

### FEATURES

1. Universal AC input 90~264VAC
2. Protections: Short circuit /Overload /Over voltage Over temperature
3. Can be installed on DIN rail TS-35/7.5 or 15
4. The body width is only 30mm
5. Built-in constant current limit, strong start-up ability
6. 100%full load burn-in test
7. 3 years warranty
8. Compliance to IEC/EN/UL 62368-1, EN61558-1/-2-16



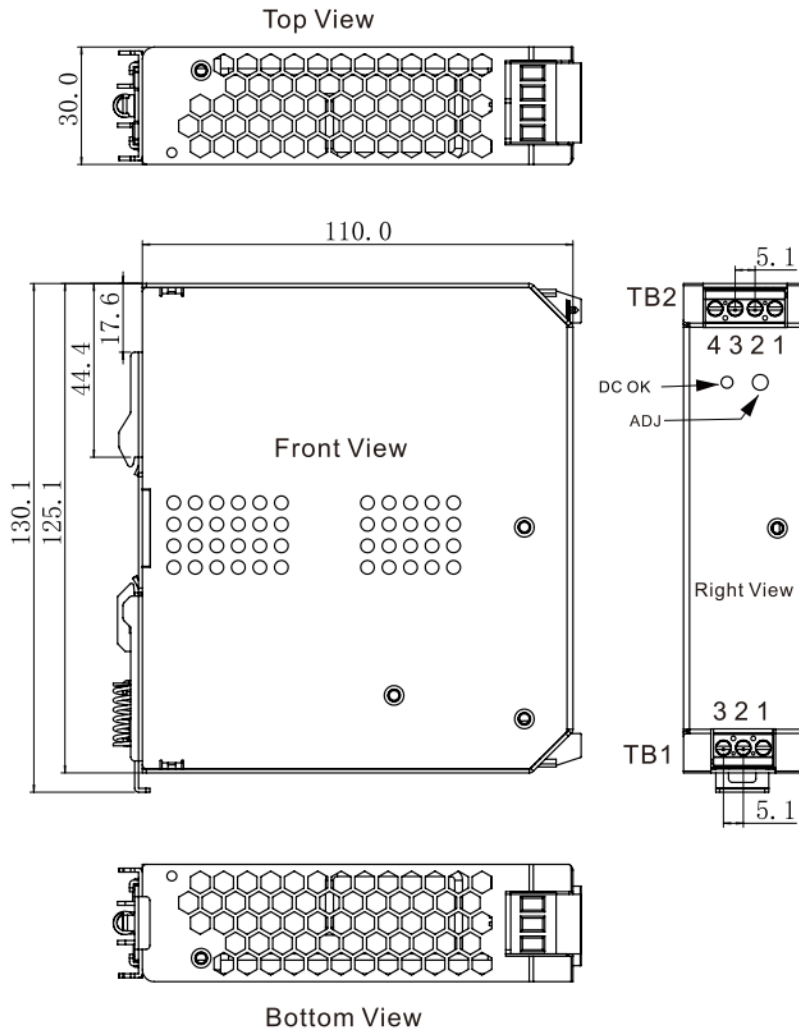
3 years  
Warranty

### Specification

MODEL		RAI150-12	RAI150-15	RAI150-24	RAI150-36	RAI150-48
INPUT	VOLTAGE RANGE	90~264VAC 127~370VDC(Refer to "Static characteristics")				
	FREQUENCY RANGE	47~63Hz				
	EFFICIENCY(Typ.)	86%	86%	89%	90%	91%
	AC CURRENT(Typ.)	2.8A/115VAC 1.6A/230VAC				
	INRUSH CURRENT(Typ.)	30A/115VAC 55A/230VAC (cold start)				
	LEAKAGE CURRENT	<1mA/240VAC				
OUTPUT	DC VOLTAGE	12V	15V	24V	36V	48V
	RATED CURRENT	11.2A	9A	6.3A	4.2A	3.2A
	CURRENT RANGE	0~11.2A	0~9A	0~6.3A	0~4.2A	0~3.2A
	RATED POWER	134.4W	135W	151.2W	151.2W	153.6W
	RIPPLE&NOISE(max.)	100mVp-p	100mVp-p	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE ADJ.RANGE	12~14V	15~17.5V	24~28V	36~42V	48~55V
	VOLTAGE TOLERANCE	±1.5%	±1.5%	±1%	±1%	±1%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.5%	±1.5%	±1%	±1%	±1%
	SETUP,RISE TIME	500ms,50ms/230VAC 500ms,50ms/115VAC				
	HOLD UP TIME(Typ.)	30ms/230VAC 7ms/115VAC				
PROTECTION	OVER LOAD	105%~135%rated output power Protection Mode:constant current limit (output voltage>50%Vo),When the output is less than 5V,the constant current value increases,recovers automatically after fault condition is removed				
	OVER VOLTAGE	15~18V	19~23V	29~33V	43~47V	56~65V
	OVER TEMPERATURE	Protection type:Shunt down,recovers after repower on; Automatic recovery products are customizable				
ENVIRONMENT	WORKING TEMP, HUMIDITY	-20~+70°C(Refer to "Derating curve"),20~90%RH non-condensing				
	STORAGE TEMP. HUMIDITY	-40~+85°C,10~95%RH				
	TEMP.COEFFICIENT	±0.03%/°C(0~50°C)				
	VIBRATION	10~500Hz,2G 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,EN61558-1,EN61558-2-16		
	Withstand voltage and isolation resistance	I/P-O/P:4.2KVac;100MΩ/500Vdc /25°C/70%RH		
		I/P-FG:2.1KVac;100MΩ /500Vdc/25°C/70%RH		
		O/P-FG:0.5KVac;100MΩ/500Vdc /25°C/70%RH		
	Electromagnetic compatibility emission	<b>Parameter</b>	<b>Standard</b>	<b>Test Level/Note</b>
		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(≤80%load)
		Voltage flicker	BS EN/EN61000-3-3	
	Electromagnetic compatibility immunity	BS EN/EN55035		
		<b>Parameter</b>	<b>Standard</b>	<b>Test Level /Note</b>
		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		
OTHERS	MTBF	≥400Khrs ML-HDBK-217F(25°C)		
	DIMENSION	30*125.1*110mm(W*H*D)		
	PACKING	0.54Kg;24pcs/14Kg/0.83CUFT		
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 &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 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 star, Turing 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 greater 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 union a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives.</p> <p>9. Installation clearances:40mm on top,20mm on the bottom,.5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat resource. 15mm clearances is recommended.</p>			

### Mechanical specification



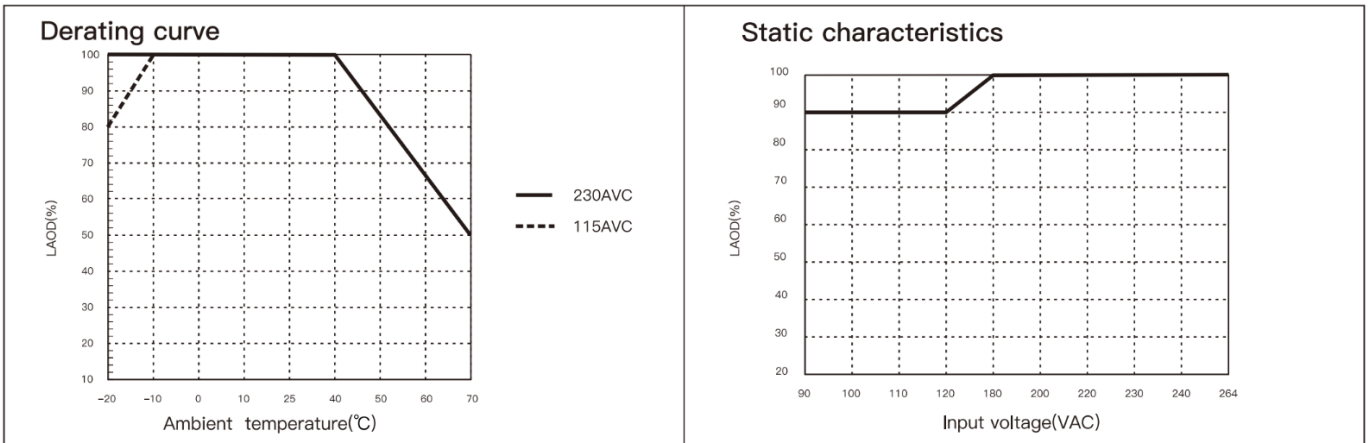
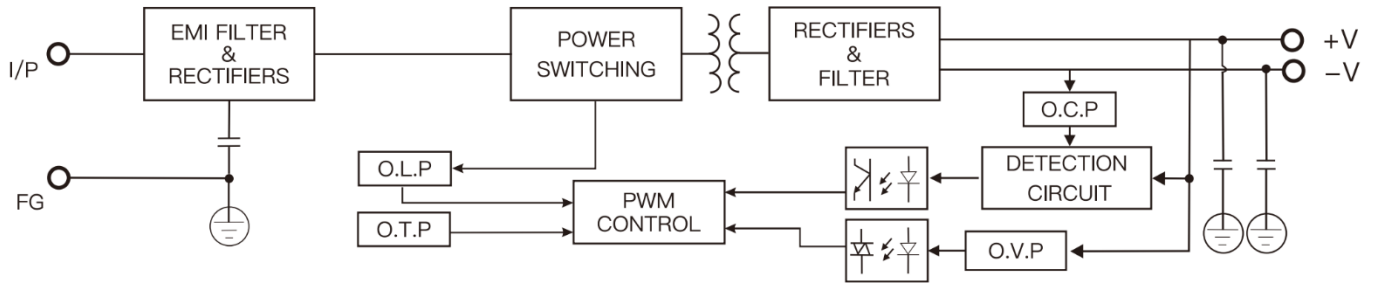
NOTE:  
Unit: mm  
ADJ: Output adjustable resistor  
TOL: ±1.00

ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

Terminal Pin No. Assignment

TB1		TB2	
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	1,2	DC output -V
2	AC/N	3,4	DC output +V
3	FG		

### Block diagram



### NORPAS-POWER TECHNOLOGY CO., LTD.

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Specifications can be changed without notice! Make sure you are using the latest documentation, downloadable at www.norpas-power.com

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