

# YSDN480 SERIES 480W



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 Built-in Active PFC Function



Three Years Warranty

## Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT (Max.)	RATED POWER	VOLTAGE ADJ. RANGE
YSDN480-24020000	24V	20A	480W	24-28V
YSDN480-48010000	48V	10A	480W	48-55V

## Input

RATED INPUT (Certified Voltage)	100 ~ 240VAC
NOMINAL INPUT VOLTAGE RANGE	90~ 264VAC or 127-370VDC [DC input by connecting AC/L(+),AC/N(-)]
FREQUENCY RANGE	47~63Hz
POWER FACTOR (Typ.)	>0.98/115VAC      at full load > 0.94/230VAC      at full load
EFFICIENCY (Typ.)	92%
AC CURRENT (Typ.)	4.8A/115VAC 2.4A/230VAC
INRUSH CURRENT (Typ.)	20A/115VAC 35A/230VAC
LEAKAGE CURRENT	<2mA / 240VAC

## Output

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

## Protection

OVER LOAD	105 ~ 130% rated output power Protection type : Constant current limiting, unit will shut down after 3 sec., re-power on to recover	
OVER VOLTAGE	29 ~ 33V	YSDN480-24020000
	56 ~ 65V	YSDN480-48010000
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 °C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP.	-40 ~ +85 °C
STORAGE HUMIDITY	10 ~ 95% RH
MTBF	150K hrs min. MIL-HDBK-217F (25 °C)

## 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).

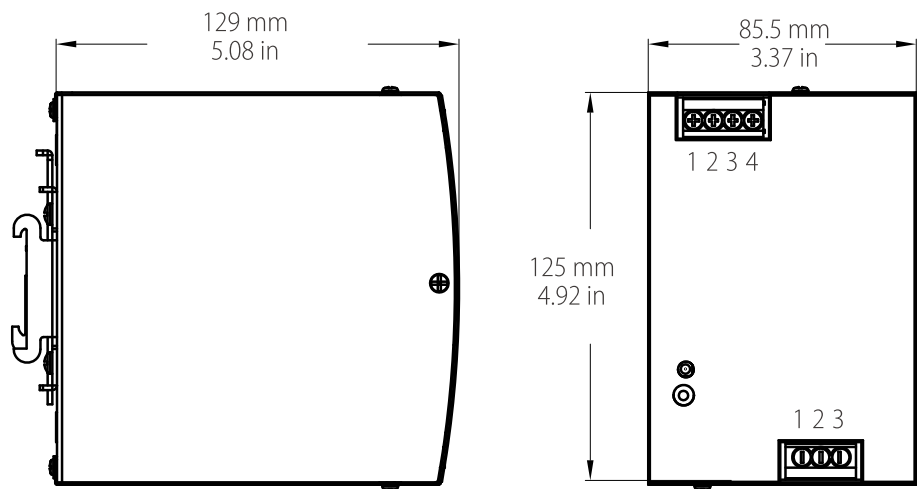
## Dimensions & Weight

<b>Width:</b>	85.5mm / 3.37in
<b>Height:</b>	125mm / 4.92in
<b>Depth:</b>	129mm / 5.08in
<b>Weight:</b>	1.5kg

## Packing

<b>Carton Size:</b>	49 x 34.5 x 16.5 CM 19.29 x 13.58 x 6.5 in
<b>Master Carton Quantities:</b>	8pcs / Carton

# Mechanical Specification



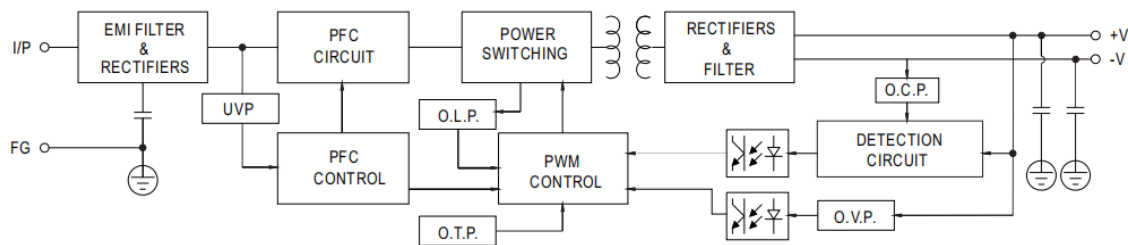
Input

Pin No.	Description
1	FG $\oplus$
2	AC/N or DC -
3	AC/L or DC +

Output

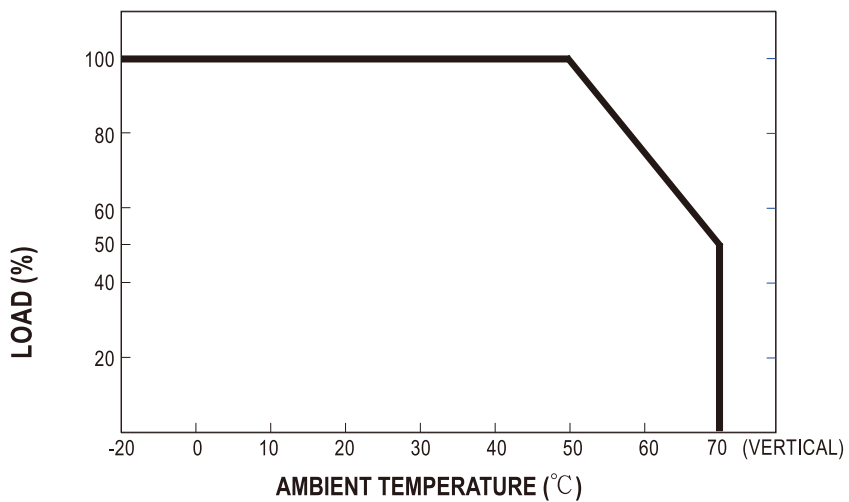
Pin No.	Description
1,2	DC OUTPUT -V
3,4	DC OUTPUT +V

# Block Diagram



## Deduction Curve and Temperature

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## Minus Output and Input Voltage Curves

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