



Description

PMS30 is a 30W miniature (69.6*39*24.2mm) 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.

CB
SCHEME

UL
US
UL62368-1

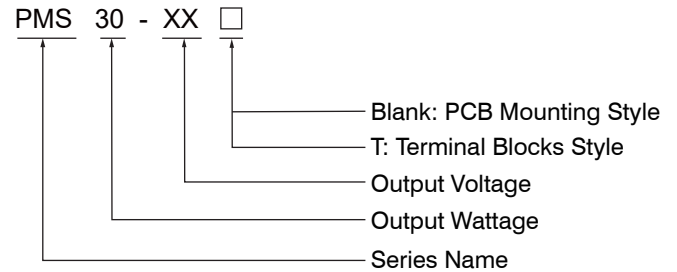
RoHS
EN60335-1

RoHS
CE

Features

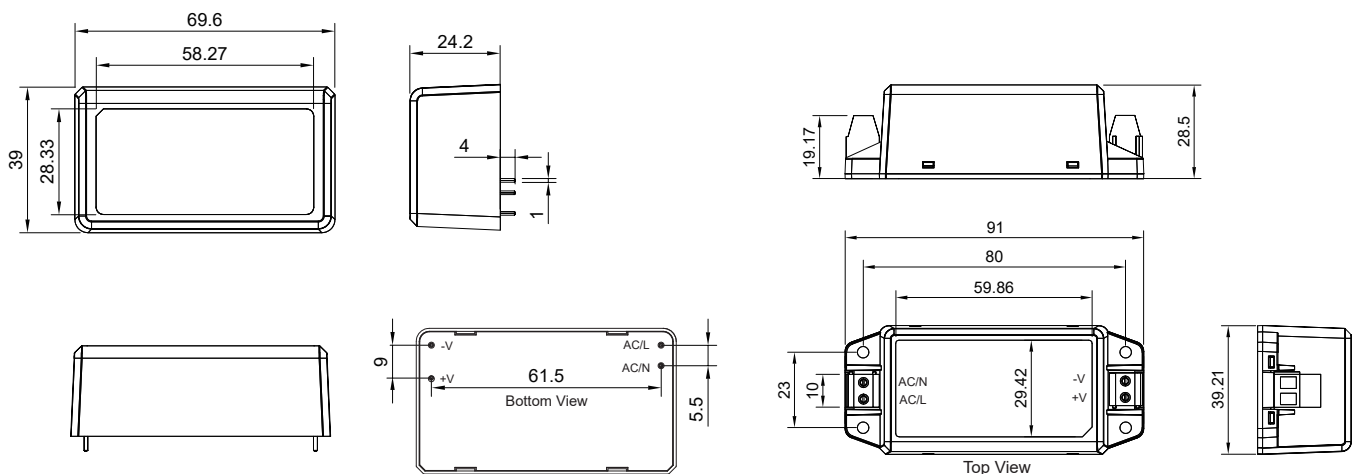
- Universal AC Input/ Full Range
- No load power consumption < 0.1W
- Wide operating temperature range -30~85° C
- High efficiency up to 88%
- Protections: Short circuit/Over load/Over voltage
- Isolation Class II
- Three years warranty

Model Description



Dimensions and installation

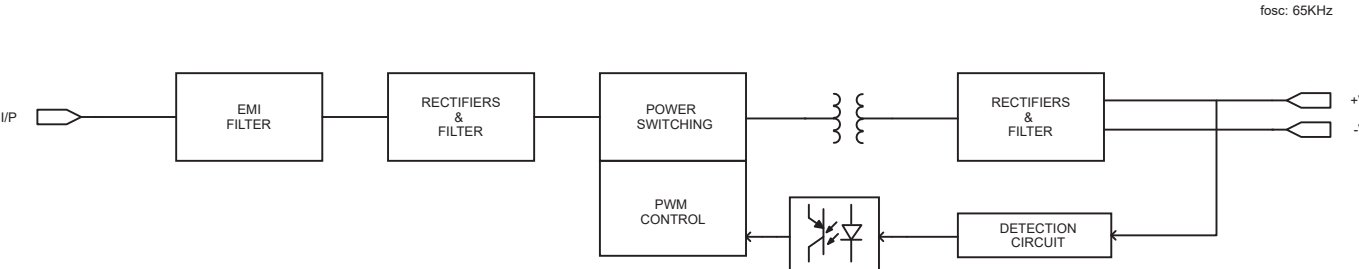
(Unit: mm , tolerance: ±0.5mm)



Specification

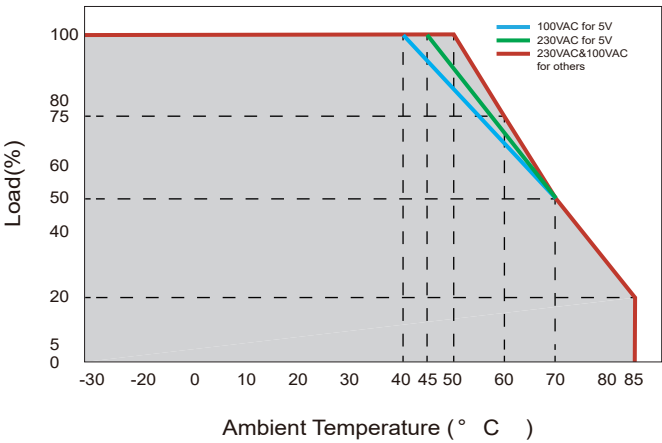
Model	Safety Model No.	PMS30-5 □	PMS30-12 □	PMS30-15 □	PMS30-24 □	PMS30-48 □
Output	DC Voltage	5V	12V	15V	24V	48V
	Rated Current	6A	2.5A	2A	1.25A	0.625A
	Rated Power	30W	30W	30W	30W	30W
	Ripple & Noise(max.)	80mVp-p	120mVp-p	120mVp-p	150mVp-p	240mVp-p
	Voltage Tolerance	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	Max.Capactive Load	6000uF	4400uF	3300uF	700uF	470uF
	Setup,Rise,Hold up Time	1.5s,30ms,40ms/230VAC(at full load)1.9s,30ms,10ms/115VAC(at full load)				
Input	Rated Voltage Range	100-277VAC				
	Voltage Range	85-305VAC/120-430VDC				
	Frequency Range	47-63Hz				
	AC Current	1.0A/115VAC	0.5A/230VAC	0.3A/277VAC		
	Inrush Current	Cold Start 45A/400us at 230VAC 50Hz			Cold Start 25A/600us at 115VAC 50Hz	
	Leakage Current	<0.25mA/277VAC				
	Efficiency	85%	87%	87%	87%	88%
	No Load Power Consumption	<0.1W				
Protection	Over Load	115~160%				
		Hiccup mode, recovers automatically after fault condition is removed.				
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.				
	Over Voltage	5.25 ~ 6.75V	12.8 ~ 16V	15.75 ~ 20.25V	25.2~ 32.4V	50.4 ~ 64V
Shut off o/p voltage, clamping by zener diode						
Ambient	Working TEMP.	-30 ~ +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)				
	Vibration	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				
	Soldering Temperature	Wave soldering:265° C ,5s(max.); Manual soldering:390° C ,3s(max.)				
	Over Voltage Category	OVC III				
Safety	Safety Standards	EN60335-1, EN IEC62368-1, UL62368-1				
	Withstand Voltage	I/P-O/P: 3KVAC/1min				
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25° C / 70% RH				
EMC	EMC Emission	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			
	EMC Immunity	EN55014-1,EN55014-2				
		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 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	
		Voltage Dips and interruptions	EN61000-4-11		95% dip 0.5 periods, 30% dip 25 periods, 95% interruptions 250 periods	
Others	Weight	PCB Mounting: 94g/pcs; Terminal Blocks: 113g/pcs				
	Packing	PCB Mounting: 32.5×17.5x25cm 100pcs/Carton; Terminal Blocks: 41.5×25x17cm 100pcs/Carton				
	Dimension (LxWxH)	PCB Mounting: 69.6 × 39 x 24.2 mm; Terminal Blocks: 91 × 39.21 x 28.5 mm				
	MTBF	654.7Khrs min. MIL-HDBK-217F(25° C)				
Note	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".					

Block Diagram



Engineering Data

Derating Curve



Static Characteristics

