

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 88%
- Protection: OLP, OVP, OTP SCP
- 3 Years Warranty



Ideal Power's 56YEP200-xy 200W 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) |
|---------------|----------------|-------------------|-----------------|----------------|------------------------|------------------------|
| 56YEP200-05 | 5 | 40 | 200 | 83 | 4.5~5.5 | 150 |
| 56YEP200-7.5 | 7.5 | 26.7 | 200.3 | 84 | | |
| 56YEP200-12 | 12 | 16.6 | 199.2 | 84 | 10~13.2 | 150 |
| 56YEP200-13.5 | 13.5 | 14.9 | 201.2 | 84 | | |
| 56YEP200-15 | 15 | 13.33 | 200 | 85 | 13.5~18 | 150 |
| 56YEP200-24 | 24 | 8.33 | 199.9 | 87 | 20~26.4 | 150 |
| 56YEP200-27 | 27 | 7.5 | 202.5 | 87 | | |
| 56YEP200-36 | 36 | 5.56 | 200.2 | 88 | | |
| 56YEP200-48 | 48 | 5.56 | 199.7 | 88 | 41~56 | 240 |
| 56YEP200-60 | 60 | 4.16 | 200.4 | 88 | | |

Input Specifications

| | |
|-----------------|---|
| Input Voltage | 90-305VAC/127-430VDC |
| Frequency Range | 47-63Hz |
| Power Factor | PF> 0.95/230V AC at full load - PF> 0.98/115V AC at full load |
| AC Current | 2.5A/115VAC, 1.3A/230VAC |
| Inrush Current | 20A/115VAC, 40A/230VAC |
| Leakage Current | < 1mA/240VAC |
| Connection | I/P: 3 poles terminal Block |

Output Specifications

| | | |
|-------------------|----------------------------------|---------------|
| Voltage Tolerance | ±2.0% | |
| Line Regulation | ±0.5% | |
| Load Regulation | ±1.0% | 5v, 12v, 15v |
| | ±0.5% | 24v, 48v, 56v |
| Set up | 1500ms, 50/230VAC at full load | |
| Rise Time | 3000ms, 50ms/115VAC at full load | |
| Hold up Time | 8ms at full load, 230VAC/115VAC | |
| Connection | O/P: 4 poles terminal Block | |

Protection

| | | |
|------------------|--|-----|
| Over Load | 105%-135% Rated Output Power | |
| | Protection type: Constant current limiting, recovers automatically after fault condition is removed. | |
| Over Voltage | 5.75 ~ 7V | 5v |
| | 13.8 ~ 16.2V | 12v |
| | 18.8 ~ 21.8V | 15v |
| | 27.6 ~ 32.4V | 24v |
| | 58.4 ~ 68V | 48v |
| | 65 ~ 70V | 56v |
| | 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 (0~45°C) |
| Vibration | 10 ~ 500Hz, 2G 10min. /1cycle, period for 60min. each along X, Y,Z axes |
| MTBF | 1766.4K hrs min. Telcordia SR-332 (Bellcore) |

Safety & EMC

| | |
|----------------------|--|
| Safety Standards | BS EN/EN62368-1 |
| 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:

All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperatures. 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). Derating may be needed under low input voltages. Please check the derating curve for more details.

The power supply is considered a component which will be installed into 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 “EMC testing of component power supplies”.

The ambient temperature derating of 5°C/1000m with fan models for operating altitude higher than 2000m (6500ft).

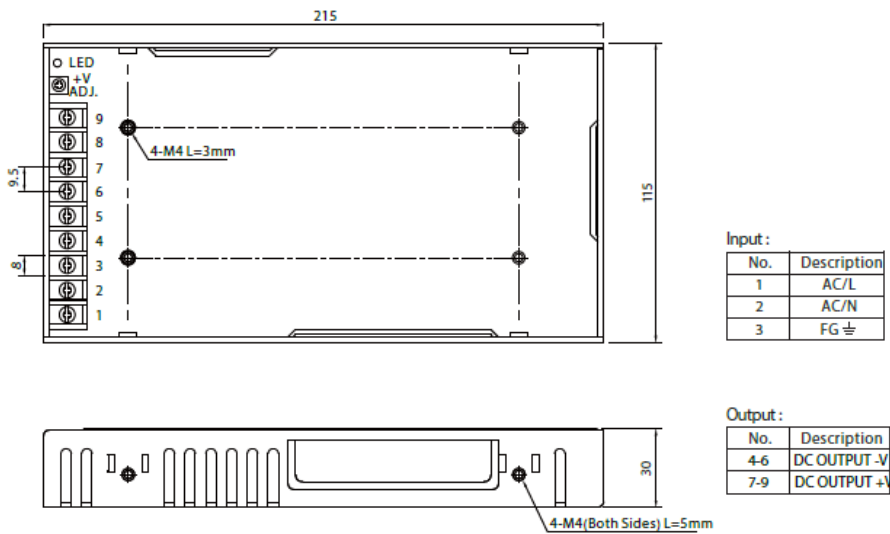
Dimensions & Weight

| | |
|--------|-------------------------------|
| Size | 215x115x30mm / 8.46x4.53x1.18 |
| Weight | 720g |

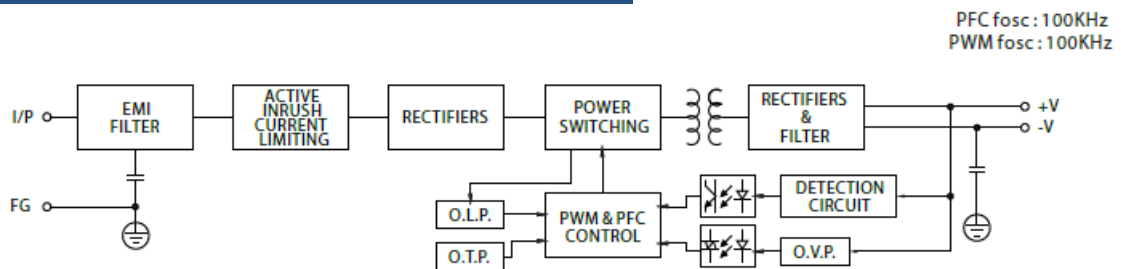
Packaging

| | |
|--------------------------|-----------------------------------|
| Carton Size | 38x19.5x26cm / 14.96x7.68x10.24in |
| Master Carton Quantities | 15pcs/Carton |

Dimensions and Recommended Layout



Block Diagram



Derating Curve

