

Features

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



Ideal Power's 56YSM20-xy 20W 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.

15W Models

Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)	Ripple & Noise (mVp-p)
56YSM20-0333500	3.3	3.5	11.55	74	150
56YSM20-0503000	5	3	15	78	150
56YSM20-1201250	12	1.25	15	82	150
56YSM20-1501000	15	1	15	82	180
56YSM20-2400630	24	0.63	15.12	83	180

20W Models

Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)	Ripple & Noise (mVp-p)
56YSM20-0504000	5	4	20	79	150
56YSM20-1201800	12	1.8	21.6	84	180
56YSM20-1501400	15	1.4	21	84	200
56YSM20-2400900	24	0.9	21.6	85	200

Input Specifications

Input Voltage	90~264VAC 50/60Hz
AC Current	15W 0.35A/115VAC 0.2A/230VAC 0.17A/277VAC 20W 0.6A/115VAC 0.4A/230VAC 0.3A/277VAC
Inrush Current	COLD START 20A/115VAC 40A/230VAC
Leakage Current	< 0.25mA/277VAC

Output Specifications

Voltage Tolerance	±2.0%
Line Regulation	±0.3%
Load Regulation	±0.5%
Set up, Rise Time	1500ms, 30ms/230VAC 1500ms, 30ms/115VAC at full load
Hold up Time	40ms/230VAC 10ms/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

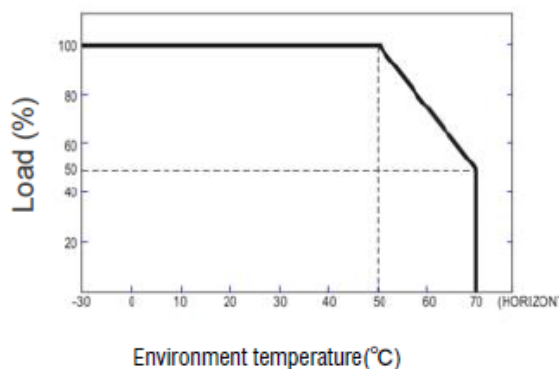
Safety Regulations:	IEC62368-1, UL62368-1, TUV EN62368-1, EAC TP TC 004, -1 approved
Withstand Voltage:	I/P-O/P:3KVAC
EMC Emission:	EN55032(CISPR32), CNS13438, EN61000-3-2 Class A, EN61000-3-3

Other Specifications

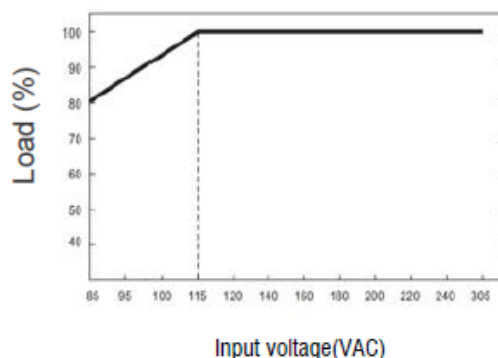
MTBF	15W > 7000K hrs min. 20W > 1.24m hrs min.
Size	52.4 x 27.2 x 24 mm

15W Derating Curve

Deduction curve and temperature

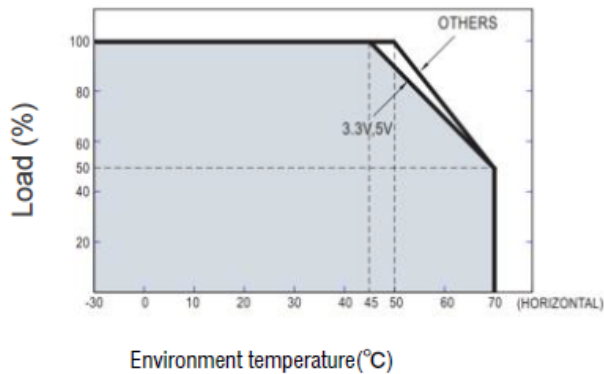


Minus output and input voltage curves

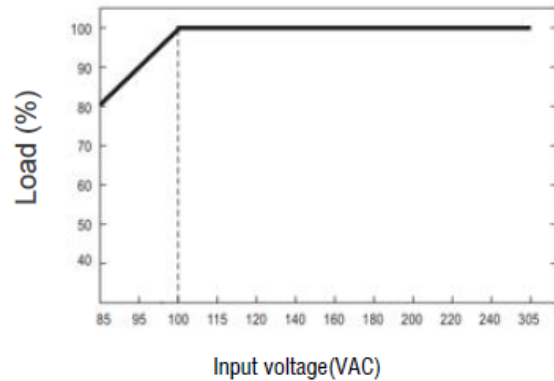


20W Derating Curve

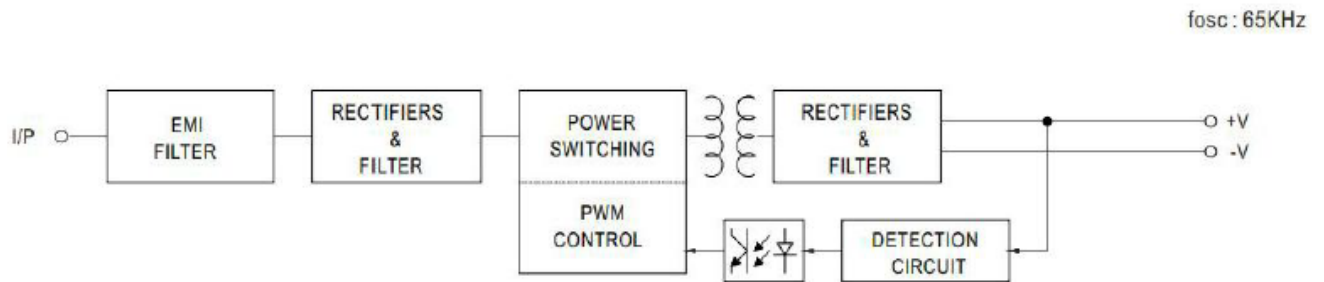
Deduction curve and temperature



Minus output and input voltage curves



Functional Diagram



Dimensions and Recommended Layout

