

Features

- Voltage Input Range 85~277V AC
- No-load power consumption < 0.1 W
- Operating Temperature Range: -30°C~+70°C
- Efficiency up to 91%
- Safety Standards to IEC/UL 62368-1
- Output SCP, OLP, OVP
- Three Years Warranty



Ideal Power's 56YSM60-xy 60W Enclosed AC/DC Power Supply (PSU) Series are certified to UKCA, CE, CB, cULus & BS EN62368-1, UL62368-1 Standards and comply with the relevant Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

45W Models

Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)	Ripple & Noise (mVp-p)
56YSM60-05008000	5	8	40	83.5	80
56YSM60-12003800	12	3.8	45.6	87.5	150
56YSM60-15003000	15	3	45	88.5	180
56YSM60-24001900	24	1.9	45.6	89.5	200
56YSM60-48000940	48	0.94	45.12	90.5	300

60W Models

Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)	Ripple & Noise (mVp-p)
56YSM60-05010000	5	10	50	83	80
56YSM60-12005000	12	5	60	87.5	120
56YSM60-15004000	15	4	60	89	150
56YSM60-24002500	24	2.5	60	90	200
56YSM60-48001250	48	1.25	60	91	240

Input Specifications

Input Voltage	85-277VAC 50/60Hz	
AC Current	45W range	1.5A/115VAC 0.9A/230VAC 0.75A/277VAC
	60W range	1.8A/115VAC 1.0A/230VAC 0.9A/277VAC
Inrush Current	COLD START 20A/115VAC 40A/230VAC	
Leakage Current	< 0.25mA/277VAC	

Output Specifications

Voltage Tolerance	±2.0%
Line Regulation	±0.5%
Load Regulation	12V ±1%, Others ±0.5%
Set up, Rise Time	1000ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load
Hold up Time	50ms/230VAC 12ms/115VAC at full load

Protection

Over Load Protection	115% ~ 160% rated output power, Protection type: Hiccup Mode recovers automatically after fault condition is removed
Over Voltage Protection	115% ~ 135%, Protection Type: Clamp by Zener Diode

Environmental Characteristics

Working Temp	-30~+70°C (Refer to "Derating Curve")
Working Humidity	20~90% RH non-condensing
Storage Temp., Humidity	-30~+85°C, 10~95% RH non-condensing
Temp. Coefficient	±0.03%/°C (0~60°C)
Vibration	10 ~ 500Hz, 5G 10min. /1cycle, period for 60min. each along X, Y,Z axes

Safety & EMC

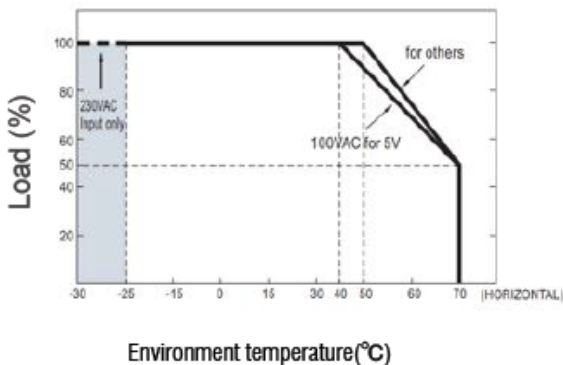
Safety Regulations:	IEC62368-1, UL62368-1, TUV EN62368-1, EAC TP TC 004, -1 approved
Withstand Voltage:	I/P-O/P:3KVAC
EMC Emission:	EN55032(CISPR32), CNS13438, EN61000-3-2 Class A, EN61000-3-3

Other Specifications

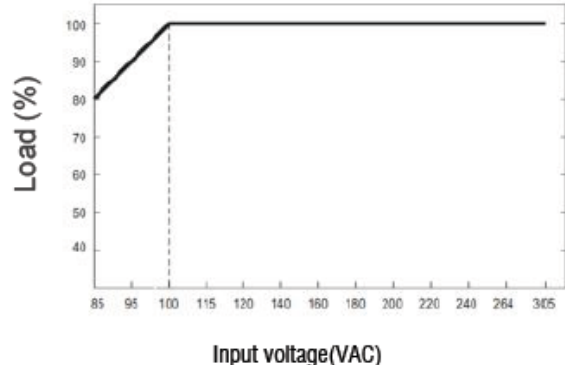
MTBF	Up to 45.12W	> 5000K hrs min.
	45.12W – 60W	> 4500K hrs min.
Size	87 x 52 x 30 mm	

Derating Curve

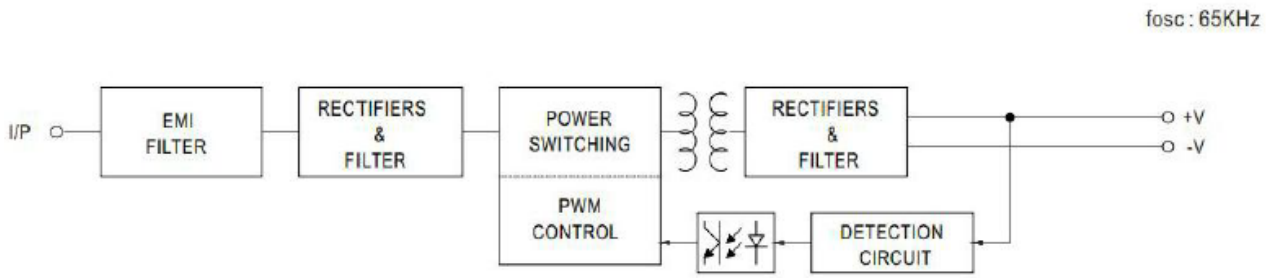
Deduction curve and temperature



Minus output and input voltage curves



Functional Diagram



Dimensions and Recommended Layout

