

Features

- Input Voltage 90~132/180~264V AC
- AC input range selectable by switch
- Cooling by free air convection
- Efficiency up to 92%
- Protection: OLP, OVP, OTP, SCP
- 3 Years Warranty



Ideal Power's 56YEL450-xy 450W Enclosed AC/DC Power Supply (PSU) Series complies with the relevant Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

Models

Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)	Voltage Adj. Range (V)	Ripple & Noise (mVp-p)
56YEL450-12	12	37.5	450	88	11.4~13.2	200
56YEL450-15	15	30	450	88.5	13.5~18	200
56YEL450-24	24	18.8	451.2	90	22.8~26.4	240
56YEL450-36	36	12.5	450	90.5	34.2~39.6	360
56YEL450-48	48	9.4	451.2	91	45.6~52.8	360

Input Specifications

Input Voltage	90-132VAC/180-264VAC by switch, 240~370VDC (switch on 230VAC)
Frequency Range	47-63Hz
AC Current	6A/230VAC – cold start 35A/115VAC
Inrush Current	Cold Start 60A at 230V
Leakage Current	< 2mA/240V
Connection	I/P: 3 poles terminal Block

Output Specifications

Voltage Tolerance	±1.0%	All
Line Regulation	±0.5%	
Load Regulation	±1.0%	12v
	±0.5%	Others
Set up	1500ms, 50ms/230VAC at full load	
Rise Time	1500ms, 50ms/115VAC at full load	
Hold up Time	16ms/230VAC at full load - 12ms/115VAC at full load	
Connection	O/P: 6 poles terminal Block	

Protection

Over Load	105%-150% Rated Output Power	
	Constant current limiting, until shutdown after 3 sec, re-power on to recover.	
Over Voltage	13.8 ~ 16.2V	12v
	18 ~ 21V	15v
	27.6 ~ 32.4V	24v
	41.4 ~ 48.6V	36v
	55.2 ~ 64.8V	48v
	5-36V Hiccup mode, recovers automatically after fault condition is	
Over Temperature	48V Shut down and latch off o/p voltage, re-power on to recover	
	5-36V Hiccup mode, recovers automatically after fault condition is	
	48V Shut down and latch off o/p voltage, re-power on to recover	

Environmental Characteristics

Working Temp	-30~+70°C (Refer to "Derating Curve")	
Working Humidity	20~90% RH non-condensing	
Storage Temp., Humidity	-40~+85°C, 10~95% RH non-condensing	
Temp. Coefficient	±0.03%/°C (0~50°C)	
Vibration	10 ~ 500Hz, 5G 10min. /1cycle, period for 60min. each along X, Y,Z axes	
Over Voltage Category	III; According to BS EN/EN61558, BS EN/EN50178, BS EN/EN60664 BS EN/EN62477-1; altitude up to 2000 meters	
MTBF	1508.9K hrs min. Telcordia SR-332 (Bellcore)	

Safety & EMC

Safety Standards		
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,-3,	
EMC Immunity	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035	

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).

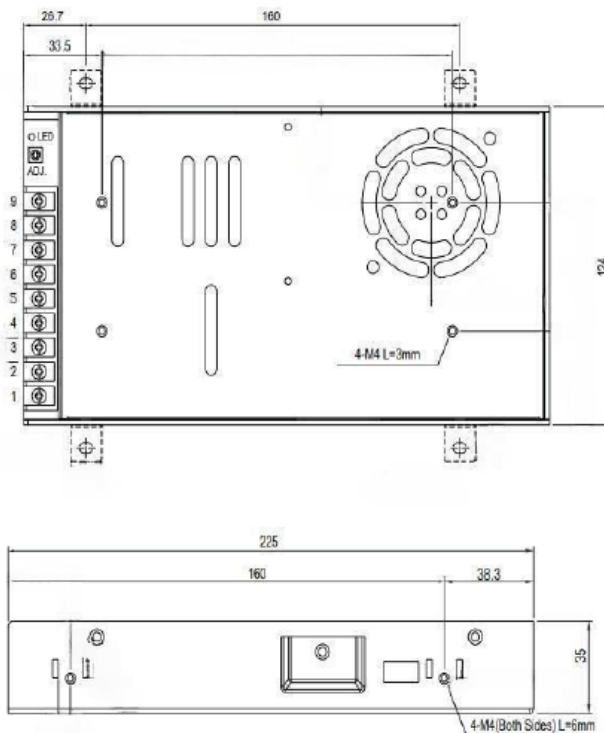
Dimensions & Weight

Size	225x124x41mm / 8.85x4.88x1.61in
Weight	850g

Packaging

Carton Size	54x30x24cm / 21.26x11.81x9.45in
Master Carton Quantities	9pcs/Carton

Dimensions and Recommended Layout



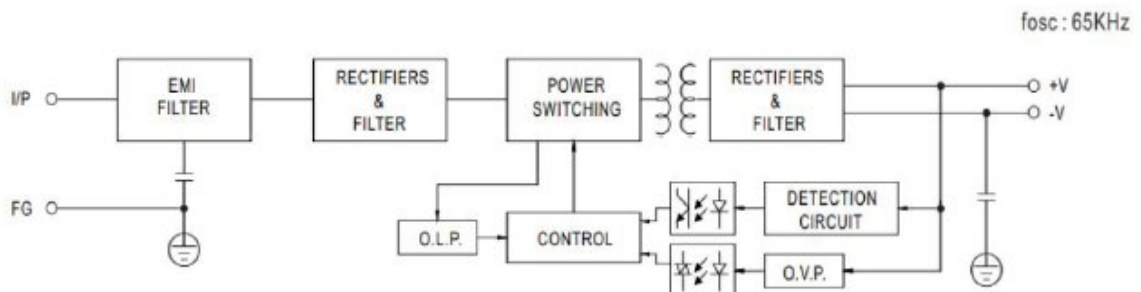
Input

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

Output :

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

Block Diagram



Derating Curve

