



# MEAN WELL

## SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

## PSP-500 SERIES

- .LOW COST, HIGH RELIABILITY
- .BUILT IN EMI FILTER, CURRENT SHARING CIRCUIT
- .BUILT IN REMOTE CONTROL, REMOTE SENSE, POWER GOOD SIGNAL
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE, OVER TEMP. PROTECTED
- .100% FULL LOAD BURN-IN TEST
- .105°C OUTPUT CAPACITOR
- .BUILT IN PFC CIRCUIT PFC >0.95,
- COMPLIES WITH EN61000-3-2

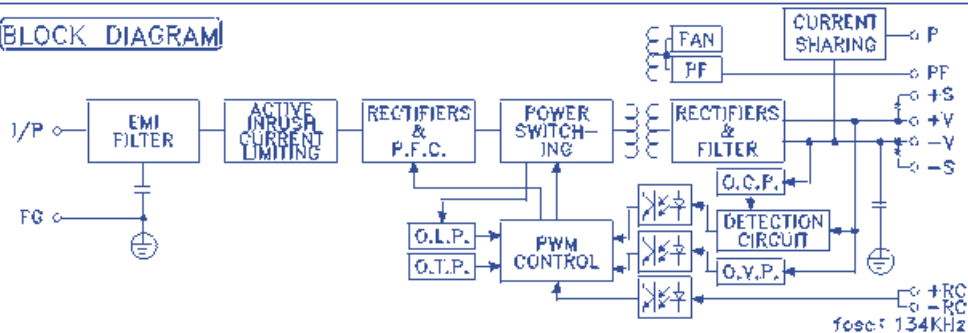


MODEL	PSP-500 -5	PSP-500 -12	PSP-500 -13.5	PSP-500 -15	PSP-500 -24	PSP-500 -27	PSP-500 -48
SPECIFICATION							
DC OUTPUT VOLTAGE	5V	12V	13.5V	15V	24V	27V	48V
OUTPUT V. TOLERANCE	±2%	±1%	±1%	±1%	±1%	±1%	±1%
OUTPUT RATED CURRENT	80A	41.5A	37A	33A	20.8A	18.5A	10.5A
OUTPUT CURRENT RANGE	0-80A	0-41.5A	0-37A	0-33A	0-20.8A	0-18.5A	0-10.5A
RIPPLE & NOISE(Vp-p)	100m	150m	150m	150m	150m	150m	200m
LINE REGULATION	±0.5%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
LOAD REGULATION	±2%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
DC OUTPUT POWER	400W	498W	499.5W	495W	499.2W	499.5W	504W
PEAK OUTPUT POWER	500W	600W	600W	600W	600W	600W	600W
EFFICIENCY	76%	82%	82%	82%	84%	84%	86%
DC VOLTAGE ADJ.	4.75-5.5V	10-13.2V	12-15V	13.5-18V	20-26.4V	24-30V	41-56V
INPUT VOLTAGE RANGE	90~264VAC 47~63Hz; 127~370VDC						
AC CURRENT	7A/115V 3.5A/230V						
POWER FACTOR	0.98/100VAC 0.95/230VAC						
INRUSH CURRENT	20A/115V 40A/230V						
LEAKAGE CURRENT	<1mA/240VAC						
OVERLOAD PROTECTION	115%~130% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY						
OVER VOLTAGE PROTECTION	5.75-6.75	13.8~16.2V	15.5~18.2V	18~21V	27.6~32.4V	31~36.5V	57.6~67.2V
OVER TEMP.PROTECTION	RTH2 >95°C OUTPUT SHUTDOWN						
REMOTE CONTROL	RC+/RC-: 0-0.8V=POWER ON; 3-10V=POWER OFF SINK CURRENT3-10mA						
TEMP. COEFFICIENT	±0.03% / °C (0~50°C)						
SETUP, RISE, HOLD UP TIME	1.5s, 50ms, 15ms						
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES						
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:500VDC / 100M Ohms						
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH WITH 30CFM FORCED AIR						
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH						
DIMENSION	278*127*63.5mm						
WEIGHT	2.5 Kgs						
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED						
EMC STANDARDS	CISPR22(EN55022)CLASS B, EN61000-4-2,3,4,5,6,8,11;ENV50204 EN61000-3-2 VERIFICATION						

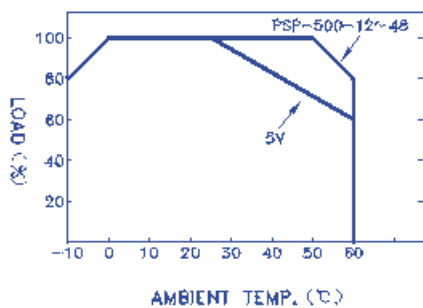
- NOTE :
- 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
  - 2.TOLERANCE INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
  - 3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
  - 4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
  - 5.LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD.
  - 6.REFER TO OUTPUT DERATING CURVE VS INPUT VOLTAGE.
  - 7.PEAK OUTPUT POWER LASTING <30 SECONDS WITH A MAX. 10% DUTY CYCLE.

# PSP-500 SERIES

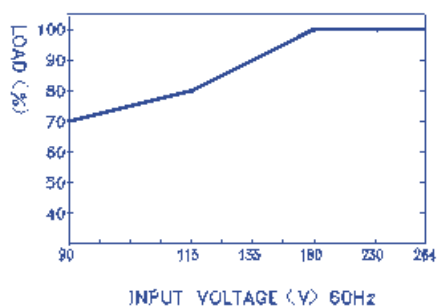
## BLOCK DIAGRAM



## OUTPUT DERATING VS $T_a$



## OUTPUT DERATING VS INPUT VOLTAGE



## DIMENSION (mm)

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>☒ CASE : 919</li> <li>☒ I/P TERMINAL PIN NO. ASSIGNMENT                     <ul style="list-style-type: none"> <li>☒ PIN 1,2 : AC INPUT</li> <li>☒ PIN 3 : FG <math>\perp</math></li> </ul> </li> <li>☒ O/P TERMINAL PIN NO. ASSIGNMENT                     <ul style="list-style-type: none"> <li>☒ PIN 1,2,3 : DC OUTPUT +V</li> <li>☒ PIN 4,5,6 : DC OUTPUT -V</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>☒ CONTROL PIN NO. ASSIGNMENT                     <ul style="list-style-type: none"> <li>☒ PIN 1 : P(CURRENT SHARE)</li> <li>☒ PIN 2 : -S</li> <li>☒ PIN 3 : G</li> <li>☒ PIN 4 : RC-</li> <li>☒ PIN 5 : NC</li> <li>☒ PIN 6 : PF(POWER FAIL SIGNAL)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>☒ MATING CONNECTOR                     <ul style="list-style-type: none"> <li>☒ Molex 5559-NP Uses 3558 Male Crimp Terminal</li> <li>☒ Molex 5557-NR Uses 5556 Female Crimp Terminal Receptacle</li> </ul> </li> </ul> |
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