



### Features :

- Supports 90 - 264 VAC / 127 - 370 VDC
- Efficiencies up to 89 %
- Protection against short circuit, overload, overvoltage & over temperature
- Cooling by free air convection
- UL 508 approved (E522848)

### Model Number Legend:

RPS120 -    - CU

1. Output Voltage: 12: 12 V  
15: 15 V  
24: 24 V  
48: 48 V

Certification :

### SPECIFICATIONS:

| MODEL        |  | RPS120-12-CU   | RPS120-15-CU  | RPS120-24-CU    | RPS120-48-CU  |
|--------------|--|--|---------------|-----------------|---------------|
| OUTPUT       | NOMINAL DC VOLTAGE   | 12 V   | 15 V          | 24 V            | 48 V          |
|              | RATED CURRENT  | 8 A  | 8 A           | 5 A             | 2.5 A         |
|              | CURRENT RANGE  | 0 - 8 A  | 0 - 8 A       | 0 - 5 A         | 0 - 2.5 A     |
|              | RATED POWER  | 96 W   | 120 W         | 120 W           | 120 W         |
|              | RIPPLE & NOISE (max)   | <1% of Vout  | <1% of Vout   | <1% of Vout     | <1% of Vout   |
|              | VOLTAGE ADJ. RANGE   | 12 to 14 V   | 15 to 17.5 V  | 24 to 28 V      | 48 to 56 V    |
|              | VOLTAGE TOLERANCE  | ± 1 %  |               |                 |               |
|              | LINE REGULATION  | ± 1 %  |               |                 |               |
|              | LOAD REGULATION  | ± 1 %  |               |                 |               |
|              | TURN ON TIME   | < 1 sec @ 230 VAC & < 3 sec @ 115 VAC, Full load   |               |                 |               |
|              | HOLD UP TIME   | ≥ 60 ms at 230 VAC & ≥ 15 ms at 115 VAC, Full load   |               |                 |               |
| RISE TIME    | < 100 ms   |  |               |                 |               |
| INPUT        | VOLTAGE RANGE *  | 90 - 264 VAC / 127 - 370 VDC   |               |                 |               |
|              | FREQUENCY RANGE  | 50 / 60 Hz   |               |                 |               |
|              | EFFICIENCY @ 230V AC   | Up to 89 %   | Up to 89 %    | Up to 89 %      | Up to 89 %    |
|              | AC CURRENT   | 2.2 A @ 115 VAC; 1.5 A @ 230 VAC   |               |                 |               |
|              | INRUSH CURRENT   | < 48 Amps; Measured at 264 VAC, 25°C Ambient, Cold start   |               |                 |               |
|              | LEAKAGE CURRENT  | < 1 mA; 264 VAC input  |               |                 |               |
| PROTECTION   | OVERLOAD   | > 110 % of rated output current; Hiccup type; Autorecovery   |               |                 |               |
|              | OVERVOLTAGE  | 17V DC ±1V DC  | 20V DC ±1V DC | 31.5V DC ±1V DC | 61V DC ±2V DC |
|              | OUTPUT SHORT CIRCUIT   | Latched type; Input AC power to be recycled to recover the power supply  |               |                 |               |
|              | OVER TEMPERATURE   | Power supply shuts down when the temperature of PCB below main transformer reaches typically 120°C; Turns on only after the temperature falls below 90°C typically and AC power is recycled thereafter           |               |                 |               |
| ENVIRONMENT  | OPERATING TEMP   | - 25°C to + 70°C; De-rate linearly above 50°C from 100 % load at 50°C to 50 % load at 70°C, - 25°C to 0°C startup is guaranteed with spec deviation (Output ripple can be more than 10 % of the output voltage.) |               |                 |               |
|              | STORAGE TEMP   | - 40°C to + 85°C   |               |                 |               |
|              | COOLING  | Natural convection cooled  |               |                 |               |
|              | HUMIDITY   | 5 to 95 % RH, Non condensing   |               |                 |               |
|              | ALTITUDE   | 2000 m   |               |                 |               |
| VIBRATION    | Component : 10 ~ 500 Hz, 2 G 10 min. / 1 cycle, period for 60 min. each along X, Y, Z axes |  |               |                 |               |
| SAFETY & EMC | DIELECTRIC WITHSTAND VOLTAGE   | I/P to Earth: 2500 VAC<br>I/P to O/P: 4000 VAC<br>O/P to Earth: 1500 VAC   |               |                 |               |
| OTHERS       | DIMENSION  | 43 x 109.8 x 102.7mm (W x H x D)   |               |                 |               |
|              | WEIGHT   | 350 gms  |               |                 |               |
|              | MOUNTING   | 35 mm DIN rail   |               |                 |               |

\* Although power supply will work for the specified DC input voltage range, UL approval is only for the specified AC input voltage range.

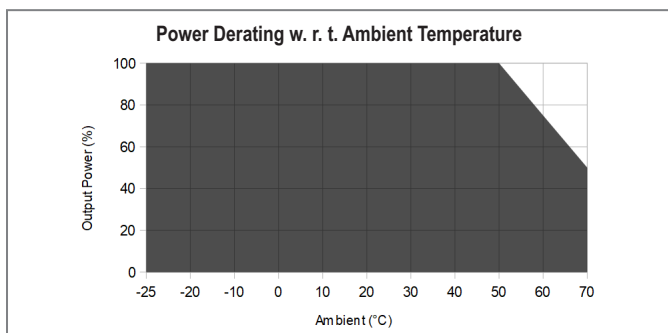
### Dimensions (All are in mm)



### Terminal connections



### Derating curve



### Compliance

| Applicable EMI / EMC Standards    |   |  |
|-----------------------------------|---|--|
| Category                          | Reference Standards                                       | Testing Level                              |
| Conducted Emission                | CISPR11   | CLASS A                                    |
| Radiated Emission                 | CISPR22   | CLASS A                                    |
| Electrostatic Discharge           | IEC 61000-4-2   | Level 4, Criteria A<br>Level 3, Criteria A |
| Radiated Susceptibility           | IEC 61000-4-3   | Level 3, Criteria B                        |
| Electrical Fast Transient / Burst | IEC 61000-4-4   | Level 3, Criteria A                        |
| Surge                             | IEC 61000-4-5   | Level 3, Criteria A                        |
| Conducted Susceptibility          | IEC 61000-4-6   | Level 3, Criteria B                        |
| Power Frequency Magnetic Field    | IEC 61000-4-8   | Level 4, Criteria A                        |
| Voltage Dips & Interruption       | IEC 61000-4-11  | Criteria A & B                             |
| Safety                            | UL 508 approved (E522848)<br>Designed to meet IEC 62368-1 |  |

### Ordering information

| Product Code | Description  | Certification           |
|--------------|--|-------------------------|
| RPS120-12-CU | 96 W, 12 V / 8 A Din rail mounted Power Supply in Plastic Housing    | CE, RoHS, cUL US LISTED |
| RPS120-15-CU | 120 W, 15 V / 8 A DIN rail mounted Power Supply in Plastic Housing   | CE, RoHS, cUL US LISTED |
| RPS120-24-CU | 120 W, 24 V / 5 A DIN rail mounted Power Supply in Plastic Housing   | CE, RoHS, cUL US LISTED |
| RPS120-48-CU | 120 W, 48 V / 2.5 A DIN rail mounted Power Supply in Plastic Housing | CE, RoHS, cUL US LISTED |