



# PSH-120 High Input Series

## Specifications



### Features:

- Universal AC input / full range
- Protections: Short Circuit / Overload / Over Voltage / Overtemperature
- 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 year warranty

### OUTPUT

#### Cat. No.

#### PSH-12024

#### PSH-12048

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
<small>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12 twisted pair-wire terminated with a 0.1µF &amp; 47µF parallel capacitor.</small>		
VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V
VOLTAGE TOLERANCE	±1.0%	±1.0%
<small>Tolerance: includes set up tolerance, line regulation and load regulation.</small>		
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
<small>Protection type: Constant current limiting, recovers automatically after fault condition is removed</small>	
OVERVOLTAGE	30 ~ 36V
<small>Protection type: Shut down overvoltage, re-power on to recover</small>	
OVERTEMPERATURE	85°C ± 5°C (TSW: detect on heat sink of power switch)
<small>Protection type: Shut down overvoltage, recovers automatically after temperature goes down</small>	

### 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

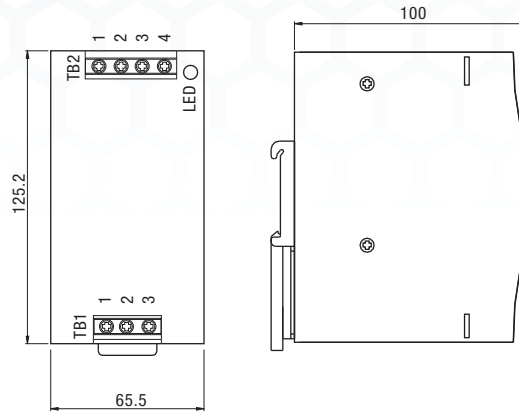
### SAFETY & EMC

SAFETY STANDARDS	UL60950-1 approved IEC60950-1 CB 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 (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
<small>The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</small>	

### OTHERS

MTBF	178.7K hrs min. MIL-HDBK-217K (25°C)
DIMENSION	65.5x125.2x100mm (WxHxD)
PACKING	0.75Kg; 20pcs / 16Kg / 1.29CUFT
<small>All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.</small>	

**Mechanical Specification**



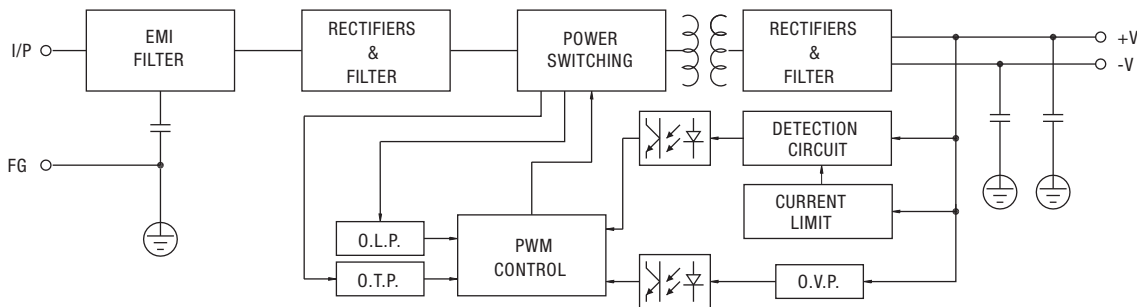
Terminal Pin No. Assignment (TB1)

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

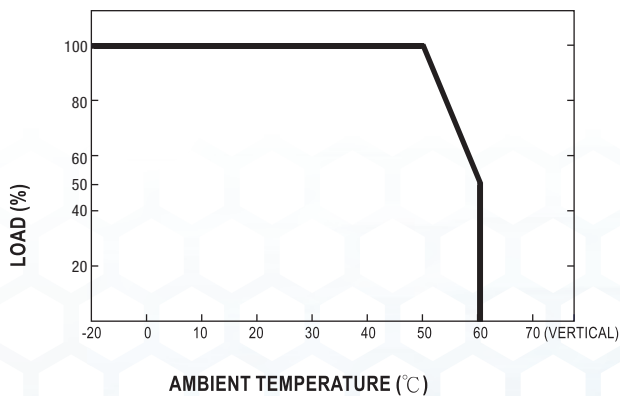
Terminal Pin No. Assignment (TB2)

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.

- PSC Class 2 Series Compact Housing
- PSA Flex Series 1 Phase
- PSB Flex Series 2 & 3 Phase
- PS-S Slim Series Plastic Housing
- PS Low Profile Series Plastic Housing
- PS Industrial Series 1, 2 & 3 Phase
- PS C & W Series 1 and 2 Phase
- CBI Type DC UPS Systems
- CB Type Battery Chargers
- Accessories
- Appendix