

FEATURES

- 3 Year Warranty
- 100% Full Load Burn-In Tested
- Universal AC Input / Full Range
- Built-In Remote Sense Function
- Built-In Remote ON/OFF Control
- Built-In Active PFC Function, PF > 0.95
- Current Sharing up to 2 units or 2000W
- AC Input Active Surge Current Limiting
- Built-In Constant Current Limiting Circuit
- Built-In Active Current Sharing and Parallel Function
- Short Circuit, Overload, Over Voltage, and Over Temperature Protected



SPECIFICATIONS: PSPSP1000 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 (See Note 6)	90 ~ 264VAC (127 ~ 370VDC)
Input Frequency	47 to 63Hz
AC Current (typical)	11.2A @ 115VAC 5.6A @ 230VAC
Inrush Current (typical)	32A @ 115VAC 63A @ 230VAC
Leakage Current	< 2mA @ 240VAC
Power Factor (typical)	0.96 @ 230VAC 0.96 @ 115VAC and full load
Remote ON/OFF Control	RC+/RC-: 0 ~ 0.8V = power on; 4 ~ 10V = power off sink current < 20mA

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Output Power	See Table
Voltage Tolerance (See Note 3)	5V output: 6%, 12V output: 3%, 13.5V & 15V outputs: 2%, 24V - 48V outputs: 1%
Voltage Adjustment Range	See Table
Line Regulation	5V output: 0.5%, 12V - 15V outputs: 0.3%, 24V - 48V outputs: 0.2%
Load Regulation	5V output: 2.0%, 12V - 48V outputs: 0.5%
Output Current	See Table
Ripple & Noise (max) (See Note 2)	5V output: 100mVp-p; 12V - 27V outputs: 150mVp-p; 48V output: 200mVp-p
Setup, Rise Time	1500ms, 50ms @ 230VAC 1500ms, 50ms @ 115VAC and full load
Hold Up Time (typical)	24ms @ 230VAC 24ms @ 115VAC and full load
Temperature Coefficient	±0.03%/°C (0 ~ 50°C)

PROTECTION

Overload Protection	115 ~ 140% rated output power Protection Type: Constant current limiting; recovers automatically after fault condition is removed
Over Voltage Protection	See Table Protection Type: Shutdown output voltage; re-power on to recover
Over Temperature Protection	95°C (TSW1) detect on the heatsink of PFC MOSFET 90°C (TSW2) detect the winding of output choke Protection Type: Shutdown output voltage; recovers automatically after temperature goes down

GENERAL SPECIFICATIONS

Efficiency (typical)	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
Vibration	10 ~ 500Hz, 2G 10min./1 cycle, 60min each along X, Y, Z axes.
MTBF	59,600 hours min. @ 25°C (MIL-HDBK-217F)

PHYSICAL SPECIFICATIONS

Weight	4700 grams
Dimensions	278(L) x 129(W) x 127(H) mm
Warranty	3 years

SAFETY & EMC

Safety Standards	UL60950-1, TUV EN60950-1 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, light industry level, criteria A

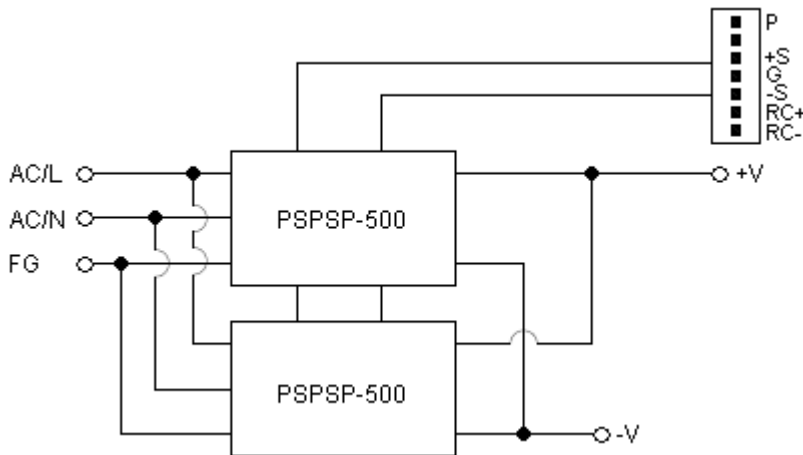
OUTPUT VOLTAGE / CURRENT RATING CHART

Model Number	Input Voltage	Output Voltage	Voltage Adjust. Range	Over Voltage Protection	Output Current	Output Power		Efficiency
						Rated Power	Peak Load ⁽⁴⁾	
PSPSP1000-5	90 ~ 264 VAC (127 ~ 370 VDC)	5 VDC	4.75 ~ 5.5V	5.75 ~ 6.75V	145A	725W	800W	77%
PSPSP1000-12		12 VDC	10 ~ 13.2V	13.8 ~ 16.2V	75A	900W	1000W	84%
PSPSP1000-13.5		13.5 VDC	12 ~ 15V	15.5 ~ 18.2V	67A	904.5W	1000W	84%
PSPSP1000-15		15 VDC	13.5 ~ 18V	18 ~ 21V	60A	900W	1000W	84%
PSPSP1000-24		24 VDC	20 ~ 26.4V	27.6 ~ 32.4V	37.6A	902.4W	1000W	86%
PSPSP1000-27		27VDC	24 ~ 30V	31 ~ 36.5V	33.6A	907.2W	1000W	86%
PSPSP1000-48		48 VDC	41 ~ 56V	57.6 ~ 67.2V	19A	912W	1000W	86%

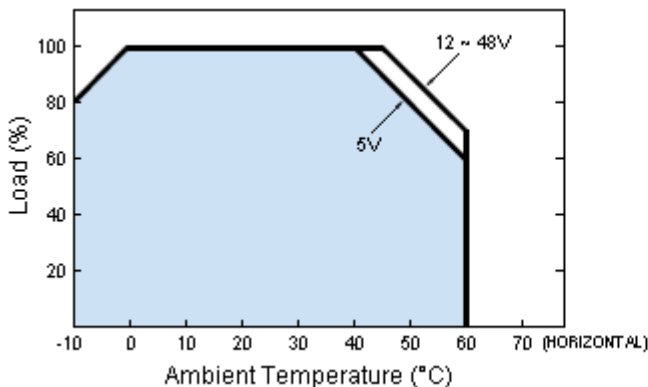
NOTES

- All parameters NOT specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
- Ripple & noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
- Tolerances include set up tolerance, line regulation, and load regulation.
- 10% Duty cycle maximum within every 30 seconds (max.). Average output power should not exceed the rated power.
- 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 may be needed under low input voltages. Please check the derating curve for more details.

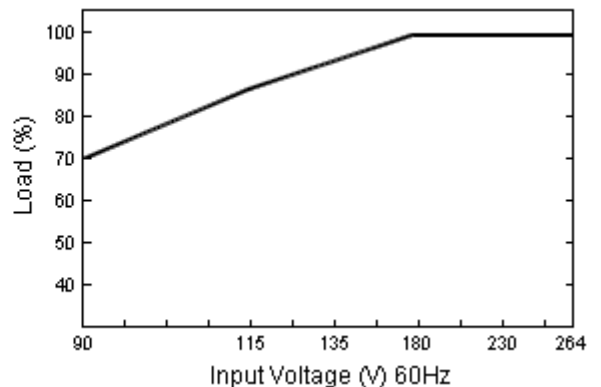
BLOCK DIAGRAM



DERATING CURVE

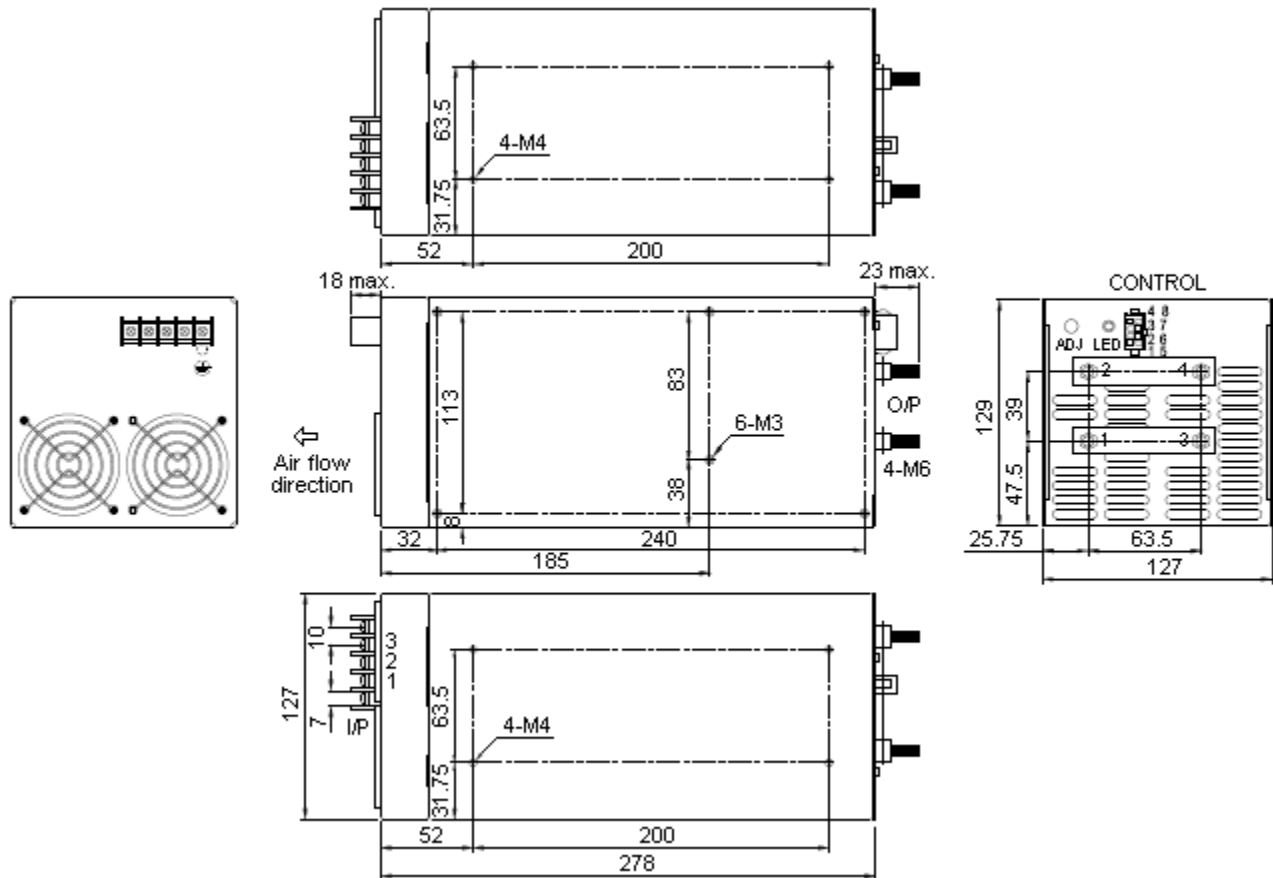


OUTPUT DERATING VS INPUT VOLTAGE



MECHANICAL DRAWING

Unit: mm



AC INPUT TERMINAL PIN NO. ASSIGNMENT	
Pin No.	Assignment
1	AC/L
2	AC/N
3	FG

DC OUTPUT TERMINAL PIN NO. ASSIGNMENT	
Pin No.	Assignment
1, 3	DC OUTPUT +V
2, 4	DC OUTPUT -V

CONTROL PIN NO. ASSIGNMENT: MOLEX 5559-NP USES 5558 MALE CRIMP TERMINAL			
Pin No.	Assignment	Mating Connector	Terminal
1	P (Current Share)	MOLEX 5557-NR	MOLEX 5556 Female Crimp Terminal Receptacle
2	-S		
3	G		
4	RC-		
5	NC		
6	NC		
7	+S		
8	RC+		