



# PS-750W-12V

Enclosed DC Power Supply

UNIT CODE	DESCRIPTION
PS-750W12V	750 Watt, 12V DC, Single Output AC-to-DC Power Supply with PFC Function

SPECIFICATIONS		
Input	Output	Agency approvals
Universal AC Input	+12VDC@0-62.5A	UL/CUL/TUV/CB/CE

## Features at a Glance:

- Using ZVS technology to reduce power dissipation
- High 86% efficiency
- Universal AC input / full range
- Built-in active PFC circuit compliance to EN61000-3-2
- Short circuit, overload, over-voltage, over-temperature protection
- Built-in remote ON/OFF control and remote sense function
- PF/PG signal output
- High power density 5.48W/ in<sup>3</sup>
- 100% full-load burn-in
- Universal AC input:88-264VAC@47-63Hz
- 105°C output capacitors
- Withstanding voltage of 300VAC surge input for 5 seconds
- Mating Connector:103587CH, pg 121
- High power density 5.48/inch<sup>3</sup>
- Built-in constant limiting circuit
- Power good and fail signal output
- Built-in remote ON-OFF control
- Built-in remote sense function
- SAFETY STANDARDS: UL60950-1, TUV EN60950-1 Approved
- High operating temperature up to 60°C
- 3 year warranty
- Weight: 6.3lbs (2.9 Kgs)
- Dimensions: 10.9" \* 5" \* 2.5" (L\*W\*H)  
278mm\*127mm\*63.5mm



**PS-750 series** are 750W full input range enclosed type switching power supplies with power factor correction (PFC) function that designed for the growing demand of high wattage applications. Featuring advanced ZVS technology and 5.48W/ in<sup>3</sup> high power density, SP-750 series can provide full output wattage even at 100VAC input. Besides the standard functions of remote sense, remote ON/OFF control and PF/PG signal output, SP-750 series uses constant current limiting plus delay hiccup as the over load protection which gives users the flexibility under applications of capacitive/inductive load and still provide full protection for customers' system in the mean time. Applications include general electronic usage, factory automation, instrumentation, moving sign, telecom/datacom, specific charging equipment, and many others.

Pricing:	1 +	\$ 598.80
	10 +	\$ 538.50
	100 +	\$ 485.50
<b>electracool.com</b>		



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■ Features :

- Universal AC input/Full range
- AC input active surge current limiting
- Built-in active PFC function,PF>0.95
- Protections:Short circuit, overload, over voltage, over temperature
- Forced air cooling by built-in DC ball bearing fan
- High power density 5.48/inch<sup>3</sup>
- Built-in constant current limiting circuit
- With power good and fail signal output
- Built-in remote ON-OFF control
- Built-in remote sense function
- 3 years warranty

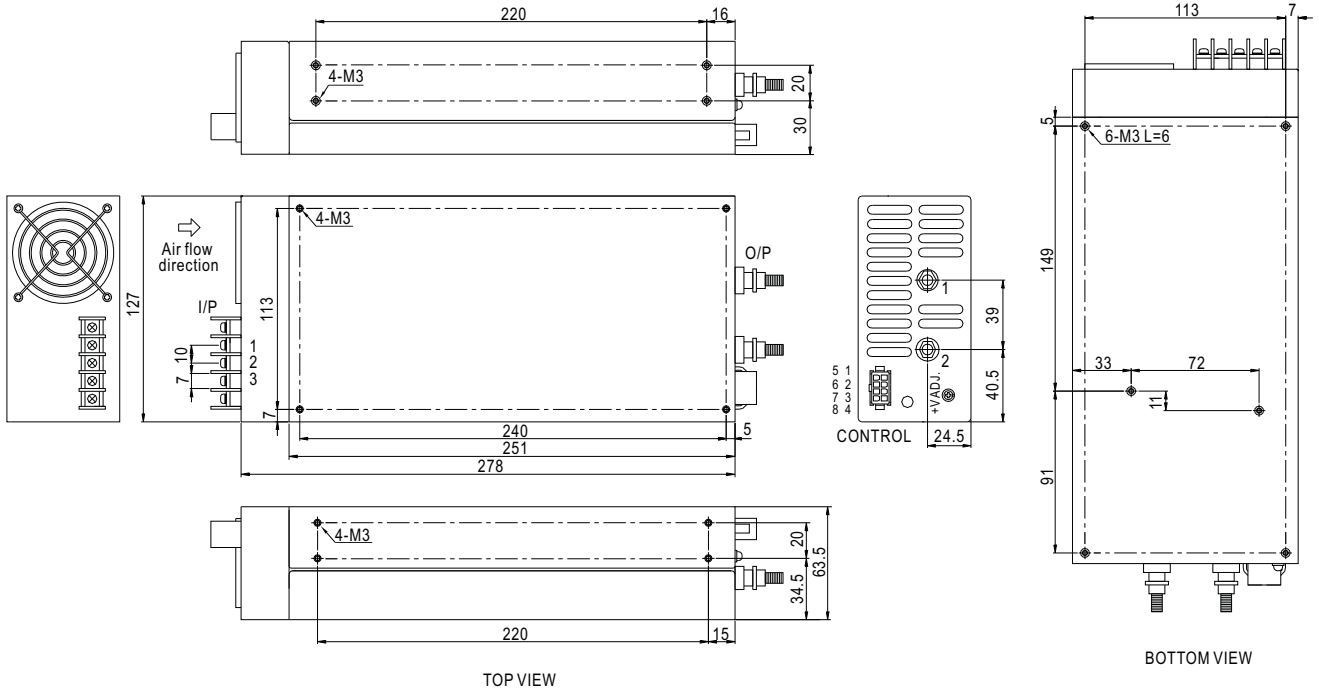


SPECIFICATION

MODEL	SP-750-5	SP-750-12	SP-750-15	SP-750-24	SP-750-27	SP-750-48	
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	27V	48V
	RATED CURRENT	120A	62.5A	50A	31.3A	27.8A	15.7A
	CURRENT RANGE	0 ~ 120A	0 ~ 62.5A	0 ~ 50A	0 ~ 31.3A	0 ~ 27.8A	0 ~ 15.7A
	RATED POWER	600W	750W	750W	751.2W	750.6W	753.6W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10 ~ 13.5V	13.5 ~ 16.5V	22 ~ 26.4V	24 ~ 30V	43 ~ 56V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
LOAD REGULATION	±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
SETUP, RISE, HOLD TIME	600ms, 50ms, 16ms/230VAC      600ms, 50ms, 16ms/115VAC at full load						
INPUT	VOLTAGE RANGE	90 ~ 264VAC    127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR	PF>0.95/230VAC		PF>0.98/115VAC at full load			
	EFFICIENCY (Typ.)	81%	86%	87%	89%	89%	90%
	AC CURRENT	11A/115VAC	5.3A/230VAC				
	INRUSH CURRENT (max.)	30A/115VAC	50A/230VAC				
	LEAKAGE CURRENT	<2.0mA / 240VAC					
PROTECTION	OVER LOAD	105~125% rated output power Protection type : Constant current limiting, unit will Hiccup after 3 sec.					
	OVER VOLTAGE	5.75 ~ 6.3V	13.8 ~ 16.2V	18 ~ 21V	27.6 ~ 32.4V	31 ~ 36.5V	57.6 ~ 67.2V
	OVER TEMPERATURE	85°C±5°C (TSW1 ) Detect on heatsink of power transistor    85°C±5°C (TSW2 ) Detect on heatsink of power diode Protection type : Shut down o/p voltage, recovers automatically after temperature goes down					
FUNCTION	POWER GOOD/FAIL	50ms/1ms					
	REMOTE CONTROL Note.5	RC+/RC- short power on, open power off					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to output load derating curve)					
	WORKING HUMIDITY	20~90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC					
	EMI CONDUCTION & RADIATION	Compliance to EN55011 (CISPR11), EN55022 (CISPR22) Class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, EN61000-6-2, EN61204-3 Heavy industry level, criteria A					
	MTBF	769.3K hrs min.    MIL-HDBK-217F (25°C)					
	DIMENSION	278*127*63.5mm (L*W*H)					
NOTE	PACKING	2.9Kg; 6pcs / 18.4Kg / 0.98CUFT					
		1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 5. The power supply unit will have no output if the shorting connector is not assembled between RC+ & RC-.					

**Mechanical Specification**

Case No.919A Unit:mm



AC Input Terminal Pin. No. Assignment

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG $\perp$

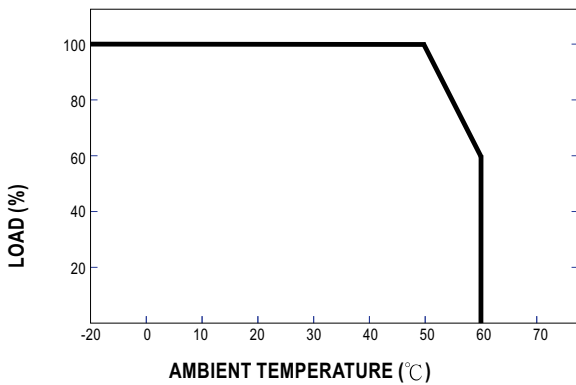
DC Output Terminal Pin. No Assignment

Pin No.	Assignment
1	DC OUTPUT +V
2	DC OUTPUT -V

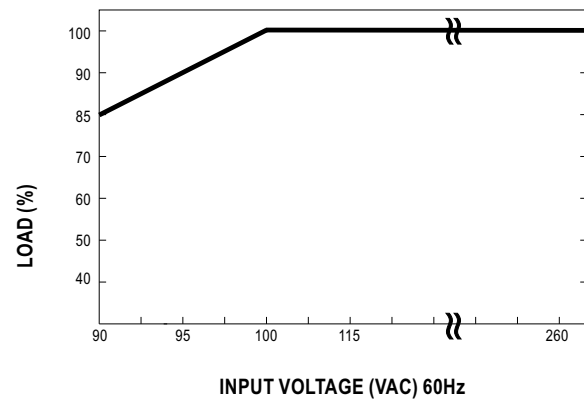
Control Pin. No Assignment : MOLEX 5559-NP uses 5558male crimp terminal

Pin No.	Assignment	Pin No.	Assignment	Mating connector	Terminal
1	NC	5	NC	MOLEX 5557-NR	MOLEX 5556 Female crimp Terminal receptacle
2	-S	6	PF(Power fail signal)		
3	G	7	+S		
4	RC-	8	RC+		

**Derating Curve**



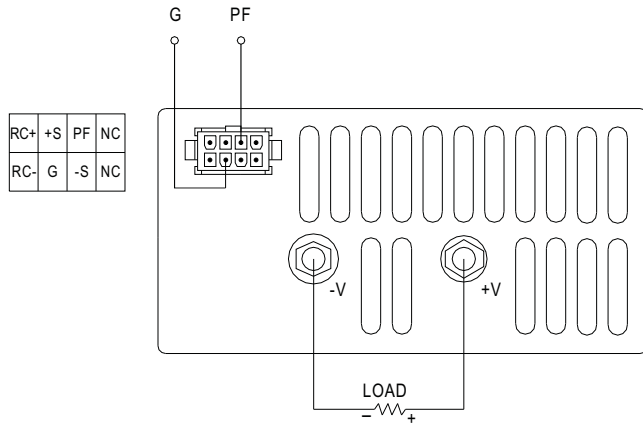
**Static Characteristics**



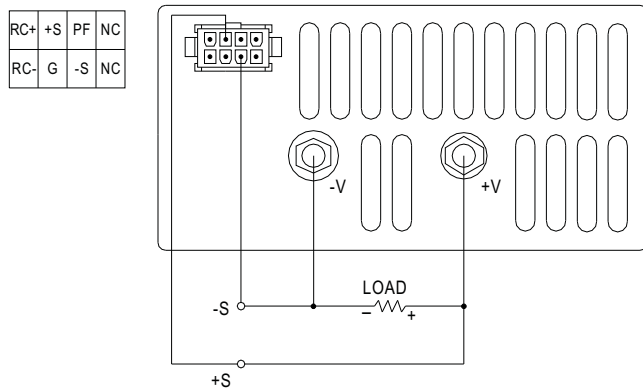
■ Control Terminal Instruction Manual

**Power Fail Signal**

PF Signal is the voltage difference between "G" and "PF" pin output



**Remote Sensing**



**Remote Control**

Power ON: RC+/RC- Short  
Power OFF: RC+/RC- open

