

YSD15S SERIES 15W



Yingjiao's step shape power family are designed with ultra-slim plastic housing and for full range AC input from 90V AC to 264V AC.

The series are isolation Class II Level, achieving high efficiency and low no-load power consumption. They provide adjustable DC output voltage and operate in wide temperature range.

The good performance can be used for building automation, household and industrial control systems etc.



Features



Isolation Class II



Class 2/Pass LPS



Ultra Slim Step Shape



DC Output Voltage Adjustable



Protection:Short Circuit/Overload/
Over Voltage



Over Voltage Category II



Three Years Warranty

Model Information

| Yingjiao Part number | DC VOLTAGE | RATED CURRENT | RATED POWER |
|-------------------------|---------------|------------------|----------------|
| YSD15S-0502400 | 5V | 2.4A | 12W |
| YSD15S-1201250 | 12V | 1.25A | 15W |
| YSD15S-1501000 | 15V | 1A | 15W |
| YSD15S-2400630 | 24V | 0.63A | 15W |
| YSD15S-4800310 | 48V | 0.31A | 15W |

Input

| | | |
|-----------------|-----------------------------------|--|
| VOLTAGE RANGE | 90 ~ 264VAC 127 ~ 370VDC | |
| FREQUENCY RANGE | 47 ~ 63Hz | |
| INRUSH CURRENT | COLD START 25A/115VAC 45A/230VAC | |
| AC CURRENT | 0.5A/115VAC 0.25A/230VAC | |
| EFFICIENCY | 80% 85% 85.5% 86% 87% | YSD15S-0502400 YSD15S-1201250 YSD15S-1501000 YSD15S-2400630 YSD15S-4800310 |

Output

| | | |
|----------------------------|---------------------|----------------|
| RIPPLE & NOISE | 80mVp-p | YSD15S-0502400 |
| | 120mVp-p | YSD15S-1201250 |
| | 120mVp-p | YSD15S-1501000 |
| | 150mVp-p | YSD15S-2400630 |
| | 240mVp-p | YSD15S-4800310 |
| VOLTAGE ADJ. RANGE | 4.5~5.5V | YSD15S-0502400 |
| | 10.8~13.8V | YSD15S-1201250 |
| | 13.5~18V | YSD15S-1501000 |
| | 21.6~29V | YSD15S-2400630 |
| | 43.2~55.2V | YSD15S-4800310 |
| VOLTAGE TOLERANCE | ± 2.0% | YSD15S-0502400 |
| | ± 2.0% | YSD15S-1201250 |
| | ± 2.0% | YSD15S-1501000 |
| | ± 2.0% | YSD15S-2400630 |
| | ± 2.0% | YSD15S-4800310 |
| LINE REGULATION | ± 1.0% | |
| LOAD REGULATION | ± 1.0% | |
| SETUP, RISE TIME | 2000ms, 80ms/230VAC | at full load |
| | 2000ms, 80ms/115VAC | at full load |
| HOLD UP TIME (Typ.) | 30ms/230VAC | at full load |
| | 12ms/115VAC | at full load |

Protection

| | | |
|---------------------|--|----------------|
| OVER LOAD | 110 ~ 145% rated output power Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50%-100% rated output voltage, recovers automatically after fault condition is removed. | |
| OVER VOLTAGE | 5.75 ~ 6.75V | YSD15S-0502400 |
| | 14.2 ~ 16.2V | YSD15S-1201250 |
| | 18.8 ~ 22.5V | YSD15S-1501000 |
| | 30 ~ 36V | YSD15S-2400630 |
| | 56.5 ~ 64.8V | YSD15S-4800310 |
| | Protection type : Shut off o/p voltage, clamping by zener diode | |

Environment

| | |
|--------------------------------|---|
| WORKING TEMP. | -20 °C ~ +70 °C |
| Working Humidity | 20 ~ 90% RH Non-Condensing |
| STORAGE TEMP., HUMIDITY | -40 °C ~ +85 °C, 10 ~ 95% RH non-condensing |
| TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50 °C) RH non-condensing |
| VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 |
| OPERATING ALTITUDE | 5000 meters |
| OVER VOLTAGE CATEGORY | II; According to EN62368-1; altitude up to 2000 meters |
| MTBF | 1000K hrs min. MIL-HDBK-217F (25 °C) |

SAFETY & EMC

| | |
|------------------------------|--|
| SAFETY REGULATIONS | UL62368-1, BS EN/EN62368-1 |
| WITHSTAND VOLTAGE | I/P-O/P:4KVAC |
| INSULATION RESISTANCE | I/P-O/P:100M Ohms / 500VDC / 25 °C / 70% RH |
| EMC EMISSION | BS EN/EN 55032 class B, BS EN/EN IEC 61000-3-2,3 |
| EMC IMMUNITY | BS EN/EN61000-4-2,3,4,5,6,8,11 |

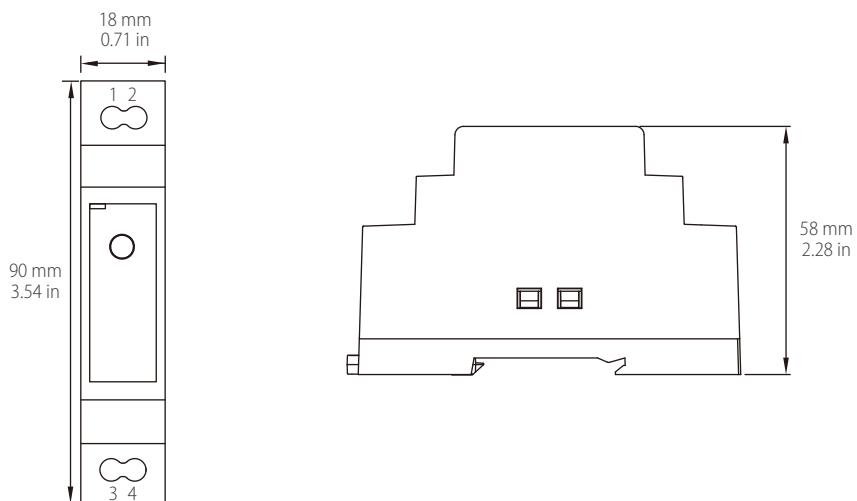
Dimensions & Weight

| | |
|---------|---------------|
| Length: | 18mm / 0.71in |
| Width: | 90mm / 3.54in |
| Height: | 58mm / 2.28in |
| Weight: | 78g |

Packing

| | |
|---------------------------|--|
| Carton Size: | 33.5 x 25.5 x 21 CM 13.19 x 10.04 x 8.27 in |
| Master Carton Quantities: | 100pcs / Carton |

Dimensions and Installation



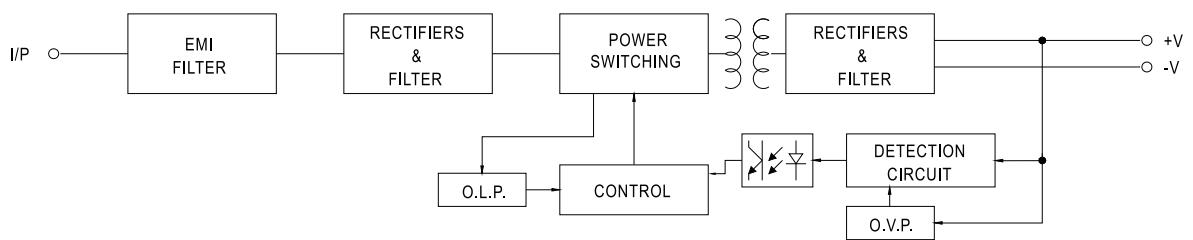
Input

| No. | Description |
|-----|-------------|
| 1 | +V |
| 2 | -V |

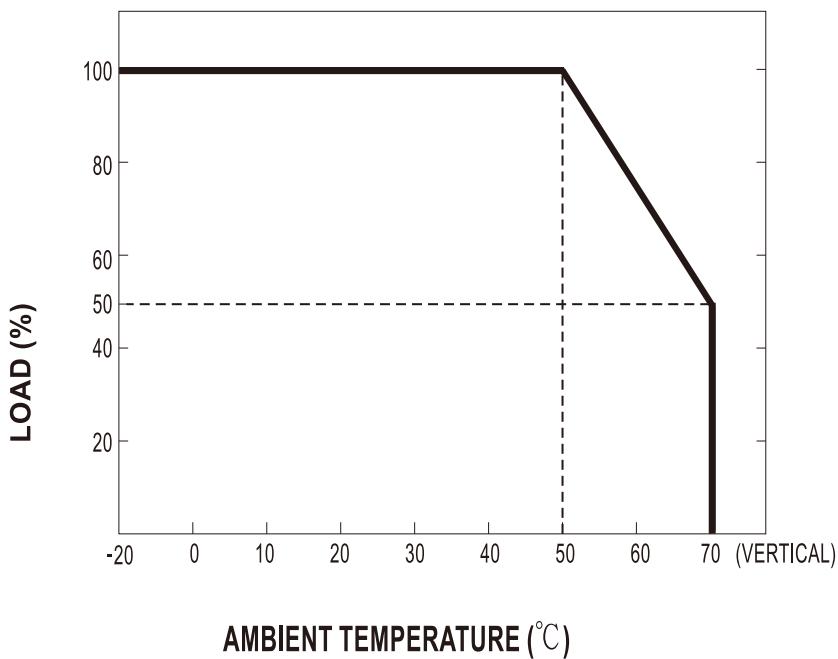
Output

| No. | Description |
|-----|-------------|
| 3 | AC/N |
| 4 | AC/L |

Functional Diagram



Deduction Curve and Temperature



Minus Output and Input Voltage Curves

