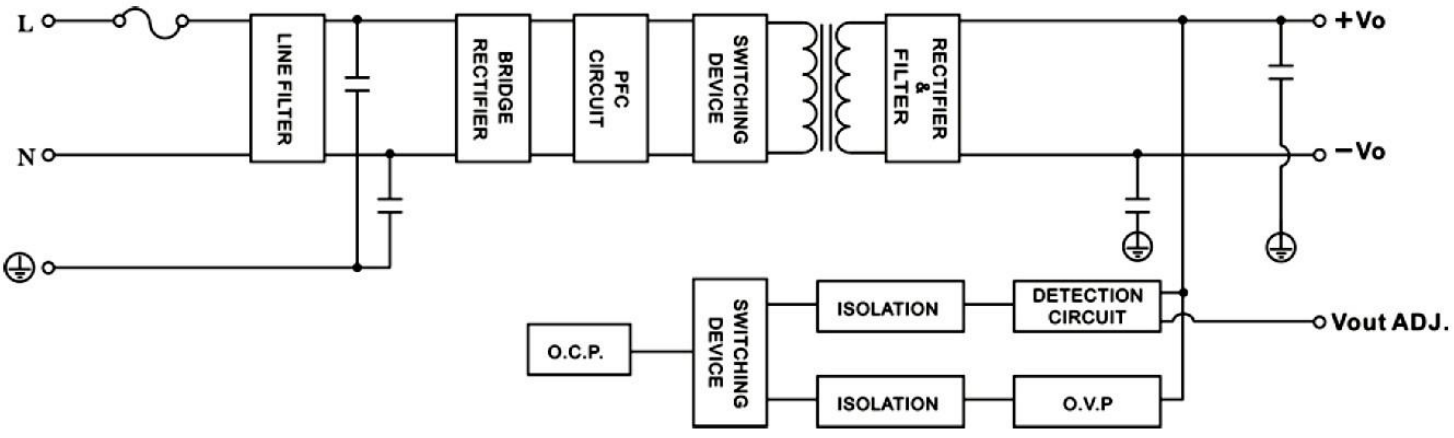
Models and Ratings

Model	Output Voltage	Max Load Convection	Max Load 10CFM	Output Regulation	Ripple & Noise (Note 4)	Efficiency	Fan Output
PDAM240-12A-H	12VDC	13.33A	20A	240mV	±2%	92.5%	12V/0.5A
PDAM240-14A-H	24VDC	6.67A	10A	300mV	±2%	93%	12V/0.5A
PDAM240-18A-H	48VDC	3.33A	5A	380mV	±2%	93.5%	12V/0.5A

Note:

1. All models are available in an enclosed version (e.g. PDAM240-12A would be PDAM240-12C)
2. We strongly recommend to conduct Hi-Pot test with DC voltage. If wanting to test with AC voltage, disconnect all Y-Capacitors within power supply.
3. Hold-up Time measured at 90% Vout
4. Measured at 20MHz bandwidth with a 47uF electrolytic capacitor and 0.1uF ceramic capacitor in parallel at the output connector.
5. Please secure the PSU to your casing by using the four screw holes in the corners for Class I and Class II equipment.
6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other than the ones listed on this datasheet.

Block Diagram



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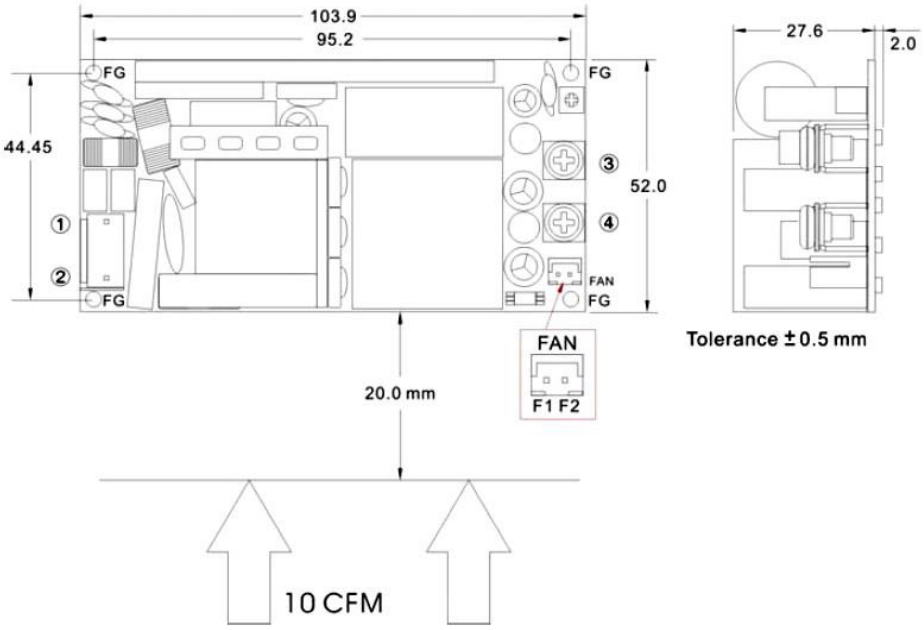
Mechanical Outline (Open Frame Standard Terminal Block)

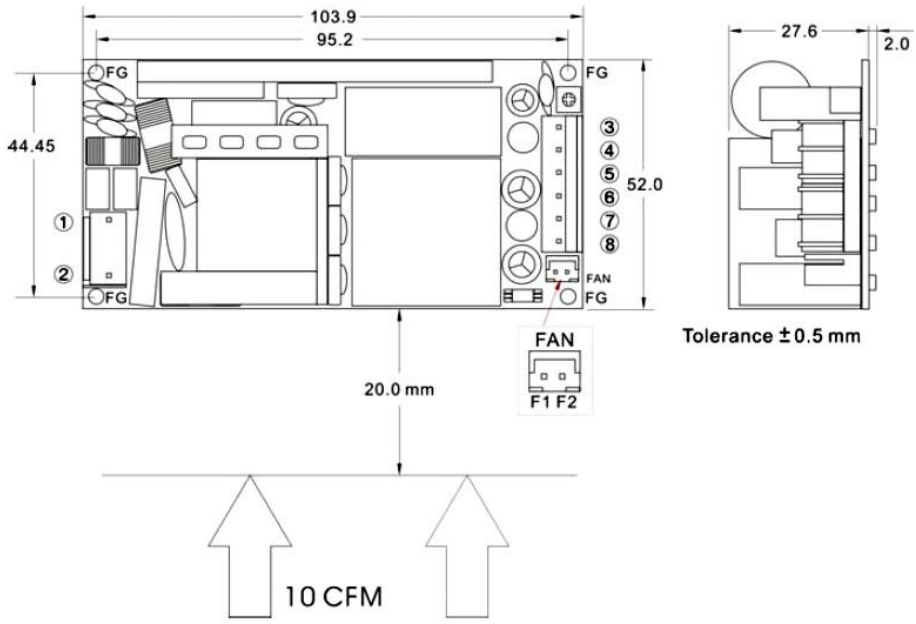


PIN#	Signal
1	AC IN (N)
2	AC IN (L)
3	+DC OUT
4	-DC OUT

Connector Pin (FAN)

PIN#	Signal
F1	+AUX OUT
F2	-AUX OUT

Header Version



PIN#	Signal
1	AC IN (N)
2	AC IN (L)
3~5	+DC OUT
6~8	-DC OUT

Connector Pin (FAN)

PIN#	Signal
F1	+AUX OUT
F2	-AUX OUT

For Header version, part number is PDAM240-XXA-H. For Example PDAM240-12A-H

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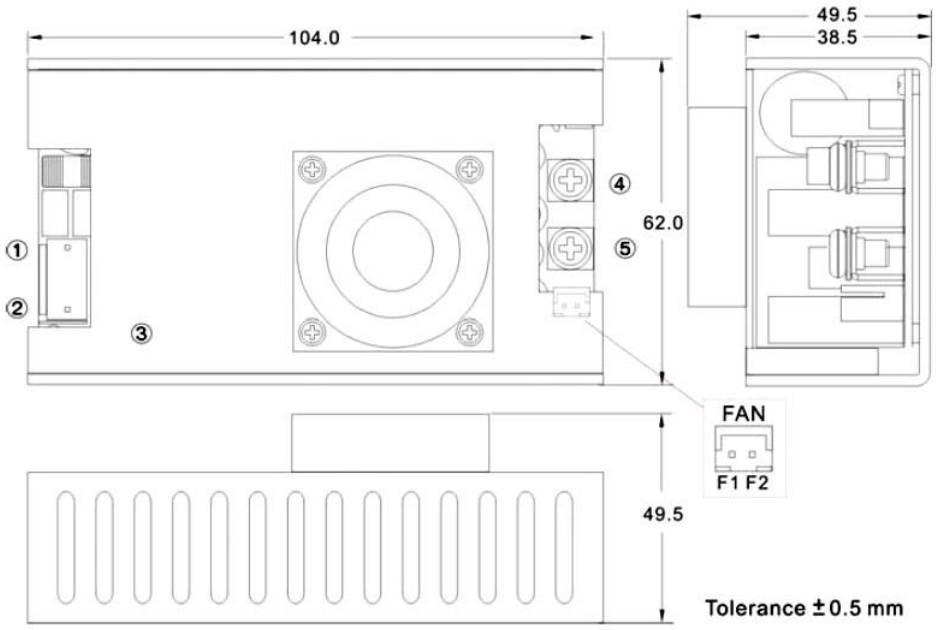
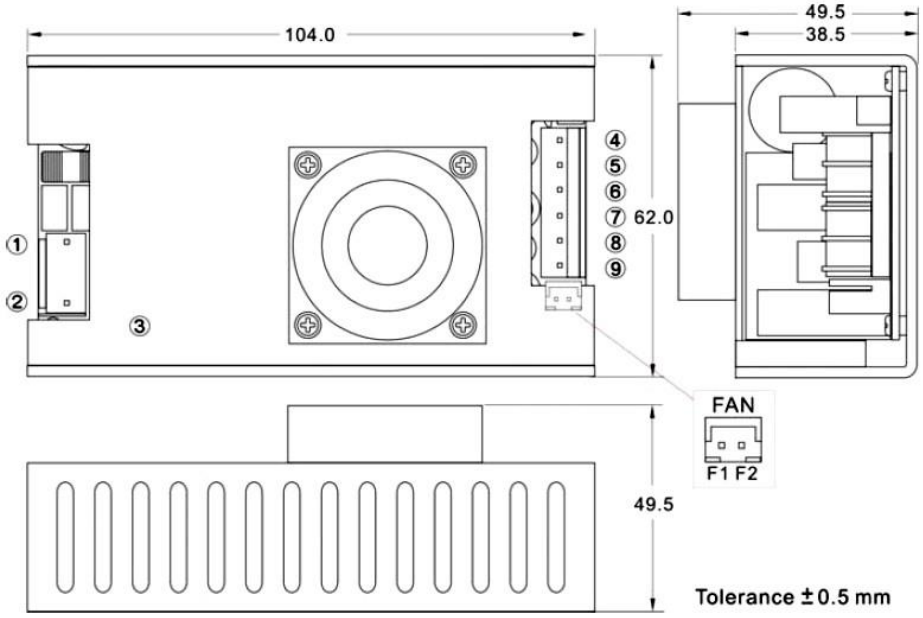


PIN#	Signal
1	AC IN (N)
2	AC IN (L)
3	PF / FG
4	+DC OUT
5	-DC OUT

Connector Pin (FAN)

PIN#	Signal
F1	+AUX OUT
F2	-AUX OUT

Header Version



PIN#	Signal
1	AC IN (N)
2	AC IN (L)
3	PF / FG
4~6	+DC OUT
7~9	-DC OUT

Connector Pin (FAN)

PIN#	Signal
F1	+AUX OUT
F2	-AUX OUT

For Header version, part number is PDAM240-XXC-H. For Example PDAM240-12C-H

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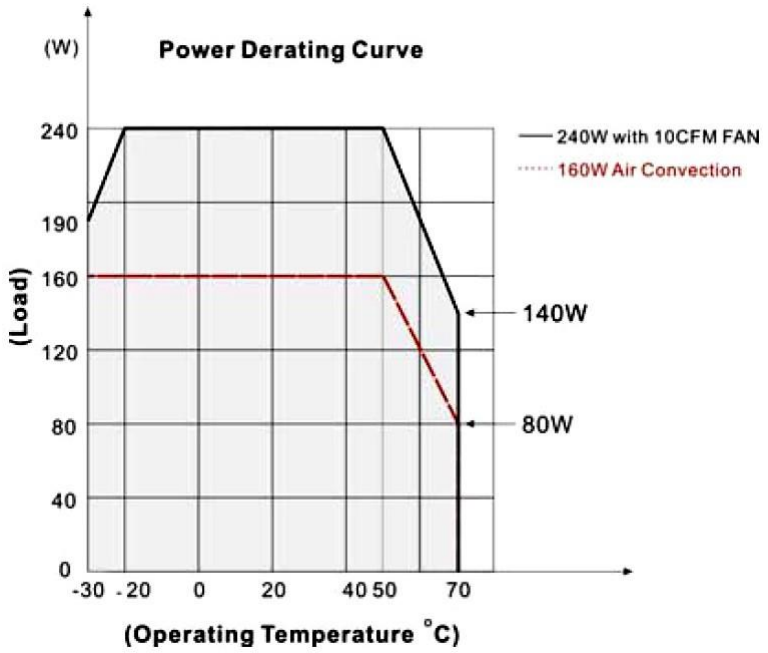
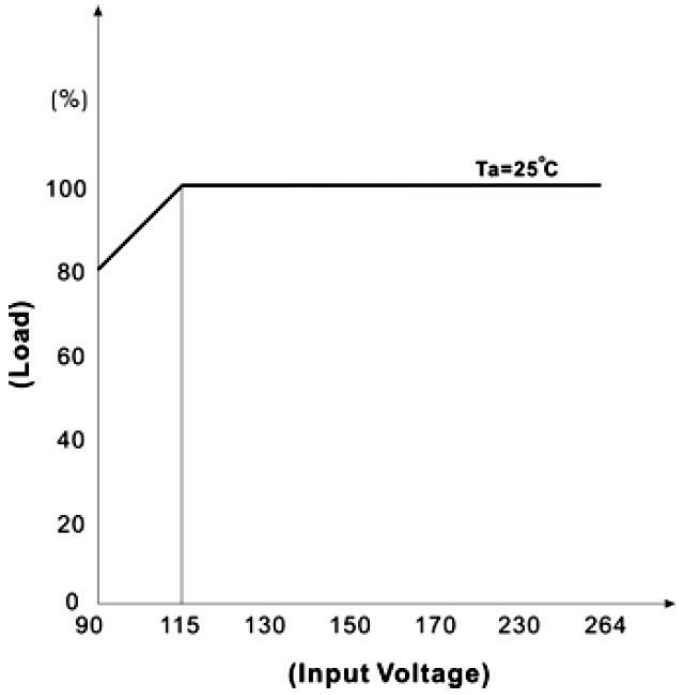
Power Derating





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