Features

1. Universal AC input 90~264VAC
2. Built-in active PFC function
3. Protections: Short circuit / Overload / Over voltage /Over temperature
4. Can be installed on DIN rail TS-35/7.5 or 15
5. The body width is only 50mm
6. 100% full load burn-in test
7. LED indicator for power on
8. Built-in DC OK relay contact(RAIF500-xx-D)
9. Redundant function(RAIF500-xx-R)
10. High efficiency/High reliability
11. 3 years warranty
12. Compliance to IEC/EN/UL 62368-1

RoHS CE 3 years Warranty

Specification

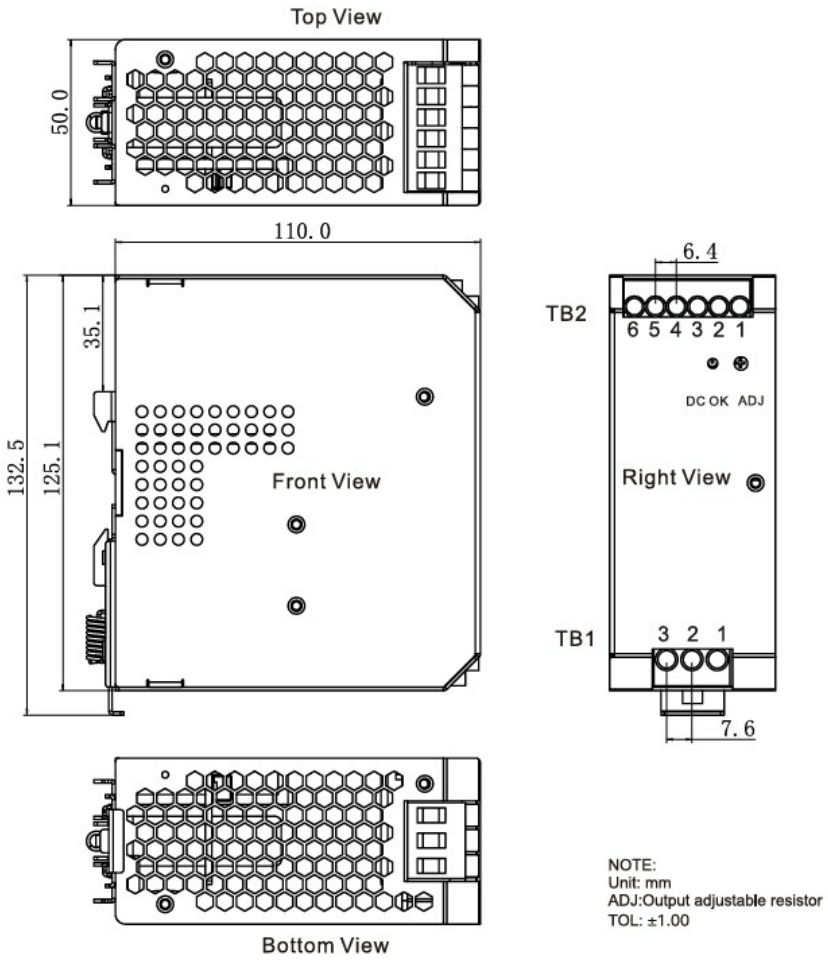
MODEL		RAIF500-12	RAIF500-24	RAIF500-48
INPUT	VOLTAGE RANGE	90～264VAC 127～370VDC(refer to 'static characteristic')		
	FREQUENCY RANGE	47~63Hz		
	POWER FACTOR(Typ.)	PF>0.98/115VAC PF>0.95/230VAC at full load		
	EFFICIENCY(Typ.)	91.5%	93.5%	94%
	AC CURRENT(Typ.)	5A/115VAC 3.2A/230VAC		
	INRUSH CURRENT(Typ.)	20A/115VAC 40A/230VAC (cold start)		
	LEAKAGE CURRENT	<2mA/240VAC		
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	30A	20.8A	10.4A
	CURRENT RANGE	0~30A	0~20.8A	0~10.4A
	RATED POWER	360W	499.2W	499.2W
	RIPPLE&NOSE(max)	100mVp-p	150mVp-p	250mVp-p
	VOLTAGE ADU.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	1500ms,50ms/230VAC 3000ms,50ms/115VAC		
	HOLD UP TIME(Typ.)	14ms/230VAC 14ms/115VAC		
PROTECTION	OVER LOAD	110%~140%rated output power		
		Protection type:>0.2s,Shutdown,recovers automatically after repower on		
	OVER VOLTAGE	15~18V	29～35V	56～65V
		Protection type:Shunt down,recovers after repower on		
	OVER TEMPERATURE	Protection type:Shunt down,recovers after temperature goes down		
FUNCTION	DO OK SIGNAL (RAIF500-xx-D)	Contact rating(max.):30VDC/1A resistive load		
	REDUNDANT(RAIF500-xx-R)	For paralel connection protection:For paralel applications,when one PSU cannot work,the another onewill be automatically enabled.This can prevent the system crash,and provide the reliabilty of system		
ENVIRONIMENT	WORKING TEMP,HUMDTY	-30~+60°C(Refer to "Derating curve"),20~90%RH non-condensing		
	STORAGE TEMP.HUMDITY	-40~+85°C,10~95%RH		
	TEMP.COEFFICIENT	±0.03%/°C(0~50°C)		
	VIBRATON	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.	Class B
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15/CISPR22 ,GB9254.	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 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	170Khrs ML-HDBK-217F(25℃)		
	DIMENSION	50*125.1*110mm(W*H*D)		
	PACKING	0.9Kg;12pcs/11.8Kg/0.9CUFT		

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.

Mechnical Specification

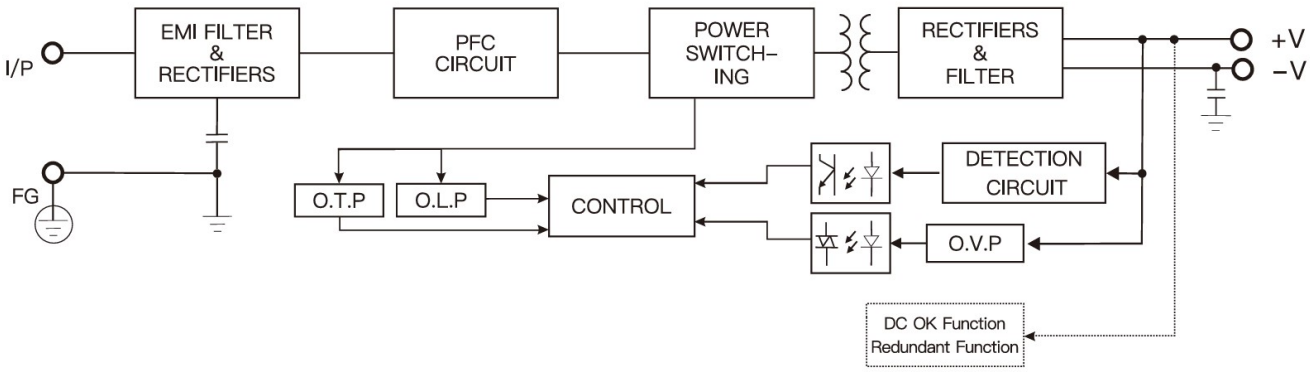


NOTE:
Unit: mm
ADJ:Output adjustable resistor
TOL: ±1.00

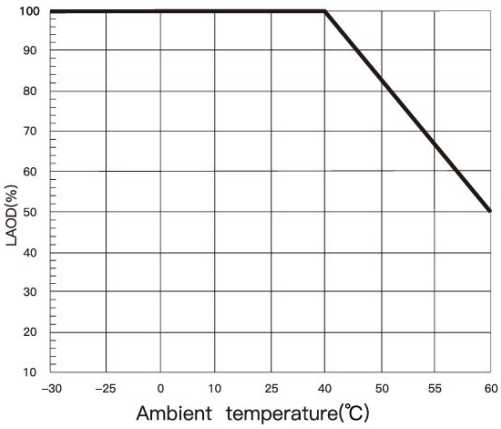
ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15
Terminal Pin No. Assignment

TB1		TB2	
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	1,2	Relay contact(Optional)
2	AC/N	3,4	DC output –V
3	FG	5,6	DC output +V

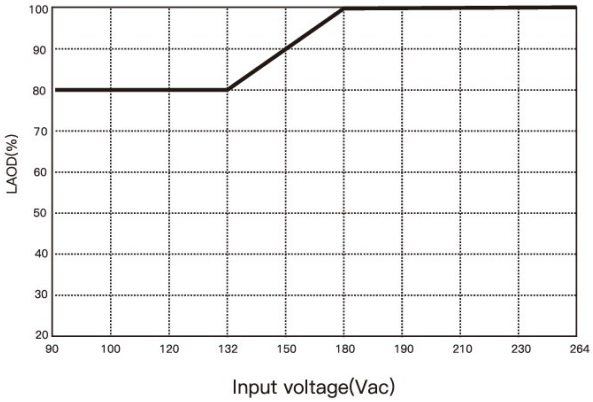
Block Diagram



Derating curve



Static characteristics

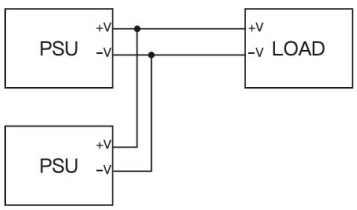


DC OK Relay Contact(Options)RAIF500-xx-D

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

Redundant function(RAIF500-xx-R)

(1) RAIF500-xx-R is built-in redundant function and can be connected 2 units in parallel.
(2) When in parallel operation the maximum load should not be greater than the rated power of any PSU.



RAIF500-xx-DR means have the function of DC OK relay and Redundancy function together.

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