

Features

- Ultra-wide Voltage Input Range 100~277V AC
- Super Small Design
- Operating Temperature: 30°C~+70°C
- Low no-load Power Consumption
- Low Ripple & Noise, High Efficiency
- Protection: SCP, OCP, OVP
- Three Years Warranty



Certified to UKCA, CE, CB, cURus, RoHS, & REACH Standards and complies with Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request

Model Number Information

56YMH	20	xx
Series Name	Rated Wattage	Output Voltage

Models

Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)	Max. Capacitive Load (uF)	Ripple & Noise (mVp-p)
56YMH20-3.3	3.3	4.5	14.85	83.0%	8000	150
56YMH20-5	5	4	20	85.0%	8000	150
56YMH20-9	9	2.3	20.7	85.0%	5400	150
56YMH20-12	12	1.8	21.6	86.0%	4000	150
56YMH20-15	15	1.4	21	87.0%	3000	150
56YMH20-24	24	0.9	21.6	87.0%	1000	150

Input Specifications

Input Voltage	100-277VAC
Frequency Range	50/60Hz
No Load Power Consumption	0.1W/277VAC, 50Hz
Ac Current	0.70A/115VAC / 0.40A/230VAC / 0.30A/277VAC
Inrush Current	Cold Start 20A/115VAC / Cold Start 45A/230VAC
Leakage Current	<0.1mA/277VAC,50Hz

Output Specifications

Voltage Tolerance	±1.5%	All Models
Line Regulation	±0.5%	All Models
Load Regulation	±0.5%	All Models
Set up	1500ms, 50ms / 230VAC at full load	
Rise Time	1500ms, 50ms / 115VAC at full load	
Hold up Time	50ms at 230VAC at full load / 8ms at 115VAC at full load	

Protection

Over Current	≥110% Rated Output current, recovers automatically after current goes down.	
Short Circuit	Hiccup mode recovers automatically after fault condition is removed.	
Over Voltage	3.8-9VDC	3.3v
	5.5-9VDC	5v
	10-16VDC	9v
	13-16.5VDC	12v
	17-24VDC	15v
	26-34VDC	24v
Protection type: Hiccup Mode, shut off o/p voltage, clamping by zener diode		

Environmental Characteristics

Working Temp	-30 °C to +70 °C (Refer to "Derating Curve")
Working Humidity	20 ~ 90% RH Non-Condensing
Storage Temp., Humidity	- 40°C ~ +85°C, 10 ~ 95% RH non-condensing
Temp. Coefficient	± 0.03%/°C(0~50°C)
MTBF	> 1500K hrs min. MIL-HDBK-217F (25°C)
Altitude Application	5000m
Cooling Method	Natural Air Cooling

Safety

Safety Standards	IEC62368-1, UL62368-1, TUV BS EN/EN62368-1 approved
Withstand Voltage	IEC/EN60335-1
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/ 500VDC/25 °C/70% RH

EMC

	Parameter	Standard	Test Level
EMC Emission	Conducted	BS EN/EN55032(CISPR32)	CLASS B
	Radiated	BS EN/EN55032(CISPR32)	CLASS B
	Harmonic Current	BS EN/EN61000-3-2	CLASS A
	Voltage Flicker	BS EN/EN61000-3-3
BS EN/EN55035, BS EN/EN61000-6-2			
EMC Immunity	ESD	BS EN/EN61000-4-2 Level 3, 8KV air; Level 2, 4KV contact	Criteria A
	Radiated Susceptibility	BS EN/EN61000-4-3	Criteria A
	EFT/Burest	BS EN/EN61000-4-4	Criteria A
	Surge	BS EN/EN61000-4-5	Criteria A
	Conducted	BS EN/EN61000-4-6 Level 3,	Criteria A
	Magnetic Field	BS EN/EN61000-4-8 Level 4,	Criteria A
	Voltage Dips and interruptions	BS EN/EN61000-4-11 > 95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250	

Notes:

All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 1µF & 10µF parallel capacitor.

Tolerance : includes set up tolerance, line regulation and load regulation.

The ambient temperature derating of 3.5°C /1000m with fanless models and of 5 °C/1000m with fan models for operating altitude higher than 2000m(6500ft).

The power supply is considered as an independent unit ,but the final equipment still needs to re-confirm that the whole system complies with the EMC directives.

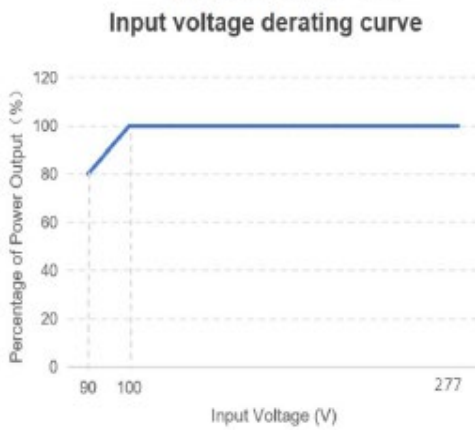
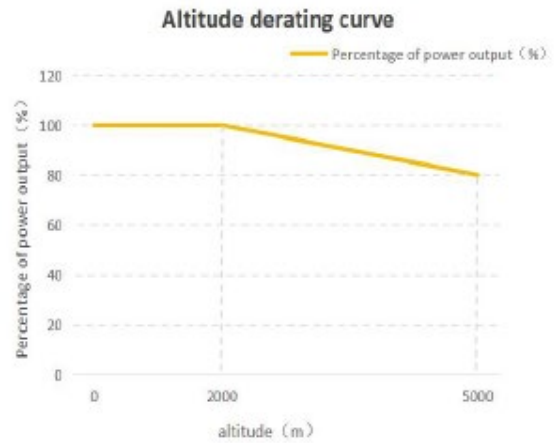
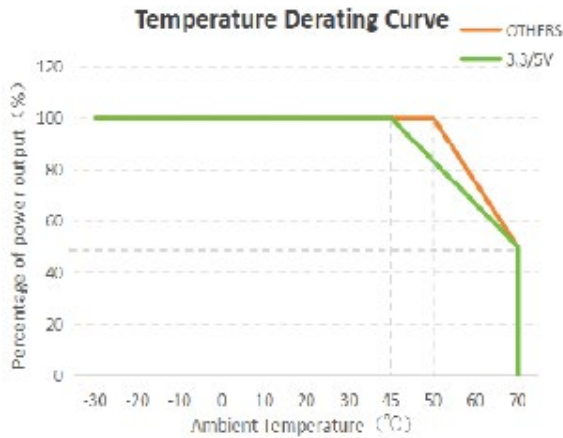
Dimensions & Weight

	Measurements	Weight
56YMH20	52.6*27.4*24.3mm	55.0g

Packaging

Carton Size	58 × 28 x 19 cm	
	22.83 x 11.02 x 7.48 in	
Master Carton Quantities	100pcs/Carton(Terminal block)	160pcs/Carton(PCB Mounting Style)

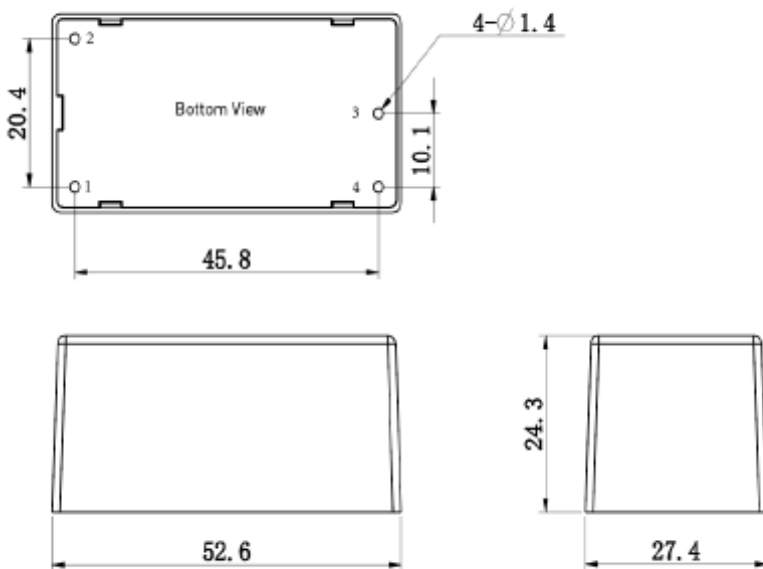
Derating Curves



AC – DC

56YMR90 Dimensions and Recommended Layout

third-angle projection



Pin-Out	
Pin	Function
1	AC/N
2	AC/L
3	-VO
4	+VO

annotation:
unit of size:mm
Pin diameter tolerances:±0.10
General tolerances:±0.50

Typical Application Circuit

fosc: 65KHz

