

### FEATURES

1. Universal AC input 85~264VAC
2. Protections: Short circuit /Overload /Over voltage
3. Can be installed on DIN rail TS-35/7.5 or 15
4. The body width is only 35mm
5. Isolation class II
6. LED indicator for power on
7. High reliability
8. 3 years warranty
9. Compliance to IEC/EN/UL 62368-1



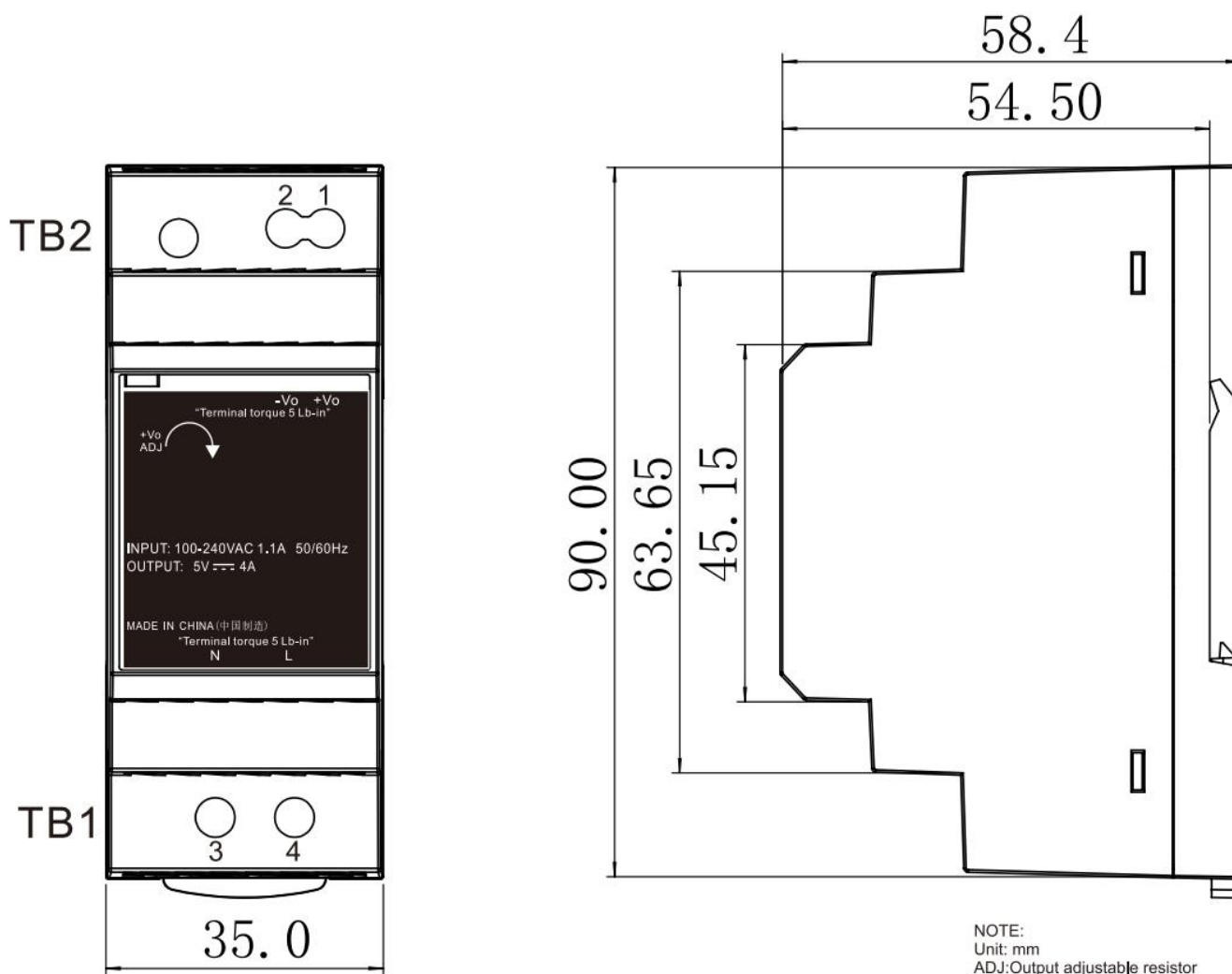
3 years  
Warranty

### Specification

MODEL		RAI45-05-PR2	RAI45-12-PR2	RAI45-15-PR2	RAI45-48-PR2
INPUT	VOLTAGE RANGE	85~264VAC 120-370VDC(Refer to "Static characteristics")			
	FREQUENCY RANGE	47~63Hz			
	EFFICIENCY(Typ.)	82%	88%	90%	91%
	AC CURRENT(Typ.)	1.1A/115VAC 0.6A/230VAC			
	INRUSH CURRENT(Typ.)	25A/115VAC 45A/230VAC (cold start)			
OUTPUT	DC VOLTAGE	5V	12V	24V	48V
	RATED CURRENT	4A	2.5A	1.87A	0.94A
	CURRENT RANGE	0~4A	0~2.5A	0~1.87A	0~0.94A
	RATED POWER	20W	30W	44.88W	45.12W
	RIPPLE& NOISE(max)	80mVp-p	100mVp-p	100mVp-p	100mVp-p
	VOLTAGE ADJ.RANGE	5~5.5V	10.8~13.8V	21.6~28.8V	43.2~57.6V
	VOLTAGE TOLERANCE	±2%	±1%	±1%	±1%
	LINE REGULATION	±1%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2%	±1%	±1%	±1%
	SETUP,RISE TIME	500ms,50ms/230VAC 500ms,50ms/115VAC			
	HOLD UP TIME(Typ.)	30ms/230VAC 7ms/115VAC			
PROTECTION	OVER LOAD	105%~160%rated output power			
		Protection type:hiccup mode,recovers automatically after fault condition removed			
	OVER VOLTAGE	6.2~8V	15~18V	30~36V	60~66V
		Protection type:Shunt down,recovers after repower on			
ENVIRONMENT	WORKING TEMP, HUMIDITY	-40~+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			

<b>Safety and electromagnetic compatibility</b>	Safety standards	Refer to UL62368-1,TUV EN62368-1,CCC GB4943.1			
	Withstand voltage and isolation resistance	I/P-O/P:4KVac;100M $\Omega$ /500Vdc/25°C/70%RH			
		<b>Parameter</b>	<b>Standard</b>	<b>Test Level/Note</b>	
	Electromagnetic compatibility emission	Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15/CIS-PR22 ,GB9254.		Class B
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15/CIS-PR22 ,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			
			<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 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		
<b>OTHERS</b>	MTBF	$\geq$ 1000Khrs MIL-HDBK-217F(25°C)			
	DIMENSION	35*90*54.5mm(W*H*D)			
	PACKING	0.15Kg;84pcs/13.6Kg/1.1CUFT			
<b>NOTE</b>	<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. 5.Load regulation is measured from 0%to 100%rated load</p> <p>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.</p> <p>7.The ambient temperature derating of 5°C/1000m is needed for operating altitude great 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 unit on 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 source,15mm clearance is recommended.</p>				

### Mechanical specification

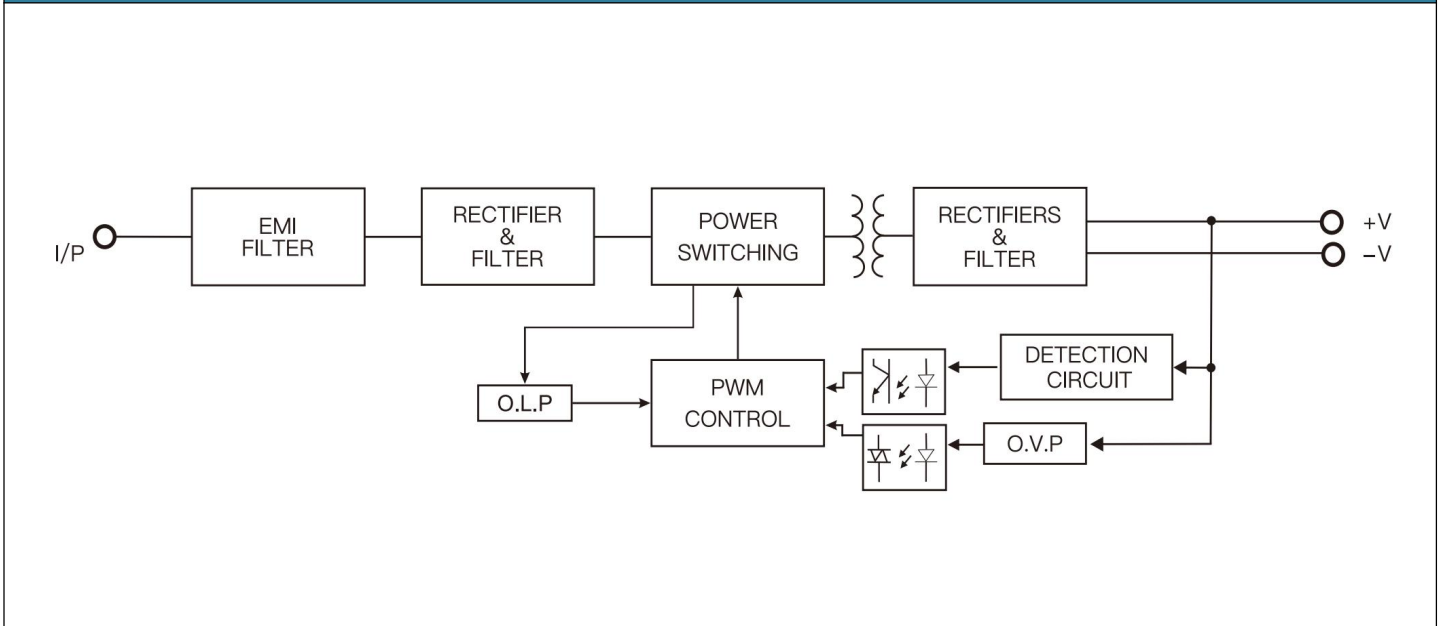


ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15  
Terminal Pin No. Assignment

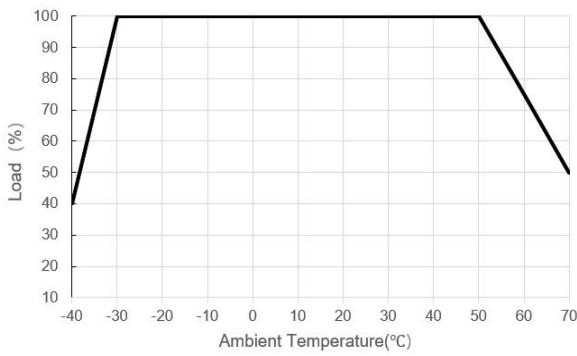
NOTE:  
Unit: mm  
ADJ: Output adjustable resistor  
TOL: ±1.00

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

### Block diagram



Derating curve



Static characteristics

