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. LED indicator for power on High reliability
8. 3 years warranty
9. Compliance to IEC/EN/UL 62368-1,EN61558-1/-2-16

RoHS CE 3 years Warranty

Specification

MODEL		RAI100-12	RAI100-15	RAI100-24	RAI100-36	RAI100-48
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.)	1.9A/115VAC 1.1A/230VAC				
	INRUSH CURRENT(Typ.)	55A/230VAC(cold start) 30A/115VAC				
	LEAKAGE CURRENT	<1mA/240VAC				
OUTPUT	DC VOLTAGE	12V	15V	24V	36V	48V
	RATED CURRENT	8A	6.6A	4.2A	2.8A	2.1A
	CURRENT RANGE	0~8A	0~6.6A	0~4.2A	0～2.8A	0~2.1A
	RATED POWER	96W	99W	100.8W	100.8W	100.8W
	RIPPLE&NOSE(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%	±1.59	±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
		Protection type:Shunt down,recovers after repower on				
	OVER TEMPERATURE	Protection type:Shunt down,recovers after repower on;Automatic recovery products are customizable				
ENVIRONIMENT	WORKING TEMP,HUMIDITY	-20~+70℃(Refer to "Derating curve"),20~90%RH non-condensing				
	STORAGE TEMP.HUMIDITY	-40~+85℃,10~95%RH				
	TEMP.COEFFICIENT	±0.03%/℃(0~50℃)				
	VIBRATON	10~500Hz,2G 10min./1 cyce,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℃/70%RH		
		I/P-FG:2.1KVac;100MΩ/500Vdc /25℃/70%RH		
		O/P-FG:0.5KVac;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 cwren	BS EN/EN61000-3-2,GB17625.1	Class A
		Voltage ficker	BS EN/EN61000-3-3	---
	Electromagneti 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
OTHERS	MTBF	≥400Khrs MIL-HDBK-217F(25℃)		
	DIMENSION	30*125.1*110mm(W*H*D)		
	PACKING	0.47Kg;24pcs/12.3Kg/0.83CUFT		

NOTE

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.

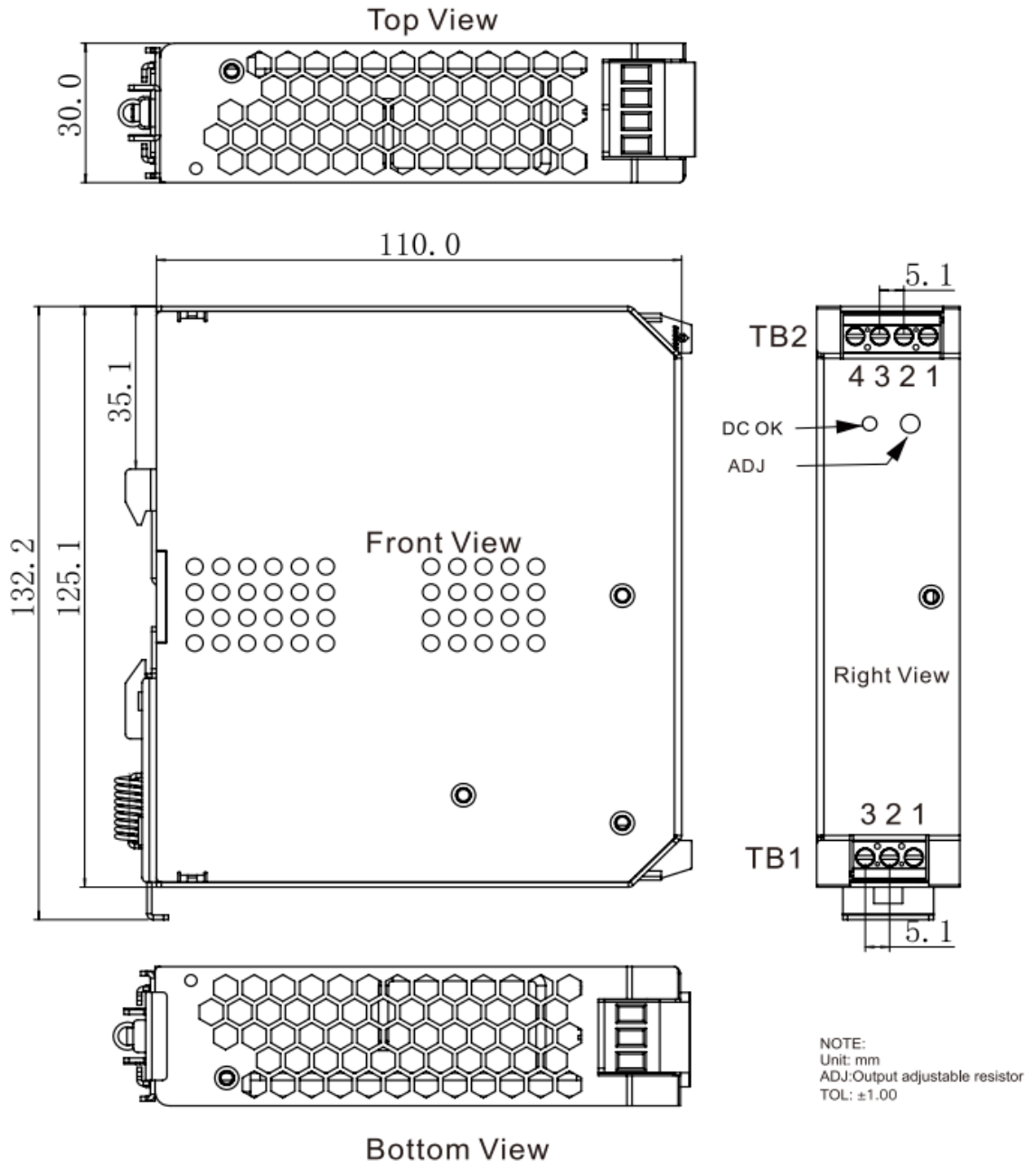
6. Length of set up time is measured at cold first star, Turing ON/OFF the power supply very quickly may lead to increase of the set up time

7. The ambient temperature derating of 5℃/1000m is needed for operating altitude greater 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 union a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives.

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.

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		

Mechanical specification