



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

HIGH INPUT

OUTPUT

Cat. No.

PSH-12024

PSH-12048

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

24V
5A
0 ~ 5A
120W
80mVp-p

48V
2.5A
0 ~ 2.5A
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%

Tolerance: includes set up tolerance, line regulation and load regulation.

LINE REGULATION
LOAD REGULATION

±0.5%
±0.5%

±0.5%
±0.5%

SETUP, RISE, HOLD UP TIME

1700ms, 120ms, 16ms / 400VAC 1000ms, 120ms, 30ms / 500VAC at full load

INPUT

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%

PROTECTION

OVERLOAD

105 ~ 160% rated output power

Protection type: Constant current limiting, recovers automatically after fault condition is removed

OVERVOLTAGE

30 ~ 36V

59 ~ 66V

Protection type: Shut down overvoltage, re-power on to recover

OVERTEMPERATURE

85°C ± 5°C (TSW: detect on heat sink of power switch)

Protection type: Shut down overvoltage, recovers automatically after temperature goes down

ENVIRONMENT

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 & EMC

SAFETY STANDARDS

UL60950-1 approved
IEC60950-1 CB compliant

WITHSTAND VOLTAGE
ISOLATION RESISTANCE

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)

EMI CONDUCTION & RADIATION
EMS IMMUNITY

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.

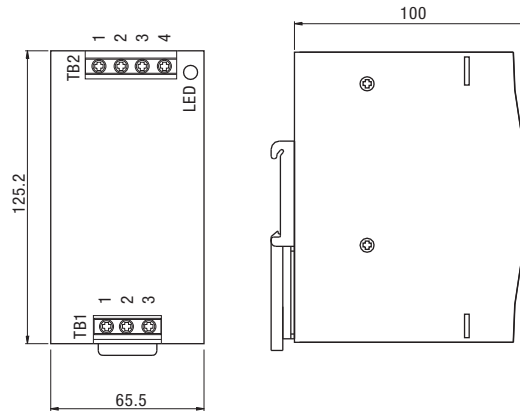
OTHERS

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



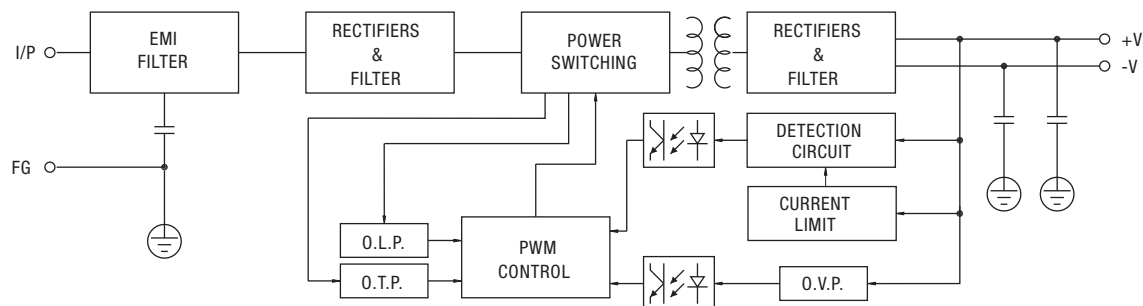
Terminal Pin No. Assignment (TB1)

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

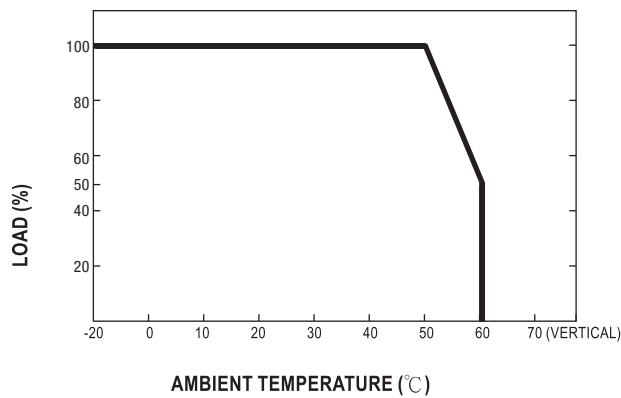
Terminal Pin No. Assignment (TB2)

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.