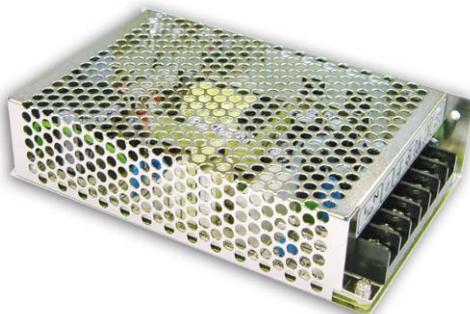




## 85W Dual Output Switching Power Supply

## RID-85 series



## ■ Features :

- Isolated output & GND for CH1,CH2
- 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
- 3 years warranty

User's Manual



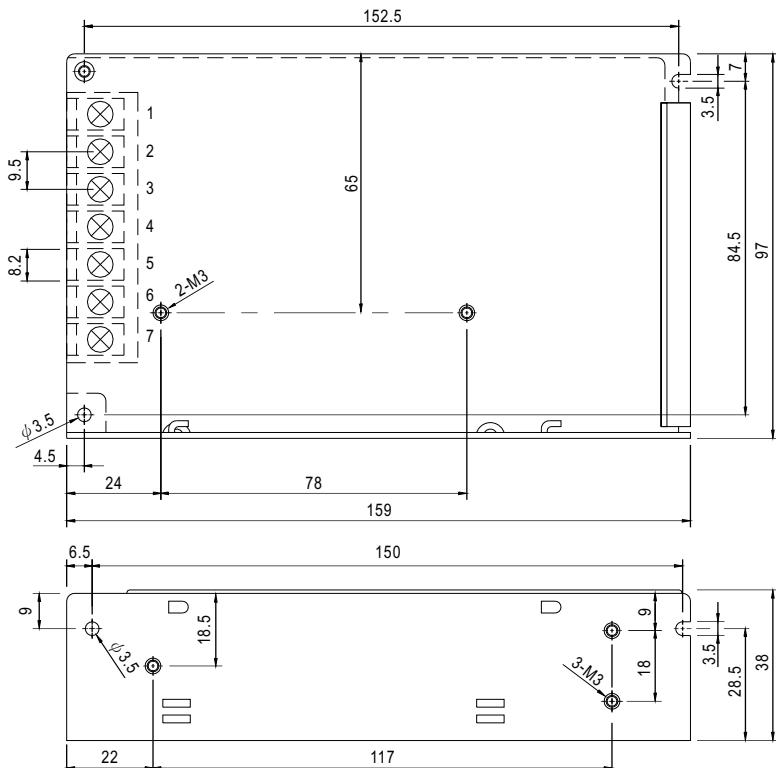
## SPECIFICATION



MODEL	RID-85A		RID-85B	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1
	DC VOLTAGE	5V	12V	5V
	RATED CURRENT	8A	4A	8A
	CURRENT RANGE	Note.3 0 ~ 10A	0 ~ 5A	0 ~ 10A
	RATED POWER	Note.6 88W		88W
	RIPPLE & NOISE (max.)	Note.2 80mVp-p	120mVp-p	80mVp-p
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V		CH1: 4.75 ~ 5.5V
	VOLTAGE TOLERANCE	Note.3 $\pm 2.0\%$	$\pm 8.0\%$	$\pm 2.0\%$
	LINE REGULATION	Note.4 $\pm 0.5\%$	$\pm 1.0\%$	$\pm 0.5\%$
	LOAD REGULATION	Note.5 $\pm 1.0\%$	$\pm 3.0\%$	$\pm 1.0\%$
INPUT	SETUP, RISE TIME	500ms, 20ms/230VAC		1200ms, 30ms/115VAC at full load
	HOLD UP TIME (Typ.)	100ms/230VAC		18ms/115VAC at full load
	VOLTAGE RANGE	88 ~ 264VAC	125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)	
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY(Typ.)	80%		81%
	AC CURRENT (Typ.)	2.5A/115VAC	1.5A/230VAC	
PROTECTION	INRUSH CURRENT (Typ.)	COLD START 50A/230VAC		
	LEAKAGE CURRENT	<2mA / 240VAC		
	OVERLOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	CH1: 5.75 ~ 6.75V Protection type : Hiccup mode, recovers automatically after fault condition is removed		
ENVIRONMENT	WORKING TEMP.	-25 ~ +70°C (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	$\pm 0.03\%/\text{°C}$ (0 ~ 50°C)on +5V output		
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY & EMC (Note 7)	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020		
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61000-6-2 (BS EN/EN50082-2), heavy industry level, criteria A, EAC TP TC 020		
OTHERS	MTBF	239.4Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	159*97*38mm (L*W*H)		
	PACKING	0.6Kg; 24pcs/15.4Kg/0.83CUFT		
NOTE	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. (In order to meet tolerance, it is recommended that CH1 load > 20% rated current.) 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. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> ) 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. 9. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). ※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a>			

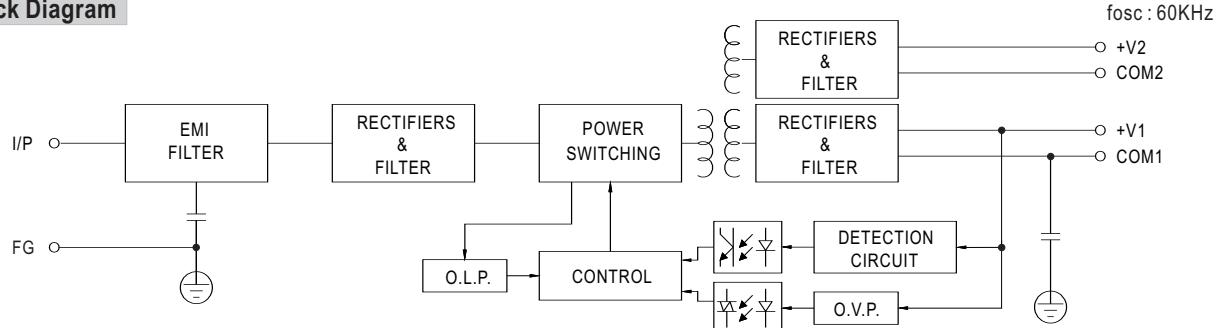
## ■ Mechanical Specification

Case No. 901C Unit:mm

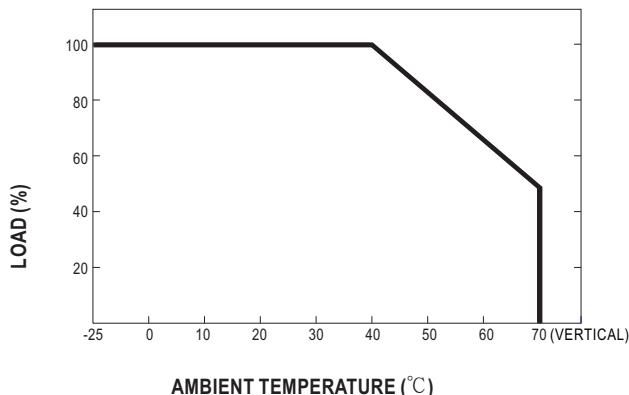


## Terminal Pin No. Assignment

## ■ Block Diagram



## ■ Derating Curve



## ■ Static Characteristics

