YINGJIAO®

YSD100S SERIES 100W

Yingjiao's step shape power family are designed with ultra-slim plastic housing and for full range .

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

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

Features

- Isolation Class II
- DC Output Voltage Adjustable
- Ultra Slim Step Shape
- Over Voltage Category II
- Protection:Short Circuit/Overload/ Over Voltage
- Three Years Warranty

Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT	RATED POWER
YSD100S-1207100	12V	7.1A	85.2W
YSD100S-1506130	15V	6.13A	92W
YSD100S-1506500	15V	6.5A	97.5W
YSD100S-2403830	24V	3.83A	92W
YSD100S-2404170	24V	4.17A	100W
YSD100S-4801920	48V	1.92A	92.2W
YSD100S-4802080	48V	2.08A	100W

Input

VOLTAGE RANGE	90 ~ 264VAC	
	127 ~ 370VDC	
FREQUENCY RANGE	47 ~ 63Hz	
INRUSH CURRENT	COLD START 35A/115VAC 70A/230VAC	
AC CURRENT	3A/115VAC	
	1.6A/230VAC	
EFFICIENCY	88%	YSD100S-1207100
	89%	YSD100S-1506130
	89%	YSD100S-1506500
	90%	YSD100S-2403830
	90%	YSD100S-2404170
	90%	YSD100S-4801920
	90%	YSD100S-4802080

Output

RIPPLE & NOISE	120mVp-p	YSD100S-1207100
	120mVp-p	YSD100S-1506130
	120mVp-p	YSD100S-1506500
	150mVp-p	YSD100S-2403830
	150mVp-p	YSD100S-2404170
	240mVp-p	YSD100S-4801920
	240mVp-p	YSD100S-4802080
VOLTAGE ADJ. RANGE	12-13V	YSD100S-1207100
	15-17V	YSD100S-1506130
	13.5-18.0V	YSD100S-1506500
	24-25.5V	YSD100S-2403830
	21.6-29V	YSD100S-2404170
	48-48.7V	YSD100S-4801920
	43.2-55.2V	YSD100S-4802080
VOLTAGE TOLERANCE	±2.0%	
LINE REGULATION	±1.0%	
LOAD REGULATION	±1.0%	
SETUP, RISE TIME	500ms, 50ms/100-240VAC at full load	
HOLD UP TIME (Typ.)	30ms/100-240VAC at full load	

Protection

OVER LOAD	102 ~ 110% rated output power ; (Below 92.2W) 105 ~ 150% rated output power;(above 92.2W) 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	14.2-16.2V	YSD100S-1207100
	18.8-22.5V	YSD100S-1506130
	18.8-22.5V	YSD100S-1506500
	30-36V	YSD100S-2403830
	30-36V	YSD100S-2404170
	56.5-64.8V	YSD100S-4801920
	56.5-64.8V	YSD100S-4802080
	Protection type : Shut down o/p voltage, re-power on to recover	

Environment

WORKING TEMP.	-20℃ ～+70℃
Working Humidity	20 ~ 90% RH Non-Condensing
STORAGE TEMP., HUMIDITY	-40℃ ～+85℃, 10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃) 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	800K hrs min. MIL-HDBK-217F (25℃)

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℃ / 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

Note

1.All parameters NOT specially mentioned at 230VAC input, rated load and 25℃ 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℃ 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 ℃/1000m for operating altitude higher than 2000m(6500ft).

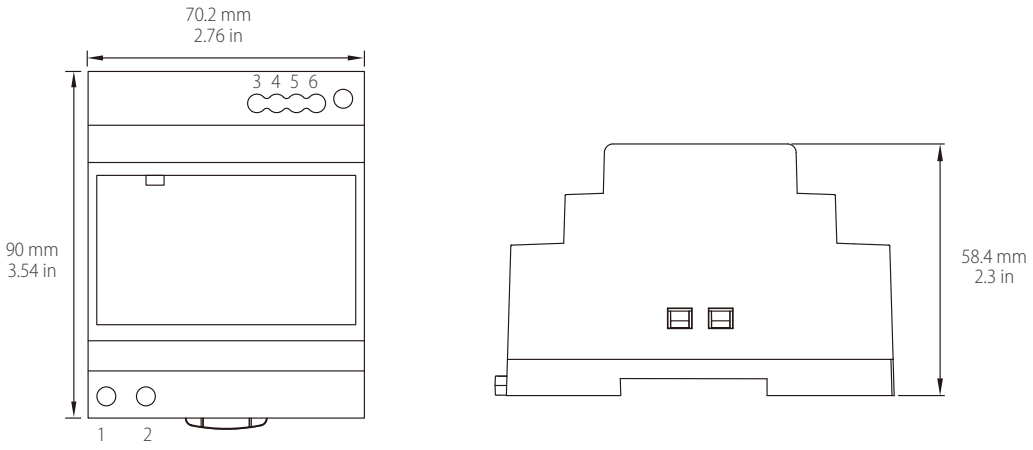
Dimensions & Weight

Length:	90mm / 3.54in
Width:	70.2mm / 2.76in
Height:	58.4mm / 2.3in
Weight:	270g

Packing

Carton Size:	420x 22 x 35 CM 15.75x 8.66 x 13.78 in
Master Carton Quantities:	50pcs / Carton

Dimensions and Installation



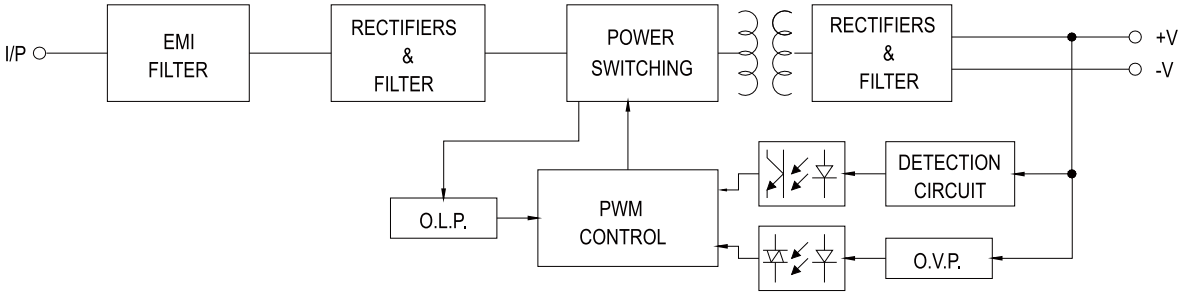
Input

No.	Description
1	AC/L
2	AC/N

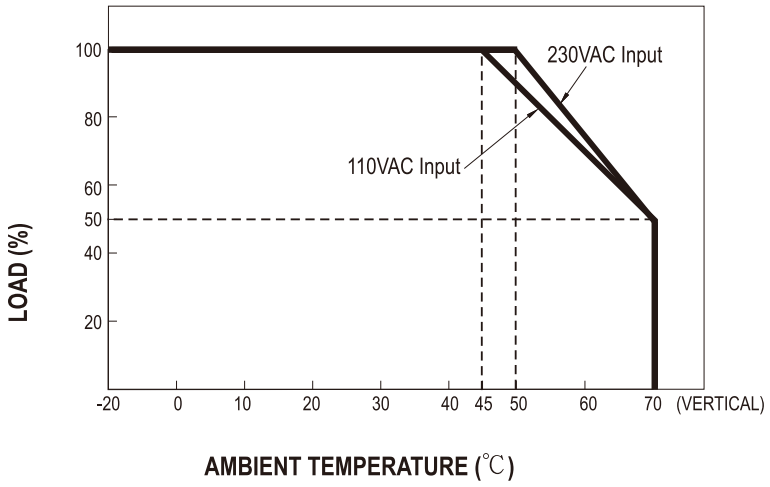
Output

No.	Description
3,4	-V
5,6	+V

Functional Diagram



Deduction Curve and Temperature



Minus Output and Input Voltage Curves