

SPECIFICATION & USER'S GUIDE

(LED Power Supply, LED driver, Switching Power Supply)

Thank you for using our power supply, please read the below information carefully before using this power supply!

PICTURE

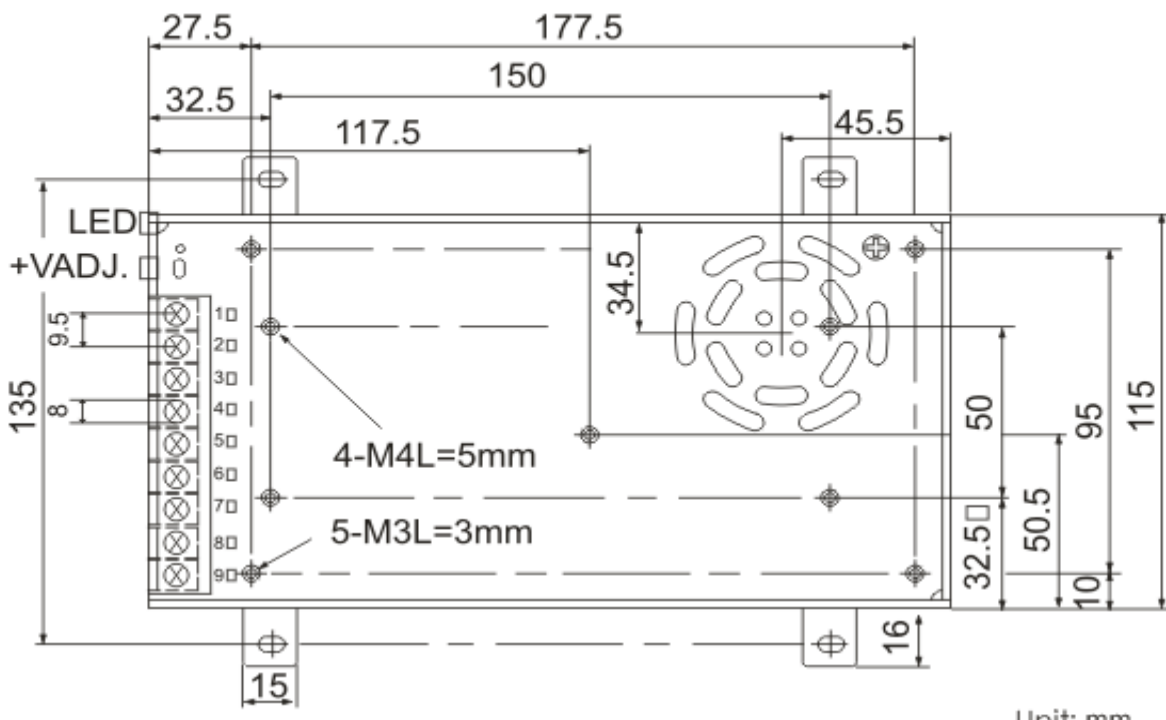
MODEL: RYD-360-12



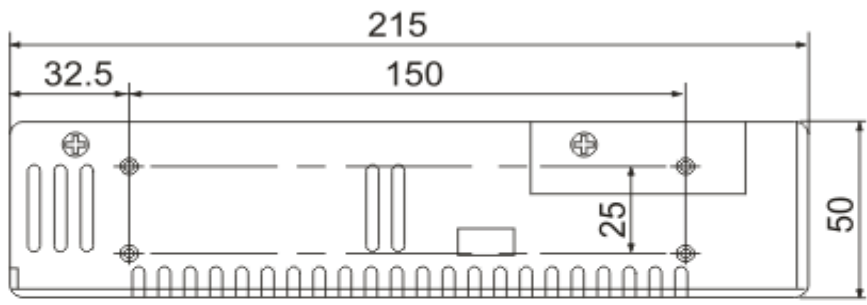
Features:

1. Designed for 100% full loading
2. Universal AC input; Smooth-start
3. High transfer efficiency
4. Over-load, short-circuit protection
5. Compact size
6. 100% full-load burn-in tested

Model		R Φ -360-12	R Φ -360-24
Output	DC voltage	12V	24V
	Voltage tolerance	$\pm 1\%$	$\pm 1\%$
	Rated current	30A	15A
	Current range	0~30A	0~15A
	Rated power	360W	360W
	Ripple&noise	150mvp-p	180mvp-p
	DC voltage ADJ.range	$\pm 10\%$	$\pm 10\%$
Input	Voltage range	90~132VAC/170~264VAC(selected by switch), 235~373VDC	
	frequency	47~63HZ	
	AC current	6.5A/115V 4A/230VAC	
	Efficiency	83%	85%
	Inrush current	Cold start current 25A/115V 50A/230VAC	
	Leakage current	<3.5mA/240VAC	
Protection	overload	Rated output power 115%~135% start over load protection	
		protection type: hiccup mode, auto-recovery after fault condition is removed	
Environment	Working temp,humidity	-10 $^{\circ}$ C~+60 $^{\circ}$ C,20%~90%RH	
	Storage temp, humidity	-20 $^{\circ}$ C~+85 $^{\circ}$ C,10%~95%RH non-condensing	
	Withstand vibration	10~500HZ,2G 10min/1cycle,period for 60 minutes, each axes	
Safety	Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
	Isolated resistance	I/P-O/P,I/P-FG,O/P-FG:100M ohms/500VDC	
Safety & EMC	Safety standard	refer to UL1012	
	EMC standard	refer to EN55022, CLASS B	
Others	Dimension	215*115*50mm (L*W*H)	
Note	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 $^{\circ}$ C 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.		

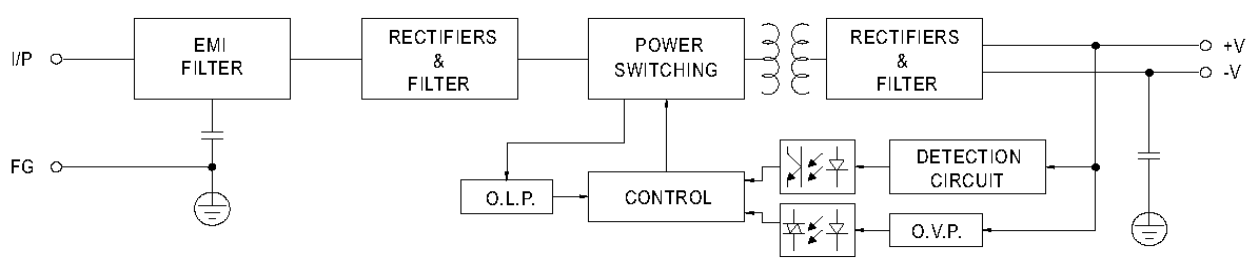


Unit: mm



Pin Distribution

Pin No.	Distribution	Pin No.	Distribution
9	AC/L	4~6	DC OUTPUT -V
8	AC/N	1~3	DC OUTPUT +V
7	FG		



I. About this LED power supply (LED driver, switching power supply)

This LED power supply is mainly consisted of five parts:

- 1) Electromagnetic Interference network
- 2) Rectifier filter
- 3) Built-in Pulse Width Modulation unit
- 4) Switch for energy transform
- 5) Low ESR Pulse Width Modulation output devices

Our high efficiency LED power supply provides you stable power output with stable current, 100% burn-in tested, and interference of fluctuation from input current which is benefit for the life span of LED appliances.

II. Product Features

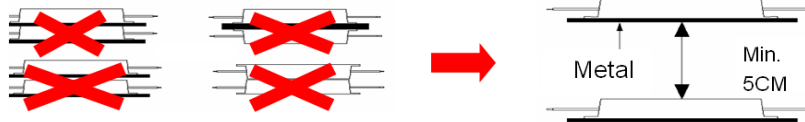
- 1) Over-load / over-current / short circuit protection
- 2) Able to work under 100% full loading continuously
- 3) Comply with international power consumption standard of *stand by* status
- 4) Input electric current suger resisting (5 seconds under 300VAC input)
- 5) Choose 105℃ electrolytic capacitor,suitable for tough work condition
- 6) High working efficiency, energy saving
- 7) Compact size and easy installation
- 8) Waterproof types are suitable for outdoor use, waterproof rate: IP67

III. Installation and working environments

- 1) The input voltage must fall into 170~250VAC (some models are able to work under 100~250VAC input) 50/60HZ
- 2) Do not overload, also avoid free of load while a power supply is powered on, keep proper loading
- 3) Always keep good ventilation as below indicated



- 4) NO wood or flammable surface mounting, keep min. 5CM for power supplies each other



- 5) Keep away from inflammable or explosive environments

IV. Wire Connection

Waterproof types:

AC Input: yellow/green lead is for grounding, rest leads are for electricity

DC Output: Red (brown) positive +, black (blue) negative -

Non-waterproof types:

Make sure wires are well connected, most of our models have multi-outlets, we recommend the following loading order: negative – positive- negative- positive- negative....etc. Please always keep balanced loading.

Cautions for Connecting Leads and Loading

- 1) The power supply will be automatically protected and enter the abnormal state of intermittent connection if the load power exceeds the maximal rated output power (normally 5~20% exceeds).
- 2) **For models have multi-outlets, never connect all loading with single outlet, please keep balanced loading. If connecting with only single outlet is necessary, please connect all positive output leads together to provide electricity fully, also negative leads.**
- 3) Please be well noticed that too long connecting leads will cause to line loss. So please avoid too long extension with output leads.
- 4) Input/output lead's surface listed its diameter and industrial standard, please choose proper extension leads accordingly. In view of the line loss, the longer extension, the

- stronger leads is needed.
- 5) This power supply can be connected with plugs, but please make it well connected and insulated.

The installation and wire connection of this power supply should be conducted by qualified technicians!

LED POWER SUPPLY Trouble-shooting Tips

There is a protection circuit in the Power Supply that will cut off (trip) the power whenever an short circuit or overload condition occurs, please make sure correct connection of positive and negative terminals(+, -) before power on.

1. Power Supply does not work:

- 1) Check the input power voltage.
- 2) Check power on/off status.
- 3) Check if there's short-circuit on output line.
- 4) Check if wrong positive and negative terminal connection.
- 5) Check if the output indication light is lighting (for the models which have this function).
- 6) Check if the fuse well connected (for the non-sealed models).

2. Over-heated of the Power Supply:

- 1) Keep good ventilation.
- 2) Check the loading status, avoid over loading.

3. Unsteady power output:

- 1) Check if there's over-loading or improper output extension leads connected.
- 2) Check if there's strong interference in the working environment.
- 3) Check if there's magnetic field around the working environment.

4. LED light works dark (weak light, LED not bright enough)

- 1) Please check if the output voltage is good for your requiremnt(5V/12V/24V...etc.).
- 2) Choose proper wires in aspects of wire's diameter and voltage capacity.
- 3) Check if there's over-load or too long extension leads been used.

V. Working environment:

Outdoor types: -25°C~+45°C, Relative Humidity: 100%

Indoor type: -25°C~+45°C, Relative Humidity: under 90%

Storage environment: -25°C~+80°C, Relative Humidity: under 95%