

YEP200 SERIES 200W



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



Built-in Active PFC Function



Cooling by free air convection



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
YEP200-5	5V	40A	200W	4.75~5.5V	4000uF
YEP200-12	12V	16.7A	200.4W	10~13.2V	3300uF
YEP200-15	15V	13.4A	201W	13.5~18V	1500uF
YEP200-24	24V	8.4A	201.6W	20~26.4V	1000uF
YEP200-48	48V	4.2A	201.6W	41~56V	470uF
YEP200-56	56V	3.6A	201.6W	50~62V	400uF

Input

VOLTAGE RANGE	90-305VAC/127-430VDC	
FREQUENCY RANGE	47-63Hz	
POWER FACTOR(Typ.)	PF>0.95/230VAC at full load PF>0.98/115VAC at full load	
AVERAGE EFFICIENCY	83%	YEP200-5
	84%	YEP200-12
	85%	YEP200-15
	87%	YEP200-24
	88%	YEP200-48
	88%	YEP200-56
AC CURRENT(Typ.)	2.5A/115VAC	
	1.3A/230VAC	
INRUSH CURRENT(Typ.)	20A/115VAC	
	40A/230VAC	
LEAKAGE CURRENT	<1mA/240VAC	

Output

RIPPLE & NOISE(max.)	150mVp-p	YEP200-5
	150mVp-p	YEP200-12
	150mVp-p	YEP200-15
	150mVp-p	YEP200-24
	240mVp-p	YEP200-48
	240mVp-p	YEP200-56
VOLTAGE TOLERANCE	$\pm 2.0\%$	
LINE REGULATION	$\pm 0.5\%$	
LOAD REGULATION	$\pm 1.0\%$	YEP200-5
	$\pm 1.0\%$	YEP200-12
	$\pm 1.0\%$	YEP200-15
	$\pm 0.5\%$	YEP200-24
	$\pm 0.5\%$	YEP200-48
	$\pm 0.5\%$	YEP200-56
SETUP, RISE TIME	1500ms, 50ms/230VAC at full load	
	3000ms, 50ms/115VAC at full load	
HOLD UP TIME(Typ.)	8ms at full load, 230VAC /115VAC	

Protection

SHORT CIRCUIT	Protection type: Hiccup mode, recovers automatically after fault condition is removed
OVER LOAD	105%-135% Rated Output Power Protection type: Hiccup mode, recovers automatically after fault condition is removed.
OVER VOLTAGE	5V: 5.75~ 7V 12V: 13.8 ~ 16.2V 15V: 18.8 ~ 21.8V 24V: 27.6 ~ 32.4V 48V: 58.4~ 68V 56V: 65-70V 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	± 0.03%/°C (0~45 °C)
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes
MTBF	200K hrs min. MIL-HDBK-217F(25 °C)
OVER VOLTAGE CATEGORY	III;According to EN62368-1;altitude up to 2000 meters
SAFETY PROTECTION	CLASS I

Safety & EMC

SAFETY STANDARDS	BS EN/EN62368-1, BS EN/EN61558-1,BS EN/EN61558-2-16
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 (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

Note

- 1.All parameters NOT specially mentioned are measured at 115/230VAC 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.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."
- 4.Derating may be needed under low input voltages. Please check the derating curve for more details.
- 5.Strongly recommended that external output capacitance should not exceed 10000uF(Only for the models with output voltage 5/12V)
- 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).

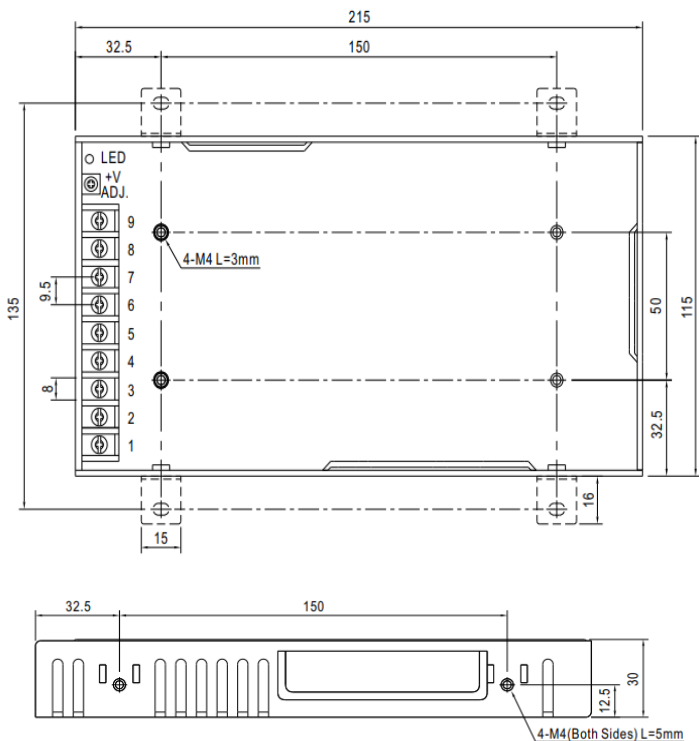
Dimensions & Weight

Length:	215mm / 8.46in
Width:	115mm / 4.53in
Height:	30mm / 1.18in
Weight:	720g

Packing

Carton Size:	38 x 19.5 x 26 CM 14.96 x 7.68 x 10.24 in
Master Carton Quantities:	15pcs / Carton

Mechanical Specification



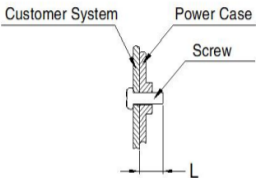
Input :

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

Output :

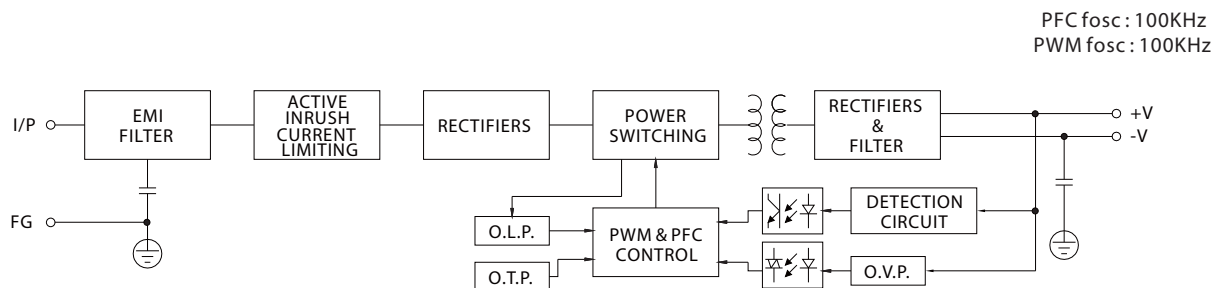
No.	Description
4-6	DC OUTPUT -V
7-9	DC OUTPUT +V

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

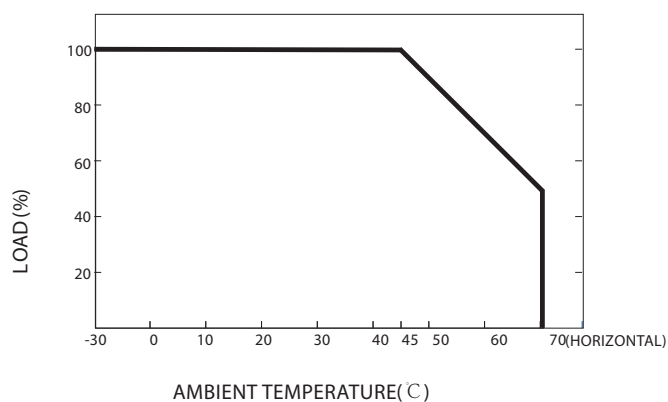


Note:
Unit: mm[inch]
Wire range: 22-12AWG
Connector tightening torque: M3.5 , 0.8N·m
General tolerances: $\pm 1.00[\pm 0.039]$

Block Diagram



Derating Curve



Static Characteristics

