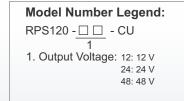
## RPS120 INDUSTRIAL POWER SUPPLIES



#### Features :

• Supports 90 - 264 VAC / 127 - 370 VDC

- Ediplots 30 200 VIC 121 310 VIC
  Efficiencies up to 89 %
  Protection against short circuit, overload, overvoltage & over temperature
  Cooling by free air convection
  UL 508 approved (E522848)



Certification : CE Rents

**SELEC** 

#### SPECIFICATIONS:

| MODEL        |                                 | RPS120-12-CU  | RPS120-24-CU     | RPS120-48-CU    |  |
|--------------|---------------------------------|---|------------------|-----------------|--|
| OUTPUT       | NOMINAL DC VOLTAGE              | 12 V  | 24 V             | 48 V            |  |
|              | RATED CURRENT                   | 8 A   | 5 A              | 2.5 A           |  |
|              | CURRENT RANGE                   | 0 - 8 A   | 0 - 5 A          | 0 - 2.5 A       |  |
|              | RATED POWER                     | 96 W  | 120 W            | 120 W           |  |
|              | RIPPLE & NOISE (max)            | < 1 % of Vout   | < 1 % of Vout    | < 1 % of Vout   |  |
|              | VOLTAGE ADJ. RANGE              | 12 to 14 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 @ 230 V AC           | 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   |                  |                 |  |
|              | OVERLOAD                        | > 110 % of rated output current; Hiccup type; Autorecovery  |                  |                 |  |
|              |                                 | 15.5 - 18.5 VDC   | 28.5 - 33.5 VDC  | 56.5 - 65.5 VDC |  |
| PROTECTION   | OVERVOLTAGE                     | Latched type; Input AC power to be recycled to recover the power supply   |                  |                 |  |
|              | OUTPUT SHORT CIRCUIT            | Hiccup mode when output is shorted; Autorecovery type.  |                  |                 |  |
|              | OVER TEMPERATURE                | Power supply shuts down when the temperature of PCB below main transformer reaches typically 120°C;<br>Turns on only after the temperature falls below 90°C typically and AC power is recycled thereafter                                 |                  |                 |  |
|              | OPERATING TEMP                  | <ul> <li>25°C to + 70°C; De-rate linearly above 50°C from 100 % load at 50°C to 50 % load at 70°C,</li> <li>25°C to 0°C startup is guaranteed with spec deviation (Output ripple can be more than 10 % of the output voltage.)</li> </ul> |                  |                 |  |
|              | STORAGE TEMP                    |   | - 40°C to + 85°C |                 |  |
| ENVIRONMENT  | 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<br>VOLTAGE | I/P to Earth: 2500 VAC<br>I/P to O/P: 4000 VAC<br>O/P to Earth: 1500 VAC  |                  |                 |  |
| RELIABILITY  | MTBF                            | > 220K hrs. as per MIL-HDBK-217F (25°C)   |                  |                 |  |
|              | DIMENSION                       | 43 x 109.8 x 102.7 mm (W x H x D)   |                  |                 |  |
| OTHERS       | WEIGHT                          | 350 gms   |                  |                 |  |
|              | MOUNTING                        | 35 mm DIN rail  |                  |                 |  |

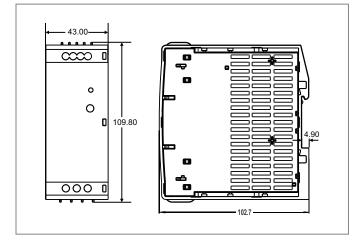
\* Although power supply will work for the specified DC input voltage range, UL approval is only for the specified AC input voltage range.

# RPS120 | INDUSTRIAL POWER SUPPLIES \_\_\_\_\_ SELEC

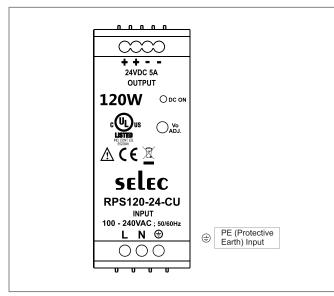
#### **Connectors details**

| Description         | Туре                                  | Torque   |  |
|---------------------|---------------------------------------|----------|--|
| Input<br>connector  | GOOSVN : GS007S-7.5<br>OR Equivalent  | 0.5 Nm   |  |
| Output<br>connector | GOOSVN : GS007S-5.08<br>OR Equivalent | 0.0 1411 |  |

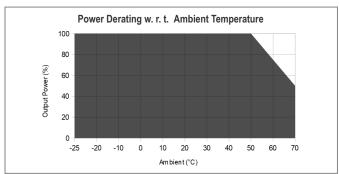
#### Dimensions (All are in mm)



#### **Terminal connections**



#### **Derating curve**



#### Compliance

| Applicable EMI / EMC Standards    |  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|
| Category                          | Reference Standards                        | Testing Level                              |  |  |  |
| Conducted Emission                | CISPR32                                    | CLASS A                                    |  |  |  |
| Radiated Emission                 | CISPR32                                    | 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 (E8<br>Designed to meet IE | ,  |  |  |  |

### **Ordering information**

| Product Code | Description   | Certification |
|--------------|---|---------------|
| RPS120-12-CU | 96 W, 12 V / 8 A Din rail mounted Power Supply<br>in Plastic Housing    |               |
| RPS120-24-CU | 120 W, 24 V / 5 A DIN rail mounted Power Supply<br>in Plastic Housing   |               |
| RPS120-48-CU | 120 W, 48 V / 2.5 A DIN rail mounted Power<br>Supply in Plastic Housing |               |