

# YMR60 SERIES

## 60W



YMR60 is a 60W miniature (87\*52\*30mm) AC-DC module-type power supply, ready to be soldered onto the PCB boards of various kinds of electronic instruments or industrial automation equipments. This product allows the universal input voltage range of 85~305VAC.

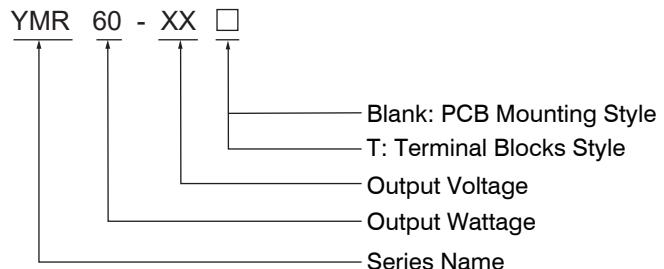


RoHS

### Features

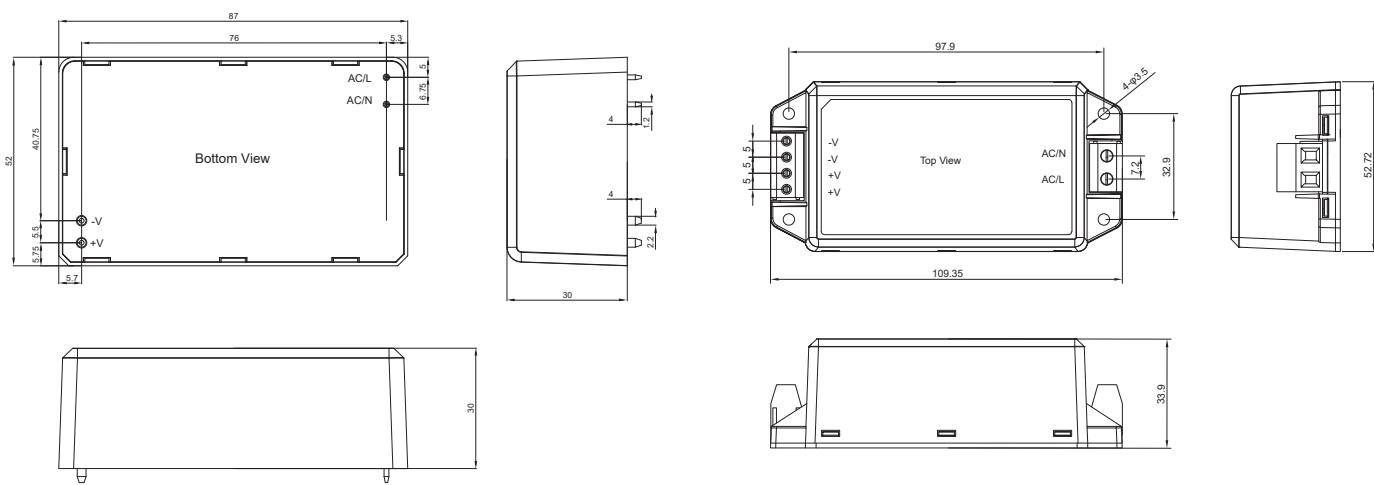
- Universal AC Input/ Full Range
- No load power consumption<0.15W
- Wide operating temperature range -30~85°C
- High efficiency up to 91%
- Protections: Short circuit/Over load/Over voltage
- Isolation Class II
- Three years warranty

### Model Description



### Dimensions and installation

(Unit: mm , tolerance:  $\pm 0.5$ mm)



File last modification time: 2026-01-19

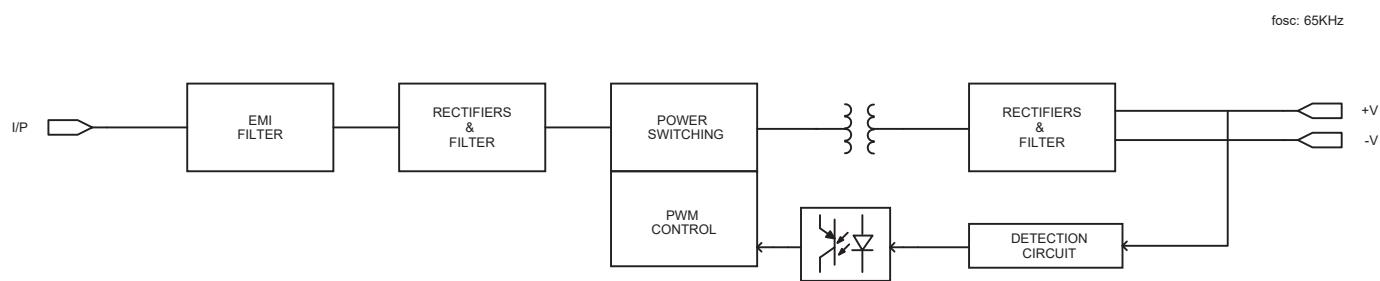
## Specification

Model	Safety Model No.	YMR60-5□	YMR60-12□	YMR60-15□	YMR60-24□	YMR60-48□					
Output	<b>DC Voltage</b>	5V	12V	15V	24V	48V					
	<b>Rated Current</b>	10A	5A	4A	2.5A	1.25A					
	<b>Rated Power</b>	50W	60W	60W	60W	60W					
	<b>Ripple &amp; Noise(max.)</b>	80mVp-p	120mVp-p	120mVp-p	150mVp-p	240mVp-p					
	<b>Voltage Tolerance</b>	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%					
	<b>Line Regulation</b>	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%					
	<b>Load Regulation</b>	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%					
	<b>Max.Capacitive Load</b>	20000uF	8000uF	5000uF	4200uF	800uF					
	<b>Setup,Rise,Hold up Time</b>	0.2s,35ms,50ms/230VAC(at full load)			0.3s,35ms,12ms/115VAC(at full load)						
Input	<b>Rated Voltage Range</b>	100-277VAC									
	<b>Voltage Range</b>	85-305VAC/120-430VDC									
	<b>Frequency Range</b>	47-63Hz									
	<b>AC Current</b>	1.8A/115VAC	1.0A/230VAC	0.8A/277VAC							
	<b>Inrush Current</b>	Cold Start 65A/2000us at 230VAC 50Hz			Cold Start 30A/2000us at 115VAC 50Hz						
	<b>Leakage Current</b>	<0.25mA/277VAC									
	<b>Efficiency</b>	83%	88%	88%	89.5%	91%					
	<b>No Load Power Consumption</b>	<0.15W									
Protection	<b>Over Load</b>	115~180%									
		Hiccup mode, recovers automatically after fault condition is removed.									
	<b>Short Circuit</b>	Hiccup mode, recovers automatically after fault condition is removed.									
Ambient	<b>Over Voltage</b>	5.25 ~ 8V	12.6 ~ 16.5V	15.75 ~ 24V	25.2 ~ 34V	50.4 ~ 65V					
		Hiccup mode, recovers automatically after fault condition is removed.									
	<b>Working TEMP.</b>	-30 ~ +85 °C (Refer to "Derating Curve".)									
Safety	<b>Working Humidity</b>	20 ~ 90%RH Non-condensing									
	<b>Storage TEMP. Humidity</b>	-40 ~ +85 °C, 10 ~ 95%RH Non-condensing									
	<b>TEMP. Coefficient</b>	±0.03%/(0 ~ 40 °C)									
	<b>Vibration</b>	PCB Mounting: 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes Terminal Blocks: 10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes									
	<b>Soldering Temperature</b>	Wave soldering: 265 °C, 5s(max.); Manual soldering: 390 °C, 3s(max.)									
	<b>Over Voltage Category</b>	OVC III									
	<b>Safety Standards</b>	EN60335-1, UL62368-1									
EMC	<b>Withstand Voltage</b>	I/P-O/P: 3KVAC/1min									
	<b>Isolation Resistance</b>	I/P-O/P: 100M Ohms / 500VDC / 25 °C / 70% RH									
	<b>EMC Emission</b>	Parameter	Standard	Test Level							
		Conducted	EN55014-1	CLASS B							
		Radiated	EN55014-2	CLASS B							
		Harmonic Current	EN61000-3-2	CLASS A							
		Voltage flicker	EN61000-3-3	.....							
	<b>EMC Immunity</b>	EN55014-1, EN55014-2									
		Parameter	Standard	Test Level							
		ESD	EN61000-4-2	Level 3, 8KV air, Level 2, 4KV contact criteria B							
		Radiated Susceptibility	EN61000-4-3	Level 3, criteria A							
		EFT/Burst	EN61000-4-4	Level 3, criteria B							
		Surge	EN61000-4-5	Level 3, 1KV/L-N, criteria B							
		Conducted	EN61000-4-6	Level 3, criteria A							
		Magnetic Field	EN61000-4-8	Level 4, criteria A							
Others	<b>Voltage Dips and interruptions</b>	EN61000-4-11		> 95% dip 0.5 periods, 30% dip 25 periods, > 95% interruptions 250 periods							
	<b>Weight</b>	PCB Mounting: 210g/pcs; Terminal Blocks: 277g/pcs									
	<b>Packing</b>	PCB Mounting: 48×27.5×16cm 50pcs/Carton; Terminal Blocks: 31.5×24.5×22cm 50pcs/Carton									
	<b>Dimension (LxWxH)</b>	PCB Mounting: 87 × 52 × 30 mm; Terminal Blocks: 109.35 × 52.72 × 33.9 mm									
Note	<b>MTBF</b>	755.4Khrs min. MIL-HDBK-217F(25 °C)									
		1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 °C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF & 47μF parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. 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). 5. The power supply is considered as an independent unit ,but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests,please refer to "EMI testing of component power supplies". (as available on <a href="https://yingjiao.com/wp-content/uploads/2025/06/EMI_Testing_of_Component_Power_Supplies_Yingjiao.pdf">https://yingjiao.com/wp-content/uploads/2025/06/EMI_Testing_of_Component_Power_Supplies_Yingjiao.pdf</a> )									

# YMR60 SERIES

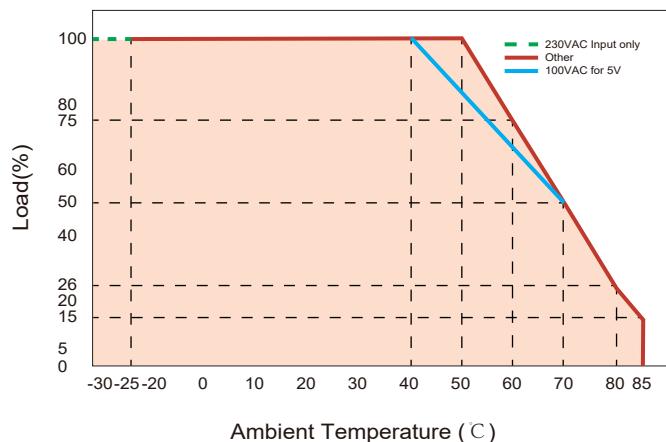
## 60W

### Block Diagram



### Engineering Data

#### Derating Curve



#### Static Characteristics

