

YSDN150 SERIES 150W



Yingjiao's metal case power family designed with slim plastic housing and for full range AC input from 90V AC TO 264V AC.

The series are single phase PSU, providing adjustable DC output voltage. They have high efficiency and operate in wide temperature range.

The series can widely used for industrial automation & control systems, varied equipments etc.



Features



DC O/P Voltage Adjustable



Universal AC Input 90-264V



Protection: Short Circuit/Overload /Over Voltage/Over Temperature



Free Air Convection Design



Installation: DIN Rail TS-35/7.5 & 15



Three Years Warranty

Model Information

| Yingjiao Part number | DC VOLTAGE | RATED CURRENT (Max.) | RATED POWER | VOLTAGE ADJ. RANGE |
|-------------------------|---------------|-------------------------|----------------|-----------------------|
| YSDN150-12010000 | 12V | 10A | 120W | 12-14V |
| YSDN150-24005000 | 24V | 5A | 120W | 24-28V |
| YSDN150-48002500 | 48V | 2.5A | 120W | 48-55V |
| YSDN150-24006250 | 24V | 6.25A | 150W/230V AC | 24-28V |

Input

| | | |
|------------------------------|---|------------------|
| VOLTAGE RANGE | 90 ~ 264VAC, 127 ~ 370VDC [DC input by connecting AC/L(+),AC/N(-)] | |
| FREQUENCY RANGE | 47~63Hz | |
| EFFICIENCY (Typ.) | 85.5% | YSDN150-12010000 |
| | 88% | YSDN150-24005000 |
| | 89% | YSDN150-48002500 |
| | 87% | YSDN150-24006250 |
| AC CURRENT (Typ.) | 2.25A/115VAC 1.3A/230VAC | |
| INRUSH CURRENT (Typ.) | 47.8A/115VAC 92.5A/230VAC | |
| LEAKAGE CURRENT | <1mA / 240VAC | |

Output

| | | |
|-----------------------|----------------------------------|------------------|
| RIPPLE & NOISE (max.) | 100mVp-p | YSDN150-12010000 |
| | 120mVp-p | YSDN150-24005000 |
| | 150mVp-p | YSDN150-48002500 |
| | 150mVp-p | YSDN150-24006250 |
| VOLTAGE TOLERANCE | $\pm 2.0\%$ | |
| LINE REGULATION | $\pm 0.5\%$ | |
| LOAD REGULATION | $\pm 1.0\%$ | |
| SETUP, RISE TIME | 1200ms, 60ms/230VAC at full load | |
| | 2500ms, 60ms/115VAC at full load | |
| HOLD UP TIME (Typ.) | 16ms/230VAC at full load | |
| | 10ms/115VAC at full load | |

Protection

| | | |
|------------------|--|------------------|
| OVER LOAD | 105 ~ 130% rated output power | |
| | Protection type : Constant current limiting, recovers automatically after fault condition is removed | |
| OVER VOLTAGE | 14~17V | YSDN150-12010000 |
| | 29 ~ 33V | YSDN150-24005000 |
| | 56 ~ 65V | YSDN150-48002500 |
| | 29-33V | YSDN150-24006250 |
| | Protection type : Shut down o/p voltage, re-power on to recover | |
| OVER TEMPERATURE | Shut down o/p voltage, re-power on to recover | |

Environment

| | |
|------------------|---|
| WORKING TEMP. | -20 ~ +70 °C (Refer to "Derating Curve") |
| WORKING HUMIDITY | 20 ~ 95% RH non-condensing |
| STORAGE TEMP. | -40 ~ +85 °C, 10 ~ 95% RH |
| STORAGE HUMIDITY | 10 ~ 95% RH |
| MTBF | 200,000 Hours Minimum at Full Load at 25 °C Ambient |

SAFETY & EMC (Note 4)

| | |
|-----------------------------|--|
| SAFETY STANDARDS | UL508, BS/EN62368-1 |
| WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC |
| ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25 °C / 70% RH |
| EMC EMISSION | Compliance to BS EN/EN55032 , BS EN/EN61000-3-2,-3 |
| EMC IMMUNITY | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2) |

Note

- 1.All parameters NOT specially mentioned at 230VAC input, rated load and 25 °C of ambient temperature.
- 2.Ripple&noise are measured from peak to peak with band width limit of 20MHz(0.1uF and 47uF/50V parallel capacitor under DC output full load,AC nominal input 25 °C ambient temperature).
- 3.Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.
- 4.Derating may be needed under low input voltage. Please check the derating curve for more details.
- 5.Efficiency test after 30 minutes of burn-in.
- 6.The ambient temperature derating of 3.5 °C/1000m for operating altitude higher than 2000m(6500ft).

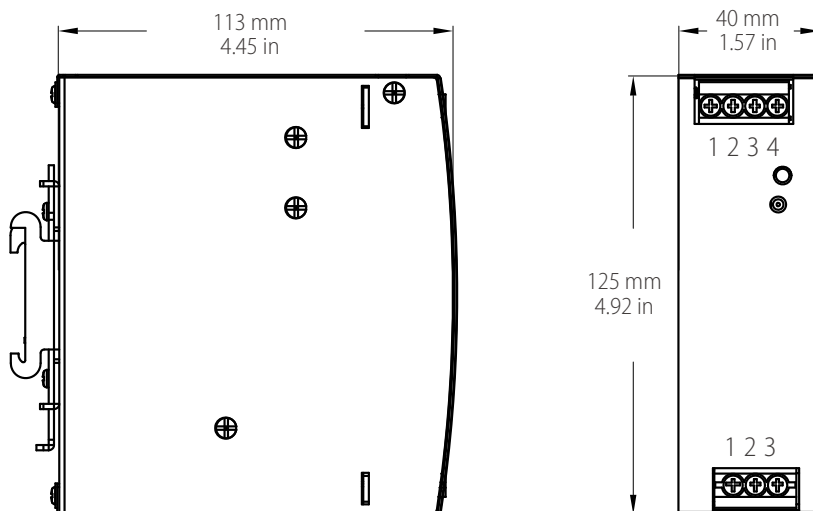
Dimensions & Weight

| | |
|----------------|----------------|
| Length: | 40mm / 1.57in |
| Width: | 125mm / 4.92in |
| Height: | 113mm / 4.45in |
| Weight: | 0.6kg |

Packing

| | |
|----------------------------------|---|
| Carton Size: | 31.5 x 30 x 30 CM 12.4 x 11.8 x 11.81 in |
| Master Carton Quantities: | 20pcs / Carton |

Mechanical Specification



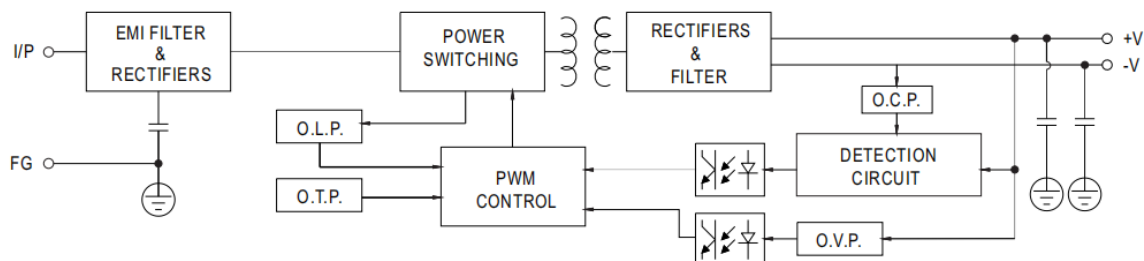
Input

| No. | Description |
|-----|-------------|
| 1 | FG \oplus |
| 2 | AC/N |
| 3 | AC/L |

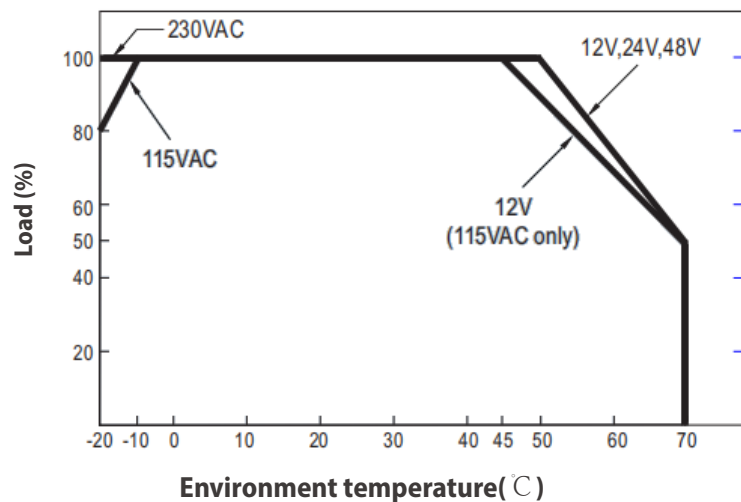
Output

| No. | Description |
|-----|--------------|
| 1,2 | DC OUTPUT -V |
| 3,4 | DC OUTPUT +V |

Block Diagram



Deduction Curve And Temperature



Minus Output And Input Voltage Curves

