PSP-240 Series
Specifications

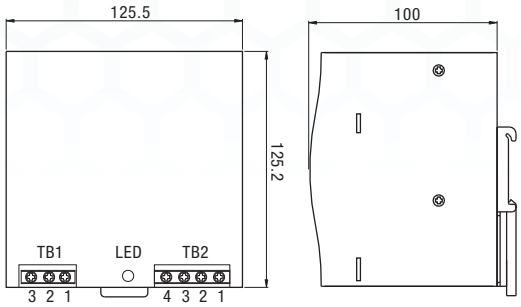
Features:

- Universal AC input / full range
- Built in active PFC function
- Protections: Short Circuit / Overload / Overvoltage / Over temperature
- Cooling by free air convection
- DIN rail mountable
- UL 508(industrial control equipment)approved
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at 100KHz
- 3 year warranty

	Cat. No.	PSP-24024	PSP-24048
OUTPUT	DC VOLTAGE	24V	48V
	RATED CURRENT	10A	5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A
	RATED POWER	240W	240W
	RIPPLE & NOISE (max)	80mVp-p	150mVp-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 ~ 53V
	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	800ms, 40ms / 230VAC	800ms, 40ms / 115VAC at full load
	HOLD UP TIME (Typ.)	24ms / 230VAC	24ms / 115VAC at full load
INPUT	VOLTAGE RANGE	85 ~ 264VAC	120 ~ 370VDC
		Derating may be needed under low input voltages, please check the derating curve for more detail	
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR (Typ.)	0.96 / 230VAC	0.99 / 115VAC at full load
	EFFICIENCY (Typ.)	84%	85%
	AC CURRENT (max.)	2.8A / 115VAC; 1.4A / 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	
	OVERVOLTAGE	30 ~ 36V	54 ~ 60V
		Protection type: Shut down overvoltage, re-power on to recover	
	OVERTEMPERATURE	100°C ± 5°C (TSW: detect on heat sink of power transistor)	
		Protection type: Shut down overvoltage, recovers automatically after temperature goes down	
ENVIRONMENT	WORKING TEMP.	-10 ~ +70°C (Refer to output load derating curve)	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-20 ~ +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 UL60950-1 EN60950-1 compliant	
	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; 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; EN55024; 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	289.9K hrs min.	MIL-HDBK-217K (25°C)
	DIMENSION	125.5x125.2x100mm (WxHxD)	
	PACKING	1.2Kg; 12pcs / 15.5Kg / 1.29CUFT	
		All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.	

For the latest on Altech Power Supply specifications please visit www.altechcorp.com/power.

Mechanical Specification



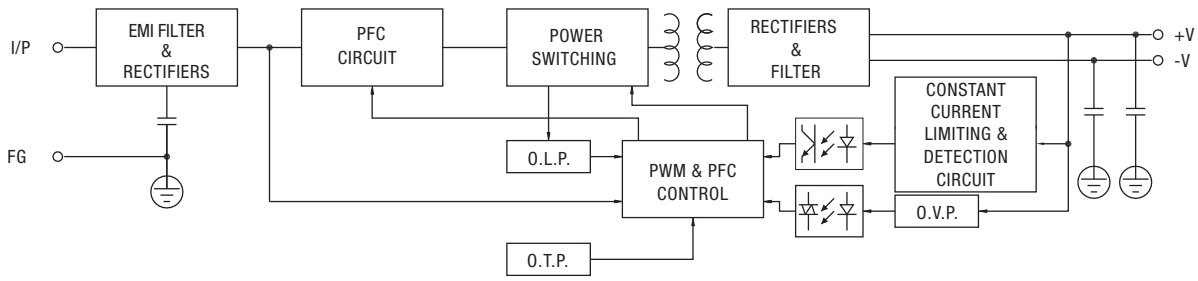
Terminal Pin Number Assignment (TB1)

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

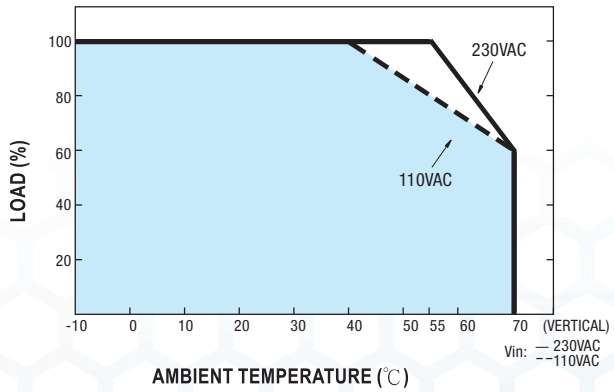
Terminal Pin Number Assignment (TB2)

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

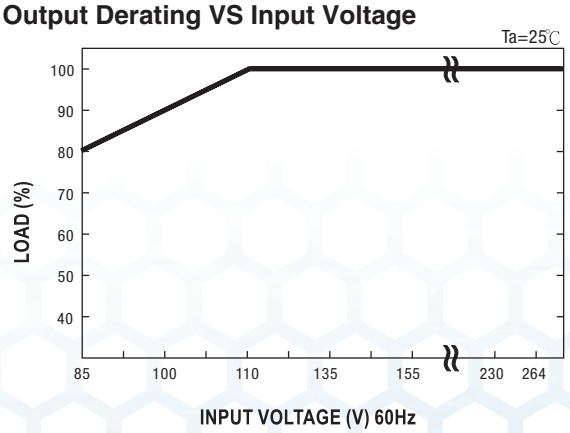
Block Diagram



Derating Curve



Output Derating VS Input Voltage



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