



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

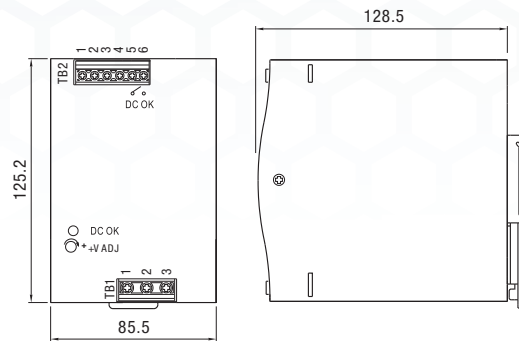
SAFETY & EMC

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 |
| VOLTAGE ADJ. RANGE | 24 ~ 28V | 48 ~ 55V |
| VOLTAGE TOLERANCE | ±1.0% | ±1.0% |
| 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 | |
| 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 | |
| OVERVOLTAGE | 29 ~ 33V | 56 ~ 65V |
| OVERTEMPERATURE | 95°C ± 5°C (TSW) detect on heat sink of power switch | |
| 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) | |
| 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; | |
| 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

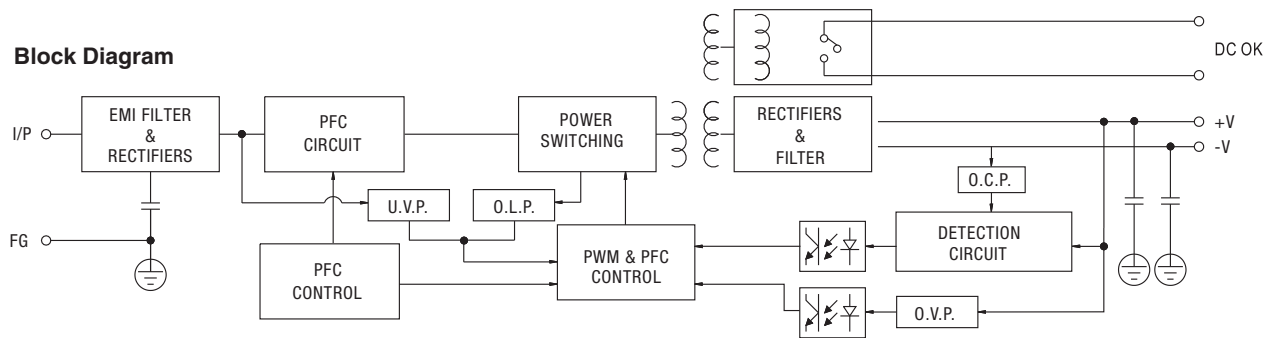


Terminal Pin No. Assignment (TB1) Terminal Pin No. Assignment (TB2)

| Pin No. | Assignment |
|---------|------------|
| 1 | FG ⊕ |
| 2 | AC/L2 |
| 3 | AC/L1 |

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

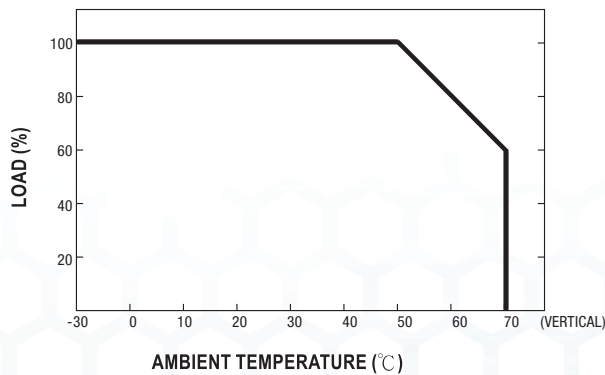
Block Diagram



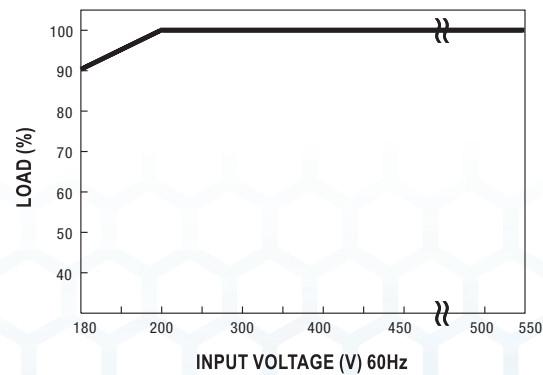
DC OK Relay Contact

| | |
|------------------------|--------------------------|
| 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Altech:](#)

[PSW-48024](#) [PSW-48048](#)