# RPS15 | INDUSTRIAL POWER SUPPLIES




## Features :

- Plastic case, Ultra slim
- Support wide range of AC/DC auxiliary supply
- Efficiencies up to 82%
- Full power between -25°C to +50°C
- Protection against short circuit, overload
- Cooling by free air convection

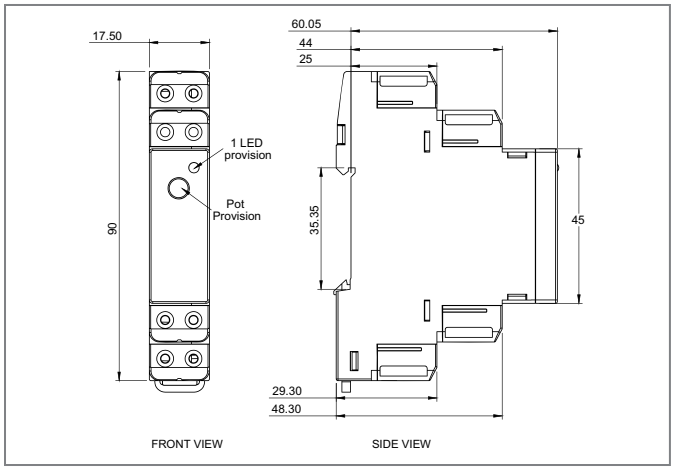
**Model Number Legend:**
RPS15 - □□ - CE
1
1. Output Voltage: 05 : 5 V
12 : 12 V
24 : 24 V

Certification : CE RoHS

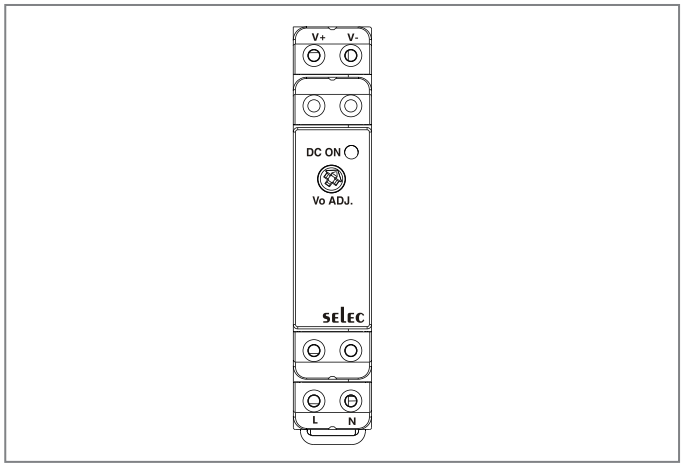
## SPECIFICATIONS:

| MODEL | | RPS15-05-CE | RPS15-12-CE | RPS15-24-CE |
|---|---|---|---|---|
| OUTPUT | NOMINAL DC VOLTAGE | 5 V | 12 V | 24 V |
| | RATED CURRENT | 2.4 A | 1.25 A | 0.63 A |
| | CURRENT RANGE | 0 – 2.4 A | 0 – 1.25 A | 0 – 0.63 A |
| | RATED POWER | 12 W | 15 W | 15 W |
| | RIPPLE & NOISE (max) | < 1.5 % of Vout | < 1 % of Vout | < 1 % of Vout |
| | VOLTAGE ADJ. RANGE | 4.5 to 5.5 V | 12 to 14 V | 24 to 28 V |
| | VOLTAGE TOLERANCE | ± 1 % | | |
| | LINE REGULATION | ± 1 % | | |
| | LOAD REGULATION | ± 1 % | | |
| | TURN ON TIME | < 1 sec, full load | | |
| | HOLD UP TIME | 30 ms @ 230 VAC & 10 ms @ 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 76% | Up to 80% | Up to 82% |
| | AC CURRENT | 0.3 A @ 115 VAC; 0.15 A @ 230 VAC | | |
| | INRUSH CURRENT | < 30 Amps; Measured at 264 VAC, 25°C Ambient, Cold start | | |
| PROTECTION | OVERLOAD | 110 % to 150 % of rated output current; Hiccup type, Autorecovery | | |
| | OUTPUT SHORT CIRCUIT | Hiccup mode when output is shorted; Autorecovery type. | | |
| ENVIRONMENT | OPERATING TEMP | -40°C to +70°C; De-rate linearly above 50°C from 100 % load at 50°C to 50 % load at 70°C. Note : Only start up guaranteed at -40°C with spec deterioration. | | |
| | STORAGE TEMP | -40°C to +85°C | | |
| | COOLING | Natural Cooling | | |
| | 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 | SAFETY STANDARDS | Designed to meet IEC 62368-1 | | |
| | DIELECTRIC WITHSTAND VOLTAGE | I/P to O/P : 4000 VAC | | |
| | CONDUCTED EMISSION | CISPR32 ; Class B | | |
| | RADIATED EMISSION | CISPR22 ; Class A | | |
| MECHANICAL | DIMENSION | 17.5 mm x 90 mm x 65 mm (W x H x D) | | |
| | WEIGHT | < 100 gms | | |
| | MOUNTING | 35 mm DIN Rail | | |

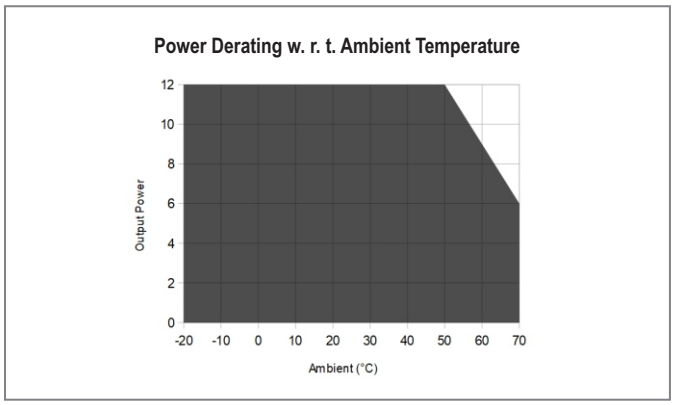
## Mechanical Dimensions (All are in mm)



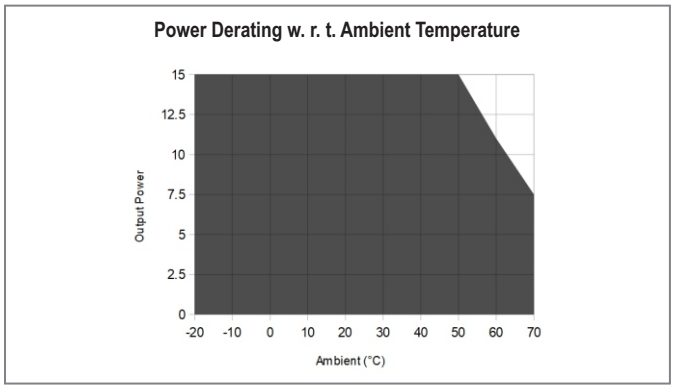

## Terminal connections




## Power derating w.r.t Ambient for 5V




## Power derating w.r.t Ambient for 12V & 24V




## Compliance

| Applicable EMI / EMC Standards | | |
|---|---|---|
| **Product Standard** | | |
| **Category** | **Reference Standards** | **Testing Level** |
| Conducted Emission | CISPR32 | CLASS B |
| Radiated Emission | CISPR22 | CLASS A |
| Electrostatic Discharge | IEC61000-4-2 | Level 4, Criteria A<br>Level 3, Criteria A |
| Radiated Susceptibility | IEC61000-4-3 | Level 3, Criteria B |
| Electrical Fast Transient / Burst | IEC61000-4-4 | Level 3, Criteria A |
| Surge | IEC61000-4-5 | Level 3, Criteria A |
| Conducted Susceptibility | IEC61000-4-6 | Level 3, Criteria B |
| Power Frequency Magnetic Field | IEC61000-4-8 | Level 4, Criteria A |
| Voltage Dips & Interruption | IEC61000-4-11 | Criteria A & B |
| Safety | Designed to meet IEC62368-1 | |

## Ordering information

| Product Code | Description | Certification |
|---|---|---|
| RPS15-05-CE | 12 W, 05 V / 2.4 A DIN rail mounted Power Supply in Plastic Housing | CE RoHS |
| RPS15-12-CE | 15 W, 12 V / 1.25 A DIN rail mounted Power Supply in Plastic Housing | CE RoHS |
| RPS15-24-CE | 15 W, 24 V / 0.63 A DIN rail mounted Power Supply in Plastic Housing | CE RoHS |