



PST-480 Series Specifications



Features:

- Three-Phase AC 340 ~ 550V wide range input
- High efficiency 89% and low dissipation
- Protections: Short Circuit / Overload / Over Voltage / Overtemperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- 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-48024	PST-48048
----------	-----------	-----------

DC VOLTAGE	24V	48V
RATED CURRENT	20A	10A
CURRENT RANGE	0 ~ 20A	0 ~ 10A
RATED POWER	480W	480W
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	1200ms, 40ms, 16ms / 400VAC; 800ms, 40ms, 35ms / 500VAC at full load	

INPUT

VOLTAGE RANGE	Three Phase 340 ~ 550VAC (Dual Phase operation possible)	480 ~ 780VDC
Dual phase operation: derating of 20% is required		
FREQUENCY RANGE	47 ~ 63Hz	
EFFICIENCY (Typ.)	89%	90%
AC CURRENT	1.7A / 400VAC; 1.3A / 500VAC	
INRUSH CURRENT (Typ.)	COLD START 50A	
LEAKAGE CURRENT	≤ 3.5mA / 530VAC	

PROTECTION

OVERLOAD	105 ~ 150% 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	110°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.	-20 ~ +70°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	

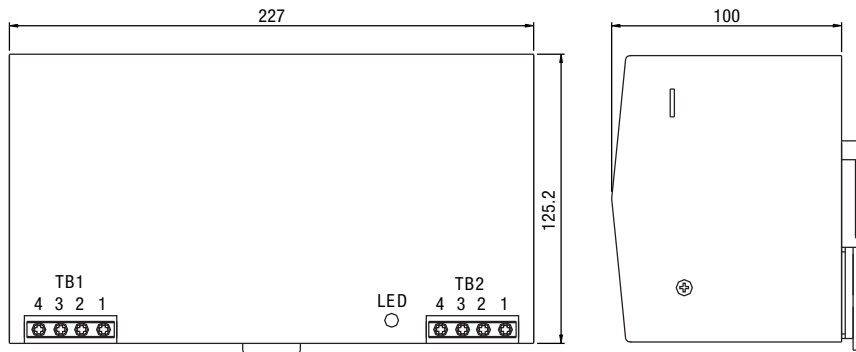
SAFETY & EMC

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	91.1K hrs min. MIL-HDBK-217K (25°C)	
DIMENSION	227x125.2x100mm (WxHxD)	
PACKING	2.5Kg; 6pcs / 16Kg / 1.75CUFT	
All parameters NOT specially mentioned are measured at 400VAC input, rated load and 25°C of ambient temperature.		

Mechanical Specification



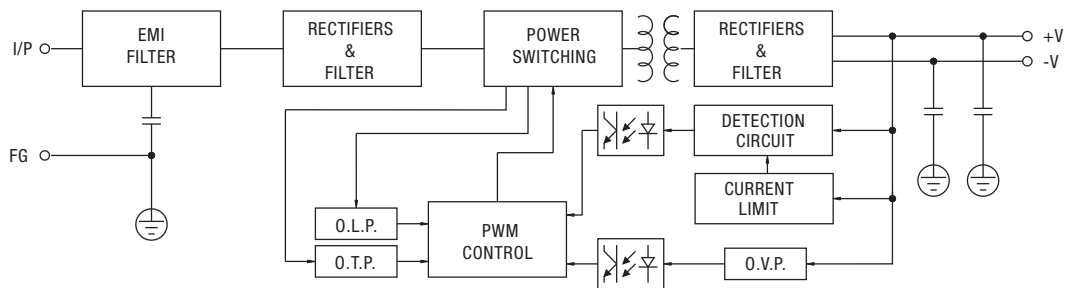
TB1 Terminal Pin. No Assignment

Pin No.	Assignment
1	AC/L1
2	AC/L2
3	AC/L3
4	FG

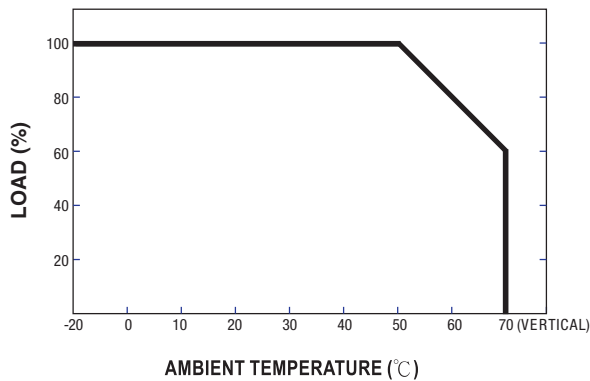
TB2 Terminal Pin. No Assignment

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

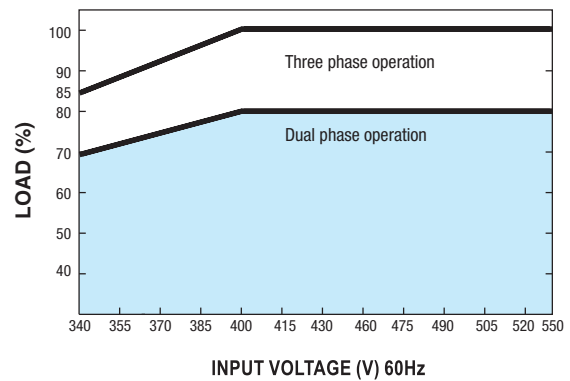
Block Diagram



Derating Curve



Output Derating VS Input Voltage



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