YINGJIAO

YEP320 SERIES
320W

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℃.

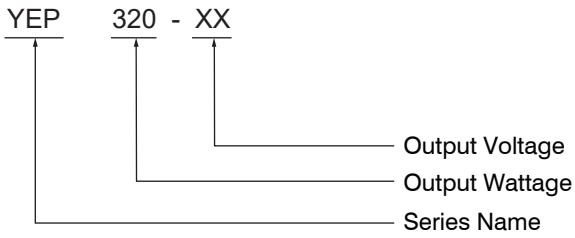
The good performance can be used for industrial automation & control systems, varied equipments etc.

c UL us UL62368-1 CE UKCA RoHS

Features

- Universal AC Input/ Full Range
- Built-in Active PFC Function
- Forced air cooling by build-in DC fan
- High efficiency up to 90%
- Over voltage category II
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Three years warranty

Model Description



Model Information

Part number	DC Voltage	Rated Current(max.)	Rated Power	Efficiency	Ripple & Noise	Max Capacitive Load	Voltage ADJ Range
YEP320-5	5V	60A	300W	83%	150mVp-p	4000uF	4.5~5.5V
YEP320-7.5	7.5V	40A	300W	85%	150mVp-p	3600uF	6.75~8.25V
YEP320-12	12V	26.7A	320.4W	88%	150mVp-p	3300uF	10~13.2V
YEP320-13.5	13.5V	23.8A	321.3W	88%	150mVp-p	2500uF	12.15~14.85V
YEP320-15	15V	21.4A	321W	88.5%	150mVp-p	1500uF	13.5~18V
YEP320-24	24V	13.4A	321.6W	89%	150mVp-p	1000uF	20~26.4V
YEP320-27	27V	11.9A	321.3W	89%	150mVp-p	900uF	26.1~29.7V
YEP320-36	36V	8.9A	320.4W	89.5%	180mVp-p	700uF	32.4~39.6V
YEP320-48	48V	6.7A	321.6W	90%	240mVp-p	470uF	43.2~52.8V
YEP320-60	60V	5.34A	320.4W	90.5%	300mVp-p	230uF	54~66V

File last modification time: 2025-2-25

YINGJIAO

YEP320 SERIES
320W

Specification

Model	Safety Model No.	YEP320-XX	
Output	Setup,Rise,Hold up Time	1.5s,50ms,8ms/230VAC(at full load)	3.0s,50ms,8ms/115VAC(at full load)
	Voltage Tolerance	±2.0%	
	Line Regulation	±0.5%	
	Load Regulation	±1.0% YEP320-5/7.5/12/13.5/15	±0.5% YEP320-24/27/36/48/60
Input	Rated Voltage Range	100-277VAC/127-430VDC	
	AC Voltage Range	90-305VAC/127-430VDC	
	Frequency Range	50/60Hz	
	AC Current	4A/115VAC 2A/230VAC	
	Inrush Current	Cold Start 40A/200us at 230VAC 50Hz	Cold Start 20A/200us at 115VAC 50Hz
	Leakage Current	<1mA/240VAC	
	Power Factor(Typ.)	>0.95/230VAC at full load	>0.98/115VAC at full load
Protection	Over Load	105~135%Rated Output Power	
		Hiccup mode, recovers automatically after fault condition is removed.	
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.	
	Over Voltage	115~135%Rated Output Voltage	
		Shut down o/p voltage, re-power on to recover.	
	Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down.	
Ambient	Working TEMP.	-30 ~ +70℃(Please refer to “Derating Curve”section)	
	Working Humidity	20 ~ 95%RH Non-condensing	
	Storage TEMP. Humidity	-40 ~ +85℃,10 ~ 95%RH Non-condensing	
	TEMP. Coefficient	±0.03%/(0 ~ 50℃) on load output	
	Vibration	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes	
	Safety Protection	Class I	
	Over Voltage Category	OVC II / According to EN62368-1;altitude up to 2000 meters	
Safety	Safety Standards	BS EN/EN62368-1	
	Withstand Voltage	I/P-O/P:3KVAC/1min I/P-FG:2KVAC/1min O/P-FG:0.5KVAC/1min	
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH	
EMC	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2 Class A-D,BS EN/EN61000-3-3	
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-11 Criteria B, BS EN/EN61000-4-2,3,4,5,6,8 Criteria A	
Others	Packing	1kg/pcs; 38 x 19.5 x 26 cm; 15pcs/carton	
	Dimension (LxWxH)	215 x 115 x 30 mm	
	MTBF	188.4Khrs min. MIL-HDBK-217F(25℃)	
	Housing material	Aluminium / steel	
Note	1.All parameters NOT specially mentioned are measured at 115/230VAC input, rated load and 25℃ 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”. (as available on https://yingji-ao.com/wp-content/uploads/2025/06/EMI_Testing_of_Component_Power_Supplies_Yingjiao.pdf) 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 ℃/1000m with fanless models and of 5 ℃/1000m with fan models for operating altitude higher than 2000m(6500ft).		

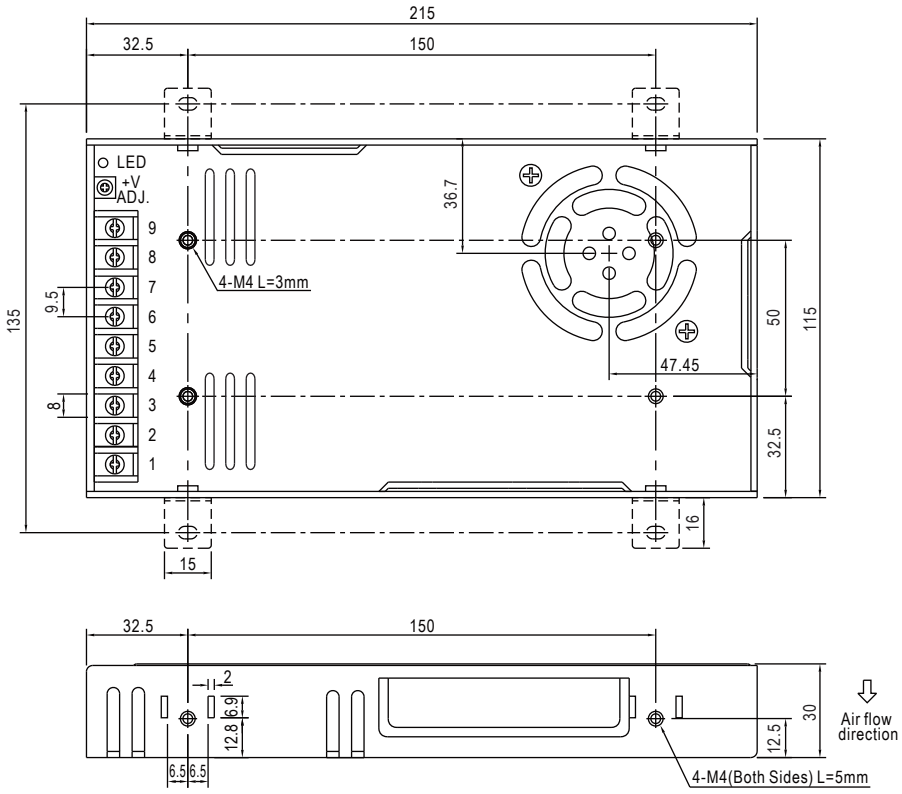
File last modification time: 2025-2-25

YINGJIAO

YEP320 SERIES
320W

Drawing & Label

(Unit: mm , tolerance: ±1mm)



Output	
No.	Description
4,5,6	DC OUTPUT -V
7,8,9	DC OUTPUT +V

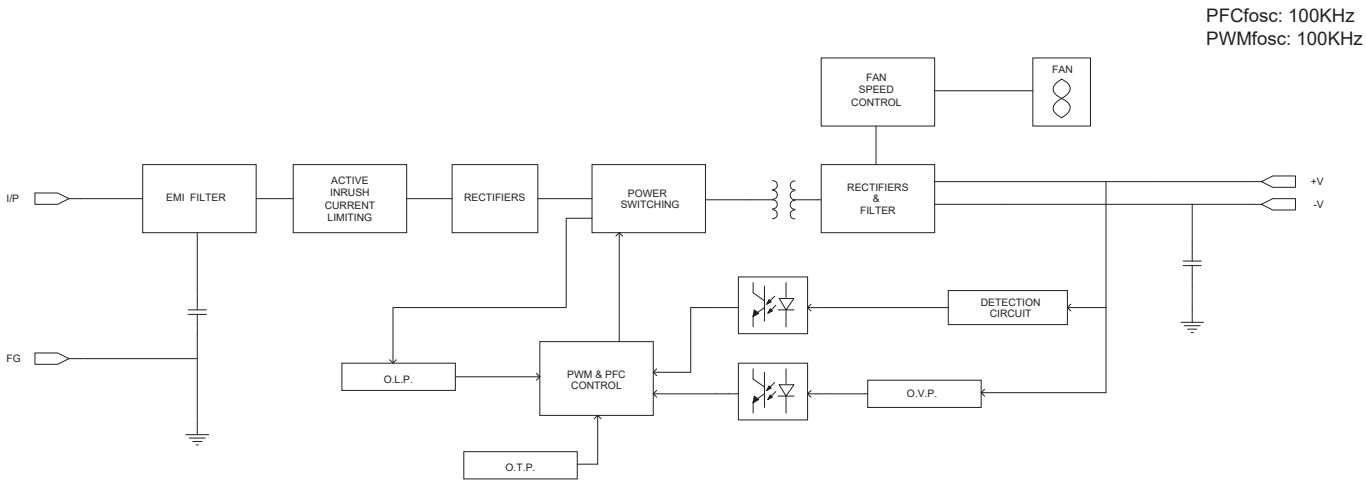
Input	
No.	Description
1	AC/L
2	AC/N
3	PE

File last modification time: 2025-2-25

YINGJIAO

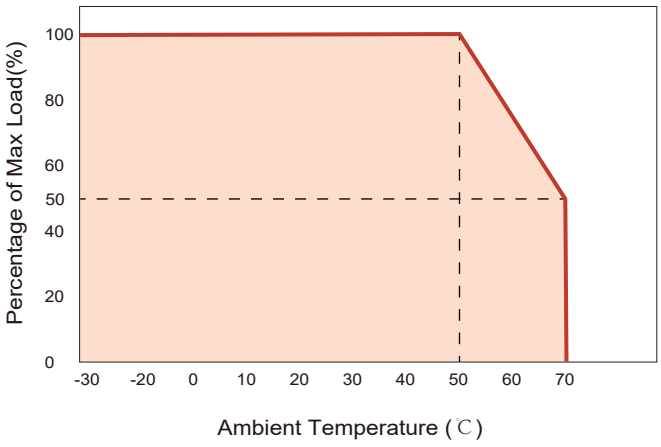
YEP320 SERIES
320W

Block Diagram

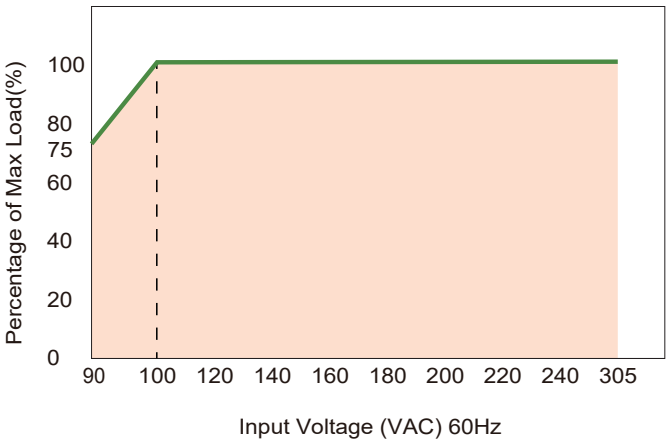


Engineering Data

Derating Curve



Static Characteristics



File last modification time: 2025-2-25