FEATURES

1. Universal AC input 90~264VAC
2. Built in active PFC function
3. High efficiency up to 95%, low leakage current<0.5mA/240VAC
4. Protections: Short circuit /Overload /Over voltage/Over temperature
5. Can be installed on DIN rail TS-35/7.5 or 15
6. The body width is only 30mm
7. 100% full load burn-in test
8. LED indicator for power on
9. Redundancy function(RAIF240-xx-R)
10. DC OK relay contact(RAIF240-xx-D)
11. High reliability
12. 3 years warranty
13. Compliance to IEC/EN/UL 62368-1

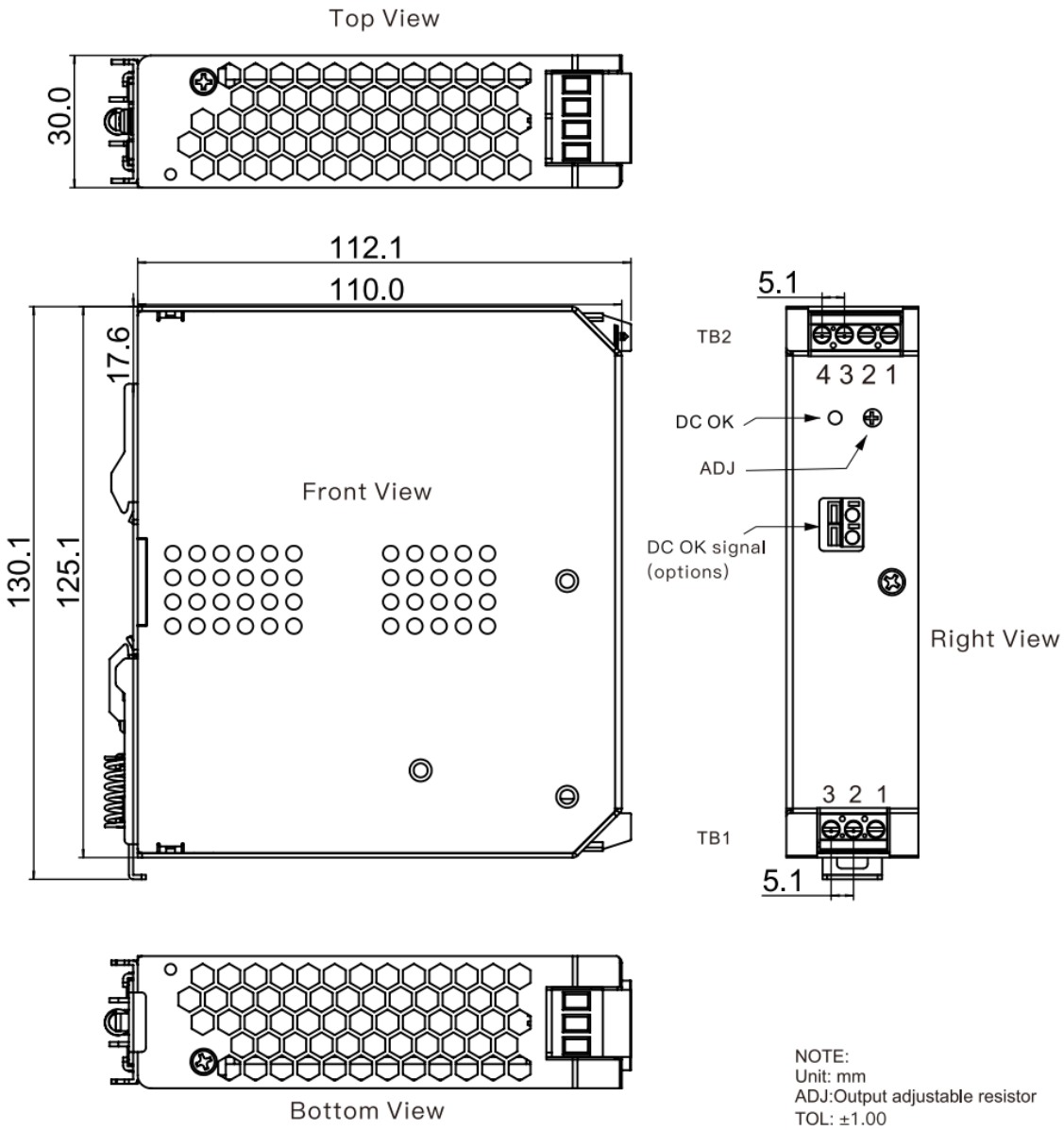
RoHS CE 3 years Warranty

Specification

MODEL		RAIF240-12	RAIF240-24	RAIF240-48
INPUT	VOLTAGE RANGE	90～264VAC(Refer to"Static characteristics")127～370VDC(Options)		
	FREQUENCY RANGE	47～63Hz		
	POWER FACTOR(Typ.)	PF>0.99/115VAC PF>0.95/230VAC Full-load		
	EFFICIENCY(Typ.)	93.5%	94.5%	95%
	AC CURRENT(Typ.)	3A/115VAC 1.5A/230VAC		
	INRUSH CURRENT(Typ.)	23A/115VAC 45A/230VAC (cold start)		
	LEAKAGE CURRENT	<0.5mA/240VAC		
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	16A	10A	5A
	CURRENT RANGE	0～16A	0～10A	0～5A
	RATED POWER	192W	240W	240W
	RIPPLE&NOISE(max.)	150mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ.RANGE	12～14V	24～28V	48～55V
	VOLTAGE TOLERANCE	±1%	±1%	±1%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2%	±1%	±1%
	SETUP,RISE TIME	500ms,50ms/230VAC 500ms,50ms/115VAC		
	HOLD UP TIME(Typ.)	14ms/230VAC 14ms/115VAC		
PROTECTION	OVER LOAD	130%~160% rated output power		
		Protection Mode:hiccup mode,recovers automatically after fault condition is removed		
	OVER VOLTAGE	15～18V	29～35V	56～65V
		Protection mode:Shut down,recovers after repower on		
	OVER TEMPERATURE	Protection mode:Shut down,recovers after temperature drop		
FUNCTION	DC OK SIGNAL (RAIF240-xx-D)	Contact specifications (max.):30VDC/1A Resistive load		
	REDUNDANCY (RAIF240-xx-R)	Protection for parallel redundancy use:In parallel redundancy applications,when one power supply experiences abnormal shutdown,the other power supply will automatically activate.This can prevent system crashes and increase system reliability		
ENVIRONMENT	WORKING TEMP., HUMIDITY	-30~+70°C(Refer to"Derating curve"),20～90%RH non-condensing		

	STORAGE TEMP.,HUMIDITY	-40~+85℃,10～95%RH		
	TEMP.COEFFICIENT	±0.03%/℃(0～50℃)		
	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		
	Withstand voltage and isolation resistance	I/P-O/P:3KVac;100MΩ /500Vdc /25℃/70%RH		
		I/P-FG:2KVac;100MΩ /500Vdc /25℃/70%RH		
		O/P-FG:0.5KVac;100MΩ/500Vdc /25℃/70%RH		
	Electromagnetic	**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 4,15KV air,Level 2,8KV contact,criteria A
		RF field susceptibility	BS EN/EN61000-4-3	Level 3,10V/m,criteria A
		EFT bursts	BS EN/EN61000-4-4	Level 3,2KV/5KHz,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 3,10V,criteria A
		Magnetic field immunity	BS EN/EN61000-4-8	Level 4,30A/m,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	≥300Khrs MIL-HDBK-217F(25℃)		
	DIMENSION	30*125.1*110mm(W*H*D)		
	PACKING	0.6Kg;24pcs/15.4Kg/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



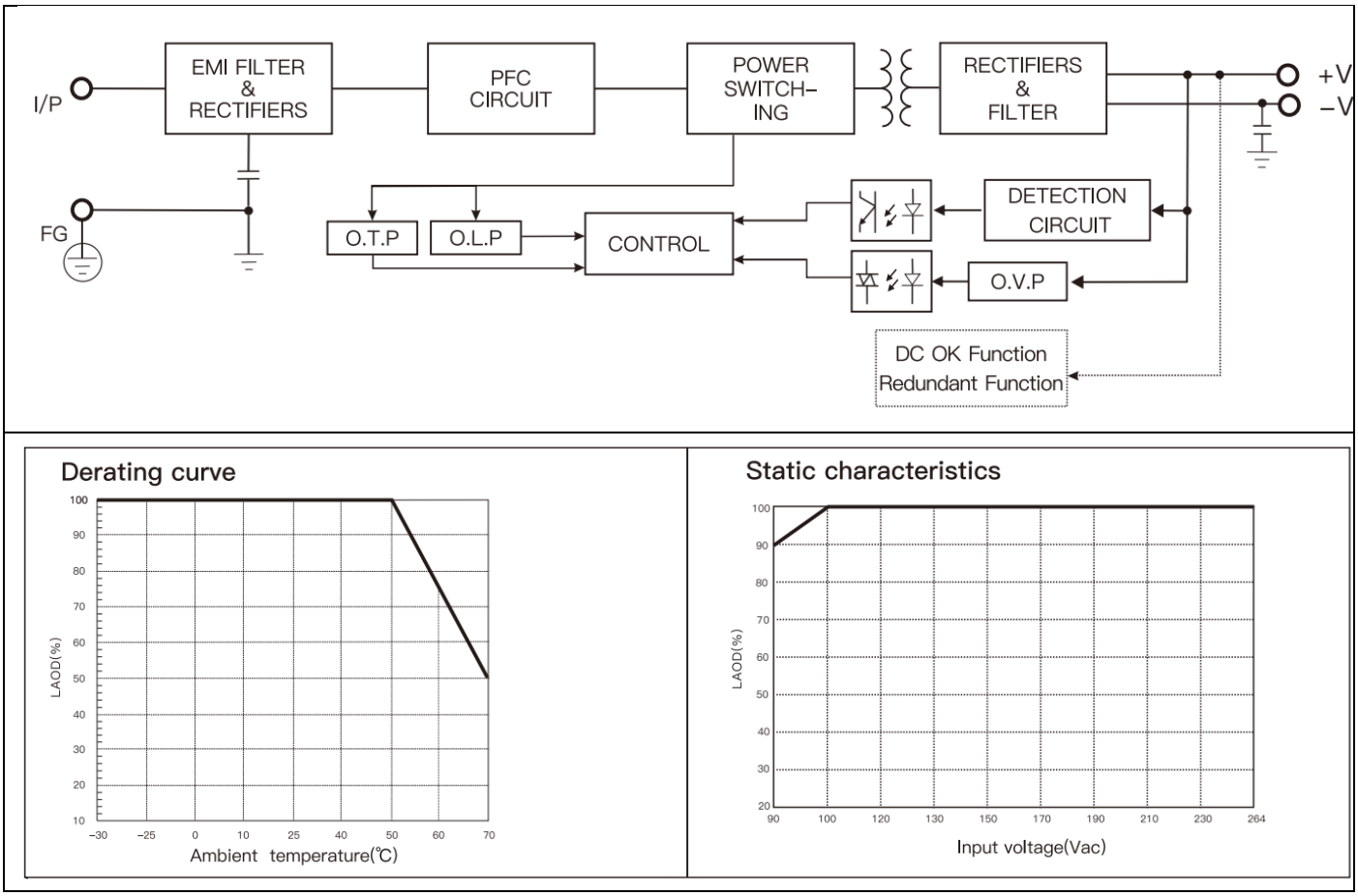
NOTE:
Unit: mm
ADJ:Output adjustable resistor
TOL: ±1.00

ADMISSIBLE DIN-RAIL:TS35/7.5 或 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

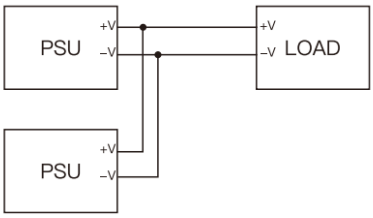


DC OK Relay Contact(Options)RAIF240-xx-D

Contact closure	Power on/DC ok
Contact open	Power off/DC fail
Contact specifications (max.)	30V/1A Resistive load

Redundancy function(Options)RAIF240-xx-R

1,Built in redundancy function, capable of parallel connection of 2 single machines
2,When running in parallel, the maximum load should not exceed the rated power of any one power source



RAIF240-xx-DR means have the function of DC OK relay and Redundancy function together.

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