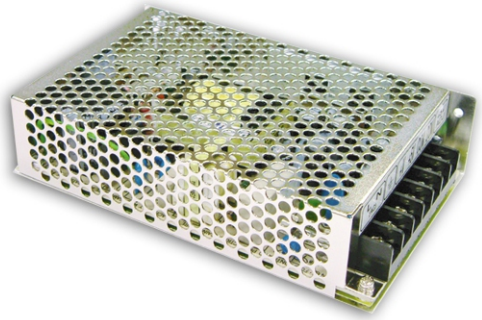
85W Dual Output Switching Power Supply

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℃ long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70℃
- Withstand 5G vibration test
- High efficiency, long life and high reliability
- 3 years warranty

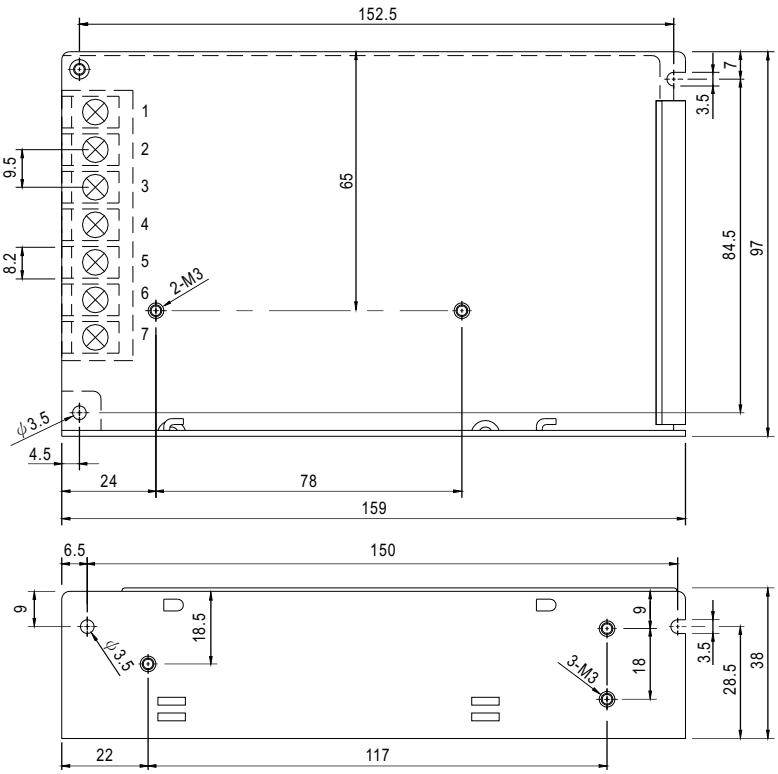
SPECIFICATION

MODEL		RID-85A		RID-85B	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	12V	5V	24V
	RATED CURRENT	8A	4A	8A	2A
	CURRENT RANGE Note.6	2 ~ 10A	0.3 ~ 5A	2 ~ 10A	0.3 ~ 2.5A
	RATED POWER Note.6	88W		88W	
	RIPPLE & NOISE (max.) Note.2	80mVp p	120mVp p	80mVp p	120mVp p
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V		CH1: 4.75 ~ 5.5V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±8.0%	±2.0%	±5.0%
	LINE REGULATION Note.4	±0.5%	±1.0%	±0.5%	±1.0%
	LOAD REGULATION Note.5	±1.0%	±3.0%	±1.0%	±5.0%
	SETUP, RISE TIME	500ms, 20ms/230VAC 1200ms, 30ms/115VAC at full load			
	HOLD UP TIME (Typ.)	100ms/230VAC 18ms/115VAC at full load			
INPUT	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			
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC			
	LEAKAGE CURRENT	<2mA / 240VAC			
PROTECTION	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℃ (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non condensing			
	STORAGE TEMP., HUMIDITY	40 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)on +5V output			
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 7)	SAFETY STANDARDS	UL60950 1, TUV EN60950 1 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℃/ 70% RH			
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000 3 2, 3			
	EMC IMMUNITY	Compliance to EN61000 4 2,3,4,5,6,8,11, EN61000 6 2 (EN50082 2), heavy industry level, criteria A			
OTHERS	MTBF	239.4Khrs min. MIL HDBK 217F (25℃)			
	DIMENSION	159*97*38mm (L*W*H)			
	PACKING	0.6Kg; 24pcs/15.4Kg/0.7CUFT			
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 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 http://www.meanwell.com) 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.				

Costruzioni Elettroniche Elettromeccaniche & Affini s.r.l. - 10132 TORINO - C.so Casale, 413 - Tel. 0118987106 / 0115534597 - fax 0115534597 - e_mail cea@cea.to - URL http //www cea.to

■ Mechanical Specification

Case No. 901C Unit:mm

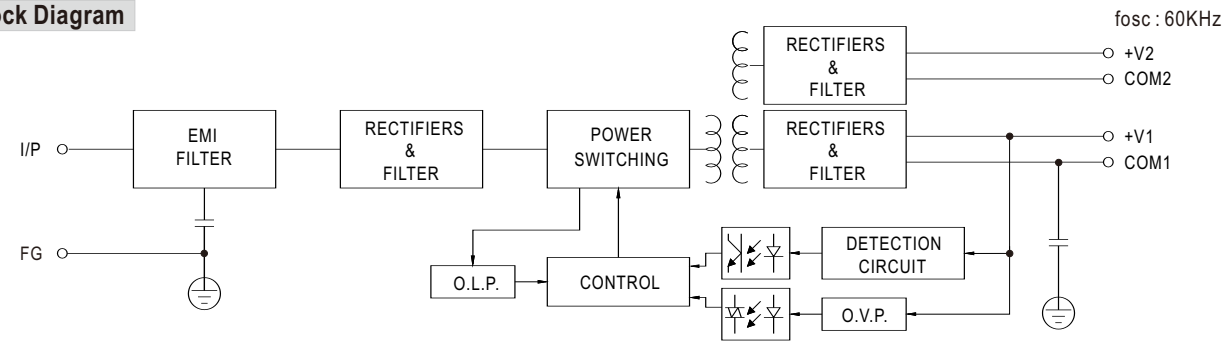


Terminal Pin No. Assignment

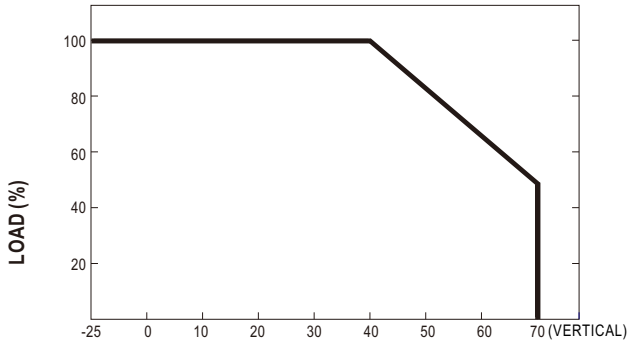
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT +V2
2	AC/N	6	DC OUTPUT G1
3	FG ⏚	7	DC OUTPUT +V1
4	DC OUTPUT G2		

■ Block Diagram

fosc : 60KHz

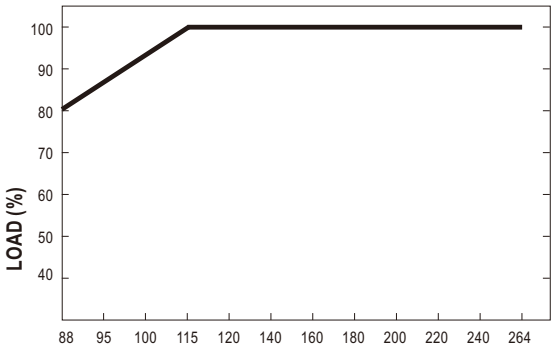


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Static Characteristics



INPUT VOLTAGE (VAC) 60Hz