

# YSEP100 SERIES 100W



YSEP series are designed with lower profile housing and for wide range AC input from 90 VAC to 305V AC.

The series have build-in active function and operate for the temperature up to 70 °C .

The good performance can be used for industrial automation & control systems, varied equipments etc.



## Features



Universal AC Input/ Full Range



Built-in Active PFC Function



Built-in Remote ON-OFF Control



Higher Efficiency



Protection:Short Circuit/Overload/  
Over Voltage/Over Temperature



Three Years Warranty

## Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT	RATED POWER	VOLTAGE ADJ. RANGE
YSEP100-05020000	5V	20A	100W	4.75~5.5V
YSEP100-12008500	12V	8.5A	102W	11.4~13.2V
YSEP100-15006700	15V	6.7A	100.5W	14.3~16.5V
YSEP100-24004200	24V	4.2A	100.8W	22.8~26.4V
YSEP100-48002100	48V	2.1A	100.8W	45.6~52.8V

## Input

<b>VOLTAGE RANGE</b>	90-305VAC/127-430VDC
<b>FREQUENCY RANGE</b>	47-63Hz
<b>POWER FACTOR(Typ.)</b>	PF>0.93/230VAC at full load PF>0.98/115VAC at full load
<b>EFFICIENCY(Typ.)</b>	86% YSEP100-05020000 86% YSEP100-12008500 87% YSEP100-15006700 87% YSEP100-24004200 88% YSEP100-48002100
<b>AC CURRENT(Typ.)</b>	1.1A/115VAC 0.55A/230VAC
<b>INRUSH CURRENT(Typ.)</b>	COLD START 30A/230VAC
<b>LEAKAGE CURRENT</b>	<2mA/240VAC

## Output

<b>RIPPLE &amp; NOISE(max.)</b>	100mVp-p	YSEP100-05020000
	100mVp-p	YSEP100-12008500
	100mVp-p	YSEP100-15006700
	150mVp-p	YSEP100-24004200
	250mVp-p	YSEP100-48002100
<b>VOLTAGE TOLERANCE</b>	± 2.0%	YSEP100-05020000
	± 2.0%	YSEP100-12008500
	± 2.0%	YSEP100-15006700
	± 2.0%	YSEP100-24004200
	± 2.0%	YSEP100-48002100
<b>LINE REGULATION</b>	± 1.0%	
<b>LOAD REGULATION</b>	± 1.0%	YSEP100-05020000
	± 1.0%	YSEP100-12008500
	± 1.0%	YSEP100-15006700
	± 1.0%	YSEP100-24004200
	± 1.0%	YSEP100-48002100
<b>SETUP, RISE TIME</b>	600ms, 30ms at full load	
<b>HOLD UP TIME(Typ.)</b>	16ms at full load	

## Protection

<b>OVER LOAD</b>	105%-135% Rated Output Power
	Protection type: Constant current limiting, recovers automatically after fault condition is removed.
<b>OVER VOLTAGE</b>	5V:5.75~ 6.75V
	12V:13.2 ~ 16.2V
	15V:16.5 ~ 20.25V
	24V:26.4 ~ 32.4V
	48V:52.8~ 64.8V
	Protection type : Shut down o/p voltage, re-power on to recover.
<b>OVER TEMPERATURE</b>	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down.

## Environment

<b>WORKING TEMP.</b>	-30 °C to +70 °C (Refer to "Derating Curve")
<b>WORKING HUMIDITY</b>	20 ~ 90% RH non-condensing
<b>STORAGE TEMP., HUMIDITY</b>	-40 °C to +85 °C , 10 ~ 95% RH non-condensing
<b>TEMP. COEFFICIENT</b>	± 0.05%/ °C (0~50 °C)
<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes
<b>OVER VOLTAGE CATEGORY</b>	III; According to EN61558, EN50178, EN60664-1, EN62477-1; altitude up to 2000 meters
<b>MTBF</b>	1976.4K hrs min. Telcordia SR-332 (Bellcore)

## Safety & EMC

<b>SAFETY STANDARDS</b>	UL62368-1, TUV BS EN/EN62368-1, BS EN/EN61558-1
<b>WITHSTAND VOLTAGE</b>	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG: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) Class B, BS EN/EN61000-3-2,-3,
<b>EMC IMMUNITY</b>	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035

## Function

<b>REMOTE CONTROL</b>	CN: < 0~0.8VDC POWER ON , 4~10VDC POWER OFF
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## Note

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1.All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 °C of ambient temperature.

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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).

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3.Derating may be needed under low input voltages. Please check the derating curve for more details.

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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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."

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5.The ambient temperature derating of 3.5 °C /1000m with fanless models for operating altitude higher than 2000m(6500ft).

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## Dimensions & Weight

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<b>Length:</b>	179mm / 7.05in
<b>Width:</b>	99mm / 3.90in
<b>Height:</b>	30mm /1.18in
<b>Weight:</b>	520g

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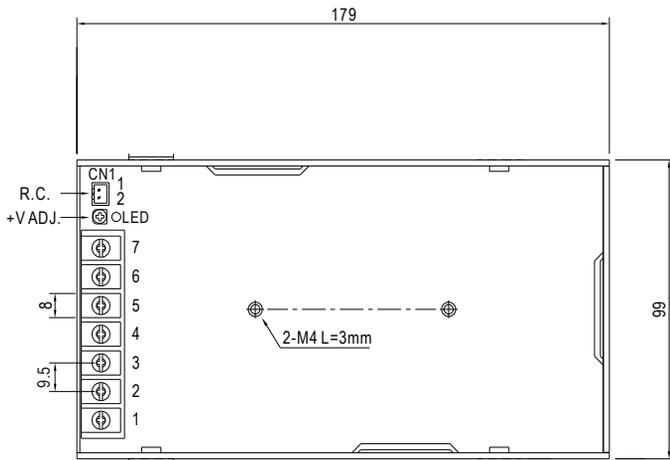
## Packing

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<b>Carton Size:</b>	29 x 32 x 19.5 CM 11.42 x 12.60 x 7.68 in
<b>Master Carton Quantities:</b>	24pcs / Carton

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# Mechanical Specification

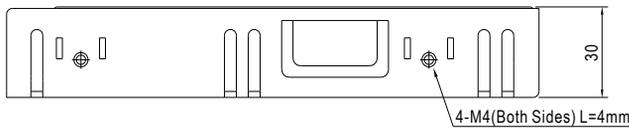


## Output

No.	Description
4,5	DC OUTPUT -V
6,7	DC OUTPUT +V

## Input

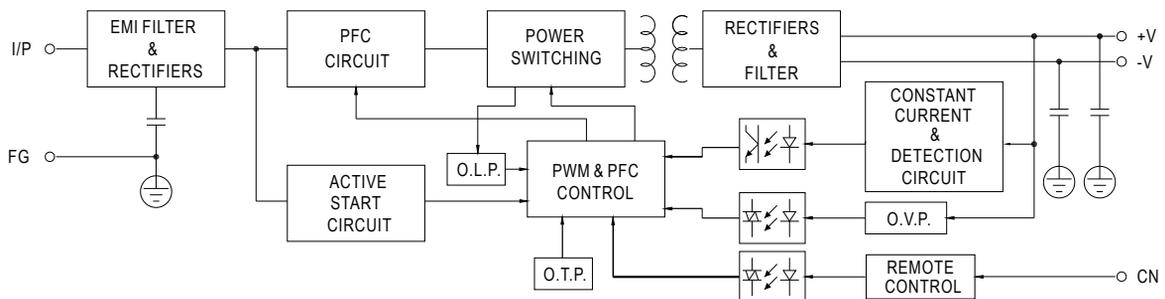
No.	Description
1	AC/L
2	AC/N
3	FG $\perp$



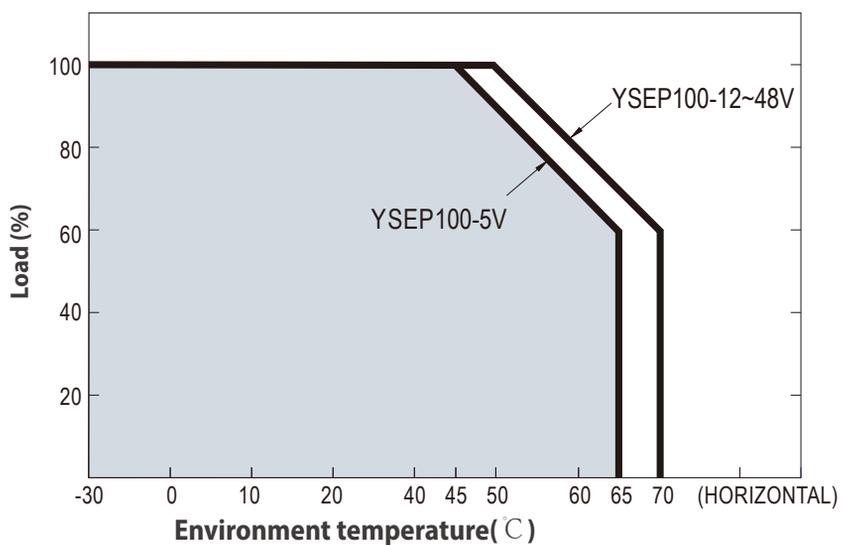
Remote ON/OFF(CN): JST S2B-XH or equivalent(optional)

No.	Description	Mating Housing	Terminal
1	RC+	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	RC-		

# Block Diagram



## Deduction curve and temperature



## Minus output and input voltage curves

