



PSA-600 Series (1 Phase) Specifications



OUTPUT

| Cat. No. | PSA-60024 |
|--|---|
| DC VOLTAGE | 24 V |
| RATED CURRENT | 25 A |
| CURRENT RANGE | 0-25A |
| RATED POWER | 600 W |
| RISSLE & NOISE (max) | 100 mVp-p |
| VOLTAGE ADJ. RANGE | Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor. |
| VOLTAGE TOLERANCE | 22 V ~ 27 V |
| START UP WITH STRONG LOAD | -0.03 |
| SHORT CIRCUIT CURRENT I _{SC} | Tolerance: includes set up tolerance, line regulation and load regulation. |
| DISSIPATION POWER LOAD I _{DS} | ≤ 50,000 µF |
| LINE REGULATION | 60 A |
| LOAD REGULATION | Max 2 sec.: Hiccup mode |
| SETUP, RISE TIME | Permanent: Continuous mode |
| HOLD UP TIME (Typ.) | 54 W |
| | ± 0.5% |
| | ± 1% |
| | 1 sec. (max) |
| | Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. |
| | Typ. 20 msec |

INPUT

| | |
|-----------------------------|--|
| VOLTAGE RANGE | 90 ~ 135V AC / 180 ~ 264V AC switch select |
| FREQUENCY RANGE | 47 ~ 63 Hz ±-6% |
| EFFICIENCY (Typ.) | >91 % |
| AC CURRENT (115 ~ 230 Vac.) | 8 ~ 4.2 A |
| INRUSH CURRENT (Typ.) | < 16 A < 5 msec |
| INTERNAL FUSE | 10A (T) |
| EXTERNAL FUSE (recommended) | 16 A (curve B) |
| LEAKAGE CURRENT | < 1.5 mA @ 230 Vac |

PROTECTION

| | |
|--------------------------|--|
| OVERLOAD | In (60°C) x 1.5 ³ (3 min.) |
| OVER VOLTAGE | Current max. Overload @ 4Vdc (permanent) I _{max} =In (60°C) x (1.8 - 2.2) |
| OVER TEMPERATURE | 30 ~ 35 Vdc |
| SHORT CIRCUIT PROTECTION | Yes. Shuts down output and automatically restarts when the temperature inside goes down 1 Hiccup Mode / 2 Fold Back / 3 Restart After Main - Selectable |

ENVIRONMENT

| | |
|---------------------------|-------------------------------|
| DC OK AKTIV SIGNAL (max.) | 20 ~ 30 Vdc |
| WORKING TEMP. | -25 up to +70 °C |
| HUMIDITY | 95 % at 25°C, no condensation |
| STORAGE TEMP | -40 up to +85 °C |
| TEMP. COEFFICIENT | ± 0.03% / C° (0 ~ 60 °C) |
| MOUNTING | In according to IEC60068-2-6 |

SAFETY & EMC

| | |
|----------------------------|---|
| SAFETY STANDARDS | UL508 Listed IEC/EN 60950, EN 50178, IEC/EN 60950, EN60950-1, PELV EN 60204-1 |
| WITHSTAND VOLTAGE | I/P-0/P: 3k VAC I/P-FG: 1.6k VAC O/P-FG: 500 VAC |
| PROTECTION CLASS | IP 20 (EN/IEC 60529) |
| ISOLATION RESISTANCE | 100 MΩ (min) @ 500 Vdc |
| EMI CONDUCTION & RADIATION | EN61000-6-4 |
| HARMONIC CURRENT | |
| EMS IMMUNITY | EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN61000-6-2, EN61000-6-4, The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. |

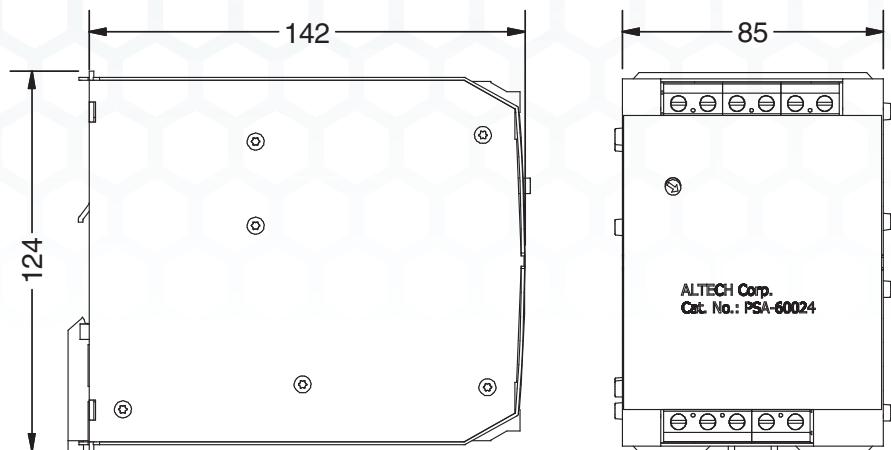
OTHERS

| | |
|---------------------------|---|
| MTBF IEC 61709 | > 500.000 h |
| POLLUTION DEGREE | 2 |
| CONNECTION TERMINAL BLOCK | 4 mm Screw terminal (30 ~ 10 AWG) |
| DIMENSION | 85x120x140 mm (3.34x4.72x5.51 in) |
| PACKING | 0.75 kg (1.9 lbs) each |
| NOTE | All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature. |

Features:

- Multiple overload/ short circuit protection modes
- Efficiency above 92%
- Easy parallel connection for more power**
- Small size
- DIN rail mountable
- Cooling by free air convection
- UL508 (industrial control equipment) approved
- EN60950-1
- Built-in DC OK relay contact
- 3 year warranty

Mechanical Specification



TB1 Terminal Pin. No Assignment

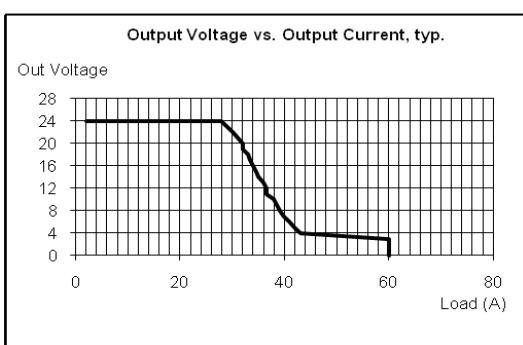
| Pin No. | Assignment (1 phase) |
|---------|----------------------|
| 1 | N / AC |
| 2 | L / AC |
| 3 | Jumper 115V AC |
| 4 | Jumper 115V AC |
| 5 | FG \ominus |

TB2 Terminal Pin. No Assignment

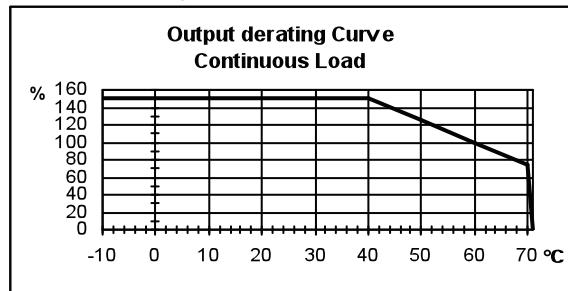
| Pin No. | Assignment |
|---------|----------------------|
| 1,2 | DC output -V |
| 3,4 | DC output +V |
| 5,6 | DC OK relay contacts |

DC OK Relay Contact

Outputs are used for preventive function monitoring of the power supply. An electrically isolated signal contact is available. The signal contact closes when the output power is OK and opens when the output voltage falls below 20Vdc $\pm 5\%$.

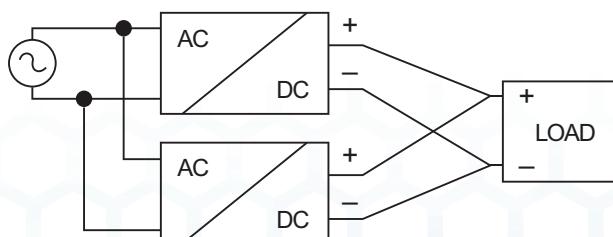


Output Derating Curve



Parallel Connection

A parallel connection with the same model power supply can be set up to increase the output power. The output has to be adjusted approximately to the same value ($\pm 20\text{mV}$) while applying a 1-2 A load to all devices before connecting them in parallel. In PSA-600xx, for more power, the position of the Easy Parallel jumper needs to be changed to enable a parallel connection. In this mode up to 4 power supplies can be put together in parallel.



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

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