PSH-120 High Input Series

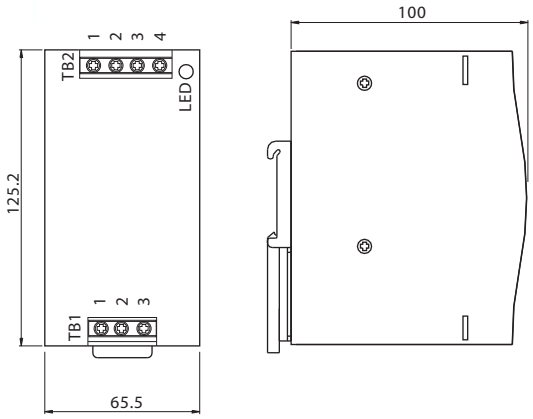
Specifications

Features:

- Universal AC input / full range
- Protections: Short Circuit / Overload / Over Voltage / Over Temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- DIN rail mountable
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- Fixed switching frequency at 70KHz
- 3 years warranty

Cat. No.	PSH-12024	PSH-12048
OUTPUT		
DC VOLTAGE	24V	48V
RATED CURRENT	5A	2.5A
CURRENT RANGE	0 ~ 5A	0 ~ 2.5A
RATED POWER	120W	120W
RIPPLE & NOISE (max)	80mVp-p	80mVp-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	±0.5%	±0.5%
SETUP, RISE, HOLD UP TIME	1700ms, 120ms, 16ms / 400VAC	1000ms, 120ms, 30ms / 500VAC at full load
INPUT		
VOLTAGE RANGE	340 ~ 550VAC 480 ~ 780VDC	
FREQUENCY RANGE	47 ~ 63Hz	
EFFICIENCY (Typ.)	85%	86%
AC CURRENT (max.)	0.65A / 400VAC 0.6A / 500VAC	
INRUSH CURRENT (max.)	COLD START 50A	
LEAKAGE CURRENT	≤ 3.5 mA / 530VAC	
PROTECTION		
OVERLOAD	105 ~ 160% 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	85˚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 ~ +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	±0.03% / ˚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	UL60950-1 approved IEC60950-1 CB approved by SIQ	
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	
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	178.7K hrs min. MIL-HDBK-217K (25˚C)	
DIMENSION	65.5x125.2x100mm (WxHxD)	
PACKING	0.75Kg; 20pcs / 16Kg / 1.29CUFT	
	All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25˚C of ambient temperature.	

Mechanical Specification



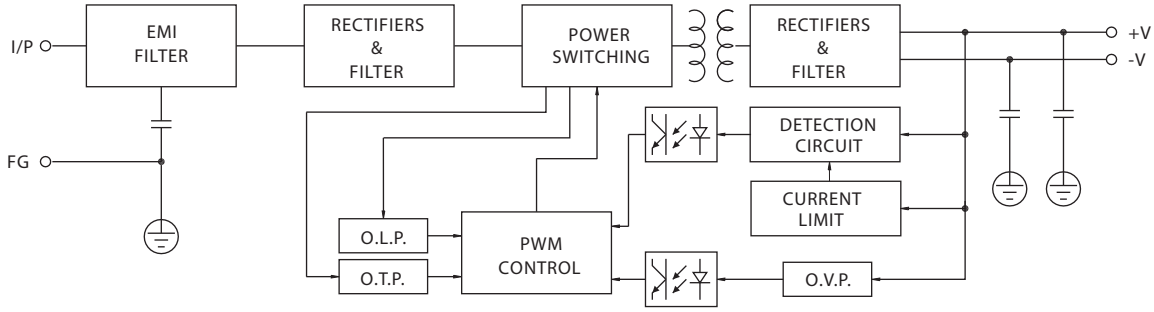
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/L2
3	AC/L1

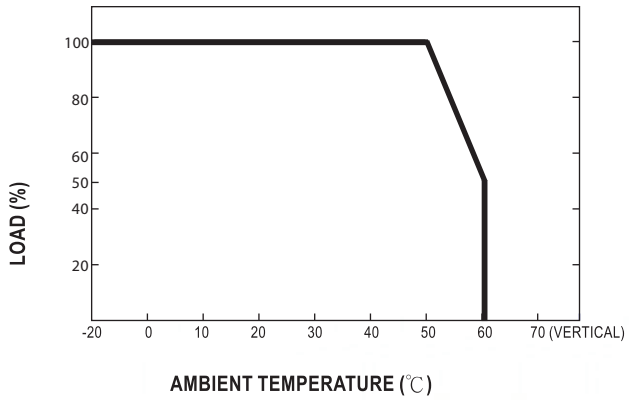
Terminal Pin No. Assignment (TB2)

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

Block Diagram



Derating Curve



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