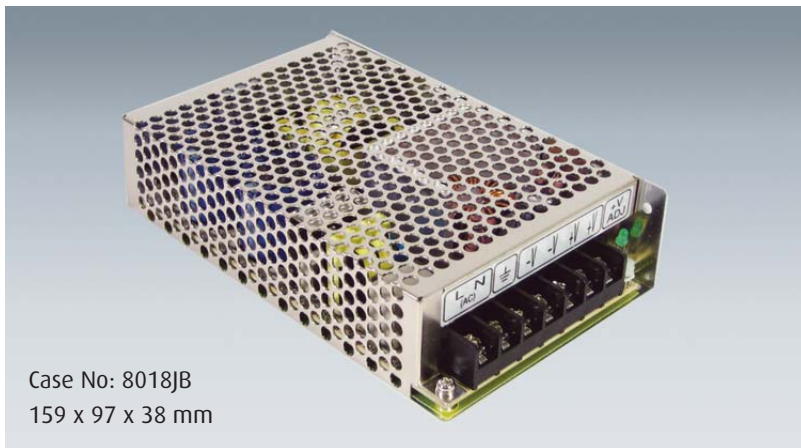


# RD-85 Series

## 85W Dual Output Switching Power Supplies



Case No: 8018JB  
159 x 97 x 38 mm

### Features

- Universal AC input / Full range
- Protections: Short circuit/Overload/Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105°C long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70°C
- Withstand 5G vibration test
- High efficiency, long life and high reliability



### Specification

<b>INPUT</b>	<b>Voltage</b>	88V ~ 264VAC universal full range or 125V ~ 373VDC			
	<b>Frequency</b>	47 ----- 63 Hz			
	<b>Current</b>	<2.5A@115VAC 1.5A@230VAC input, full load condition			
	<b>Inrush Current</b>	<40A@230VAC input, Cold start at 25°C ambient			
	<b>Leakage Current</b>	<2.0mA@240VAC input			
<b>OUTPUT</b>	<b>MODEL No.</b>	<b>RD-85A</b>		<b>RD-85B</b>	
	<b>Channel</b>	CH1	CH2	CH1	CH2
	<b>Voltage</b>	5V	12V	5V	24V
	<b>Rated Current</b>	8A	4A	8A	2A
	<b>Current Range</b>	2~10A	0.3~5A	2~10A	0.3~2.5A
	<b>Voltage Adj. Range</b>	CH1: 4.75~5.5V		CH1: 4.75~5.5V	
	<b>Output Tolerance</b>	± 2%	± 5%	± 2%	± 5%
	<b>Line Regulation</b>	± 0.5%	± 1%	± 0.5%	± 1%
	<b>Load Regulation</b>	± 1%	± 3%	± 1%	± 3%
	<b>Ripple Noise MAX.</b>	80mV	120mV	80mV	120mV
	<b>Efficiency (TYP.)</b>	78%		80%	
	<b>Power</b>	88W		88W	
	<b>PROTECTION</b>	<b>Over Voltage</b>	CH1: 4.75~5.5V Hiccup mode, recovers automatically after fault condition is removed		
<b>Over Load</b>		When the power supply is over 110%~ 150% max load or short circuited it will go into hiccup mode and recover automatically after the fault is removed			
<b>ELEC. CHAR.</b>	<b>Rise Time</b>	<20mS@230VAC, 30ms@115VAC at full load			
	<b>Hold up Time</b>	>100mS@230V, 18ms@115VAC at full load			
	<b>Setup Time</b>	<0.5 Sec@230VAC, 1.2mS@115VAC			
<b>ENVIRONMENT</b>	<b>Temperature</b>	Operating: -25 ~ +70°C ; Storage: -40~ +85°C			
	<b>Humidity</b>	Operating: 20% ~ 90% RH; Storage: 10% ~ 95% RH (non condensing)			
<b>SAFETY</b>	<b>Withstand Voltage</b>	I/P-O/P:3KVAC, I/P-FG:1.5KVAC, O/P-FG:0.5KVAC, 1minute			
	<b>Isolation Resistance</b>	I/P-O/P, I/P-FG, O/P-FG 100MΩ/500VDC			
	<b>Safety Standard</b>	UL60950-1, TUV EN60950-1 Approved			
<b>EMC</b>	<b>EMI</b>	Compliance to EN55022, EN61000-3-2,3			
	<b>EMS</b>	EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 (EN50082-2)			
<b>OTHERS</b>	<b>Cooling</b>	Natural cooling			
	<b>M.T.B.F.</b>	239.4Khrs min. MIL-HDBK-217F (25°C )			
	<b>Packing</b>	0.6Kg; 24pcs/15.4Kg/0.7 CUFT			

1 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°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.

4 Line regulation is measured from low line to high line at rated load.

5 Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load.

6 Each output can work within current range. But total output power can't exceed rated output power.

7 The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC

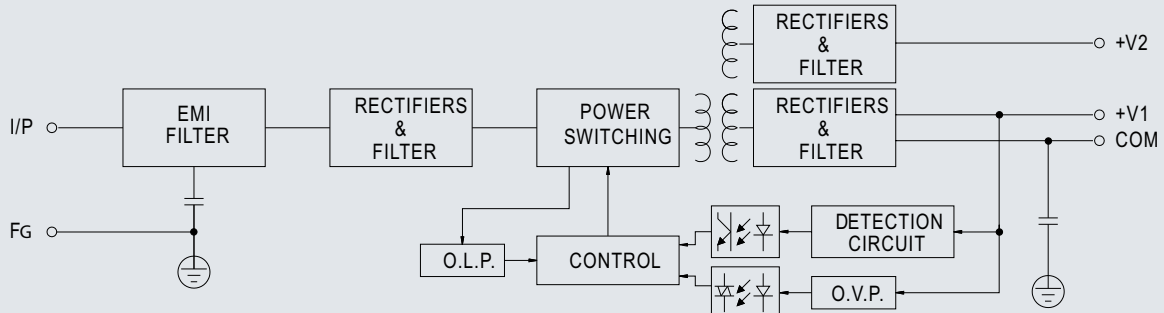
8 Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.

# RD-85 Series

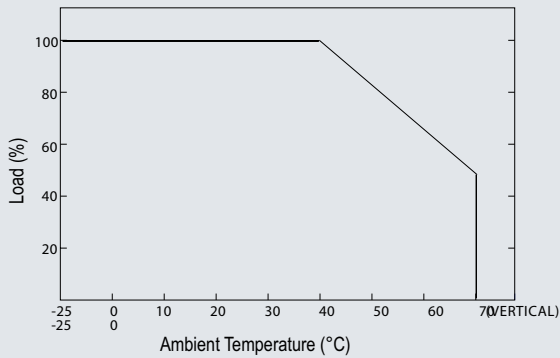
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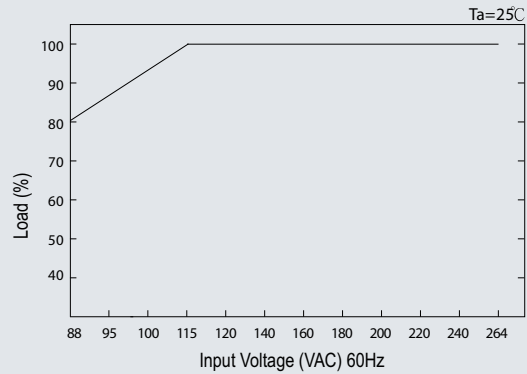
## Block Diagram



## De-Rating Curve



## Static Characteristics



## Dimensions

Terminal Pin. No Assignment:

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG
4	DC OUTPUT COM
5	DC OUTPUT +V2
6	DC OUTPUT +V1

