



# 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>	

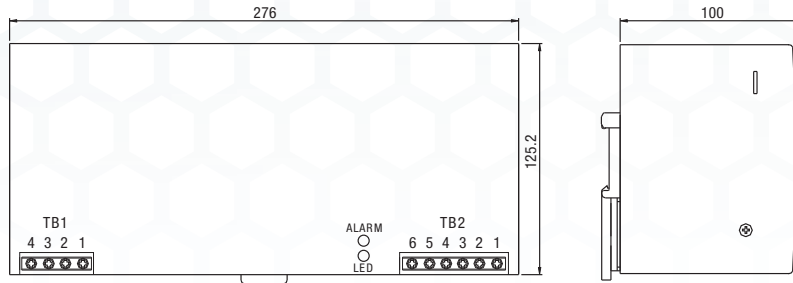
## OTHERS

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

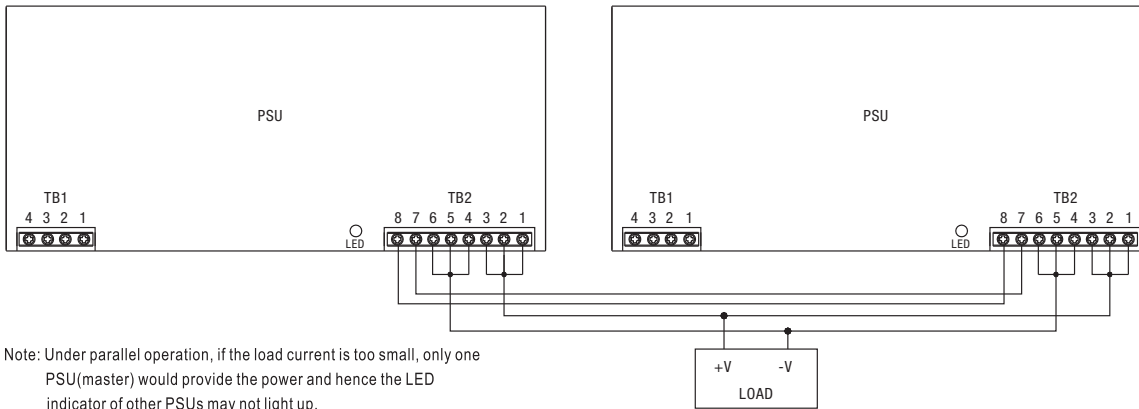
Pin No.	Assignment
1	ACL1
2	ACL2
3	ACL3
4	FG ⊕

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)

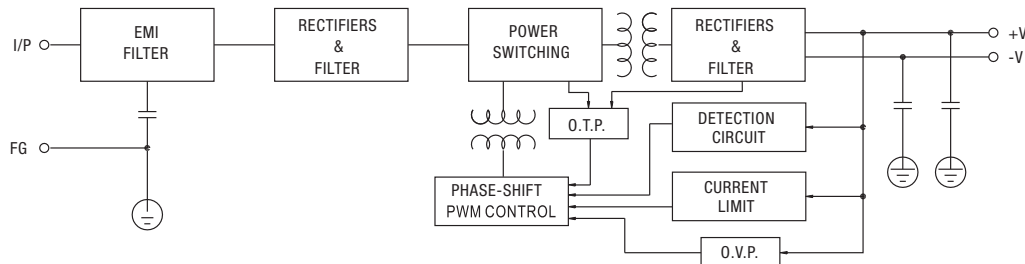
} Parallel Only

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

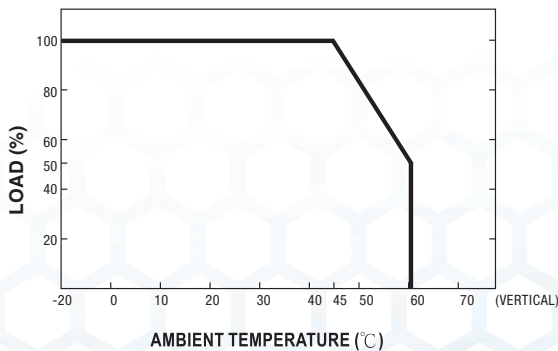


Note: Under parallel operation, if the load current is too small, only one PSU(master) would provide the power and hence the LED indicator of other PSUs may not light up.

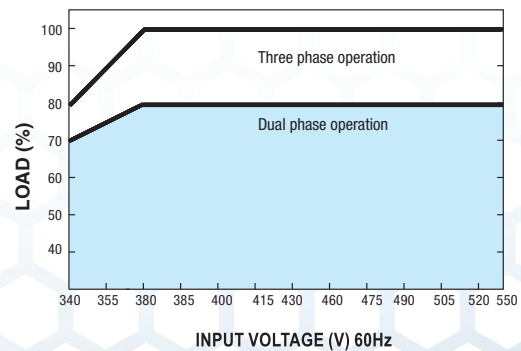
## Block Diagram



## 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

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [DIN Rail Power Supplies](#) category:*

*Click to view products by [Altech](#) manufacturer:*

Other Similar products are found below :

[PS-3015](#) [PSP-480S48](#) [PSR-SD25](#) [PS-S6024](#) [DR-45-24](#) [DRP048V120W1BA](#) [DVP01PU-S](#) [DVP06AD-S](#) [DVP06XA-S](#) [DVDPNET-SL](#)  
[DVPDT01-S](#) [DVPPS01](#) [DVPPS02](#) [KHNA30F-5](#) [KHNA60F-24](#) [S8JX-G01524](#) [S8JX-G01548C](#) [S8JX-G03512D](#) [S8VS-09024B-F](#) [PS-6012](#)  
[PS9Z-5R1G](#) [PS-C24024](#) [PSC-9648](#) [5607189](#) [KHNA30F-24](#) [KHNA480F-24](#) [KHNA90F-12](#) [KHNA90F-24](#) [DVP08ST11N](#) [DVPACAB530](#)  
[DVPCOPM-SL](#) [DVPEN01-SL](#) [DVPPF01-S](#) [S8JX-G10012](#) [S8JX-G15024](#) [CBI1210A](#) [SS14011524](#) [S8JX-G01505C](#) [S8TS-06024-E1](#) [PS-](#)  
[S2012](#) [PSW-12024](#) [PS-UPS40](#) [PSC-6024](#) [S8VS-48024A-F](#) [PSD-A60W12](#) [96PS-A120WDIN](#) [PSD-A60W48](#) [S8JX-G03515CD](#) [PSD-](#)  
[A40W12](#) [PSD-A40W24](#)