FEATURES

1. Universal AC input /Full range
2. Withstand 300VAC surge input for 5 second
3. No load power consumption <0.3W
4. Miniature size and 1U Low profile
5. High operating temperature up to 70℃
6. Protections:Short circuit /Over load /Over voltage
7. Cooling by free air convection
8. Refer to IEC/EN 60335-1(PD3)and IEC/EN61558-1,2,-16 For household appliances
9. Operating altitude up to 5000 meters
10. Withstand 5G vibration test
11. High efficiency,long life and high reliability
12. LED indicator for power on
13. Over voltage category ll
14. 100% full load burn-in test
15. 3 years warranty

RoHS CE 3 years Warranty

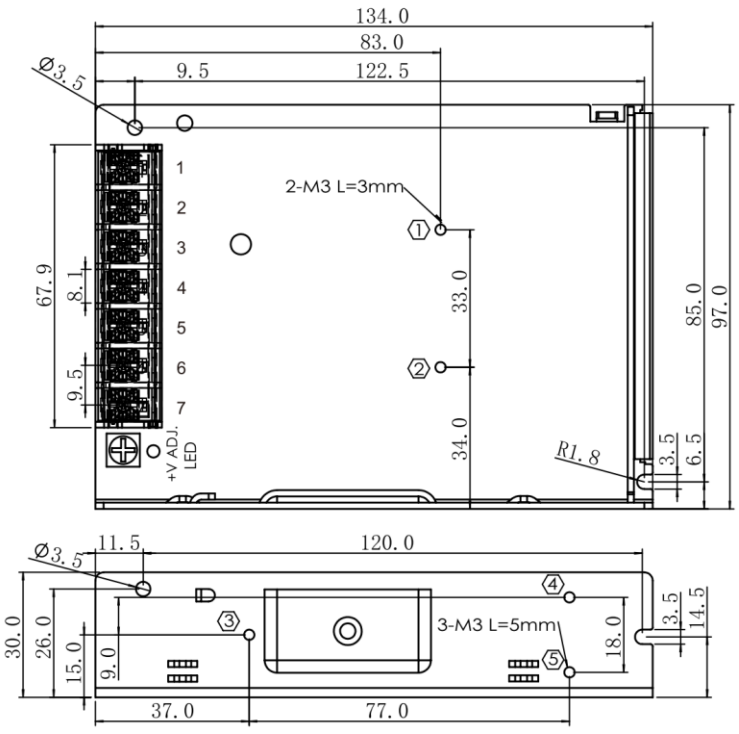
Specification

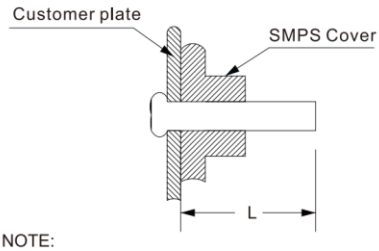
MODEL		RAM100-05	RAM100-12	RAM100-15	RAM100-24	RAM100-36	RAM100-48
INPUT	VOLTAGE RANGE	85～264Vac 120～370Vdc(refer to 'static characteristic")					
	FREQUENCY RANGE	47～63Hz					
	EFFICIENCY(Typ.)	85%	87.5%	88.5%	90%	90.5%	91%
	AC CURRENT(Typ.)	1.9A/115Vac 1.2A/230Vac					
	INRUSH CURRENT(Typ.)	50A/230Vac (cold start)					
	LEAKAGE CURRENT	<0.75mA/240Vac					
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	36V	48V
	RATED CURRENT	18A	8.5A	7A	4.5A	2.8A	2.3A
	CURRENT RANGE	0~18A	0~8.5A	0~7A	0～4.5A	0～2.8A	0~2.3A
	RATED POWER	90W	102W	105W	108W	100.8W	110.4W
	RIPPLE&NOISE(max.)	100mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ.RANGE	4.5～5.5V	10.2～13.8V	13.5～18V	21.6～28.8V	32.4～39.6V	43.2～52.8V
	VOLTAGE TOLERANCE	±2%	±1%	±1%	±1%	±1%	±1%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP,RISE TIME	500ms,30ms/230Vac 500ms,30ms/115Vac at full load					
	HOLD UP TIME(Typ.)	55ms/230Vac 10ms/115Vac at full load					
PROTECTION	OVER LOAD	110%～150% rated output power					
		Protection type:Hiccup mode,recovers automatically after fault condition is removed.					
	OVER VOLTAGE	5.75~6.75V	13.8~16.2V	18.8~21.8V	28.8~33.6V	41.4~48.6V	55.2~64.8V
		Protection type:Shutdown o/p voltage ,re-power on to recover					
ENVIRONMENT	WORKING TEMP	-30～+70°C(Refer to output load derating curve)					
	WORKING HUMIDITY	20～90%RH non-condensing					

	STORAGE TEMP/ HUMIDITY	-40～+85℃,10～95%RH non-condensing	
	TEMP.COEFFICIENT	±0.03%/℃(0～50℃)	
	VIBRATION	10~500Hz,5G 10min./1 cycle,period for 60 min.each along X、Y、Z axes	
	OVER VOLTAGE CATEGORY	Refer to UL61558;EN50178;EN60664-1,EN62477-1;altitude up to 2000 meters	
Safety standards	Refer to UL62368-1,TUV EN62368-1,CCC GB4943.1,IEC/EN 60335-1(PD3)and IEC/EN61558-1,-2,-16		
Withstand voltage and isolation resistance	I/P-O/P:4KVac;100MΩ/500Vdc/25℃/70%RH		
	I/P-FG:2KVac;100MΩ/500Vdc/25℃/70%RH		
	O/P-FG:1.25KVac;100MΩ/500Vdc/25℃/70%RH		
Electromagnetic compatibility emission	**Parameter**	**Standard**	**Test Level /Note**
	Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15/CISPR22 ,GB9254.1	Class B
	Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15/CISPR22,GB9254.1	Class B
	Harmonic current	BS EN/EN61000-3-2,GB17625.1	Class A
	Voltage flicker	BS EN/EN61000-3-3	-
Electromagnetic compatibility immunity	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.criteria A
	Surge susceptibility	BS EN/EN61000-4-5	Level 4,2KV/L-N,4KV/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
MTBF	≥700Khrs MIL-HDBK-217F(25℃)		
DIMENSION	134*97*30mm(L*W*H)		
PACKING	0.25Kg;36pcs/10Kg/0.97CUFT		

1.All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25℃ 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.Line regulation is measured from low line to high line at rated load
5.Load regulation is measured from 0%to 100%rated load
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
7.The ambient temperature derating of 5℃/1000m is needed for operating altitude great than 2000m(6500ft).
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

Mechanical specification





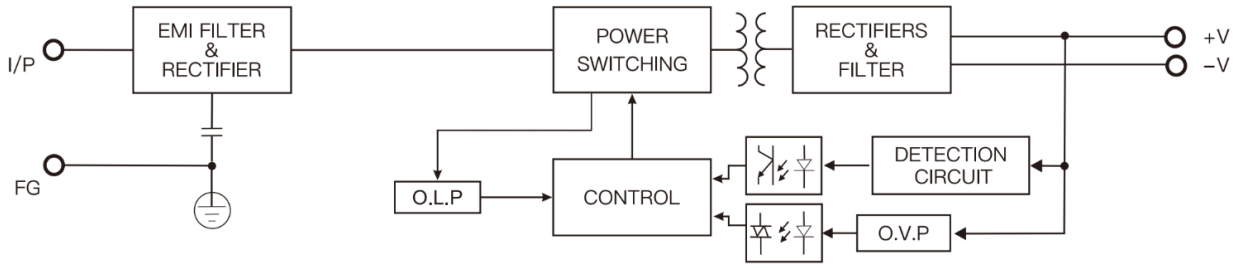
NOTE:
Unit: mm
ADJ:Output adjustable resistor
Torque:M3.5, 0.8N • m Max
TOL: ±1.00

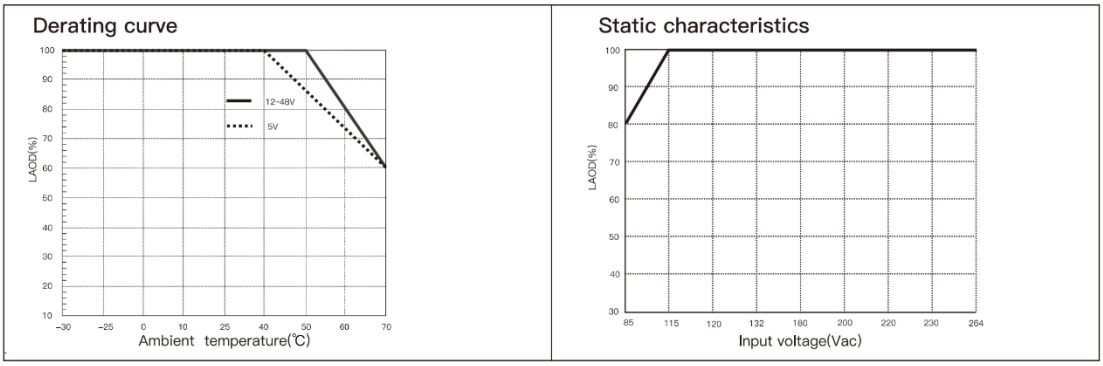
Position No.	Screw Size	L max	Torque max
1-2	M3	3mm	0.4N • m
3-5		5mm	

Screw Terminal

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT –
2	AC/N	6,7	DC OUTPUT +
3	FG		

Block diagram





NORPAS-POWER TECHNOLOGY CO., LTD.

www.norpas-power.com Mail: info@norpas-power.com

REV:07/2024