

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.

   RoHS

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	± 2.0%	
LINE REGULATION	± 0.5%	
LOAD REGULATION	± 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	2241.28K hrs min. Telcordia SR-332 (Bellcore)

SAFETY & EMC

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).

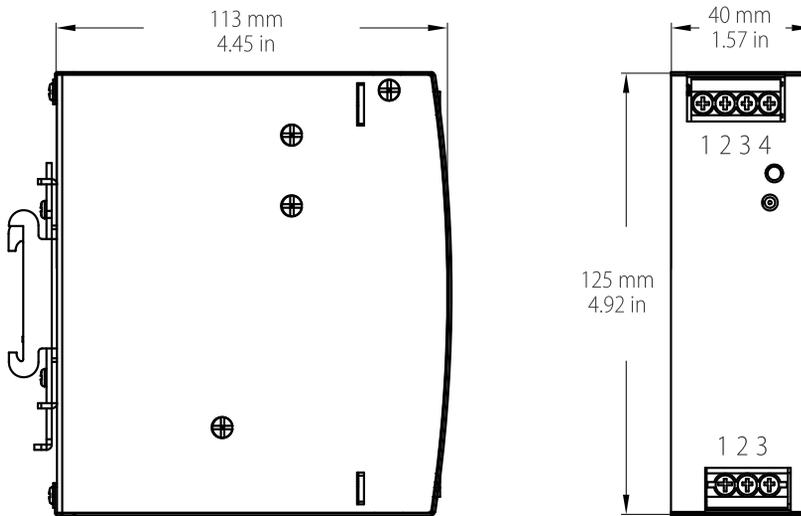
Dimensions & Weight

Width:	40mm / 1.57in
Height:	125mm / 4.92in
Depth:	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



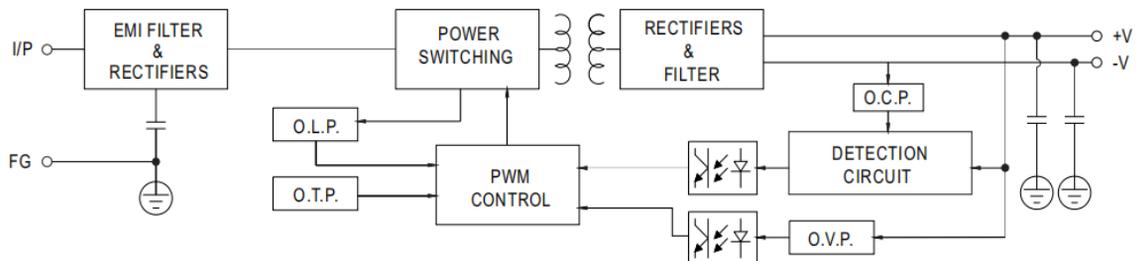
Input

No.	Description
1	FG ⊕
2	AC/N
3	AC/L

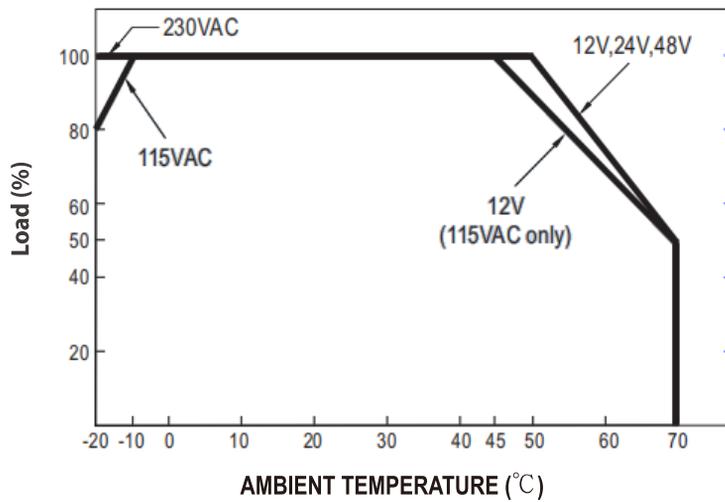
Output

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

Block Diagram



Deduction Curve and Temperature



Minus Output and Input Voltage Curves

