



# PST-960 Series Specifications

PARALLEL



## Features:

- Three-Phase AC 340 ~ 550V wide range input
- High efficiency 91% and low dissipation
- Protections: Short Circuit / Overload / Over Voltage / Over Temperature
- Optional parallel function(1+1)
- Cooling by free air convection
- DIN rail mountable
- UL 508(industrial control equipment) approved
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

## OUTPUT

### Cat. No.

### PST-96024

### PST-96048

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

24V  
40A  
0 ~ 40A  
960W  
80mVp-p

48V  
20A  
0 ~ 20A  
960W  
80mVp-p

VOLTAGE ADJ. RANGE  
VOLTAGE TOLERANCE

24 ~ 28V  
±1.0%

48 ~ 55V  
±1.0%

LINE REGULATION  
LOAD REGULATION

±0.5%  
±0.5%

±0.5%  
±0.5%

SETUP, RISE, HOLD UP TIME

200ms, 60ms, 14ms / 400VAC

200ms, 60ms, 30ms / 500VAC at full load

VOLTAGE RANGE

Three Phase 340 ~ 550VAC (Dual Phase operation possible in connecting L1, L3, FG)

FREQUENCY RANGE  
EFFICIENCY (Typ.)

47 ~ 63Hz  
91%

92%

AC CURRENT  
INRUSH CURRENT (Typ.)  
LEAKAGE CURRENT

2A / 400VAC; 1.6A / 500VAC  
COLD START 50A  
≤ 3.5 mA / 530VAC

OVERLOAD

105 ~ 125% rated output power

OVER VOLTAGE

30 ~ 36V

59 ~ 66V

OVER TEMPERATURE

Protection type: Shut down o/p voltage, re-power on to recover  
110°C ± 5°C (TSW1) detect on heat sink of power transistor  
85°C ± 5°C (TSW2) detect on heat sink of power diode  
Protection type: Shut down o/p voltage, 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

UL508  
EN60950-1 approved  
EN60950-1

WITHSTAND VOLTAGE  
ISOLATION RESISTANCE  
EMI CONDUCTION & RADIATION  
HARMONIC CURRENT  
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 EN61000-3-2, -3  
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.

MTBF  
DIMENSION  
PACKING

122.5K hrs min. MIL-HDBK-217K (25°C)  
276x125.2x100mm (WxHxD)  
3.3Kg; 4pcs / 14.2Kg / 1.14CUFT

All parameters NOT specially mentioned are measured at 400VAC input, rated load and 25°C of ambient temperature.

## INPUT

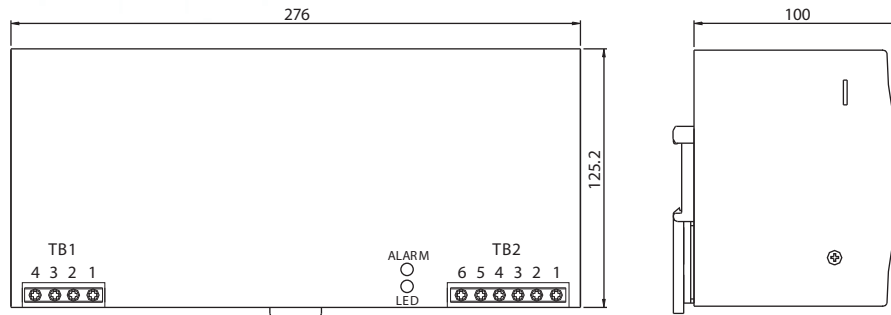
## PROTECTION

## ENVIRONMENT

## SAFETY & EMC

## OTHERS

## Mechanical Specification



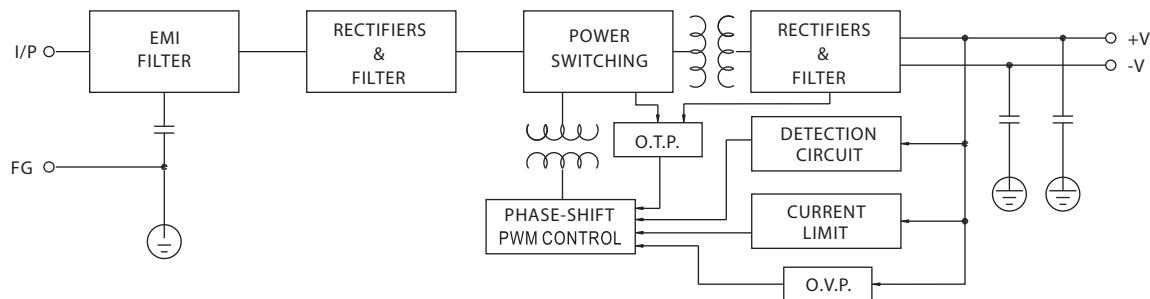
TB1 Terminal Pin. No Assignment

| Pin No. | Assignment  |
|---------|-------------|
| 1       | AC/L1       |
| 2       | AC/L2       |
| 3       | AC/L3       |
| 4       | FG $\oplus$ |

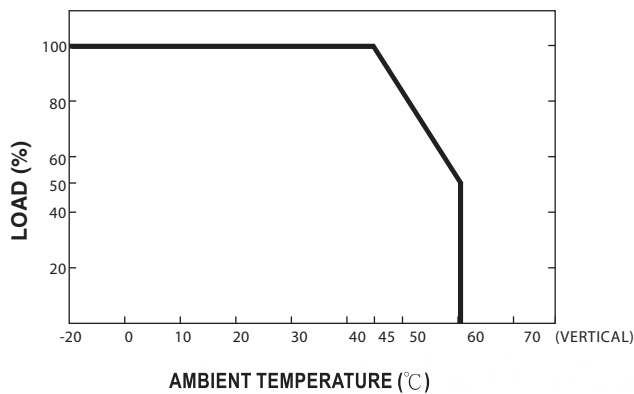
TB2 Terminal Pin. No Assignment

| Pin No. | Assignment   |
|---------|--------------|
| 1,2,3   | DC OUTPUT +V |
| 4,5,6   | DC OUTPUT -V |

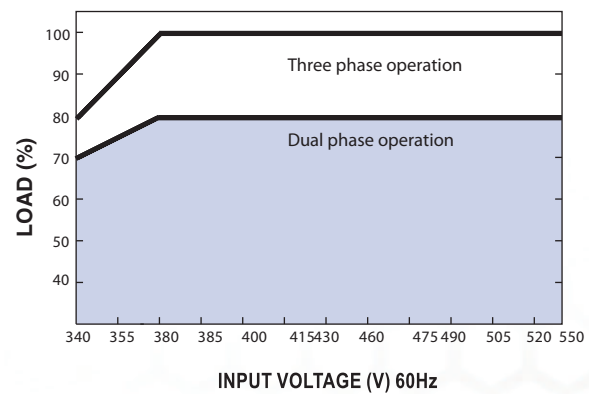
## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage



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