

YEP100 SERIES 100W



YEP 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	Max.Capacitive Load
YEP100-5	5V	20A	100W	4.75~5.5V	10000uF
YEP100-12	12V	8.5A	102W	11.4~13.2V	5000uF
YEP100-15	15V	6.7A	100.5W	14.3~16.5V	5000uF
YEP100-24	24V	4.2A	100.8W	22.8~26.4V	4200uF
YEP100-48	48V	2.1A	100.8W	45.6~52.8V	2200uF

Input

VOLTAGE RANGE	90-305VAC/127-430VDC
FREQUENCY RANGE	47-63Hz
POWER FACTOR(Typ.)	PF>0.93/230VAC at full load PF>0.98/115VAC at full load
AVERAGE EFFICIENCY	86% YEP100-5 86% YEP100-12 87% YEP100-15 87% YEP100-24 88% YEP100-48
AC CURRENT(Typ.)	1.1A/115VAC 0.55A/230VAC
INRUSH CURRENT(Typ.)	COLD START 30A/230VAC
LEAKAGE CURRENT	<2mA/240VAC

Output

RIPPLE & NOISE(max.)	100mVp-p	YEP100-5
	100mVp-p	YEP100-12
	100mVp-p	YEP100-15
	150mVp-p	YEP100-24
	250mVp-p	YEP100-48
VOLTAGE TOLERANCE	± 2.0%	YEP100-5
	± 2.0%	YEP100-12
	± 2.0%	YEP100-15
	± 2.0%	YEP100-24
	± 2.0%	YEP100-48
LINE REGULATION	± 1.0%	
LOAD REGULATION	± 1.0%	YEP100-5
	± 1.0%	YEP100-12
	± 1.0%	YEP100-15
	± 1.0%	YEP100-24
	± 1.0%	YEP100-48
SETUP, RISE TIME	600ms, 30ms at full load	
HOLD UP TIME(Typ.)	16ms at full load	
Protection		
SHORT CIRCUIT	Protection type: Hiccup mode, recovers automatically after fault condition is removed	
OVER LOAD	105%-135% Rated Output Power	
	Protection type: Constant current limiting, recovers automatically after fault condition is removed.	
OVER VOLTAGE	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.	
OVER TEMPERATURE	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down.	

Environment

WORKING TEMP.	-30 °C to +70 °C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 90% RH non-condensing
STORAGE TEMP., HUMIDITY	-40 °C to +85 °C , 10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	± 0.05%/ °C (0~50 °C)
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes
OVER VOLTAGE CATEGORY	III; According to EN61558, EN50178, EN60664-1, EN62477-1; altitude up to 2000 meters
MTBF	280K hrs min. MIL-HDBK-217F(25 °C)
SAFETY PROTECTION	CLASS I

Safety & EMC

SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, BS EN/EN61558-1
WITHSTAND VOLTAGE	I/P-O/P:4KVAC 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 (CISPR32) Class B, BS EN/EN61000-3-2 Class A ,BS EN/EN61000-3-3
EMC IMMUNITY	Compliance to BS EN/EN61000-4-3,11 Criteria B BS EN/EN61000-4-2,4,5,6,8 Criteria A

Function

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

1.All parameters NOT specially mentioned are measured 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.Derating may be needed under low input voltages. Please check the derating curve for more details.

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."

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

Dimensions & Weight

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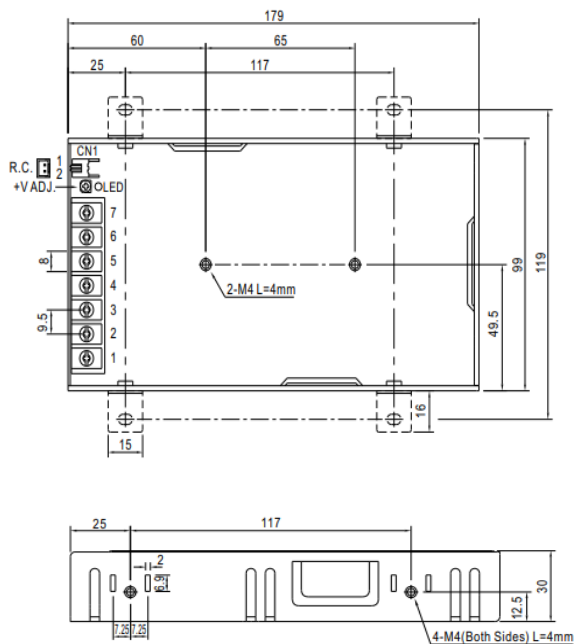
Packing

Carton Size:	29 x 32 x 19.5 CM
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	11.42 x 12.60 x 7.68 in
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Master Carton Quantities:	24pcs / Carton
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Mechanical Specification



Input

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

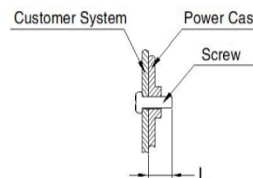
Output

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

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-		

Screw Spec.	L(max)	Torque(max)
M4	4mm	0.9N·m



Note:

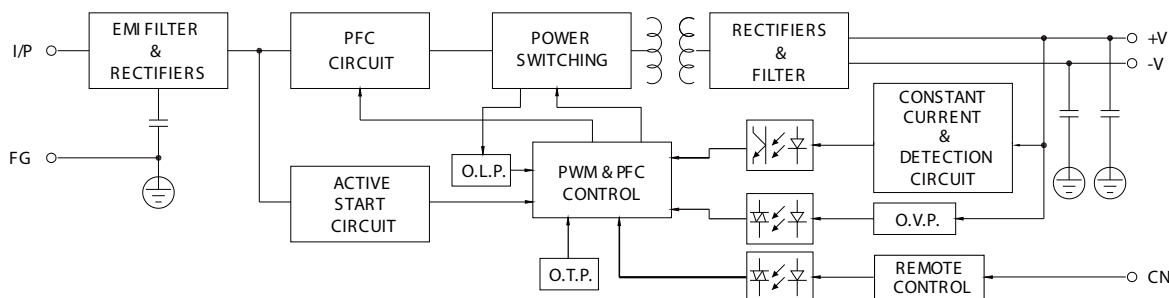
Unit: mm[inch]

Wire range: 22-12AWG

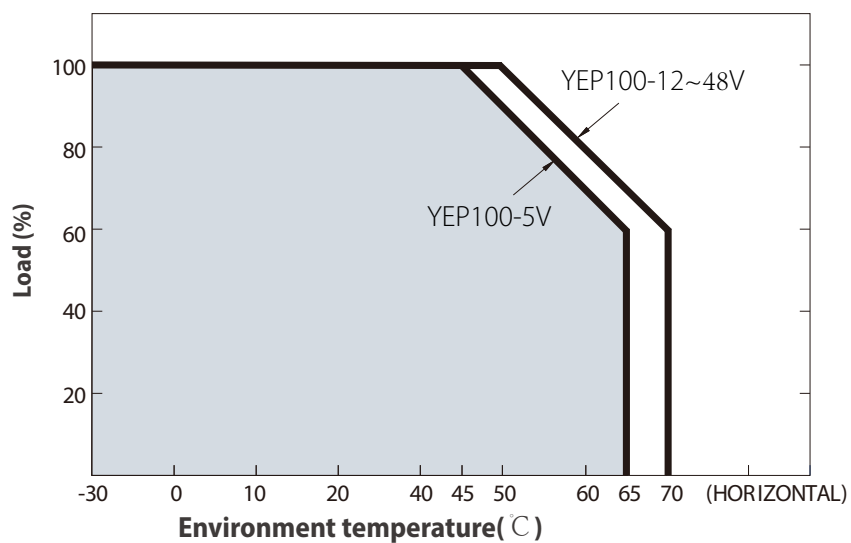
Connector tightening torque: M3.5 , 0.8N·m

General tolerances: $\pm 1.00[\pm 0.039]$

Block Diagram



Deduction curve and temperature



Minus output and input voltage curves

