

Features

- Universal Input 100-277V AC
- Approved to UKCA, CE, RoHS
- EN62368-1 Safety Approved
- 82.5% Efficiency
- DC OK active signal and redundant function(option)
- Single Output 3.3-24V DC SCP, OLP, OVP



56YMR5-xy Series

5W Encapsulated AC/DC PCB Mount Power Supply



RoHS UK CA CE

The 56YMR5-xy Series is a high-quality and reliable 5W Encapsulated AC/DC PCB Mount Power Supply. Designed for use in applications such as commercial, industrial and OEM electronics. This series is supplied with a Encapsulated input connection and supports input voltages of 100~277V AC 47-440Hz.

Model Number Information

56YMR 5 xy

Series Name Rated Wattage Output Voltage

Models

Model Number	Rated Power (W)	DC Voltage (V)	Rated Current (A)	Efficiency (%)	Max. Capacitive Load (uF)
56YMR5-3.3-xy	4.125	3.3	1.25	74	12000
56YMR5-5-xy	5	5	1	78	8500
56YMR5-12-xy	5.04	12	0.42	80.5	1600
56YMR5-15-xy	4.95	15	0.33	82.5	960
56YMR5-24-xy	5.52	24	0.23	81	500

Input Specifications			
Input Voltage	100-277VAC		
Frequency Range	47-440Hz		
AC Current	0.3A/115VAC	0.1A/230VAC	0.08A/277VAC
Inrush Current	Cold Start 40A/800us at 230VAC 50Hz		Cold Start 20A/800us at 115VAC 50Hz
Leakage Current	<0.707mA/264VAC		

Output Specifications				
Voltage Tolerance	+2.5%			
Line Regulation	+0.3%			
Load Regulation	±0.5%			
Setup,Rise,Hold up Time	1.2s,30ms,80ms/230VAC(at full load)		1.4s,30ms,12ms/115VAC(at full load)	

Protection				
Over Load	110~260% Hiccup mode, recovers automatically after fault condition is removed			
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.			
Over Voltage	3.8 ~ 6V	5.8 ~ 7.5V	12.8 ~ 16V	17 ~ 24V 27 ~ 34V
	Recovers automatically after fault condition is removed.			

Environmental Characteristics				
Working Temp	-30 ~ +85°C(Full load can be operated at -30°C to 50°C, while load should be reduced at 50°C to 85°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%/(0 ~ 40°C)			
Soldering Temperature	Wave soldering:265°C,5s(max.); Manual soldering:390°C,3s(max.)			
Over Voltage Category	OVC II; According to EN62368-1; altitude up to 2000 meters			

Safety & EMC			
Safety Standards	EN62368-1		
Withstand Voltage	I/P-O/P: 3KVAC/1min		
Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C/ 70% RH		
EMC Emission	Parameter	Standard	Test Level
	Conducted	BS EN/EN55032(CISPR32)	CLASS B
	Radiated	BS EN/EN55032(CISPR32)	CLASS B
	Harmonic Current	EN61000-3-2	CLASS A
	Voltage flicker	EN61000-3-3
EMC Immunity	BS EN/EN55035, BS EN/EN61000-6-2		
	Parameter	Standard	Test Level
	ESD	EN61000-4-2	Level 3, 8KV air, Level 2, 4KV contact criteria A
	Radiated Susceptibility	EN61000-4-3	Level 3, criteria A
	EFT/Burest	EN61000-4-4	Level 3, criteria A
	Surge	EN61000-4-5	Level 3, 1KV/L-N, criteria A
	Conducted	EN61000-4-6	Level 3, criteria A
	Magnetic Field	EN61000-4-8	Level 4, criteria A
	Voltage Dips and interruptions	EN61000-4-11	> 95% dip 0.5 periods, 30% dip 25 periods > 95% interruptions 250 periods

Notes:

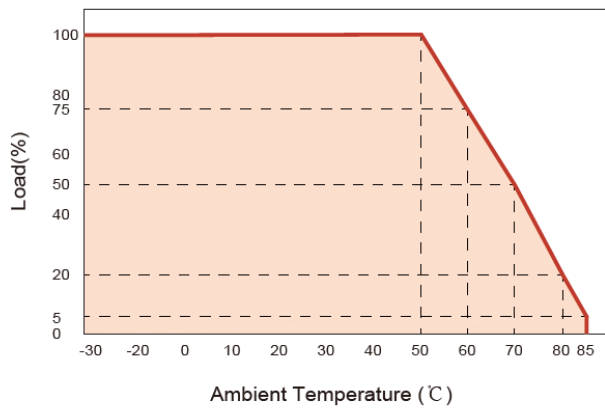
1. All parameters without special description are measured under the conditions of input 230VAC, rated load, ambient temperature 25 ° C, and ambient humidity less than 75%.
2. Ripple & noise are measured from peak to peak with a bandwidth limit of 20MHz(0.1uf and 47uf /50V parallel capacitor under DC output full load, AC nominal input 25 °C ambient temperature).
3. Tolerance: includes set up tolerance, line and load regulation.
4. Derating may be needed under low input voltages. Please check the derating curve for more details.
5. The power supply is considered a component which will be installed into the final equipment. The final equipment must be confirmed to meet EMC directives. For guidance on performing these EMC tests, please refer to "EMI testing of component power supplies."
6. The ambient temperature derating of 3.5°C/1000m is needed for operating altitude greater than 2000m(6500ft).

Dimensions & Weight	
	Measurements
56YMR5-xy	46.08 x 25.78 x 21.7 mm

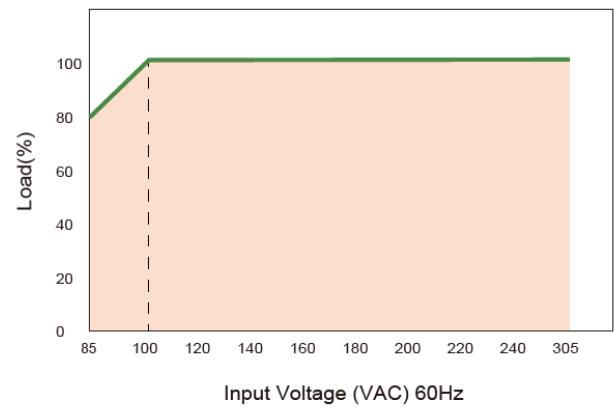
Packaging	
Carton Size	41 x 37 x 19.5 cm

Derating Curves

Derating Curve

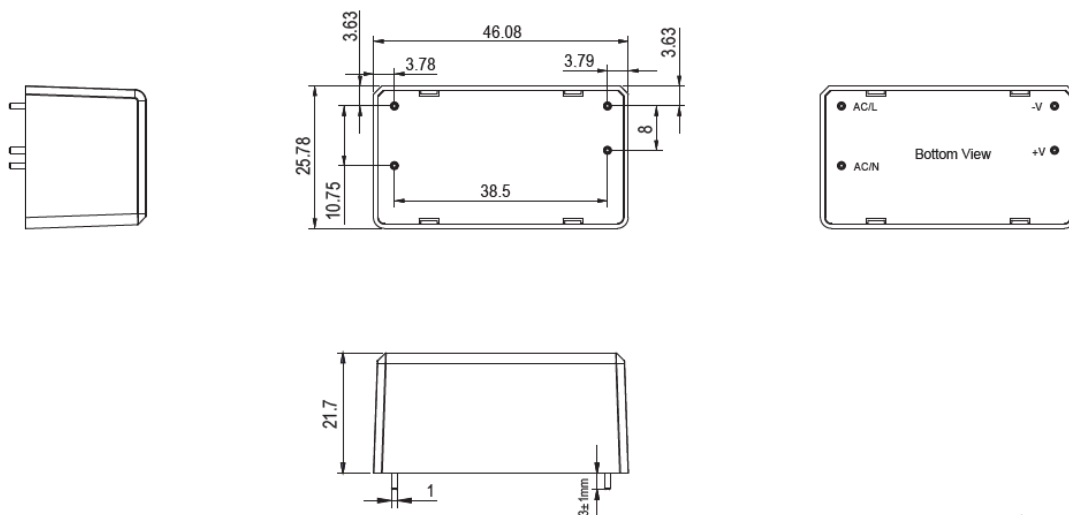


Static Characteristics



Dimensions and Recommended Layout

(Unit: mm , tolerance: ± 0.5 mm)



Block Diagram

