

## FEATURES

• 2 Year Warranty

Harmonic Current

**EMS Immunity** 

- Low Cost, High Reliability
- Fixed Switching Frequency
- Compact Size, Light Weight
- AC Input Selectable by Switch
- 100% Full Load Burn-In Tested
- Cooling by Free Air Convection
- EN55022, IEC801-2,3,4 and IEC555-2
- UL1950 and TUV EN60950 Approved
- Built-In EMI Filter, Low Ripple and Noise
- High Efficiency, Low Working Temperature
- Soft Start Circuit, Limiting AC Surge Current
- Short Circuit, Overload, and Over Voltage Protected



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SPECIFICATIONS: PSS150 Series						
	°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.					
	right to change specifications based on technological advances.					
INPUT SPECIFICATIONS						
Input Voltage Range	88 ~ 132VAC / 176 ~ 264VAC selected by switch (248 ~ 370VDC)					
Input Frequency	47 to 63Hz					
AC Current (typical)	3.2A @ 115VAC 1.6A @ 230VAC					
Inrush Current (typical)	Cold Start 35A					
Leakage Current	< 3.5mA @ 240VAC					
OUTPUT SPECIFICATIONS						
Output Voltage	See Table					
Output Power	See Table					
Voltage Tolerance (See Note 3)	PSS-150-5: ±2.0%; Other Models: ±1.0%					
Voltage Adjustment Range	See Table					
Line Regulation	5 & 7.5V outputs: ±0.5% 9 - 15V outputs: ±0.3% 24 - 48V outputs: ±0.2%					
Load Regulation	5 & 7.5V outputs: ±0.5% 9 - 15V outputs: ±0.3% 24 - 48V outputs: ±0.2%					
Output Current	See Table					
Ripple & Noise (max) (See Note 2)	See Table					
Setup, Rise Time	100ms, 50ms @ full load					
Hold Up Time (typical)	28ms @ full load					
Temperature Coefficient	±0.03%/°C (0 ~ 50°C)					
PROTECTION	105 . 1500/ roted output power					
Overload Protection	105 ~ 150% rated output power Protection Type: Shutdown output voltage, re-power on to recover.					
Over Voltage Protection	See Table Protection Type: Shutdown output voltage, re-power on to recover.					
GENERAL SPECIFICATIONS						
Switching Frequency	25KHz					
Efficiency	See Table					
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, 60min each along X, Y, Z axes.					
MTBF	286,700 hours min. @ 25°C (MIL-HDBK-217F)					
PHYSICAL SPECIFICATIONS						
Weight	800 grams					
Dimensions	199(L) x 110(W) x 50(H) mm					
Warranty	2 years					
SAFETY & EMC						
Safety Standards	UL1012, UL60950-1, TUV EN60950-1 Approved					
EMI Conduction & Radiation	Compliance to EN55022 (CISPR22) Class B					

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Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light Industry level, criteria A

Compliance to EN61000-3-2,-3



# **OUTPUT VOLTAGE / CURRENT RATING CHART**

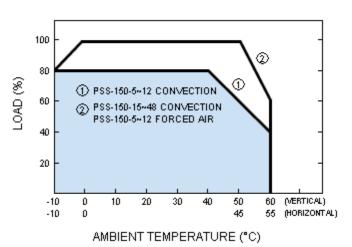
Model Number	Input Voltage	Output Voltage	Voltage Adjust. Range	Over Voltage Protection	Output Current	Ripple & Noise	Output Power	Efficiency
PSS-150-5	88 ~ 132 VAC or	5 VDC	4.5 ~ 5.5V	5.75 ~ 6.75V	30A	150mVp-p	150W	78%
PSS-150-7.5		7.5 VDC	6 ~ 8.3V	8.63 ~ 10.13V	20A	150mVp-p	150W	80%
PSS-150-9		9 VDC	8 ~ 10.4V	10.35 ~ 12.2V	16.7A	180mVp-p	150.3W	80%
PSS-150-12		12 VDC	10.6 ~ 13.2V	13.8 ~ 16.2V	12.5A	180mVp-p	150W	82%
PSS-150-13.5		13.5 VDC	12 ~ 15V	15.53 ~ 18.2V	11.2A	180mVp-p	151.2W	83%
PSS-150-15	176 ~ 264 VAC	15 VDC	13.5 ~ 16.5V	17.25 ~ 20.3V	10A	180mVp-p	150W	84%
PSS-150-24		24 VDC	21 ~ 28V	30 ~ 34.8V	6.5A	240mVp-p	156W	85%
PSS-150-27		27 VDC	24 ~ 30V	31.1 ~ 36.45V	5.6A	240mVp-p	151.2W	86%
PSS-150-48		48 VDC	43 ~ 53V	55.2 ~ 64.8V	3.2A	240mVp-p	153.6W	87%

### NOTES

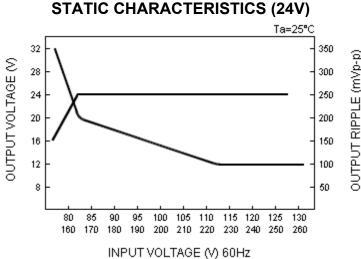
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.

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. This 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

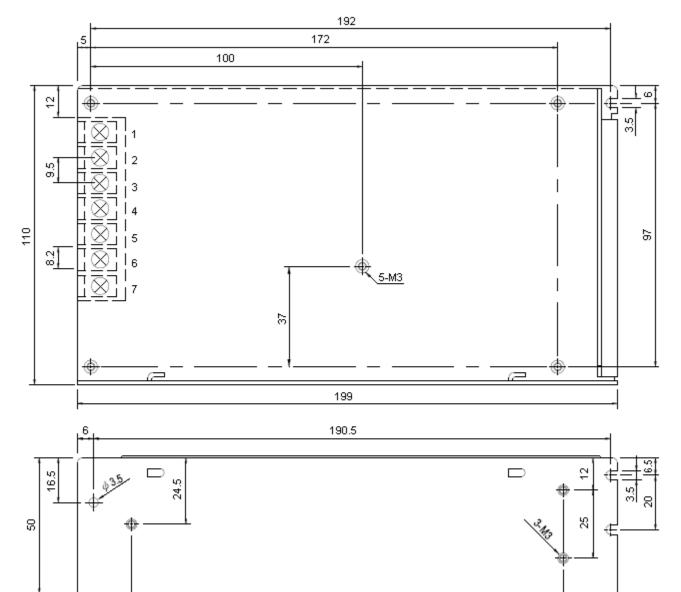




## **MECHANICAL DRAWING**

20

#### Unit: mm



#### **Terminal Pin No. Assignment**

159

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Pin No.	Assignment			
1	AC/L			
2	AC/N			
3	FG			
4,5	DC OUTPUT (-V)			
6,7	DC OUTPUT (+V)			

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