



# PSP-480S Series Specifications



## Features:

- AC input range selectable by switch
- Built-in passive PFC function compliance to EN61000-3-2
- High efficiency 89% and low dissipation
- Protections: Short Circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- DIN rail mountable
- UL 508(industrial control equipment)approved
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

### OUTPUT

Cat. No.	PSP-480S24	PSP-480S48
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DC VOLTAGE	24V	48V
RATED CURRENT	20A	10A
CURRENT RANGE	0 ~ 20A	0 ~ 10A
RATED POWER	480W	480W
RIPPLE & NOISE (max)	120mVp-p	120mVp-p
Ripple & noise are measured at 20MHz of bandwidth by using a 12 twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor.		
VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V
VOLTAGE TOLERANCE	±1.0%	±1.0%
Tolerance: includes set up tolerance, line regulation and load regulation.		
LINE REGULATION	±0.5%	±0.5%
LOAD REGULATION	±1.0%	±1.0%
SETUP, RISE TIME	1200ms, 40ms / 230VAC	1200ms, 40ms / 115VAC at full load
HOLD UP TIME (Typ.)	23ms / 230VAC	23ms / 115VAC at full load

### INPUT

VOLTAGE RANGE	90 ~ 132VAC / 180 ~ 264 VAC by switch	254 ~ 370VDC
FREQUENCY RANGE	47 ~ 63Hz	
POWER FACTOR (Typ.)	≥0.7 / 230VAC only	
EFFICIENCY (Typ.)	89%	
AC CURRENT (Typ.)	8A / 115VAC    3.2A / 230VAC	
INRUSH CURRENT (Typ.)	COLD START 27A / 115VAC    45A / 230VAC	
LEAKAGE CURRENT	≤ 3.5mA / 240VAC	

### PROTECTION

OVERLOAD	105 ~ 150% rated output power
Protection type: Constant current limiting, recovers automatically after fault condition is removed	
OVER VOLTAGE	30 ~ 36V    59 ~ 66V
Protection type: Shut down o/p voltage, re-power on to recover	
OVER TEMPERATURE	100°C ± 5°C (TSW: detect on heat sink of power switch)
Protection type: Shut down o/p voltage, recovers automatically after temperature goes down	

### ENVIRONMENT

WORKING TEMP.	-20 ~ +70°C (Refer to output load derating curve)
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH
TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50°C)
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60 min. each long X,Y, Z axes
MOUNTING	Compliance to IEC60068-2-6

### SAFETY & EMC

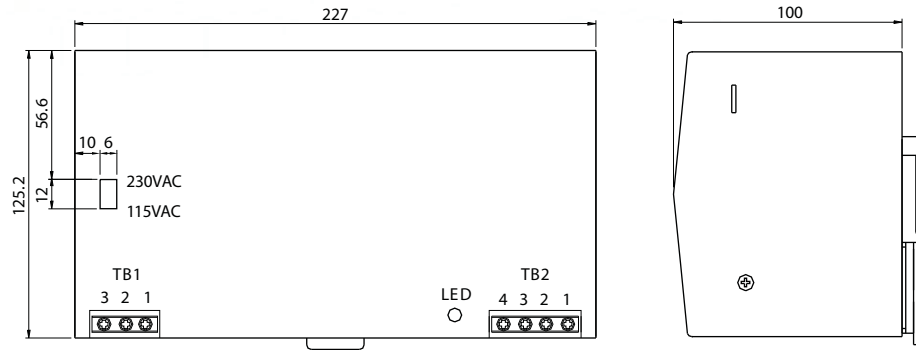
SAFETY STANDARDS	UL508 EN60950-1 EN60950-1 approved
WITHSTAND VOLTAGE	I/P-O/P: 3KVAC    I/P-FG: 1.5KVAC    O/P-FG: 0.5KVAC
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH
EMI CONDUCTION & RADIATION	Compliance to EN55011 (CISPR11); EN55022 (CISPR22); EN61204-3 Class B
HARMONIC CURRENT	Compliance to EN61000-3-2,-3
EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204; EN61204-3; EN61000-6-2 (EN50082-2); heavy industry level; criteria A
The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.	

### OTHERS

MTBF	187.9K hrs min.    MIL-HDBK-217K (25°C)
DIMENSION	227x125.2x100mm (WxHxD)
PACKING	2.6Kg; 6pcs / 16.6Kg / 1.75CUFT

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

**Mechanical Specification**



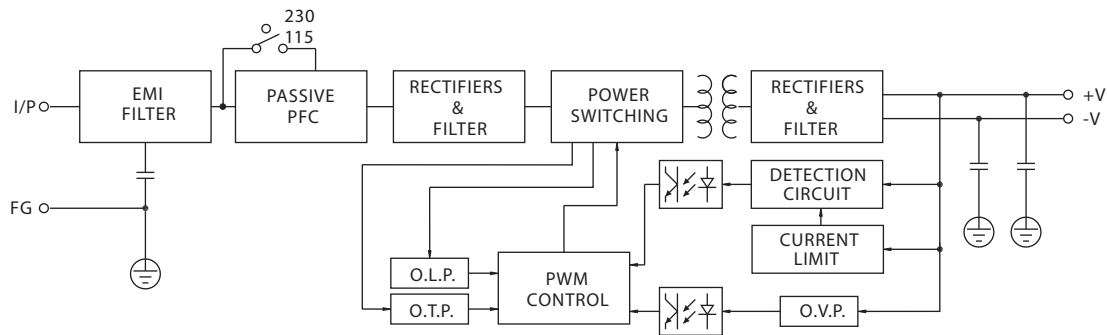
TB1 Terminal Pin. No Assignment

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG ⊕

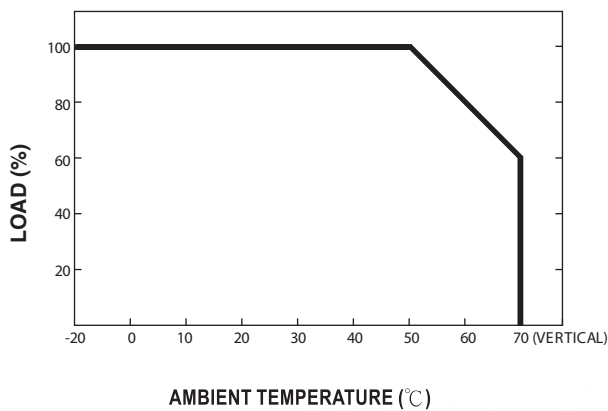
TB2 Terminal Pin. No Assignment

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

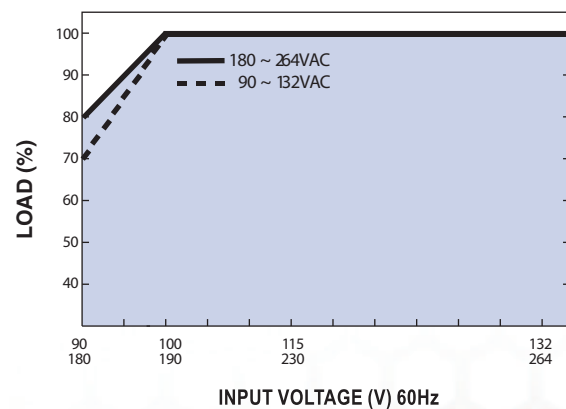
**Block Diagram**



**Derating Curve**



**Output Derating VS Input Voltage**



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.

Slimline  
single phase

Low Profile  
single phase

Industrial Metal Case  
single phase

Industrial Metal Case  
three phase

High Efficiency  
compact housing

Accessories