

YSDW120 SERIES 120W



eUrasia Power's metal case power family designed with slim housing and single or two phase wide input range from 180V AC TO 550V 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
YSDW120-12010000	12V	10A	120W	12 ~ 15V
YSDW120-24005000	24V	5A	120W	24 ~ 29V
YSDW120-48002500	48V	2.5A	120W	48 ~ 58V

Input

VOLTAGE RANGE(Note.4)	180 ~ 550VAC 254 ~ 780VDC
FREQUENCY RANGE	47~63Hz
EFFICIENCY (Typ.)	89.5%/400Vac YSDW120-12010000
	91.0%/400Vac YSDW120-24005000
	92.0%/400Vac YSDW120-48002500
AC CURRENT	0.7A/400Vac
	1.2A/230Vac
INRUSH CURRENT (max.)	COLD START 50A
LEAKAGE CURRENT	<3.5mA / 530Vac

Output

RIPPLE & NOISE (max.)(Note.2)	120mVp-p YSDW120-12010000
	120mVp-p YSDW120-24005000
	150mVp-p YSDW120-48002500
VOLTAGE TOLERANCE(Note.3)	± 1.5% YSDW120-12010000
	± 1.0% YSDW120-24005000
	± 1.0% YSDW120-48002500
LINE REGULATION	± 0.5%
LOAD REGULATION	± 0.5%
SETUP, RISE, HOLD UP TIME	2000ms, 70ms, 50ms/400Vac at full load
	2000ms, 70ms, 10ms/230Vac 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 YSDW120-12010000 29~33V YSDW120-24005000 56~65V YSDW120-48002500 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.	-25 ~ +70 °C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 90% RH non-condensing
STORAGE TEMP., HUMIDITY	-40 ~ +85 °C , 10 ~ 95% RH
TEMP. COEFFICIENT	± 0.03%/°C (0 ~ 50 °C)
VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting clip: Compliance to IEC60068-2-6.
MTBF	1509.6K hrs min. Telcordia SR-332 (Bellcore) ; 268.1K hrs min. MIL-HDBK-217F (25 °C).

Function

DC OK SIGNAL	Relay contact rating(max.) : 30V / 1A resistive
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SAFETY & EMC (Note 4)

SAFETY STANDARDS	UL508, approved, IEC62368-1 CB approved by SIQ;Design refer to BS EN/EN62368-1, AS/NZS 62368.1 EAC TP TC 004(meet BS EN/EN60204-1)
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK: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 (CISPR32), BS EN/EN61204-3 Class B, EAC TP TC 020.
EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61204-3, EN61000-6-2 (EN50082-2), heavy industry level, EAC TP TC 020.

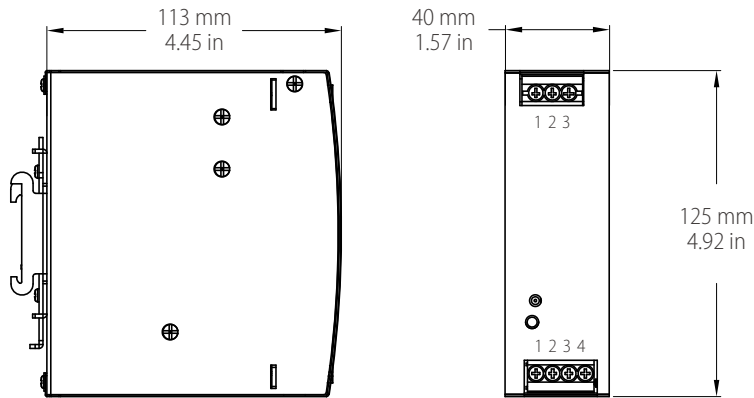
Note

- 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.Length of set up time is measured at cold first start. Turning ON/OFF the power supply vary quick may lead to increase of the set up time.
- 6.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:	40mm / 1.57in
Width:	126.5mm / 4.98in
Height:	113mm / 4.45in
Weight:	0.65kg

Mechanical Specification



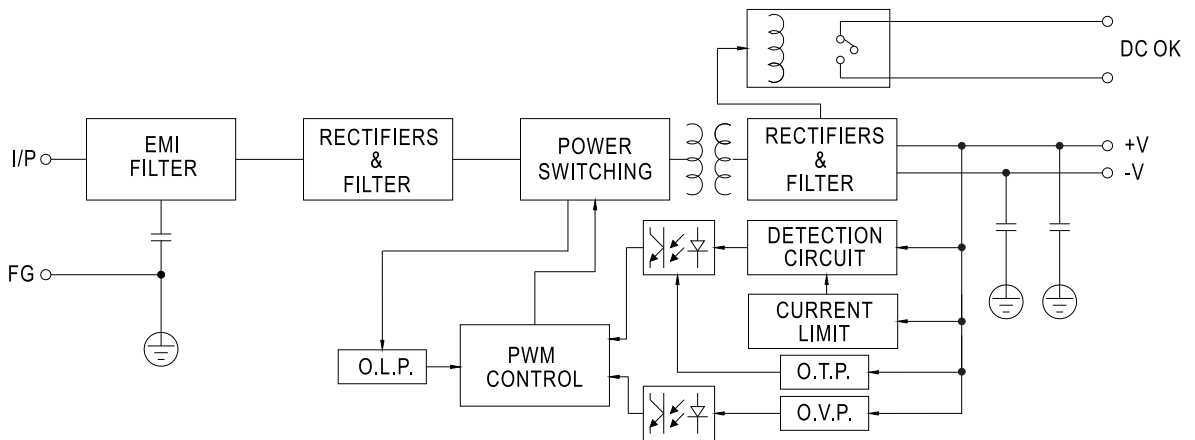
Input

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

Output

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

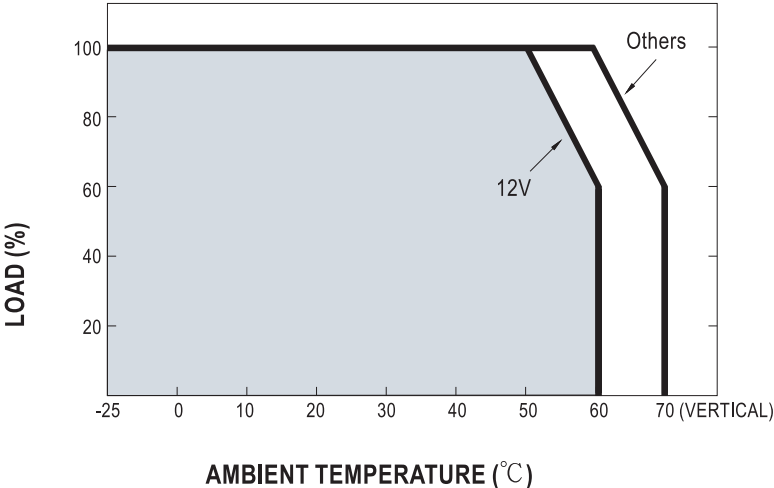
Block Diagram



DC OK Relay Contact

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



Minus Output And Input Voltage Curves

