RPS240 | INDUSTRIAL POWER SUPPLIES |





Features:

- Supports 90 264 VAC / 127 370 VDC
- Power factor > 0.95 @ full load over entire input range

24: 24 V 48: 48 V

- Efficiencies up to 93 %
- Protection against short circuit, overload, overvoltage & over temperature
- Cooling by free air convection
- UL 508 approved (E522848)

Model Number Legend: RPS240 - □ □ - CU 1. Output Voltage: 12: 12 V

Certification : $\mathbf{C} \in \mathbf{ROHS}$ $|c_{\text{LISTED}}^{\text{UL}}|$

SPECIFICATIONS:

| MODEL | | RPS240-12-CU | RPS240-24-CU | RPS240-48-CU | |
|--------------|------------------------------|---|---|---|--|
| OUTPUT | NOMINAL DC VOLTAGE | 12 V | 24 V | 48 V | |
| | RATED CURRENT | 18 A | 10 A | 5 A | |
| | CURRENT RANGE | 0 - 18 A | 0 - 10 A | 0 - 5 A | |
| | RATED POWER | 216 W | 240 W | 240 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 | < 2 sec; at full load | | | |
| | HOLD UP TIME | > 25 mS at 12 V & >16 mS at 14 V @ 115 / 230 VAC, Full Load | > 25 mS at 24 V & > 16 mS at 28 V @ 115 / 230 VAC, Full Load | > 25 mS at 48 V & > 16 mS at 56 V @ 115 / 230 VAC, Full Load | |
| | RISE TIME | < 100 ms | | | |
| | VOLTAGE RANGE * | 90 - 264 VAC / 127 - 370V DC De-rate output power linearly below 100 VAC from 100 % at 100 VAC to 90 % at 90 VAC | | | |
| | FREQUENCY RANGE | 50 / 60 Hz | | | |
| | POWER FACTOR | > 0.95 @ Full load over entire input range | | | |
| INPUT | EFFICIENCY @ 230V AC | Up to 92 % | Up to 93 % | Up to 93 % | |
| | AC CURRENT | 2.4 A @ 115 VAC; 1.2 A @ 230 VAC | | | |
| | INRUSH CURRENT | < 60 Amps; Measured at 264 VAC, 25°C Ambient, Cold start | | | |
| | LEAKAGE CURRENT | < 1 mA; 264 VAC input | | | |
| | OVERLOAD | 110 % to 140 % of rated output current; Hiccup type; Autorecovery | | | |
| | | 16 VDC ± 0.5 VDC | 31 VDC ± 0.5 VDC | 60 VDC ± 1 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 | The power supply shuts down when the temperature of PCB below PFC choke reaches typically 120°C. It recovers automatically when temperature falls to typically 90°C | | | |
| FUNCTION | DC OK SIGNAL | Contact closes @ 11.5 V (typ.) Contact opens @ 11.0 V (typ.) | Contact closes @ 23.0 V (typ.) Contact opens @ 22.5 V (typ.) | Contact closes @ 46.0 V (typ.) Contact opens @ 45.0 V (typ.) | |
| | | Contact Rating: 30 VDC 1 A; 60 VDC 0.5 A; 125 VAC 0.5 A; resistive load, min. current 1 mA | | | |
| 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 specification 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 | 2000m | | | |
| | 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 | | | |
| OTHERS | DIMENSION | 50 x 136 x 135 mm (W x H x D) | | | |
| | WEIGHT | 645 gms | | | |
| | MOUNTING | 35 mm DIN rail | | | |

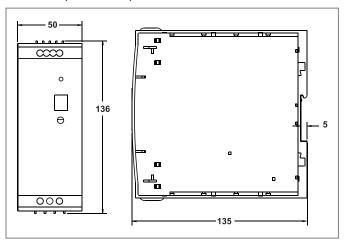
^{*} Although power supply will work for the specified DC input voltage range, UL approval is only for the specified AC input voltage range.

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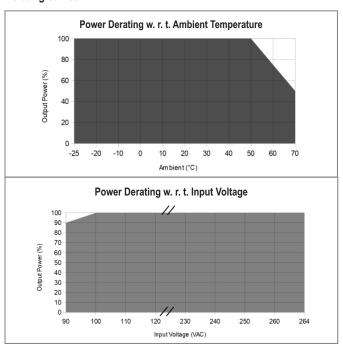
RPS240 | INDUSTRIAL POWER SUPPLIES _____ SELEC



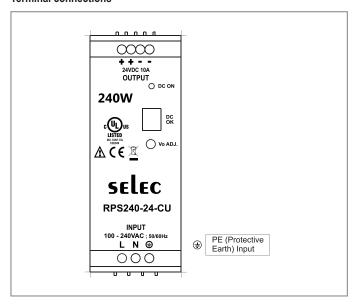
Dimensions (All are in mm)



Derating curves



Terminal connections



Compliance

| • | | | | | |
|-----------------------------------|---|--|--|--|--|
| Applicable EMI / EMC Standards | | | | | |
| Category | Reference Standards | Testing Level | | | |
| Conducted Emission | CISPR11 | CLASS B | | | |
| Radiated Emission | CISPR22 | CLASS A | | | |
| Electrostatic Discharge | IEC 61000-4-2 | Level 4, Criteria A 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 (E Designed to meet IE | , | | | |

Ordering information

| Product Code | Description | Certification |
|--------------|--|--------------------------|
| RPS240-12-CU | 216 W, 12 V / 18 A Din rail mounted Power Supply in Plastic Housing | CE ROHS CONTRIBUTED |
| RPS240-24-CU | 240 W, 24 V / 10 A DIN rail mounted Power Supply in Plastic Housing | CE ROHS COMPILISTED |
| RPS240-48-CU | 240 W, 48 V / 5 A DIN rail mounted Power Supply in Plastic Housing | CE ROHS CORPRISED LISTED |

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