



### ■ Features :

- Compliance to EN50155 and EN45545-2 railway standard
- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature / Input reverse polarity
- 4000VDC I/O isolation
- Cooling by free air convection
- Half encapsulated
- Built-in constant current limiting circuit
- 1U low profile 40mm
- All using 105°C long life electrolytic capacitors
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty

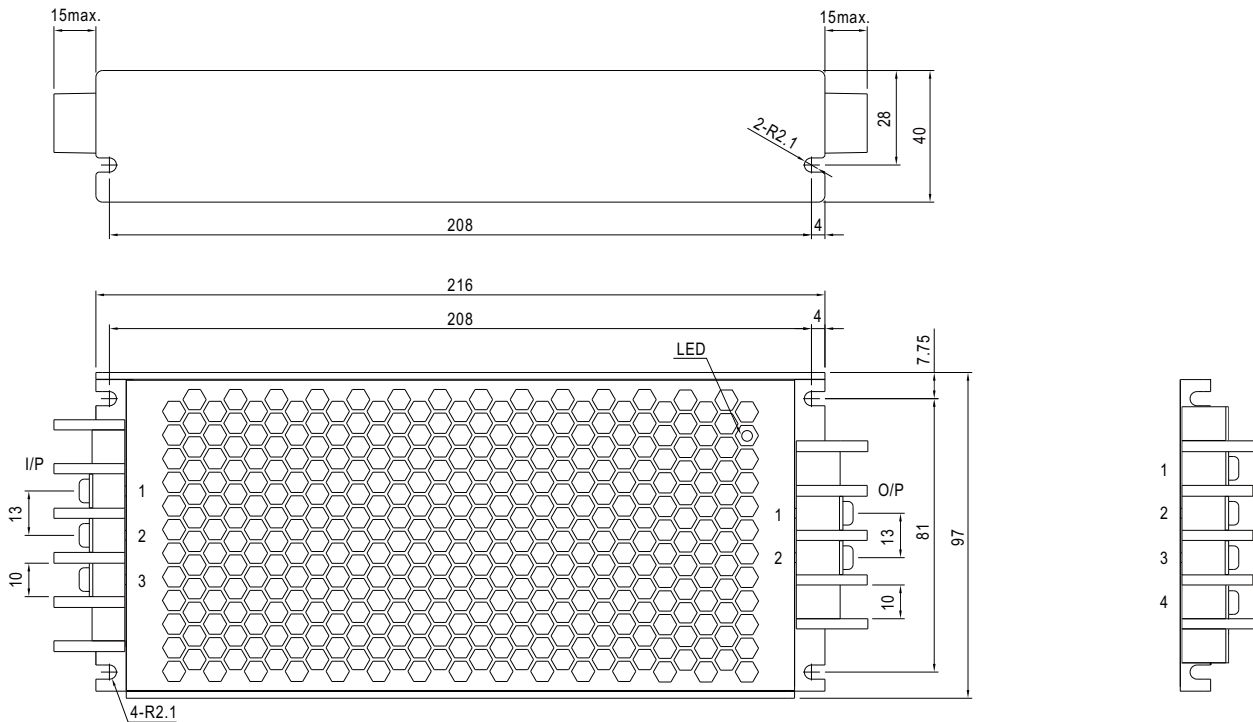


### SPECIFICATION

MODEL		RSD-300F-5	RSD-300F-12	RSD-300F-24	RSD-300F-48
OUTPUT	DC VOLTAGE	5V	12V	24V	48V
	RATED CURRENT	42A	25A	12.5A	6.3A
	CURRENT RANGE	0 ~ 42A	0 ~ 25A	0 ~ 12.5A	0 ~ 6.3A
	RATED POWER	210W	300W	300W	302.4W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	180mVp-p
	VOLTAGE TOLERANCE Note.3	± 2.0%	± 2.0%	± 2.0%	± 2.0%
	LINE REGULATION	± 0.5%	± 0.3%	± 0.2%	± 0.5%
	LOAD REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%
	SETUP, RISE TIME	800ms, 50ms at full load			
HOLD UP TIME (Typ.)	F-type comply with S2 level @ full load				
INPUT	VOLTAGE RANGE	CONTINUOUS	50.4 ~ 93.6VDC		
		1 SEC.	43.2 ~ 100.8VDC		
	EFFICIENCY (Typ.)	89%	91%	91%	91.5%
	DC CURRENT (Typ.)	3.25A/72V	4.6A/72V	4.6A/72V	4.6A/72V
INRUSH CURRENT (Typ.)	45A/72VDC				
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	55.2 ~ 64.8V
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down			
ENVIRONMENT	WORKING TEMP.	-40 ~ +55°C (no derating) ; +70°C @ 60% load by free air convection ; +70°C no derating with external base plate, TX class compliance			
	WORKING HUMIDITY	5 ~ 95% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 5 ~ 95% RH			
	TEMP. COEFFICIENT	± 0.03%/°C (0 ~ 55°C)			
VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes ; Mounting : compliance to IEC61373				
SAFETY & EMC (Note 4)	SAFETY STANDARDS	Meet IEC60950-1(LVD))			
	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			
	EMC EMISSION	Compliance to EN55022 (CISPR22) Conduction Emission: Class A, Radiation Emission: Class B			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A			
RAILWAY STANDARD	Meet EN50155 / IEC60571 including IEC61373 for shock & vibration, EN50121-3-2 for EMC ; EN45545-2 for fire protection				
OTHERS	MTBF	130.7K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	216*97*40mm (L*W*H)			
	PACKING	1.19Kg ; 12pcs/15.3Kg/1.12CUFT			
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 72VDC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. 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>)</li> <li>5. Strongly recommended that external output capacitance should not exceed 5000uF.</li> </ol>				

**Mechanical Specification**

Case No.205A Unit:mm



Input Terminal Pin No. Assignment :

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

Output Terminal Pin No. Assignment :  
(For 12V, 24V, 48V)

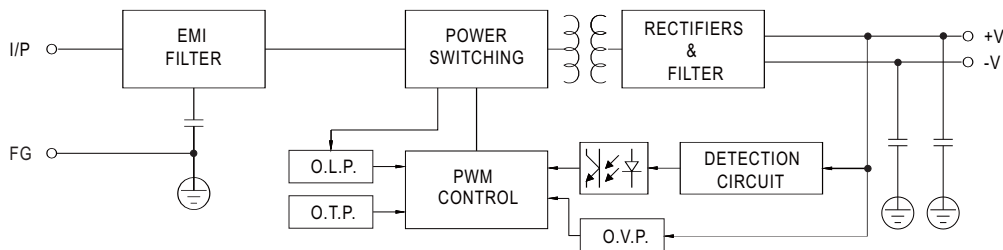
Pin No.	Assignment
1	DC OUTPUT -V
2	DC OUTPUT +V

(For 5V)

Pin No.	Assignment
1,2	DC OUTPUT -V
3,4	DC OUTPUT +V

**Block Diagram**

fosc : 130KHz



**Input Fuse**

There are one or two fuses connected in series to the positive input line, which are used to protect against abnormal surge. Fuse specifications of each model are shown as below.

Type	Fuse Type	Reference and Rating
B	Fast	Littelfuse 257, 30A, 32V
C	Time-Lag	Conquer UDA-A, 16A, 250V
D	Time-Lag	Conquer UDA-A, 8A, 250V
E	Time-Lag	Conquer UDA-A, 20A, 250V
F	Time-Lag	Conquer UDA-A, 10A, 250V