



# 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
<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%
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)	
<small>Dual phase operation (connecting L1, L3, FG) is allowed under certain derating to output load. Please refer to the derating curves for details.</small>		
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	
<small>Protection type: Constant current limiting, unit will shut down overvoltage after 3 sec., re-power on to recover</small>		
OVERVOLTAGE	30 ~ 36V	59 ~ 66V
<small>Protection type: Shut down overvoltage, re-power on to recover</small>		
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		
<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	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	
<small>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.</small>		

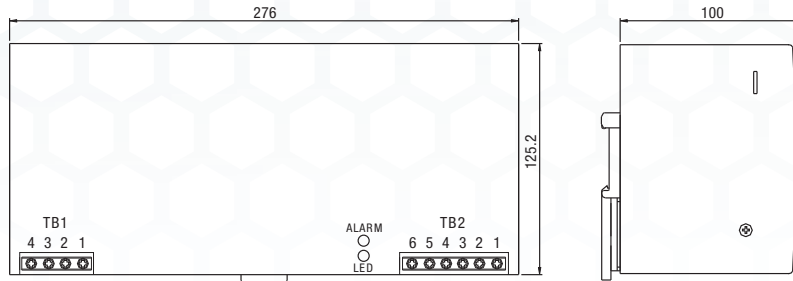
## OTHERS

MTBF	122.5K hrs min. MIL-HDBK-217K (25°C)	
DIMENSION	276x125.2x100mm (WxHxD)	
PACKING	3.3Kg; 4pcs / 14.2Kg / 1.14CUFT	
<small>All parameters NOT specially mentioned are measured at 400VAC input, rated load and 25°C of ambient temperature.</small>		

\*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

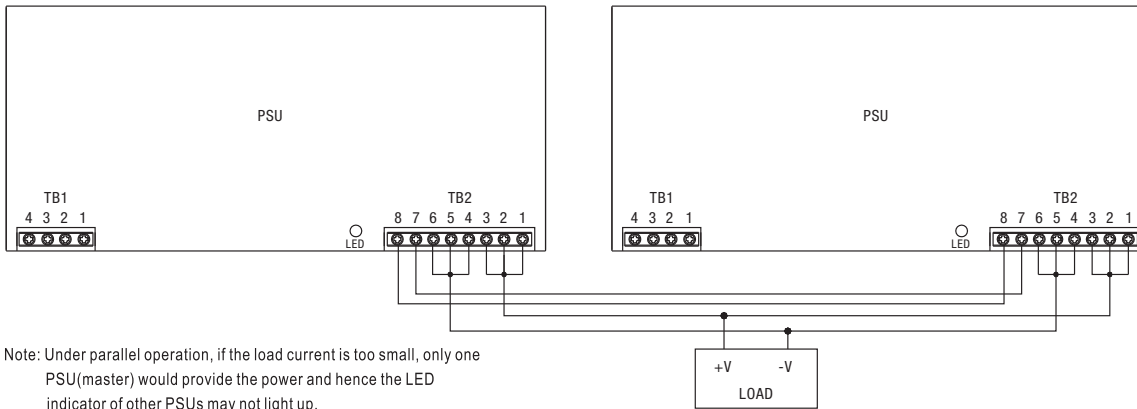
Pin No.	Assignment
1	ACL1
2	ACL2
3	ACL3
4	FG ⊕

TB2 Terminal Pin. No Assignment

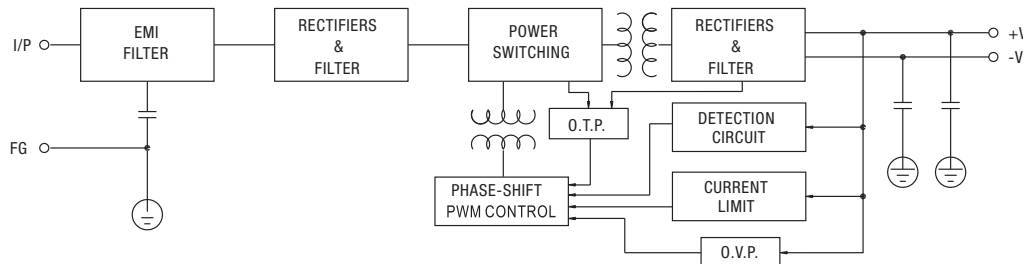
Pin No.	Assignment
1,2,3	DCOUTPUT+ V
4,5,6	DCOUTPUT - V
7	P (Current Share)
8	P (Current Share)

} Parallel Only

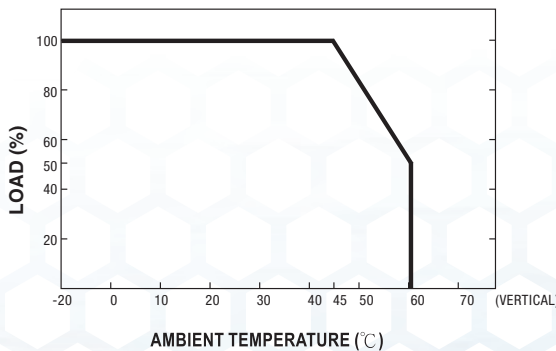
**Optional Parallel Function (1+1) - (Special order required)**



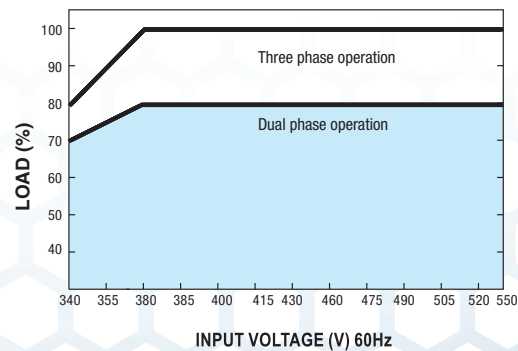
**Block Diagram**



**Derating Curve**



**Output Derating VS Input Voltage**



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

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