YINGJIAO®

YSDN240 SERIES 240W



Yingjiao's metal case power family designed with slim 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
- With build-in active PFC function
- Three Years Warranty

Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT (Max.)	RATED POWER	VOLTAGE ADJ. RANGE
YSDN240-24010000	24V	10A	240W	24-28V
YSDN240-48005000	48V	5A	240W	48-55V

Input

VOLTAGE RANGE	90 ~ 264VAC, 127 ~ 370VDC [DC input by connecting AC/L(+),AC/N(-)]
FREQUENCY RANGE	47~63Hz
POWER FACTOR (Typ.)	>0.98/115VAC at full load > 0.95/230VAC at full load
EFFICIENCY (Typ.)	87% YSDN240-24010000 88% YSDN240-48005000
AC CURRENT (Typ.)	2.5A/115VAC 1.3A/230VAC
INRUSH CURRENT (Typ.)	37.2A/115VAC 70A/230VAC
LEAKAGE CURRENT	<1mA / 240VAC

Output

RIPPLE & NOISE (max.)	150mVp-p
VOLTAGE TOLERANCE	±2.0%
LINE REGULATION	±0.5%
LOAD REGULATION	±1.0%
SETUP, RISE TIME	1500mS/100mS(115V/60HZ full load) 3000mS/100mS(230V/50HZ full load)
HOLD UP TIME (Typ.)	16mS(230V/50HZ full load) 12mS(115V/60HZ full load)

Protection

OVER LOAD	105 ~ 130% rated output power, Protection type : Hiccup mode, recovers automatically after fault condition is removed
OVER VOLTAGE	29 ~ 33V YSDN240-24010000 56 ~ 65V YSDN240-48005000 Protection type : Shut down o/p voltage, re-power on to recover
OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down

Environment

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

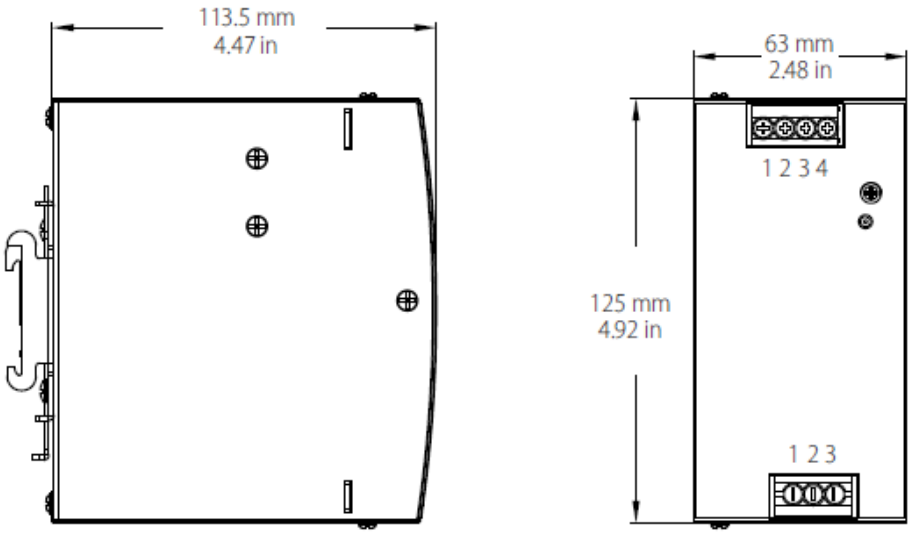
Dimensions & Weight

Length:	63mm / 2.48in
Width:	125mm / 4.92in
Height:	113.5mm / 4.47in
Weight:	1kg

Packing

Carton Size:	52.5 x 33 x 17.5 CM 20.67 x 12.99 x 6.9 in
Master Carton Quantities:	10pcs / Carton

Mechanical Specification



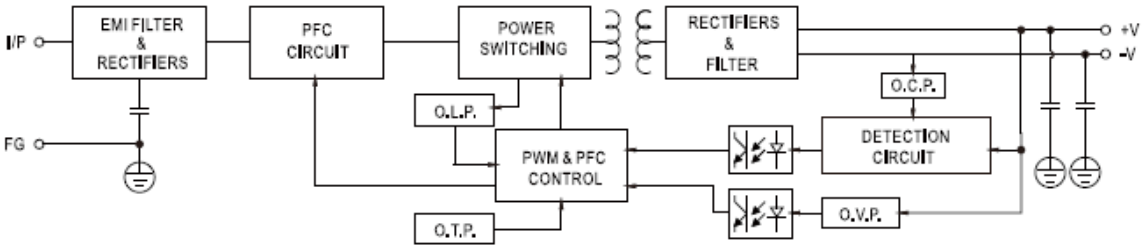
Input

No.	Description
1	FG ⏚
2	AC/N or DC -
3	AC/L or DC +

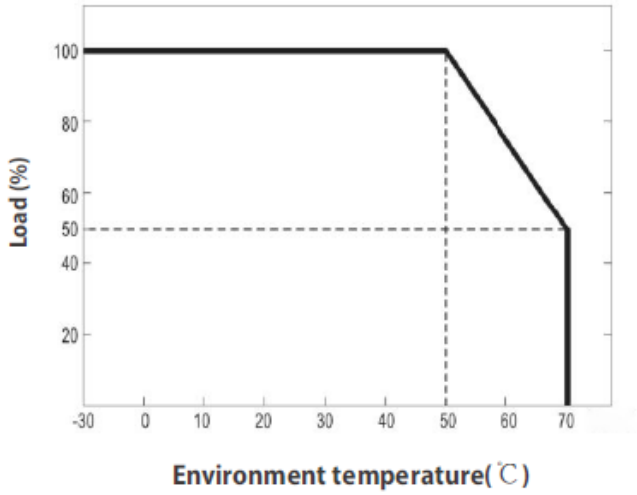
Output

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

Block Diagram



Deduction Curve And Temperature



Minus Output And Input Voltage Curves

