

IRM-20 Series

20W Single Output Encapsulated Power Supply



Case No: 8914EV
52.4 x 27.2 x 4mm

Features

- Universal AC input / Full range
- Compact size
- Protections: Short circuit / Overload / Over Voltage
- Cooling by free air convection
- Isolation class II
- No load power consumption <0.1W
- 100% full load burn-in test
- High reliability
- 3 years warranty



Specification

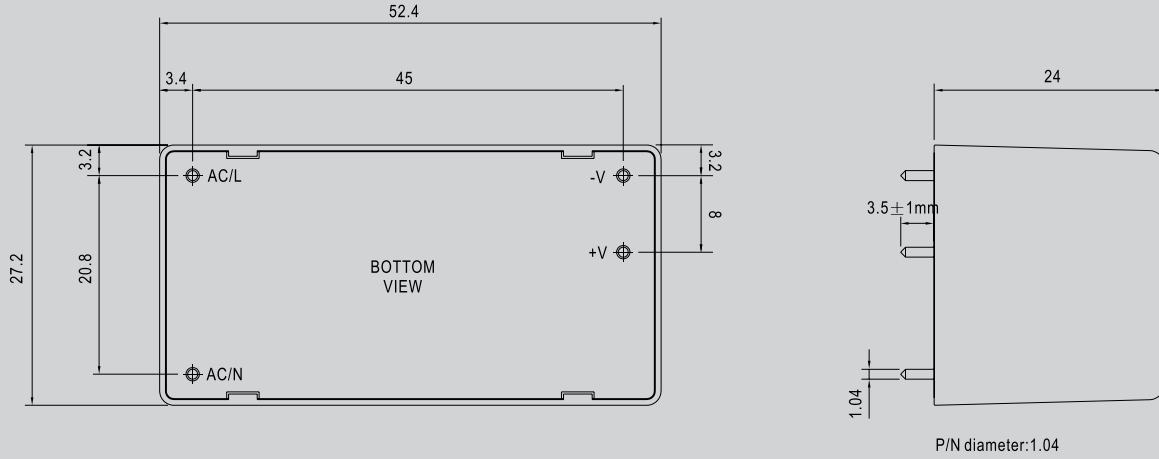
INPUT	Voltage	85 ~ 264V	120 ~ 370VDC				
	Frequency	47 ~ 440Hz					
	AC Current	0.6A/115VAC	0.4A/230VAC				
	Efficiency	76%	79%	84%	84%	85%	
	Inrush Current	Cold Start 20A/115VAC 40A/230VAC					
	Leakage Current	<0.75mA/240VAC					
	OUTPUT	MODEL No.	IRM-20-3.3	IRM-20-5	IRM-20-12	IRM-20-15	IRM-20-24
DC Voltage		3.3V	5V	12V	15V	24V	
Rated Current		4.5A	4A	1.8A	1.4A	0.9A	
Current Range		0 ~ 4.5A	0 ~ 4A	0 ~ 1.8A	0 ~ 1.4A	0 ~ 0.9A	
Rated Power		14.85W	20W	21.6W	21W	21.6W	
R & N (max)		200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	
Voltage Tolerance		±2.5%	±2.5%	±2.5%	±2.5%	±2.5%	
Line Regulation		±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	
Load Regulation		±1%	±1%	±0.5%	±0.5%	±0.5%	
Setup, Rise Time		1000ms, 20ms/230VAC 1000ms, 20ms/115VAC at full load					
Hold Up Time		40ms/230VAC 8ms/115VAC at full load					
PROTECTION		Overload	115% ~ 160% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed				
		Over Voltage	3.8~4.46V	5.75~6.75	13.8~16.2	17.25~20.25V	27.6~32.4
		Protection Type: Shut off o/p voltage, clamping by zener diode					
ENVIRONMENT	Working Temperature	-30 ~ +70°C (Refer to "Derating Curve")					
	Working Humidity	20 ~ 90% RH non-condensing					
	Storage Temp.	-40°C to +85°C, 10~95% RH					
	Temp. Coefficient	±0.03%/°C (0~50°C)					
SAFETY & EMC	Vibration	10 ~ 500Hz, 5G 10min./1 cycle, period for 60 min. each long X, Y, Z axes					
	Safety Standards	UL60950-1, TUV EN60950-1 approved					
	Withstand Voltage	I/P-O/P:3KVAC					
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH					
	EMC Emission	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3,					
OTHERS	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level (surge L-N:1KV), criteria A					
	MTBF	970.3Khrs min. MIL-HDBK-217 (25°C)					
	Packaging	0.059Kg/240pcs/15.2Kg/0.97CUFT					

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 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

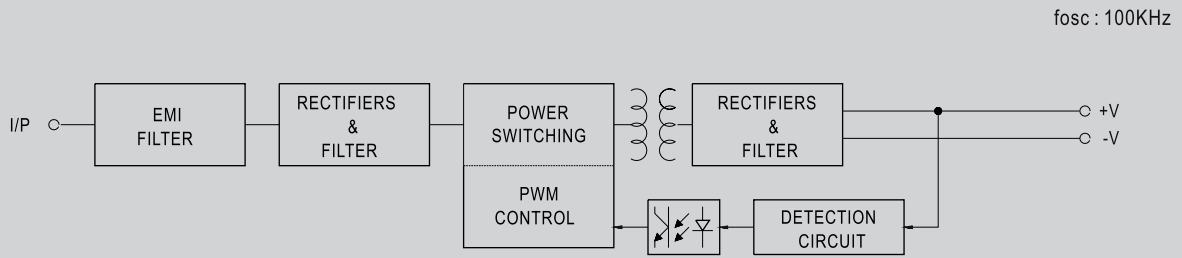
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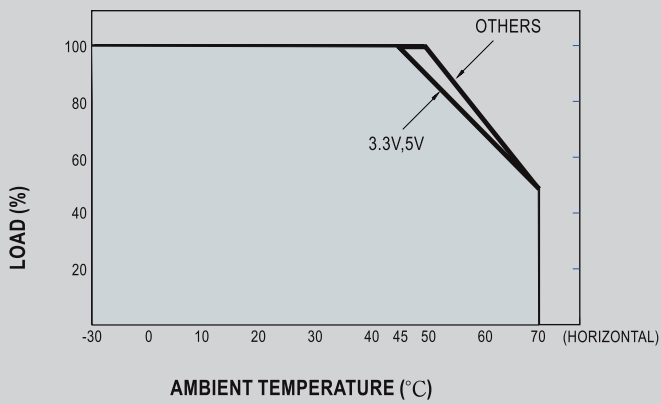
Mechanical Specification



Block Diagram



Derating Curve



Output Derating VS Input Voltage

