



■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 4000VDC I/O isolation
- Cooling by free air convection
- Built-in constant current limiting circuit
- 1U low profile 36mm
- Compliance to EN50155 (railway certification)
- All using 105°C long life electrolytic capacitors
- 100% full load burn-in test

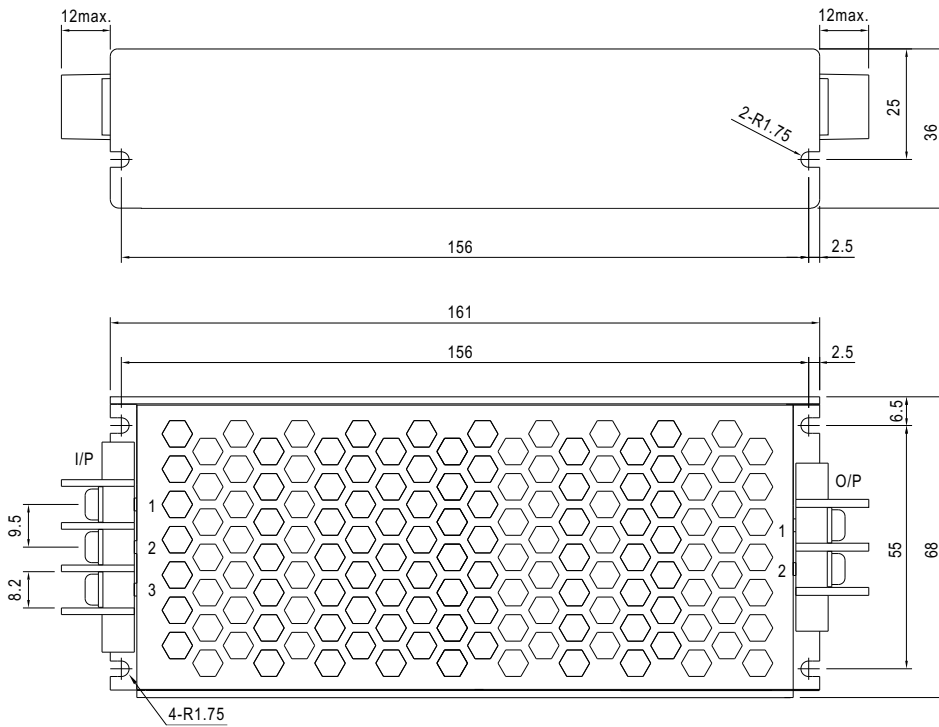


SPECIFICATION

MODEL		RSD-100B			RSD-100C			RSD-100D		
OUTPUT	DC VOLTAGE	5V	12V	24V	5V	12V	24V	5V	12V	24V
	RATED CURRENT	20A	8.4A	4.2A	20A	8.4A	4.2A	20A	8.4A	4.2A
	CURRENT RANGE	0 ~ 20A	0 ~ 8.4A	0 ~ 4.2A	0 ~ 20A	0 ~ 8.4A	0 ~ 4.2A	0 ~ 20A	0 ~ 8.4A	0 ~ 4.2A
	RATED POWER	100W	100.8W	100.8W	100W	100.8W	100.8W	100W	100.8W	100.8W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	100mVp-p	120mVp-p	150mVp-p	100mVp-p	120mVp-p	150mVp-p
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±0.5%	±0.3%	±0.2%	±0.5%	±0.3%	±0.2%	±0.5%	±0.2%	±0.2%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME		800ms, 50ms at full load								
INPUT	VOLTAGE RANGE	14.4 ~ 33.6VDC			28.8 ~ 67.2VDC			57.6 ~ 144VDC	57.6 ~ 154VDC	
	EFFICIENCY (Typ.)	88%	89%	89%	89%	91%	91%	89.5%	91%	90%
	DC CURRENT (Typ.)	4.8A/24V	4.8A/24V	4.8A/24V	2.4A/48V	2.4A/48V	2.4A/48V	1.2A/110V	1.2A/110V	1.2A/110V
	INRUSH CURRENT (Typ.)	30A/24VDC			30A/48VDC			30A/110VDC		
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 7V	13.8 ~ 16.2V	27.6 ~ 32.4V	5.75 ~ 7V	13.8 ~ 16.2V	27.6 ~ 32.4V	5.75 ~ 7V	13.8 ~ 16.2V	27.6 ~ 32.4V
ENVIRONMENT	WORKING TEMP.	-40 ~ +70°C (Refer to output load derating curve)								
	WORKING HUMIDITY	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, 5G 10min./1cycle, 60min. each along X, Y, Z axes ; Mounting : compliance to IEC61373								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	Design refer to IEC60950-1, EN50155 (IEC60571)								
	WITHSTAND VOLTAGE	I/P-O/P:4KVDC I/P-FG:2.5KVDC O/P-FG:2.5KVDC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B, EN50155(EN50121-3-2)								
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8; ENV50204, EN50155(EN50121-3-2), light industry level, criteria A								
	MTBF	254.1K hrs min. MIL-HDBK-217F (25°C)								
NOTE	DIMENSION	161*68*36mm (L*W*H)								
	PACKING	0.6Kg; 18pcs/11.8Kg/0.98CUFT								
NOTE		<p>1. All parameters NOT specially mentioned are measured at 24,48,110VDC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 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 directives.</p>								

Mechanical Specification

Case No.999A Unit:mm



Input Terminal Pin No. Assignment :

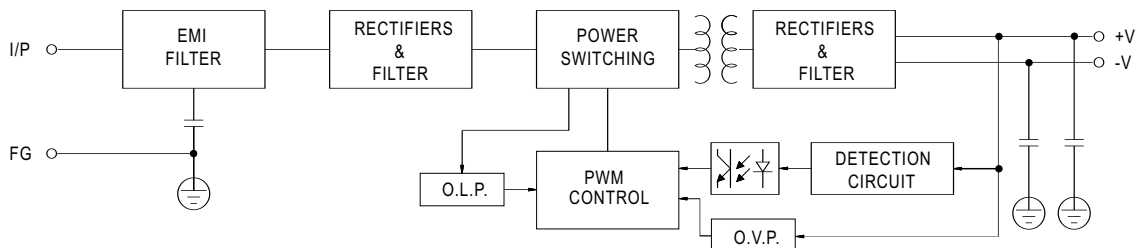
Pin No.	Assignment
1	DC INPUT V+
2	DC INPUT V-
3	FG \perp

Output Terminal Pin No. Assignment :

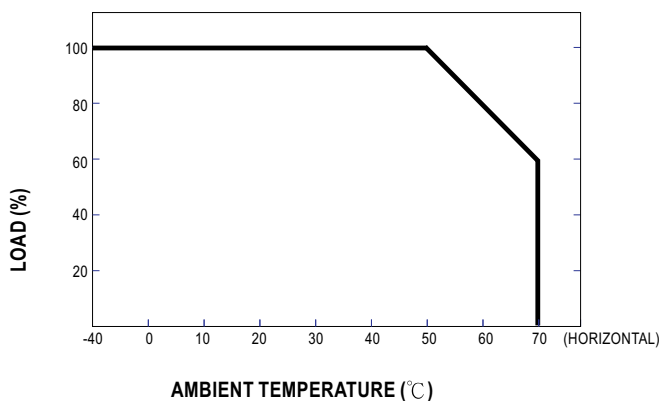
Pin No.	Assignment
1	DC OUTPUT -V
2	DC OUTPUT +V

Block Diagram

fosc : 130KHz



Derating Curve



Static Characteristics(RSD-100D-24)

