



# PSA-600xx (1 Phase)

## Specifications



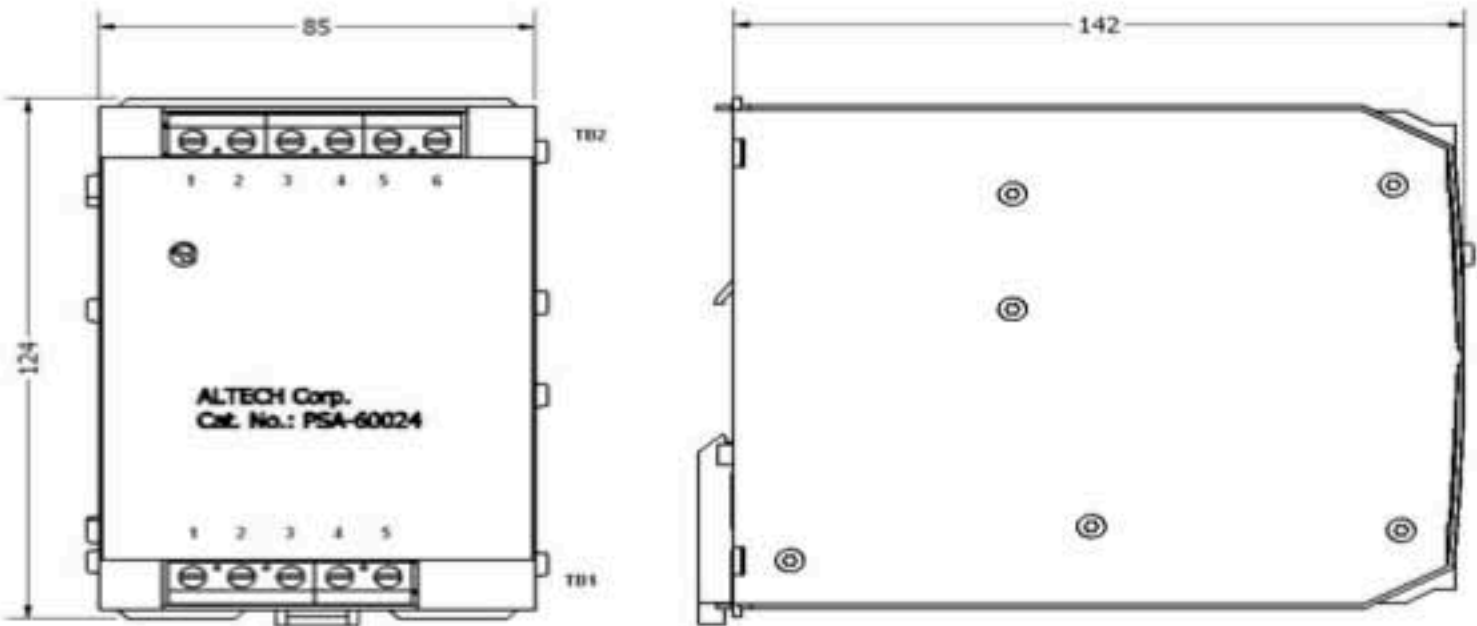
|                     |                                       |                                                                                                                            |                             |
|---------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| MODEL               |                                       | PSA-60024                                                                                                                  | PSA-60048 (only on request) |
| OUTPUT              | DC VOLTAGE                            | 24 V                                                                                                                       | 48 V                        |
|                     | RATED CURRENT                         | 25 A                                                                                                                       | 12A                         |
|                     | CURRENT RANGE                         | Refer to Output derating curve                                                                                             |                             |
|                     | RATED POWER                           | 600 W                                                                                                                      | 600 W                       |
|                     |                                       | 100 mVp-p                                                                                                                  | 100 mVp-p                   |
|                     | RIPPLE & NOISE (max)                  | Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF          |                             |
|                     | VOLTAGE ADJ. RANGE                    | 22 V – 27 V                                                                                                                | 41 V – 55 V                 |
|                     |                                       | -0.03                                                                                                                      | -0.03                       |
|                     | VOLTAGE TOLERANCE                     | Tolerance: includes set up tolerance, line regulation and load regulation.                                                 |                             |
|                     | START UP WITH STRONG LOAD             | ≤ 50,000 µF                                                                                                                | ≤ 50,000 µF                 |
|                     | CURRENT SHORT CIRCUIT I <sub>cc</sub> | 60 A                                                                                                                       | 30 A                        |
|                     | Max 2 sec.: Hiccup mode               |                                                                                                                            |                             |
|                     | Permanent: Continuous mode            |                                                                                                                            |                             |
|                     | DISSIPATION POWER LOAD mas            | 54 W                                                                                                                       | 54 W                        |
|                     | LINE REGULATION                       | ± 0.5%                                                                                                                     | ± 0.5%                      |
|                     | LOAD REGULATION                       | ± 1%                                                                                                                       | ± 1%                        |
| INPUT               |                                       | 1 sec. (max)                                                                                                               |                             |
|                     | SETUP, RISE TIME                      | 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  |                             |
|                     | HOLD UP TIME (Typ.)                   | Typ. 20 msec                                                                                                               |                             |
|                     |                                       | 90 – 135V AC / 180 – 264V AC by switch                                                                                     |                             |
|                     | VOLTAGE RANGE                         |                                                                                                                            |                             |
|                     | 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                         | T 10 A                                                                                                                     |                             |
| PROTECTION FUNCTION | EXTERNAL FUSE (recommended)           | 16 A (curve B)                                                                                                             |                             |
|                     | LEAKAGE CURRENT                       | < 1.5 mA @ 230 Vac                                                                                                         |                             |
|                     |                                       | In (60°C) x 1.5 * 3 min.;                                                                                                  |                             |
|                     | OVERLOAD                              | Current max. Overload ≅ 4Vdc (permanent) I <sub>max</sub> =In (60°C) x (1.8 - 2.2)                                         |                             |
|                     |                                       | 30 – 35 Vdc                                                                                                                | 50 – 55 Vdc                 |
|                     | OVER VOLTAGE                          |                                                                                                                            |                             |
|                     | OVER TEMPERATURE                      | Yes. Shuts down output and automatically restarts when the temperature inside goes down                                    |                             |
|                     |                                       | 1 Hiccup Mode                                                                                                              |                             |
|                     | SHORT CIRCUIT PROTECTION              | 2 Fold Back                                                                                                                |                             |
|                     |                                       | 3 Restart After Main                                                                                                       |                             |
| ENVIRONMENT         | DC OK AKTIV SIGNAL (max.)             | 20 – 30 Vdc                                                                                                                | 40 – 55 Vdc                 |
|                     | WORKING TEMP.                         | -25 up to +70 °C                                                                                                           |                             |
|                     |                                       | (>60°derating 2.5% °C)                                                                                                     |                             |
|                     | HUMIDITY                              | 95 % at 25°C, no condensation                                                                                              |                             |
|                     | STORAGE TEMP                          | -40 up to +85 °C                                                                                                           |                             |
|                     | TEMP. COEFFICIENT                     | ± 0.03% / °C (0 – 60 °C)                                                                                                   |                             |
|                     | VIBRATION                             | In according to IEC60068-2-6                                                                                               |                             |
|                     | SAFETY STANDARDS                      | UL508 approved,                                                                                                            | NOT UL APPROVED             |
|                     |                                       | IEC/EN 60950, EN 50178, IEC/EN 60950, EN60950-1, PELV EN 60204-1                                                           |                             |
|                     | WITHSTAND VOLTAGE                     | I/P-O/P: 3k VAC I/P-FG: 1.6k VAC O/P-FG: 500 VAC                                                                           |                             |
| OTHERS              | PROTECTION CLASS (EN/IEC 60529)       | IP 20                                                                                                                      |                             |
|                     | ISOLATION RESISTANCE                  | 100 MΩ (min) @ 500 Vdc                                                                                                     |                             |
|                     | EMI CONDUCTION & RADIATION            | EN61000-6-4                                                                                                                |                             |
|                     | HARMONIC CURRENT                      |                                                                                                                            |                             |
|                     |                                       | 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,                                                                                    |                             |
|                     | EMS IMMUNITY                          | The power supply is considered a component which will be installed into a final equipment. The final equipment must be re- |                             |
|                     | MTBF IEC 61709                        | > 500.000 h                                                                                                                |                             |
|                     | POLLUTION DEGREE                      | 2                                                                                                                          |                             |
|                     | CONNECTION TERMINAL BLOCK             | 4 mm Screw (30 – 10 AWG)                                                                                                   |                             |
| SPECIFICATION       | DIMENSION                             | 85x120x140 mm ( 3.34x4.72x5.51 in )                                                                                        |                             |
|                     | PACKING                               | 0.75 kg ( 1.9 lbs) per 1 pcs                                                                                               |                             |
|                     | NOTE                                  | All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.          |                             |



Mechanical Specifications

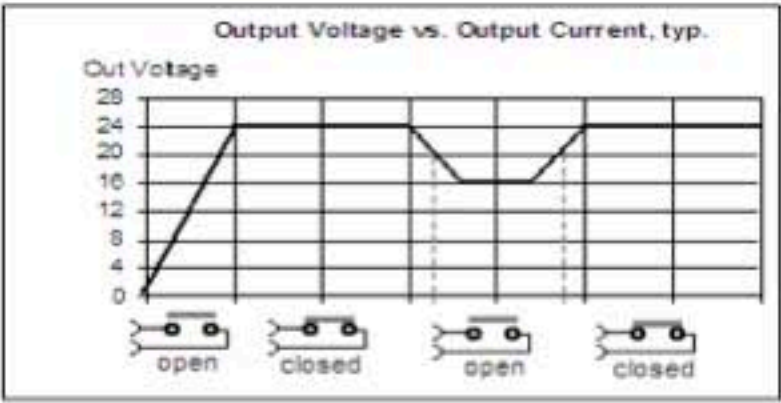
| Terminal Pin. No Assign. (TB1) |                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------|
| Pin No.                        | Assignment PSA-600xx (1 phase)                                                       |
| 1                              | L                                                                                    |
| 2                              | N                                                                                    |
| 3                              | Jumper 115V AC                                                                       |
| 4                              | Jumper 115V AC                                                                       |
| 5                              | FG  |

| Terminal Pin. No Assign. (TB2) |                      |
|--------------------------------|----------------------|
| Pin No.                        | Assignment           |
| 1,2                            | DC output -V         |
| 3,4                            | DC output +V         |
| 5,6                            | DC OK relay contacts |

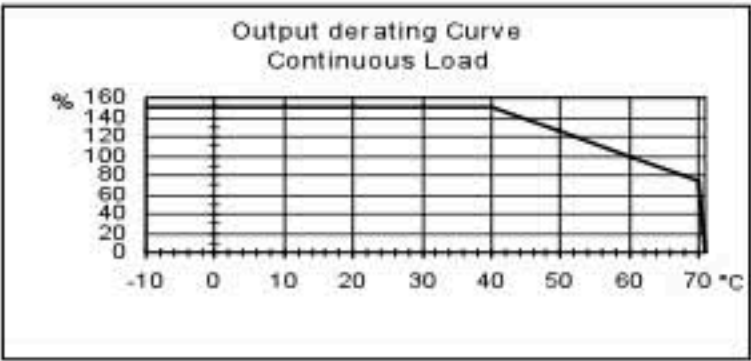


DC OK Relay Contact

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 ±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 (± 20mV) 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.

