

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



CE CB cULus RoHS REACH

Ideal Power's 56YSM60T-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)
56YSM60T-05008000	5	8	40	83.5	80
56YSM60T-12003800	12	3.8	45.6	87.5	150
56YSM60T-15003000	15	3	45	88.5	180
56YSM60T-24001900	24	1.9	45.6	89.5	200
56YSM60T-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)
56YSM60T-05010000	5	10	50	83	80
56YSM60T-12005000	12	5	60	87.5	120
56YSM60T-15004000	15	4	60	89	150
56YSM60T-24002500	24	2.5	60	90	200
56YSM60T-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

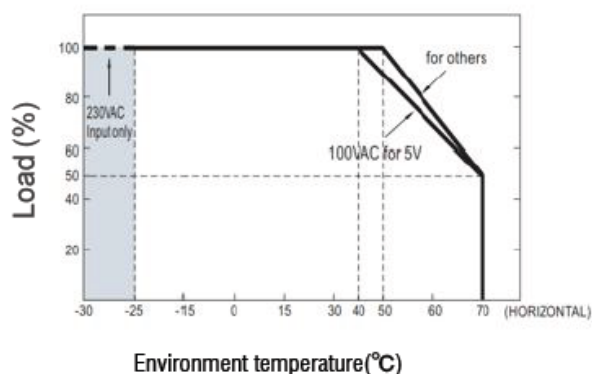
Safety Regulations:	IEC62368-1, UL62368-1, TUV EN62368-1, EAC TP TC 004, -1 approved
Withstand Voltage:	I/P-O/P:3KVAC
EMC Emission:	EN55032(CISPR32), CNS13438, EN61000-3-2 Class A, EN61000-3-3

Other Specifications

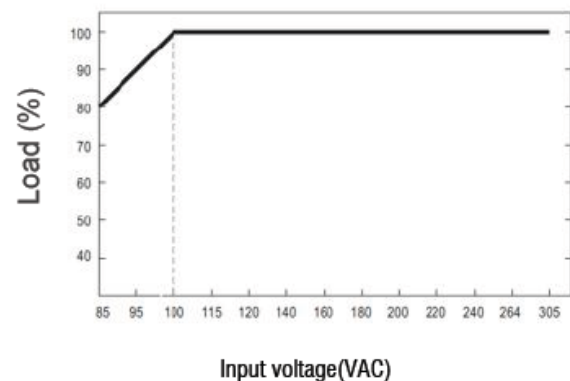
MTBF	>4500K hrs min.
Size	109 X 52.5 X 33.9 mm

Derating Curve

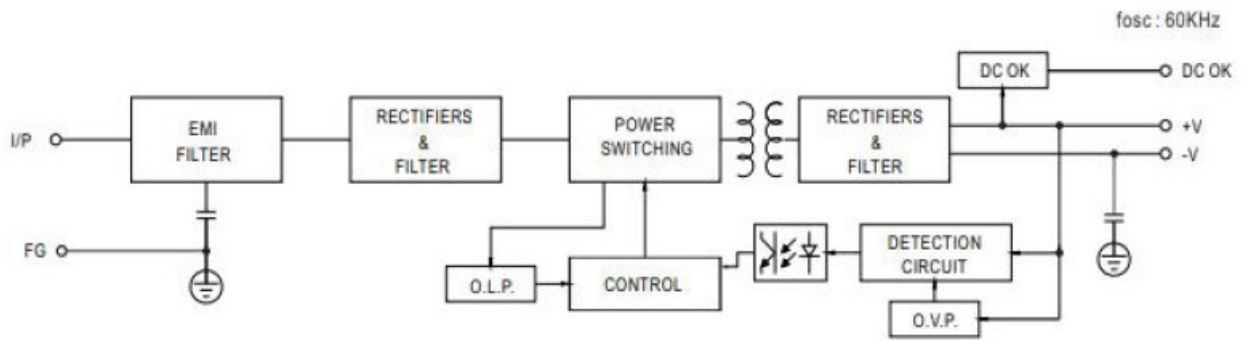
Deduction curve and temperature



Minus output and input voltage curves

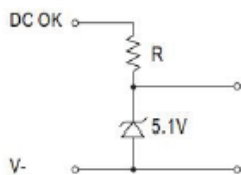


Functional Diagram



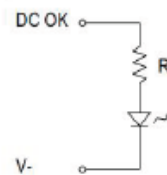
Application of DC OK Active Signal

(a) 5V signal



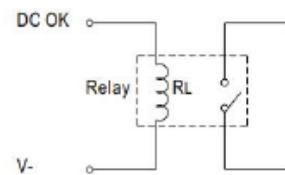
Model	R
5V	$\geq 200 \Omega$
12V	$\geq 1.5K \Omega$
15V	$\geq 2K \Omega$
24V	$\geq 3.9K \Omega$

(b) LED



Model	R
5V	$\geq 1K \Omega$
12V	$\geq 2.4K \Omega$
15V	$\geq 3K \Omega$
24V	$\geq 4.7K \Omega$

(c) Relay



Model	RL
5V	$\geq 120 \Omega$
12V	$\geq 700 \Omega$
15V	$\geq 700 \Omega$
24V	$\geq 1.2K \Omega$

Dimensions and Recommended Layout

