

## Features

- Input Voltage 85~305V AC
- Cooling by free air convection
- Efficiency up to 88%
- Protection: OLP, OVP, SCP
- 3 Years Warranty



## 56YEP500-x AC-DC PSU Series

500W Enclosed AC/DC Power Supply



The 56YEP500-x Series is a high-quality and reliable 500W Enclosed AC/DC Power Supply. Designed for use in applications such as commercial, industrial and OEM electronics. This series is supplied with a Screw Terminal Block input connection and supports input voltages of 85~305V AC 47~63Hz.

## Models

Model	Voltage (V) DC	Rated Current	Rated Power	% Efficiency	Voltage range	Ripple and Noise mVp-
56YEP500-5	5	90	450	84	4.5~5.5	150
56YEP500-12	12	41.7	500.4	88	10~13.2	150
56YEP500-15	15	33.4	501	88	13.5~18	150
56YEP500-24	24	21	504	89	20~26.4	150
56YEP500-27	27	18.6	502	89.5	26~30	150
56YEP500-36	36	14	504	90	32.4~39.6	180
56YEP500-48	48	10.5	504	90.5	41~56	240
56YEP500-60	60	8.4	504	91.5	56~64	300

Input Specifications			
Input Voltage	85-305VAC		
Frequency Range	47-63Hz		
AC Current	5.9A/115VAC	2.85A/230VAC	
Inrush Current	Cold Start 40A/200us at 230VAC 50Hz		Cold Start 20A/200us at 115VAC 50Hz
Leakage Current	<2mA/240VAC		

Output Specifications			
Voltage Tolerance	+2.0% 5v	+ 1.0% Others	
Line Regulation	±0.5% 5v	+0.3% 12/15v	+0.2% others
Load Regulation	+1.0% 5v	+0.5% Others	
Set up Rise Time Hold up	1.5s,80ms,18ms/230VAC(at full load)		3.0s,80ms,14ms/115VAC(at full load)3

Protection	
Over Load	105~130%Rated Output Power Constant current limiting recovers automatically after fault condition is removed
Over Voltage	115~135%Rated Output Voltage Shut down o/p voltage, re-power on to recover.
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.
Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down.

Environmental Characteristics	
Working Temp	-30 ~ +70 °C(Please refer to "Derating Curve"section)
Working Humidity	20 ~ 95%RH Non-condensing
Storage Temp., Humidity	-40~+85°C, 10~95% RH non-condensing
Temp. Coefficient	±0.03%/ (0 ~ 50 °C) on load output
Vibration	Component: 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes
Over Voltage Category	OVC II / According to EN62368-1;altitude up to 2000 metersup to 2000 meters
MTBF	176.8Khrs min. MIL-HDBK-217F(25°C)
Safety Protection	Class I

Safety & EMC	
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°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/EN61000-4-11 Criteria B, BS EN/EN61000-4-2,3,4,5,6,8 Criteria A

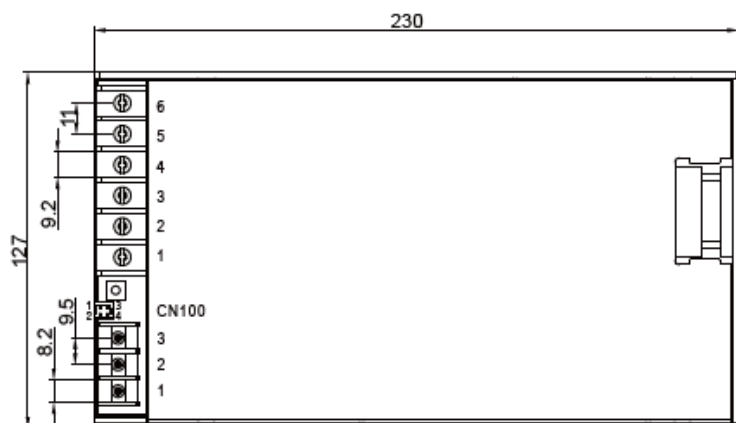
## Notes:

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 5°C/1000m is needed for operating altitude greater than 2000m(6500ft).

Dimensions & Weight	
Size	230 x 127 x 40.5 mm
Weight	1.3kg/pcs

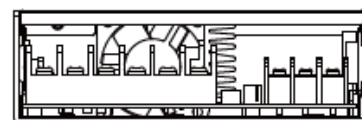
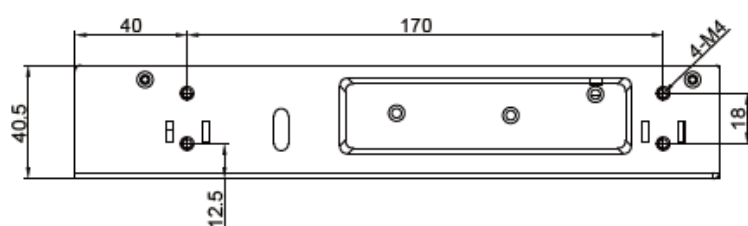
Packaging	
Carton Size	54 x 30 x 24 cm
Master Carton Quantities	9pcs/carton

## Dimensions and Recommended Layout

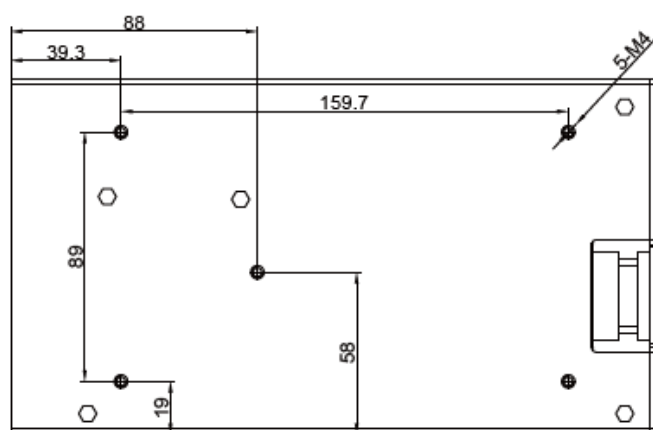


Output (TB2)	
No.	Description
1,2,3	DC OUTPUT -V
4,5,6	DC OUTPUT +V

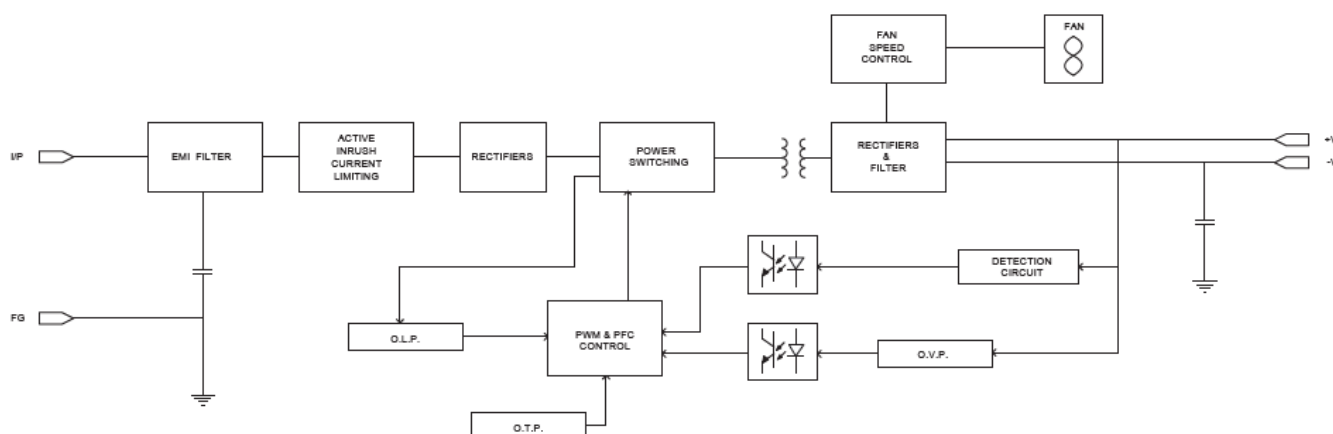
Input (TB1)	
No.	Description
1	AC/L
2	AC/N
3	PE



Connector Pin No. Assignment (CN100)	
Pin No.	Assignment
1	-S
2	+S
3	RC-
4	RC+



## Block Diagram



Derating Curve

