

FEATURES

1. AC input 180~264VAC
2. Protections: Short circuit / Overload / Over voltage / Over temperature
3. Built-in cooling Fan ON-OFF control
4. Withstand 300VAC surge input for 5 second
5. Forced air cooling by built-in DC fan
6. 100% full load burn-in test
7. LED indicator for power on
8. High reliability
9. 3 years warranty
10. Compliance to IEC/EN/UL 62368-1



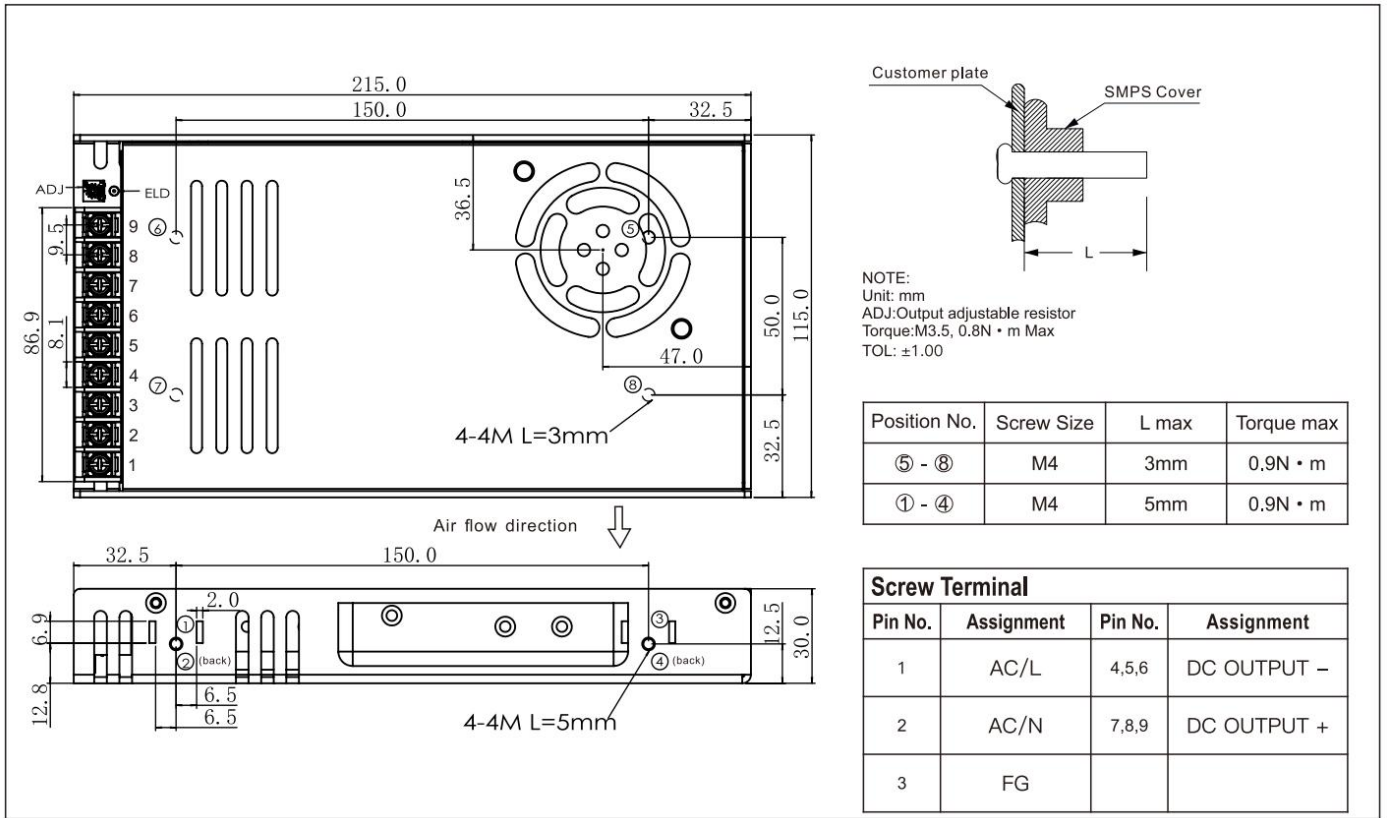
**3 years
Warranty**

Specification

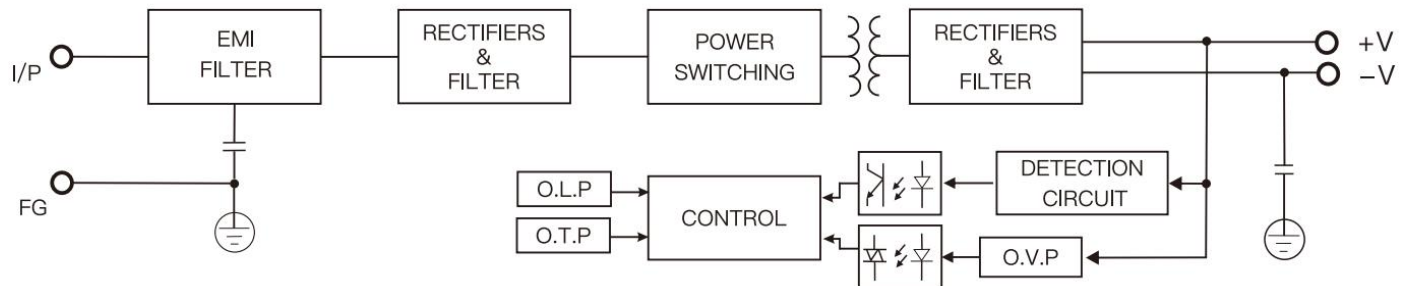
MODEL		RAM450-05	RAM450-6.5	RAM450-12	RAM450-15	RAM450-24	RAM450-36	RAM450-48
INPUT	VOLTAGE RANGE	180~264Vac 240~370Vdc (refer to 'static characteristic')						
	FREQUENCY RANGE	47~63Hz						
	EFFICIENCY(Typ.)	84%	85%	85%	86%	87%	87.5%	88%
	AC CURRENT(Typ.)	5A/230Vac						
	INRUSH CURRENT(Typ.)	65A/230Vac (cold start)						
	LEAKAGE CURRENT	<2mA/240Vac						
OUTPUT	DC VOLTAGE	5V	6.5V	12V	15V	24V	36V	48V
	RATED CURRENT	70A	60A	37.5A	30A	18.8A	12.5A	9.4A
	CURRENT RANGE	0~70A	0~60A	0~37.5A	0~30A	0~18.8A	0~12.5A	0~9.4A
	RATED POWER	350W	390W	450W	450W	451.2W	450W	451.2W
	RIPPLE&NOISE(max.)	150mVp-p	150mVp-	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4.5~5.5V	6~7.5V	10.2~13.8V	13.5~17.5V	21.6~28.5V	32.4~39.6V	43.2~52.8V
	VOLTAGE TOLERANCE	±3%	±2%	±1.5%	±1%	±1%	±1%	±1%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2%	±2%	±1%	±1%	±0.5%	±0.5%	±0.5%
	SETUP,RISE TIME	3000ms,50ms/230Vac						
	HOLD UP TIME(Typ.)	15ms/230Vac						
PROTECTION	OVER LOAD	105%~135% rated output power Protection type: 12V/15V/24V/36V/48V Constant current limiting, recovers automatically after fault condition is removed. 5V/6.5V Hiccup mode (recovers after re-power on) or shutdown						
	OVER VOLTAGE	5.75~6.75V	9.4~11.3V	13.8~17V	18.2~22.5V	28.8~33.6V	41.4~46.8V	55.2~64.8V

		Protection type:Hiccup mode,recovers automatically after fault condition is removed		
	OVER TEMPERATURE	Protection type:Hiccup mode,recovers automatically after fault condition is removed		
FUNCTION	FAN ON/OFF CONTROL(Typ.)	RTH \geq 50°C FAN ON, \leq 40°C FAN OFF		
ENVIRONMENT	WORKING TEMP,HUMIDITY	-30~+70°C(Refer to "Derating curve"),20~90%RH non-condensing		
	STORAGE TEMP,HUMIDITY	-40~+85°C,10~95%RH		
	TEMP.COEFFICIENT	\pm 0.03%/°C (0~50°C)		
	VIBRATION	10~500Hz,5G 10min./1 cycle,each along X、 Y、 Z axes		
Safety and electromagnetic compatibility	Safety standards	Refer to UL62368-1,TUV EN62368-1,CCC GB4943.1		
	Withstand voltage and isolation resistance	/P-O/P:3KVac;100M Ω /500Vdc	/25°C/70%RH	
		/P-FG:2KVac;100M Ω /500Vdc	/25°C/70%RH	
		O/P-FG:0.5KVac;100M Ω /500Vdc	/25°C/70%RH	
	Electromagnetic	Parameter	Standard	Test Level /Note
		Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15/CISPR22,GB9254.1	Class A
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15/CISPR22,GB9254.1	Class A
		Harmonic current	BS EN/EN61000-3-2,GB17625.1	Dos not meet
	Electromagnetic compatibility immunity	Voltage flicker	BS EN/EN61000-3-3	
		BS EN/EN55035		
		Parameter	Standard	Test Level /Note
		ESD	BS EN/EN61000-4-2	Level 4,8KV air,Level 2,4KV contact,criteria A
		RF field susceptibility	BS EN/EN61000-4-3	Level 3,criteria A
		EFT bursts	BS EN/EN61000-4-4	Level 3,criteriaA
		Surge susceptibility	BS EN/EN61000-4-5	Level 3,1KV/L-N,2KV/L/N-FG criteria A
Conducted susceptibility		BS EN/EN61000-4-6	Level 3,criteria A	
Magnetic field immunity		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 periods		
OTHERS	MTBF	\geq 300Khrs MIL-HDBK-217F(25°C)		
	DIMENSION	215*115*30mm(L*W*H)		
	PACKING	0.75Kg;15pcs/12.25Kg/0.77CUFT		
NOTE	<p>1.All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25°C of ambient temperature</p> <p>2.Ripple & noise are measured at 20MHz of bandwidth by using a 12"twisted pair-wire terminated with a 0.1uF&47uF parallel capacitor</p> <p>3.Tolerance:includes set up tolerance,line regulation and load regulation.</p> <p>4.Line regulation is measured from low line to high line at rated load.</p> <p>5.Load regulation is measured from 0% to 100% rated load</p> <p>6.Length of set up time is measured at cold first start,Turning ON/OFF the power supply very quickly may lead to increase of the set up time.</p> <p>7.The ambient temperature derating of 5°C/1000m is needed for operating altitude great than 2000m(6500ft)</p> <p>8.The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness.The final equipment must be re-confirmed that it still meets EMC directives</p>			

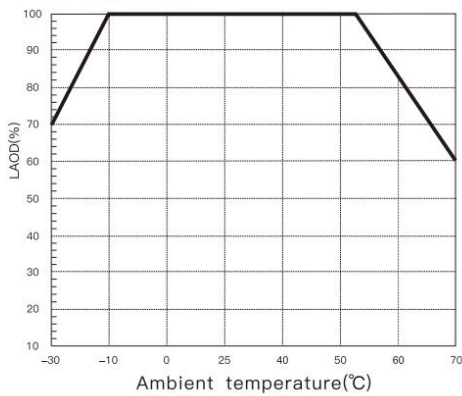
Mechanical specification



Block diagram



Derating curve



Static characteristics

