

**HIGH INPUT**

# 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****INPUT****PROTECTION****ENVIRONMENT****SAFETY & EMC****OTHERS****Cat. No.****PSH-12024****PSH-12048**

DC VOLTAGE  
RATED CURRENT  
CURRENT RANGE  
RATED POWER  
RIPPLE & NOISE (max)

24V  
5A  
0 ~ 5A  
120W  
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  
VOLTAGE TOLERANCE

24 ~ 28V  
±1.0%

48 ~ 55V  
±1.0%

LINE REGULATION  
LOAD REGULATION  
SETUP, RISE, HOLD UP TIME

±0.5%  
±0.5%  
1700ms, 120ms, 16ms / 400VAC

±0.5%  
±0.5%  
1000ms, 120ms, 30ms / 500VAC at full load

VOLTAGE RANGE  
FREQUENCY RANGE  
EFFICIENCY (Typ.)  
AC CURRENT (max.)  
INRUSH CURRENT (max.)  
LEAKAGE CURRENT

340 ~ 550VAC 480 ~ 780VDC  
47 ~ 63Hz  
85%  
0.65A / 400VAC 0.6A / 500VAC  
COLD START 50A  
≤ 3.5 mA / 530VAC

86%

OVERLOAD

105 ~ 160% rated output power  
Protection type: Constant current limiting, recovers automatically after fault condition is removed

OVERVOLTAGE

30 ~ 36V 59 ~ 66V

OVERTEMPERATURE

Protection type: Shut down overvoltage, re-power on to recover  
85°C ± 5°C (TSW: detect on heat sink of power switch)  
Protection type: Shut down overvoltage, recovers automatically after temperature goes down

WORKING TEMP.  
WORKING HUMIDITY  
STORAGE TEMP., HUMIDITY  
TEMP. COEFFICIENT  
VIBRATION  
MOUNTING

-20 ~ +60°C (Refer to output load derating curve)  
20 ~ 90% RH non-condensing  
-40 ~ +85°C, 10 ~ 95% RH  
±0.03% / °C (0 ~ 50°C)  
10 ~ 500Hz, 2G 10min./1cycle, 60 min. each long X,Y, Z axes  
Compliance to IEC60068-2-6

SAFETY STANDARDS

UL60950-1 approved  
IEC60950-1 CB compliant

WITHSTAND VOLTAGE  
ISOLATION RESISTANCE  
EMI CONDUCTION & RADIATION  
EMS IMMUNITY

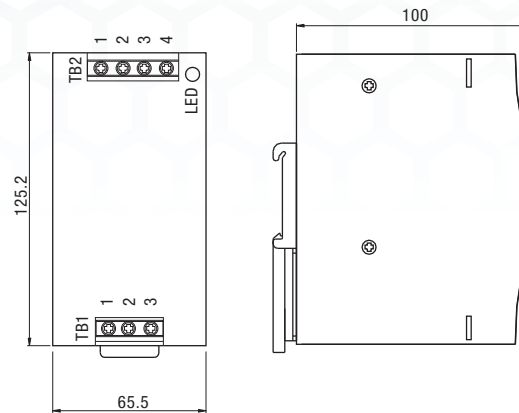
I/P-O/P: 3KVAC I/P-FG: 1.5KVAC O/P-FG: 0.5KVAC  
I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC (25°C; 70% RH)  
Compliance to EN55011 (CISPR11); EN55022 (CISPR22); EN61204-3 Class B  
Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204; EN61204-3; EN61000-6-2; (EN50082-2), heavy industry level; criteria A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

MTBF  
DIMENSION  
PACKING

178.7K hrs min. MIL-HDBK-217K (25°C)  
65.5x125.2x100mm (WxHxD)  
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



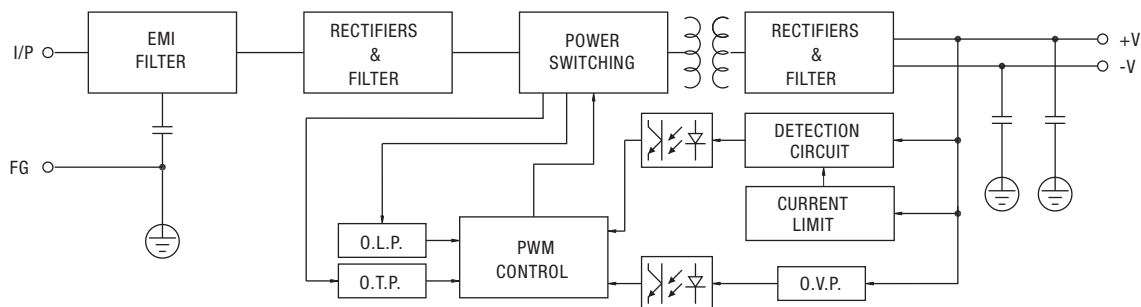
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG $\oplus$
2	AC/L2
3	AC/L1

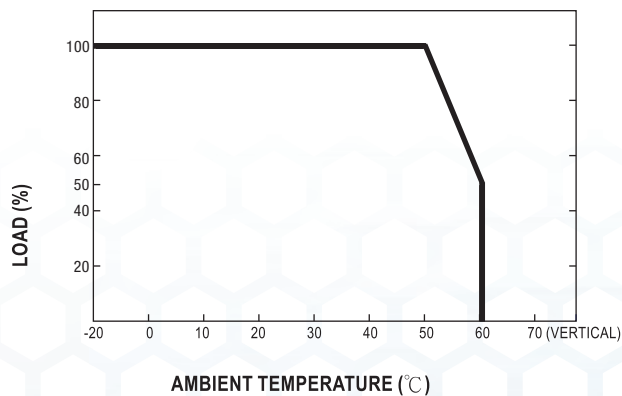
Terminal Pin No. Assignment (TB2)

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.