

**FEATURES**

- 2 Year Warranty
- LED Indicator for Power On
- 100% Full Load Burn-In Tested
- Cooling by Free Air Convection
- Universal AC Input / Full Range
- Built-In EMI Filter, Low Ripple Noise
- Fixed Switching Frequency at 54KHz
- High Efficiency, Low Working Temperature
- Soft-Start Circuit, Limiting AC Surge Current
- Short Circuit, Overload, and Over Voltage Protected



**SPECIFICATIONS: PSD60 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 Range	85 ~ 264VAC (120 ~ 370VDC)
Input Frequency	47 to 63Hz
AC Current (typical)	2A @ 115VAC 1A @ 230VAC
Inrush Current (typical)	Cold Start 20A @ 115VAC 40A @ 230VAC
Leakage Current	< 3.5mA @ 240VAC

**OUTPUT SPECIFICATIONS**

Output Voltage	See Table
Output Power	See Table
Voltage Tolerance (See Note 3)	PSD60-A: CH.1: ±2.0% CH.2: ±6.0% PSD60-B: CH.1: ±2.0% CH.2: ±5.0%
Voltage Adjustment Range	CH.1: 4.75 ~ 5.5V
Line Regulation	PSD60-A: CH.1: ±0.5% CH.2: ±1.0% PSD60-B: CH.1: ±0.5% CH.2: ±0.5%
Load Regulation (See Note 4)	PSD60-A: CH.1: ±0.5% CH.2: ±4.0% PSD60-B: CH.1: ±0.5% CH.2: ±4.0%
Output Current	See Table
Ripple & Noise (max) (See Note 2)	See Table
Setup, Rise Time	300ms, 50ms @ 230VAC 800ms, 50ms @ 115VAC and full load
Hold Up Time (typical)	80ms @ 230VAC 10ms @ 115VAC and full load
Temperature Coefficient	±0.03%/°C (0 ~ 50°C) on +5V output

**PROTECTION**

Overload Protection	105 ~ 150% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed.
Over Voltage Protection	5V: 5.75 ~ 6.75V Protection Type: Hiccup mode, recovers automatically after fault condition is removed.

**GENERAL SPECIFICATIONS**

Efficiency (typical)	See Table
Switching Frequency	54KHz
Withstand Voltage	3000VAC (Input to Output), 1500VAC (Input to FG), 500VAC (Output to FG)
Isolation Resistance	100MΩ/500DC (Input to Output, Input to FG, and Output to FG)

**ENVIRONMENTAL SPECIFICATIONS**

Working Temperature	-10°C to +60°C (refer to output load derating curve)
Storage Temperature	-20°C to +85°C
Working Humidity	20 ~ 90% RH non-condensing
Storage Humidity	10 ~ 95% RH
Cooling	Free air convection
Vibration	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min each along X, Y, Z axes.
MTBF	301,200 hours min. @ 25°C (MIL-HDBK-217F)

**PHYSICAL SPECIFICATIONS**

Weight	540 grams
Dimensions	159(L) x 97(W) x 38(H) mm
Warranty	2 years

**SAFETY & EMC (See Note 6)**

Safety Standards	UL1012, UL60950, TUV EN60950 Approved
EMI Conduction & Radiation	Compliance to EN55022 (CISPR22) Class B
Harmonic Current	Compliance to EN61000-3-2,-3
EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A

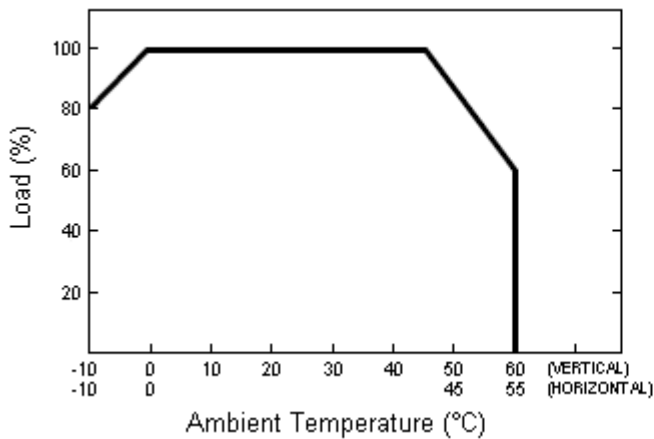
**OUTPUT VOLTAGE / CURRENT RATING CHART**

Model Number		Input Voltage	Output Voltage	Rated Output Current	Output Current Range	Ripple & Noise	Rated Output Power	Efficiency
PSD60-A	CH: 1	85 ~ 264VAC (120 ~ 370VDC)	5 VDC	4A	0.3 ~ 6A	75mVp-p	56W	73%
	CH: 2		12 VDC	3A	0.2 ~ 4A	150mVp-p		
PSD60-B	CH: 1		5 VDC	3A	0.3 ~ 6A	75mVp-p	58W	76%
	CH: 2		24 VDC	1.8A	0.2 ~ 2.2A	150mVp-p		

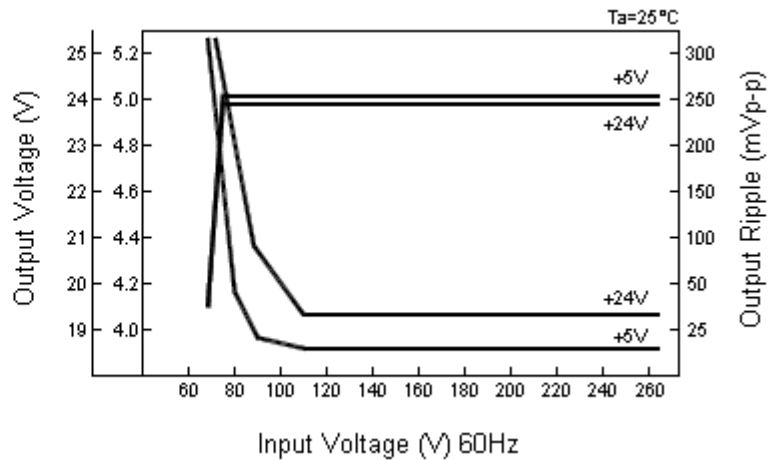
**NOTES**

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
2. Ripple & noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerances include set up tolerance, line regulation, and load regulation.
4. Load regulation is measured from 20% to 100% rated load and other output at 60% rated load.
5. Each output provides up to maximum current but total load can not exceed maximum output power.
6. The power supply is considered a component, which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

**DERATING CURVE**

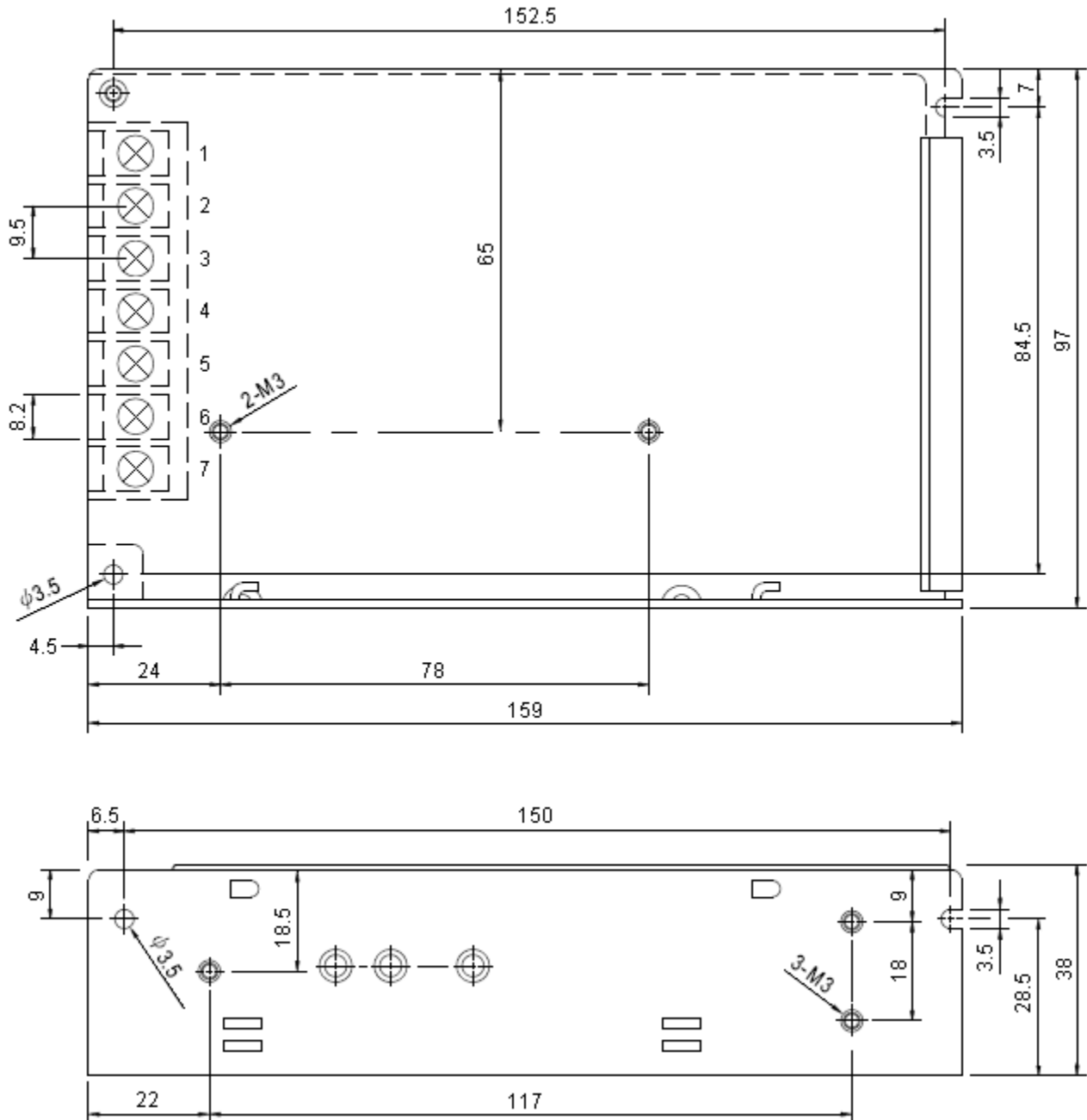


**STATIC CHARACTERISTICS (B)**



**MECHANICAL DRAWING**

Unit: mm



Terminal Pin No. Assignment	
Pin No.	Assignment
1	AC/L
2	AC/N
3	FG
4	DC OUTPUT +V2
5	DC OUTPUT +V1
6,7	DC OUTPUT COM