

FEATURES

- Compact Mounting
- High Performance
- Single Phase Input
- Reliable
- Led Indicators

RS PRO DIN Rail Power Supply - 230V ac Input Voltage, 12V dc Output Voltage, 2.5A Output Current, 30W

RS Stock No.: 136-8305



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

From RS Pro a range of high-performance power supplies in a compact 35mm DIN rail mounting package for convenience and space saving. These DIN rail mount power supplies are available with a range of power ratings from 15W to 240W and accept single-phase AC input for conversion into a single DC output of either 12V, 15V, 24V or 48V DC.

General Specifications

| | |
|-------------------------------------|--|
| Type | Switch Mode |
| AC or DC Input Voltage | 230VAV |
| AC or DC Output Voltage | 12VDC |
| Number of Outputs | 1 |
| Special Features | Compact Size, Cooling by Free Air Convection, LED Indicator for DC Low, LED Indicator for DC Power On, 3-Years Warranty, 100% Full Load Burn-In Test |
| Mounting Type | DIN Rail, Vertical Mount |
| Short Circuit Protection | Yes |
| Over Voltage Protection | Yes |
| Indication of Output Voltage | LED, continuous green light |
| Applications | Sensors, Transmitters/receivers, Analyzers, PLCs Motors, Actuators, Solenoids, Relays |

Electrical Specifications

| RS Stock# | Input Voltage | Output Voltage | Output Current | Output Wattage | Efficiency (Typ) |
|-----------|---------------|----------------|----------------|----------------|------------------|
| 136-8304 | 100VAC-240VAC | + 5VDC | 5A | 25W | 78% |
| 136-8305 | 100VAC-240VAC | + 12VDC | 2.5A | 30W | 83% |
| 136-8306 | 100VAC-240VAC | + 15VDC | 2A | 30W | 82% |
| 136-8308 | 100VAC-240VAC | + 24VDC | 1.3A | 30W | 87% |

| Input Specifications | | |
|-----------------------------|-----------------|---------|
| Input Electrical Phase | Single | |
| Input current | 0.35A/230VAC | |
| Line Frequency | 47 to 63Hz | |
| Inrush current at 25°C 230V | 60A | |
| Efficiency (Typ.) | 83% | |
| Output Specifications | | |
| Output Voltage Adjustment | 11.6VDC-12.3VDC | |
| Ripple and Noise | 42mV | |
| Hold Up Time | 20ms/115VAC | |
| Line Regulation | 1% | |
| Load Regulation | 1% | |
| | Input-Output | 3000VAC |
| | Input-Ground | 1500VAC |
| | Output-Ground | 1500VAC |
| Surge Voltage | 2kV | |
| MTBF | 200Khrs | |

Mechanical Specifications

| | |
|------------|---------------------|
| Height | 95mm |
| Depth | 108mm |
| Width | 36mm |
| Weight | 250g |
| Dimensions | 36mm x 95mm x 108mm |

Operation Environment Specifications

| | |
|-----------------------------|---------------------|
| Operating Humidity | 20% to 95% RH |
| Operating Temperature Range | -35 to 70°C |
| Storage Temperature Range | -40 to 85°C |
| Cooling | Free Air convection |

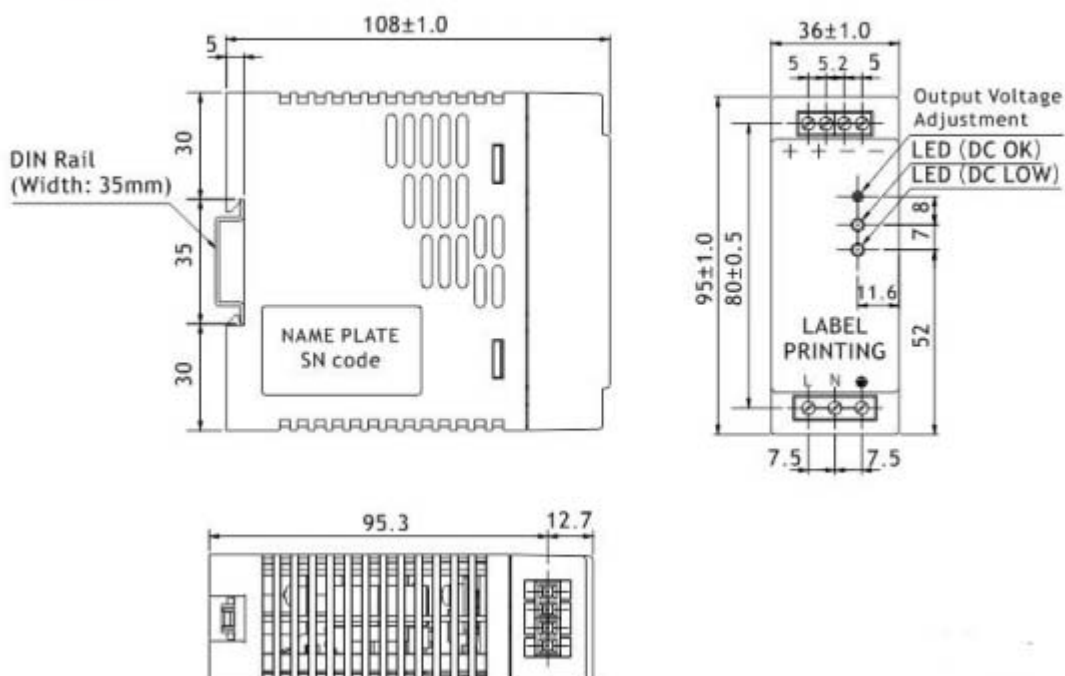
Approvals

| | |
|---------------|--|
| Standards Met | CB, CE, CUL, CULus Recognised, FCC, UL |
|---------------|--|



| Stock Number | Nominal Input Voltage | Output Voltage | Output Current | Ripple (Typ.) | Efficiency (Typ.) | Certificate |
|--------------|-----------------------|----------------|----------------|---------------|-------------------|----------------------|
| 136-8304 | 100-240VAC | 5V | 5A | 32mV | 78% | CE, FCC, CB, UL, CUL |
| 136-8305 | 100-240VAC | 12V | 2.5A | 42mV | 83% | CE, FCC, CB, UL, CUL |
| 136-8306 | 100-240VAC | 15V | 2.0A | 45mV | 82% | CE |
| 136-8308 | 100-240VAC | 24V | 1.3A | 46mV | 87% | CE, FCC, CB, UL, CUL |

Mechanical

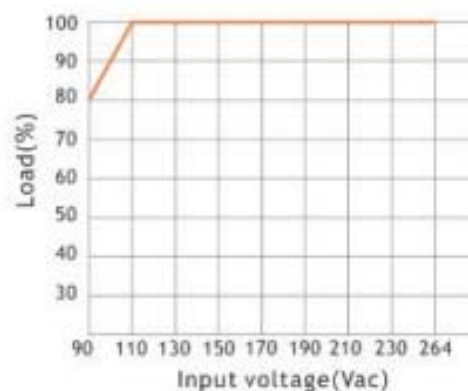
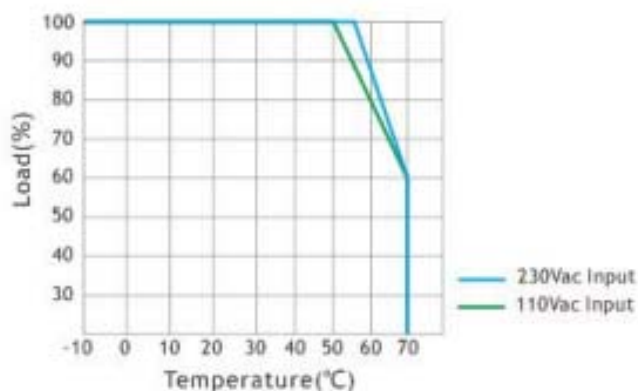


Mechanical

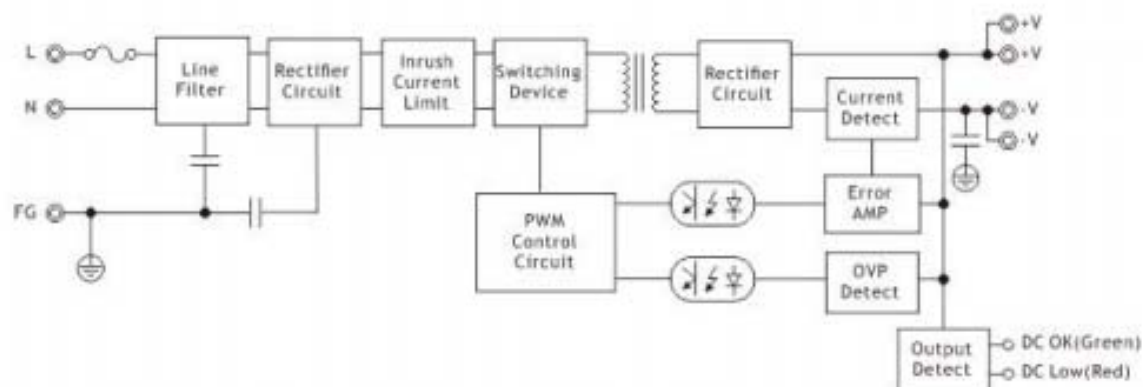


| Marking | No. | Assignment |
|---------|-----|--------------------------------------|
| + | 1 | DC(+) Output Terminal |
| + | 2 | |
| - | 3 | DC(-) Output Terminal |
| - | 4 | |
| L | 5 | AC(L) Input Terminal |
| N | 6 | AC(N) Input Terminal |
| | 7 | AC Grounding Terminal |
| V-ADJ. | / | DC Output voltage adjustment trimmer |
| DC OK | / | DC Output OK indication LED(Green) |
| DC LOW | / | DC Output Low indication LED(Red) |

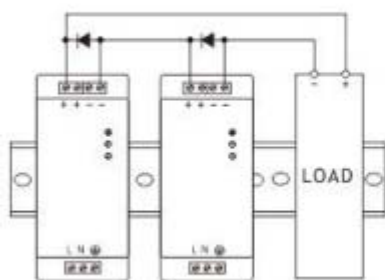
Electrical Curve



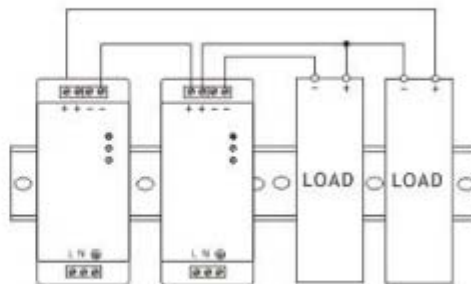
Block Diagram



Series Operation

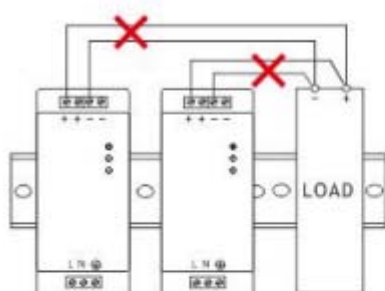


Series Operation A

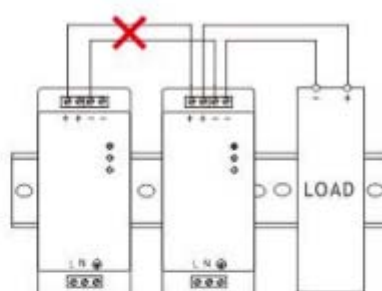


Series Operation B

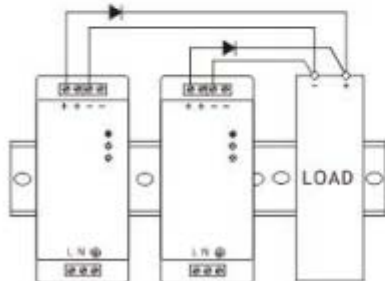
Parallel Operation



Parallel Operation A
(Unable to use)



Parallel Operation B
(Unable to use)



Parallel Operation C
(Backup)

Mounting Method

