



# 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 / Overtemperature
- 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 year warranty

## OUTPUT

Cat. No.	PST-96024 / PST-960P24*	PST-96048 / PST-960P48*
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DC VOLTAGE	24V	48V
RATED CURRENT	40A	20A
CURRENT RANGE	0 ~ 40A	0 ~ 20A
RATED POWER	960W	960W
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	200ms, 60ms, 14ms / 400VAC	200ms, 60ms, 30ms / 500VAC at full load

## INPUT

VOLTAGE RANGE	Three Phase 340 ~ 550VAC (Dual Phase operation possible in connecting L1, L3, FG)	
Dual phase operation (connecting L1, L3, FG) is allowed under certain derating to output load. Please refer to the derating curves for details.		
FREQUENCY RANGE	47 ~ 63Hz	
EFFICIENCY (Typ.)	91%	92%
AC CURRENT	2A / 400VAC;	1.6A / 500VAC
INRUSH CURRENT (Typ.)	COLD START 50A	
LEAKAGE CURRENT	≤ 3.5 mA / 530VAC	

## PROTECTION

OVERLOAD	105 ~ 125% rated output power	
Protection type: Constant current limiting, unit will shut down overvoltage after 3 sec., re-power on to recover		
OVERVOLTAGE	30 ~ 36V	59 ~ 66V
Protection type: Shut down overvoltage, re-power on to recover		
OVERTEMPERATURE		
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 overvoltage, 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	UL508 EN60950-1 compliant UL60950-1	
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	
HARMONIC CURRENT	Compliance to EN61000-3-2,-3	
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.		

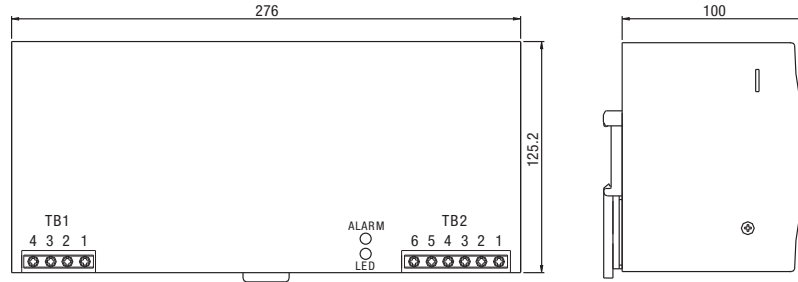
## OTHERS

MTBF	122.5K hrs min. MIL-HDBK-217K (25°C)	
DIMENSION	276x125.2x100mm (WxHxD)	
PACKING	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.		

\*Special order required.

For the latest on Altech Power Supply specifications please visit [www.altechcorp.com/power](http://www.altechcorp.com/power).

## Mechanical Specification



TB1 Terminal Pin. No Assignment

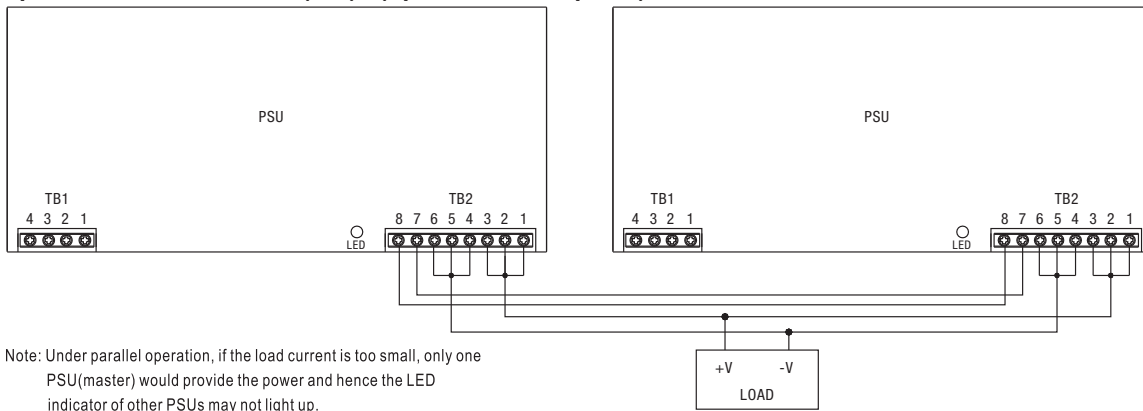
Pin No.	Assignment
1	ACL1
2	ACL2
3	ACL3
4	FG Ⓧ

TB2 Terminal Pin. No Assignment

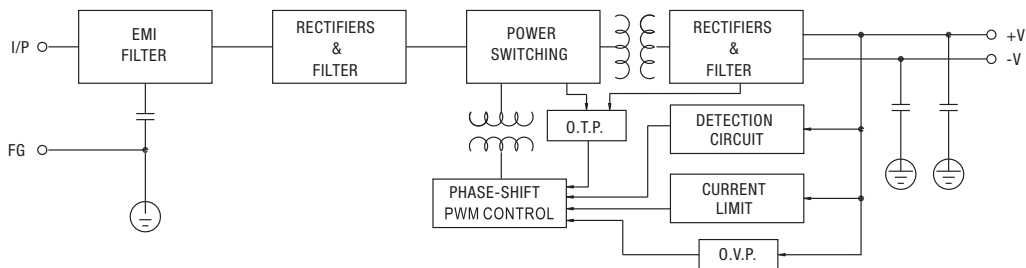
Pin No.	Assignment
1,2,3	DCOUTPUT+ V
4,5,6	DCOUTPUT- V
7	P (Current Share)
8	P (Current Share)

} Parallel Only

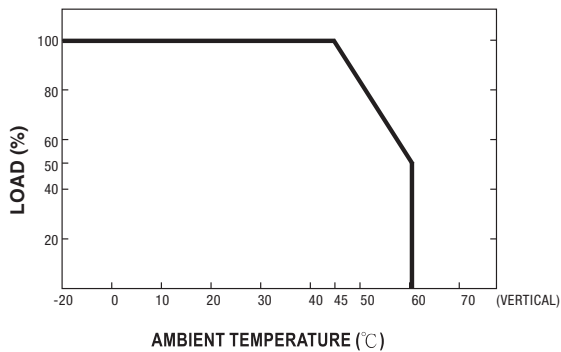
## Optional Parallel Function (1+1) - (Special order required)



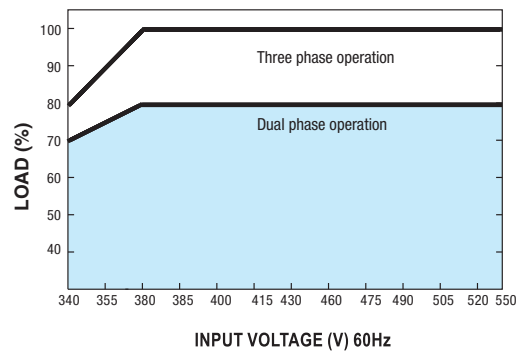
## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage



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