

## FEATURES

- Medical Application
- Low Cost, High Reliability
- Compact Size, Light Weight
- 100% Full Load Burn-In Test
- Universal AC Input / Full Range
- UL2601-1, EN60601-1 Approved
- Built-In EMI Filter, Low Ripple Noise
- High Efficiency, Low Working Temperature
- Protections: Short Circuit /Overload /Over Voltage



### SPECIFICATIONS: PSMPS45 Series

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.  
We reserve the right to change specifications based on technological advances.

#### INPUT SPECIFICATIONS

Input Voltage	90 – 264VAC (127 – 370VDC)
Input Frequency	47 to 440Hz
AC Current (typical)	1.2A @ 115VAC / 0.7A @ 230VAC
Inrush Current	15A @ 115VAC; 30A@230VAC cold start
Leakage Current	Less than 0.3mA @ 264VAC

#### OUTPUT SPECIFICATIONS

Output Voltage	See Table
Voltage Tolerance	±2.0% typical
Output Adjustment Range	±10% rated output load
Output Power	52W with 18CFM min. forced air convection
Line Regulation	±1%
Load Regulation	±2% typ.
Output Current	See Table
Ripple & Noise (20MHz BW)	See Table
Setup, Rise Time	800ms and 30ms @ 230VAC and full load / 1200ms and 30ms @ 115VAC and full load
Hold-Up Time	50ms @ 230VAC and full load / 16ms @ 115VAC and full load.
Temperature Coefficient	±0.04%/°C (0~50°C)

#### PROTECTION

Over Voltage Protection	CH.1: 115~135% rated output voltage
Overload Protection	53~75W hiccup mode, auto-recovery

#### GENERAL SPECIFICATIONS

Switching Frequency (fixed)	45KHz
Efficiency	76% typical
Isolation Voltage (Input to Output)	4000VAC for 1 min.
Isolation Voltage (Input to Field Ground)	1500VAC for 1 min.
Isolation Resistance (Input to Output)	100MΩ / 500VDC

#### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-10°C to +60°C (refer to derating curve)
Storage Temperature	-20°C to +85°C
Operating Humidity (non-condensing)	20% to 90% RH
Vibration	10~500Hz, 2G 10min./1cycle, Period for 60 minutes each along X, Y, and Z axes.
MTBF	366,100 hours min. (According to MIL-HDBK-217) at 25°C

#### PHYSICAL SPECIFICATIONS

Weight	230g
Dimensions	127(L) x 76(W) x 28(H) mm

#### SAFETY & EMC

Safety Standards	UL2601-1, TUV EN60601-1, IEC601-1 Approved
EMC Standards	EN55011 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, EN60601-1-2, ENV50204

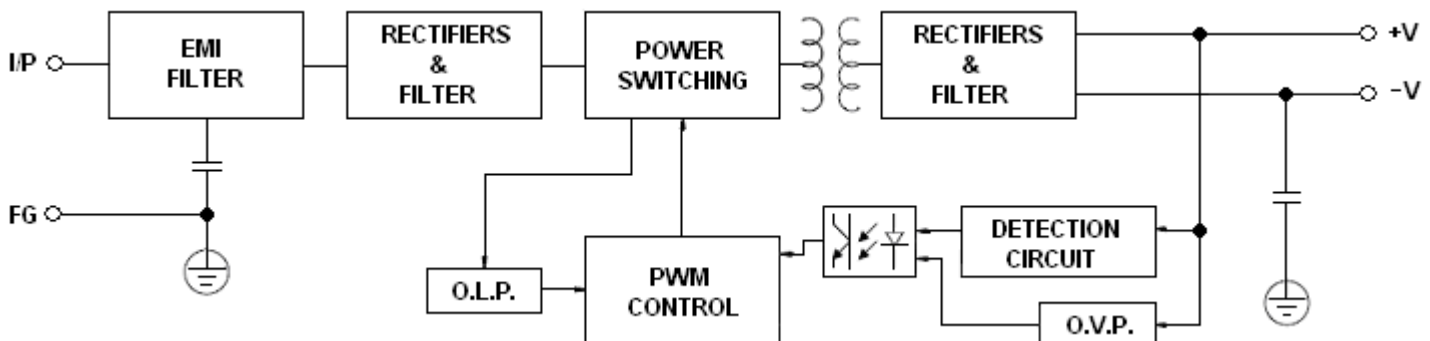
**OUTPUT VOLTAGE / CURRENT RATING CHART**

Model	Input Voltage	Output Voltage	Output Current Range	Output Current	Ripple & Noise	Output Power
PSMPS-45-3.3	90~264 VAC (127~370 VDC)	3.3 VDC	0 - 10.7A	8A	80mVp-p	26.4W
PSMPS-45-5		5 VDC	0 - 10.5A	8A	100mVp-p	40W
PSMPS-45-7.5		7.5 VDC	0 - 7A	5.4A	100mVp-p	40.5W
PSMPS-45-12		12 VDC	0 - 4.4A	3.7A	100mVp-p	44.4W
PSMPS-45-13.5		13.5 VDC	0 - 3.9A	3.3A	100mVp-p	44.6W
PSMPS-45-15		15 VDC	0 - 3.5A	3A	100mVp-p	45W
PSMPS-45-24		24 VDC	0 - 2.2A	1.9A	100mVp-p	45.6W
PSMPS-45-27		27 VDC	0 - 1.95A	1.7A	100mVp-p	45.9W
PSMPS-45-48		48 VDC	0 - 1.1A	1A	100mVp-p	48W

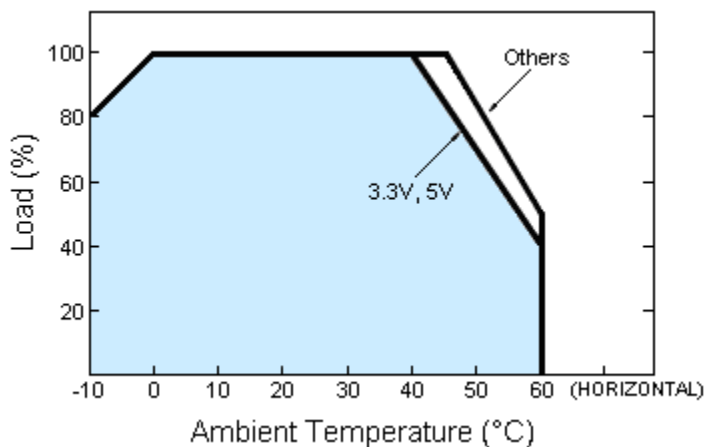
**NOTES**

1. All parameters are specified at 230VAC input, rated load, 25°C ambient.
2. Tolerances include set up tolerance, line regulation, load regulation.
3. Line regulation is measured from low line to high line at rated load.
4. Mounting holes M1 and M2 should be grounded for EMI purposes.
5. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uF & 47uF capacitor.

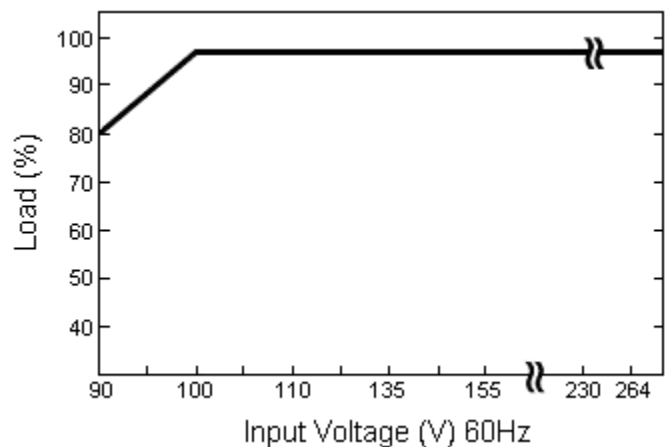
**BLOCK DIAGRAM**



**DERATING CURVE**

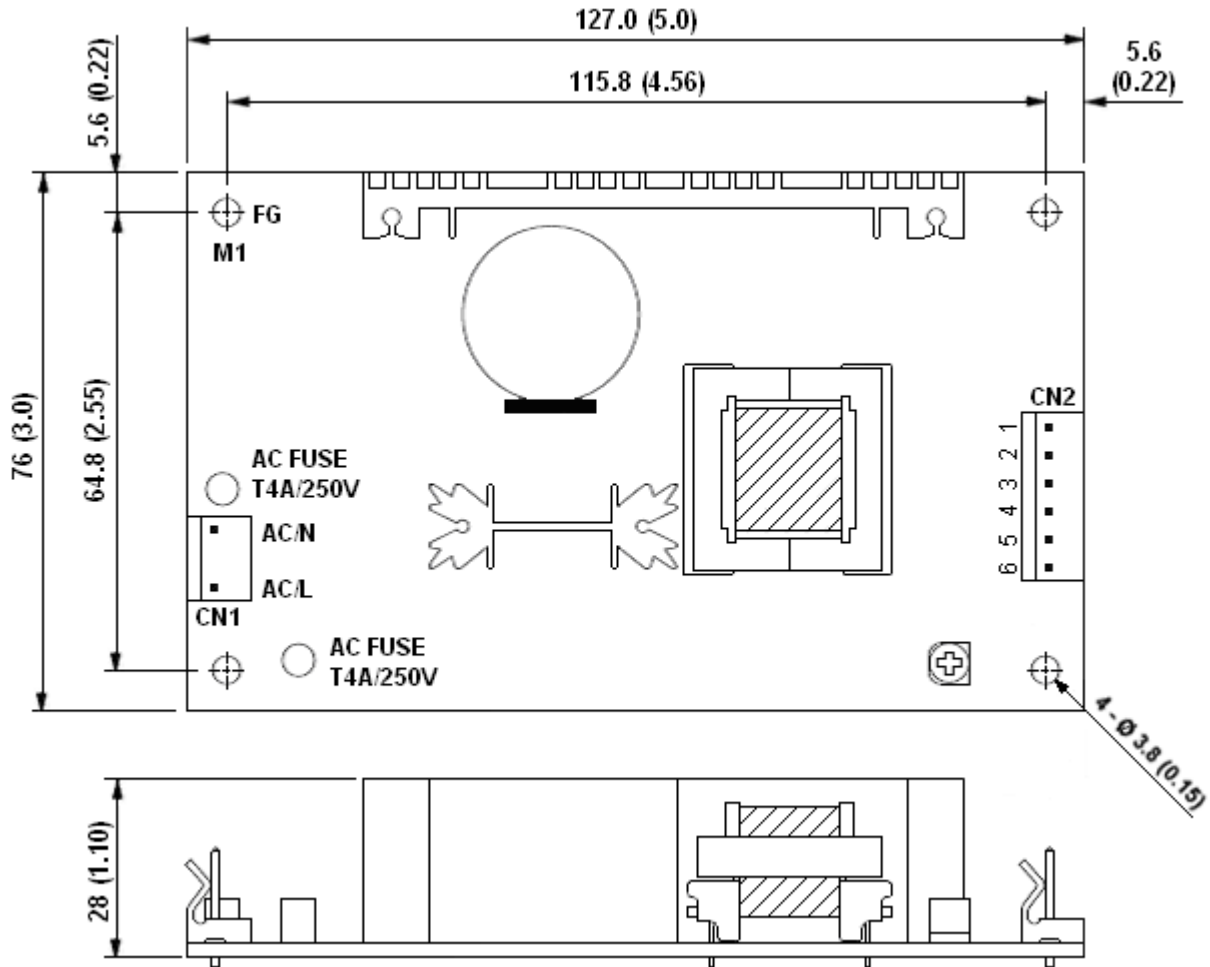


**STATIC CHARACTERISTICS**



**MECHANICAL DRAWING**

Unit: mm (inches)



**AC Input Connector (CN1): Molex 5277-02 or equivalent**

Pin. No	Assignment	Mating Housing	Terminal
1	AC/N	Molex 5195 or equivalent	Molex 5194 or equivalent
2	AC/L		

**DC Output Connector (CN2): Molex 5273-06 or equivalent**

Pin No.	Assignment	Mating Housing	Terminal
1,2,3	+V	Molex 5195 or equivalent	Molex 5194 or equivalent
4,5,6	-V		