

# YSDW480 SERIES 480W



eUrasia Power'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



Single and Two Phase Ultra Wide Input Range 180~550VAC



Over Voltage Category III



Built-in DC OK Relay Contact



DC Output Voltage Adjustable



Built-in Constant Current Limiting Circuit



Three Years Warranty

## Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT	RATED POWER	VOLTAGE ADJ. RANGE
YSDW480-24020000	24V	20A	480W	24 ~ 48V
YSDW480-48010000	48V	10A	480W	48 ~ 55V

## Input

VOLTAGE RANGE(Note.6)	180 ~ 550VAC 254 ~ 780VDC
FREQUENCY RANGE	47~63Hz
POWER FACTOR(Typ.)	PF ≥ 0.84/400VAC PF ≥ 0.84/230VAC
EFFICIENCY(Typ.)	91% YSDW480-24020000 93% YSDW480-48010000
AC CURRENT(Typ.)	1.6A/400Vac 4A/230Vac
INRUSH CURRENT(Typ.)	COLD START 50A
LEAKAGE CURRENT	<3.5mA / 530Vac

## Output

RIPPLE & NOISE (max.)(Note.2)	100mVp-p YSDW480-24020000 150mVp-p YSDW480-48010000
VOLTAGE TOLERANCE(Note.3)	± 1.0%
LINE REGULATION	± 0.5%
LOAD REGULATION	± 1.0%
SETUP, RISE TIME	800ms, 150ms/400Vac at full load 2000ms, 150ms/230Vac at full load
HOLD UP TIME(Typ.)	18ms/400Vac at full load 16ms/400Vac at full load

## Protection

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<b>OVER LOAD</b>	105 ~ 130% rated output power. Protection type : Constant current limiting, unit will shut down after 3 sec., auto-recovery after 1 minute if the fault condition is removed.
<b>OVER VOLTAGE</b>	29~33V      YSDW480-24020000 56~65V      YSDW480-48010000 Protection type : Shut down o/p voltage, auto-recovery after 1 minute if the fault condition is removed.
<b>OVER TEMPERATURE</b>	95 °C ± 5 °C (TSW) detect on heatsink of power switch. Protection type : Shut down o/p voltage, recovers automatically after temperature goes down.

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## Environment

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<b>WORKING TEMP. (Note.5)</b>	-30 ~ +70 °C (Refer to "Derating Curve")
<b>WORKING HUMIDITY</b>	20 ~ 95% RH non-condensing
<b>STORAGE TEMP., HUMIDITY</b>	-40 ~ +85 °C , 10 ~ 95% RH
<b>TEMP. COEFFICIENT</b>	± 0.03%/ °C (0 ~ 50 °C)
<b>VIBRATION</b>	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting clip: Compliance to IEC60068-2-6.
<b>MTBF</b>	825.4K hrs min. Telcordia SR-332 (Bellcore) ; 112.8K hrs min. MIL-HDBK-217F (25 °C).

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## Function

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<b>DC OK REALY CONTACT RATINGS (max.)</b>	60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load
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## SAFETY & EMC (Note 4)

<b>SAFETY STANDARDS</b>	UL508,EAC TP TC 004 approved, IEC62368-1 CB approved by SIQ, design refer to BS EN/EN62368-1, AS/NZS 62368.1, GL; (meet BS EN/EN60204-1).
<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC
<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25 °C / 70% RH
<b>EMC EMISSION</b>	Compliance to BS EN/EN55032 (CISPR32), BS EN/EN61204-3 Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020.
<b>EMC IMMUNITY</b>	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), BS EN/EN61204-3, heavy industry level, EAC TP TC 020 approved.

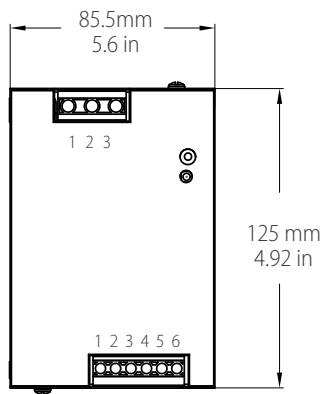
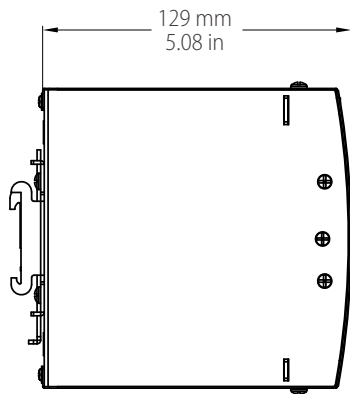
### Note

- 1.All parameters NOT specially mentioned are measured at 400VAC input, rated load and 25 °C of ambient temperature.
- 2.Ripple&noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
- 3.Tolerance: includes set up tolerance, line regulation and load regulation.
- 4.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
- 5.Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.
- 6.Derating may be needed under low input voltage. Please check the derating curves for more details.
- 7.The ambient temperature derating of 3.5 °C /1000m with fanless models and of 5 °C /1000m with fan models for operating altitude higher than 2000m(6500ft).

## Dimensions & Weight

Length:	85.5mm / 3.37in
Width:	142mm / 5.6in
Height:	125mm / 4.92in
Weight:	1.7kg

## Mechanical Specification



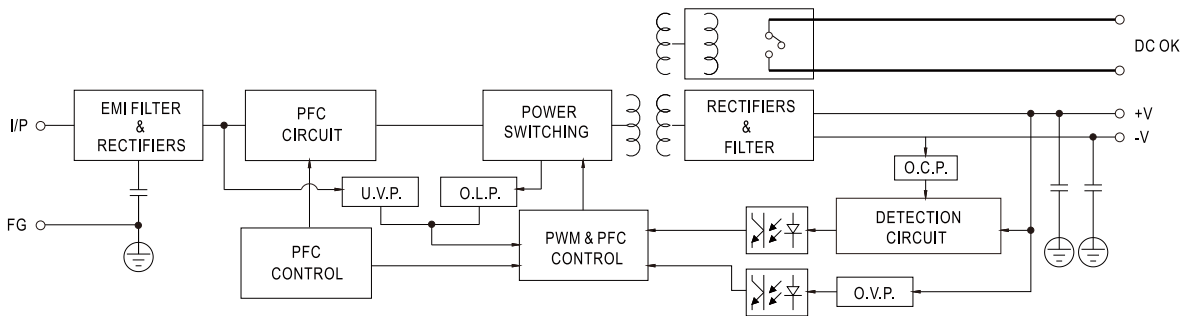
### Input

No.	Description
1	FG
2	AC/L2
3	AC/L1

### Output

No.	Description
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	Relay Contact

## Block Diagram



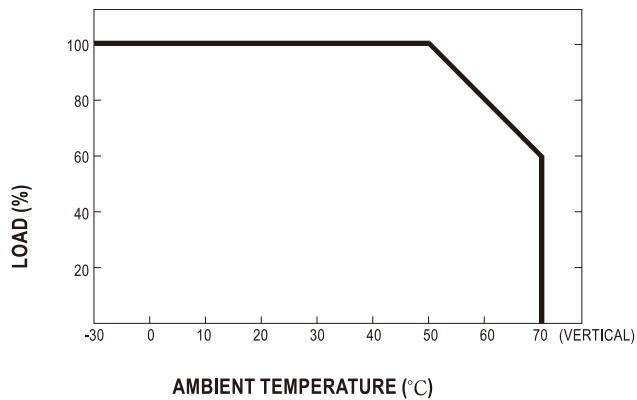
## DC OK Relay Contact

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Contact Close	PSU turns ON / DC OK.
Contact Open	PSU turns OFF / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.

## Deduction Curve And Temperature

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## Minus Output And Input Voltage Curves

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