

Features

- Input Voltage 90~305V AC
- Built in Active PFC Function
- Approved to UKCA, CE
- Safety Approved to IEC 62368-1 BS EN/EN 62368-1
- Efficiency up to 92.5%
- Protection: OLP, OVP, OTP SCP
- 3 Years Warranty



Ideal Power's 56YEP600-xy 600W Enclosed AC/DC Power Supply (PSU) Series is certified to UKCA, CE & IEC 62368-1/BS EN62368-1/EN 62368-1 Standards and 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)
56YEP600-12	12	50	600	90	10~13.2	200
56YEP600-15	15	40	600	90	13.5~18	200
56YEP600-24	24	25	600	91	20~26.4	240
56YEP600-36	36	16.6	597.6	91	28~40	270
56YEP600-48	48	12.5	600	92	41~56	360
56YEP600-60	60	10	600	92	56~64	360

Input Specifications

Input Voltage	90-305VAC/127-430VDC
Frequency Range	47-63Hz
AC Current	12A/115V – 7.5A/230V
Inrush Current	35A/115VAC, 60A/230VAC
Leakage Current	< 2mA/240V AC
Connection	I/P: 3 poles terminal Block

Output Specifications

Voltage Tolerance	±1.5%	12v, 15v
	±1.0%	Others
Line Regulation	±0.5%	
Load Regulation	±1.0%	12v, 15v
	±0.5%	Others
Set up	1300ms, 50ms/230VAC at full load	
Rise Time	1300ms, 50ms/115VAC at full load	
Hold up Time	20ms/230VAC at full load - 16ms/115VAC at full load	
Connection	O/P: 4 poles terminal Block	

Protection

Over Load	105%-130% Rated Output Power	
	Protection type: Constant current limiting automatically after fault condition is removed.	
Over Voltage	13.8 ~ 16.2V	12v
	18.8 ~ 21.8V	15v
	27.6 ~ 32.4V	24v
	55.2 ~ 64.6V	48v
	65.2 ~ 76.8V	60v
Protection type: Shut down o/p voltage, re-power on to recover.		
Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down.	

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, 2G 10min. /1cycle, period for 60min. each along X, Y,Z axes
MTBF	1372.4K hrs min. Telcordia SR-332 (Bellcore)

Function

Remote Control	Power ON: open or 0~0.8V DC between RC+ (Pin 4) & RC- (Pin 3) on CN100
	Power OFF: 4~10V DC between RC+ (Pin 4) & RC- (Pin 3) on CN100
Remote Sense	Compensate voltage drop on the load wiring up to 0.3v
Fan Control (Typ)	RTH ₁ ≥ 50°C ± 10 °C Fan on: RTH ₂ ≥ 40°C ± 10 °C Fan off (Fan always on for 3.3~5v, Fan ON/OFF control for 12v~48v)

Safety & EMC

Safety Standards	TUV BS EN/EN62368-1 approved.
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 (C1SPR32) 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 3.5°C/1000m is needed for operating altitude greater than 2000m(6500ft).

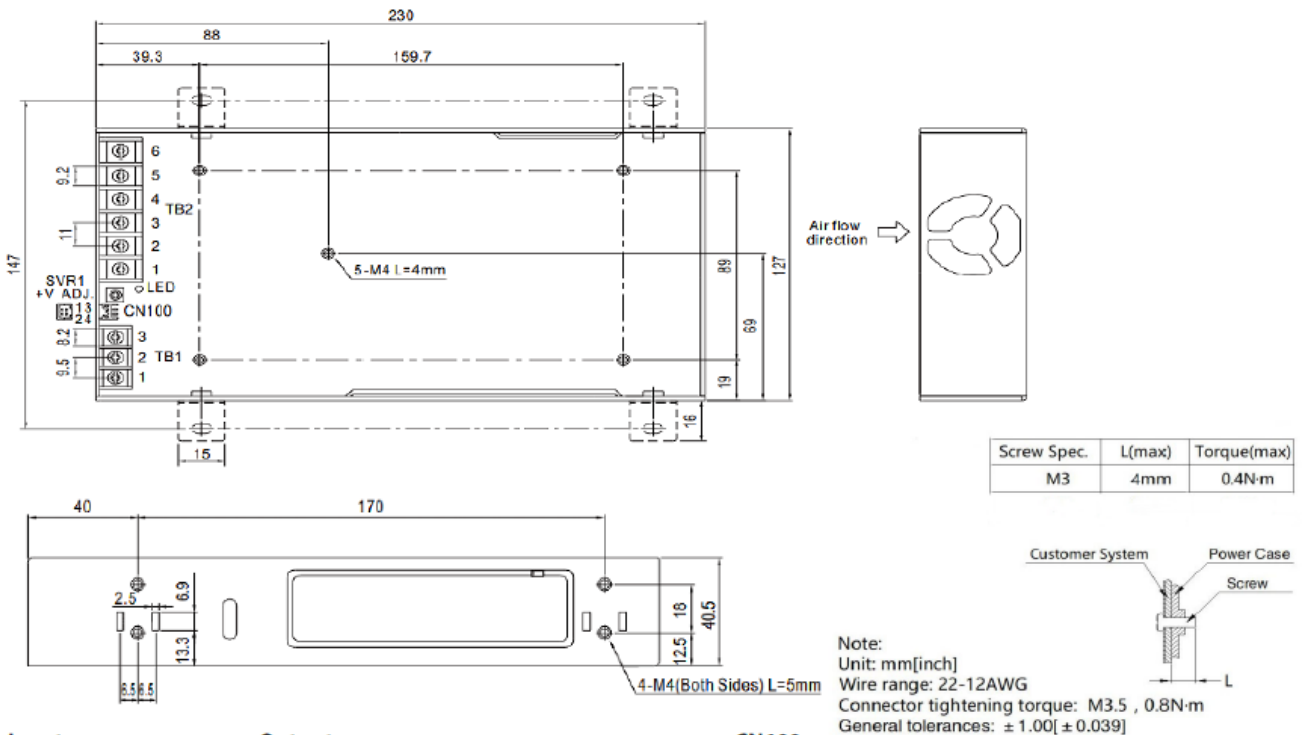
Dimensions & Weight

Size	230x127x40.5mm / 9.06x5x1.59in
Weight	1.3kg

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

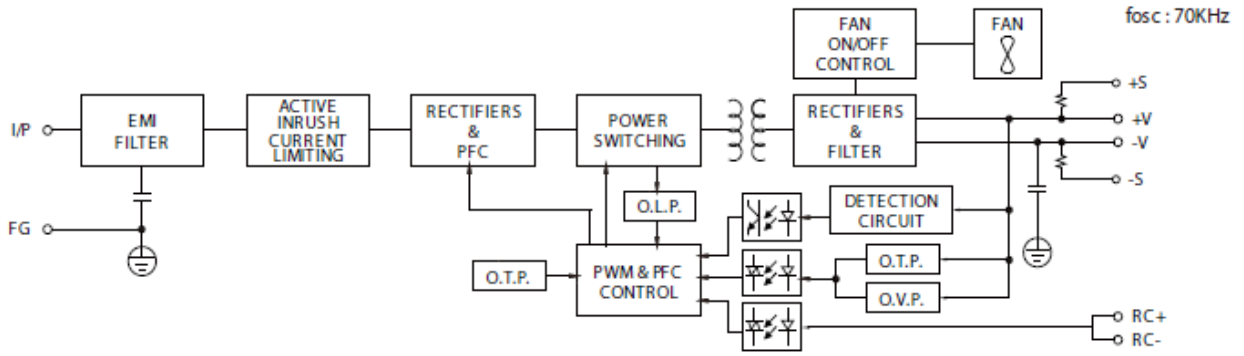
Output

No.	Description
1~3	-V
4~6	+V

CN100

No.	Description	Mating Housing	Terminal
1	-S	HRS DF11-4DS or equivalent	HRS DF11-**SC or equivalent
2	+S		
3	RC-		
4	RC+		

Block Diagram



Derating Curve

