



PSW-480 Series Specifications



Features:

- Single and two phase wide input range 180~550VAC
- High efficiency 93% and low power dissipation
- Protections: Short Circuit / Overload / Over Voltage / Overtemperature
- Cooling by free air convection
- DIN rail mountable
- UL 508(industrial control equipment) approved
- EN61000-6-2 (EN50082-2) industrial immunity level
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 year warranty

OUTPUT

INPUT

PROTECTION

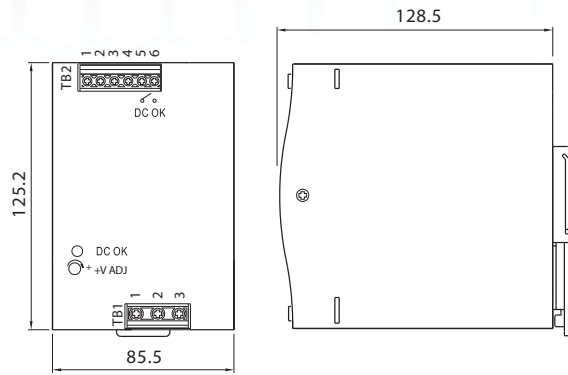
ENVIRONMENT

SAFETY & EMC

OTHERS

Cat. No.	PSW-48024	PSW-48048
DC VOLTAGE	24V	48V
RATED CURRENT	20A	10A
CURRENT RANGE	0 ~ 20A	0 ~ 10A
RATED POWER	480W	480W
RIPPLE & NOISE (max)	100mVp-p	150mVp-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	±1.0%	±1.0%
SETUP, RISE, HOLD UP TIME	800ms, 150ms, 18ms / 400VAC	2000ms, 150ms, 16ms / 230VAC at full load
VOLTAGE RANGE	180 ~ 550VAC 254 ~ 780VDC	
Derating may be needed under low input voltage. Please check the derating curve for more details		
FREQUENCY RANGE	47 ~ 63Hz	
EFFICIENCY (Typ.)	92%	93%
AC CURRENT	1.6A / 400VAC 4A / 230VAC	
INRUSH CURRENT (Typ.)	COLD START 50A	
LEAKAGE CURRENT	≤ 3.5 mA / 530VAC	
OVERLOAD	105 ~ 130% rated output power	
Protection type: Constant current limiting, unit will shut down after 3 sec.; auto recovery after 1 minute if the fault condition is removed		
OVERVOLTAGE	29 ~ 33V	56 ~ 65V
Protection type: Shut down overvoltage; auto recovery after 1 minute if the fault condition is removed		
Under over-voltage condition, if input voltage ≤ 200VAC, the power supply will shut down and then may have auto-recovery after several seconds.		
OVERTEMPERATURE	95°C ± 5°C (TSW) detect on heat sink of power switch	
Protection type: Shut down overvoltage, recovers automatically after temperature goes down		
DC OK RELAY CONTACT RATINGS (max.)	60VDC / 0.3A; 30VDC / 1A; 30VAC / 0.5A resistive load	
WORKING TEMP.	-30 ~ +70°C (Refer to output load derating curve)	
Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.		
WORKING HUMIDITY	20 ~ 95% 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 STANDARDS	UL508 approved IEC 60950-1 compliant Design refer to GL	
WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC	
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC (25°C; 70% RH)	
EMI CONDUCTION & RADIATION	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; EN 55024; EN61000-6-2; (EN50082-2); EN61204-3; heavy industry level; criteria A approved;	
The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that is still meets EMC directives.		
MTBF	112.8K hrs min. MIL-HDBK-217K (25°C)	
DIMENSION	85.5x125.2x128.5mm (WxHxD)	
PACKING	1.7Kg; 8pcs / 14.6Kg / 0.9CUFT	
All parameters NOT specially mentioned are measured at 400VAC input, rated load and 25°C of ambient temperature.		

Mechanical Specification



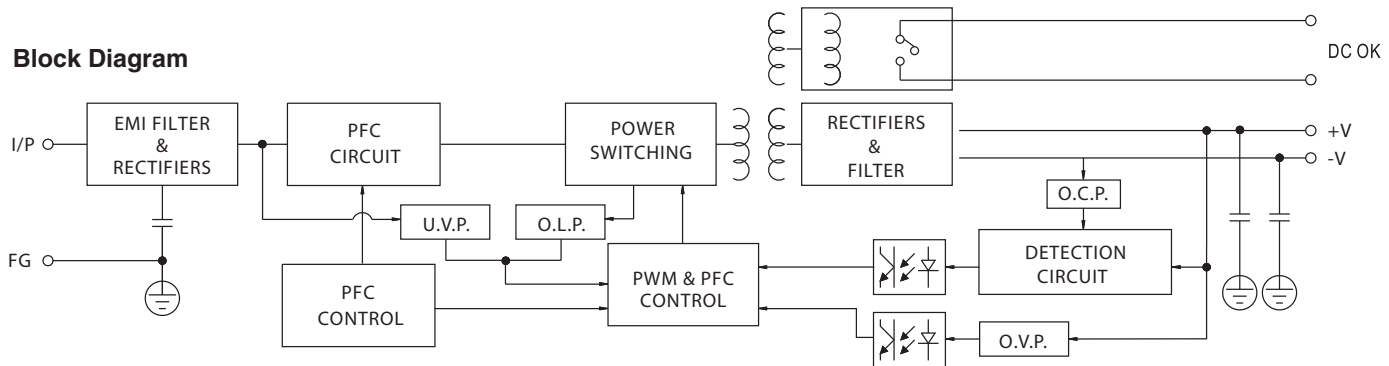
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG \oplus
2	AC/L2
3	AC/L1

Terminal Pin No. Assignment (TB2)

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

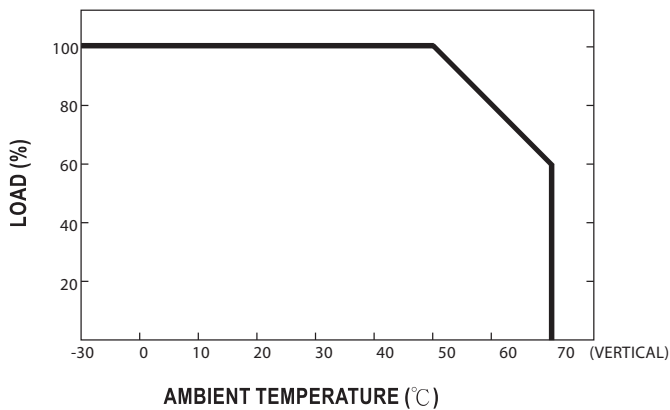
Block Diagram



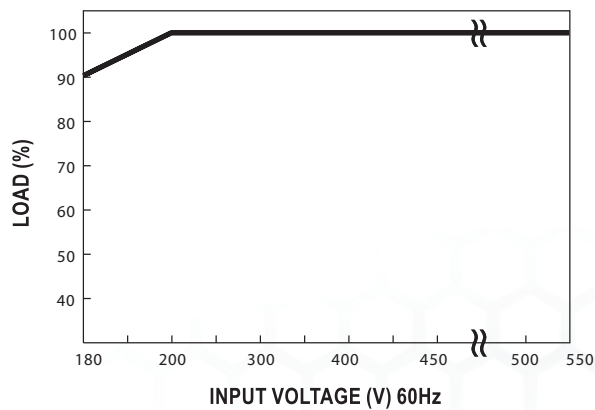
DC OK Relay Contact

Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.

Derating Curve



Output Derating VS Input Voltage



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

Slimline
single phase

Low Profile
single phase

Industrial Metal Case
single phase

Industrial Metal Case
three phase

High Efficiency
compact housing

Accessories