SPECIFICATION

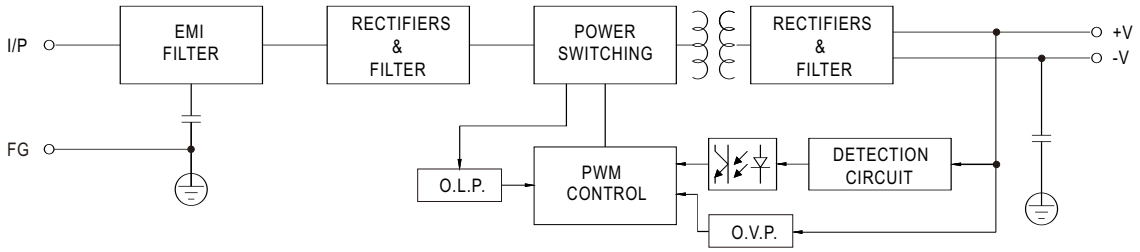
MODEL		RSD-30H-3.3	RSD-30H-5	RSD-30H-12	RSD-30H-24
OUTPUT	DC VOLTAGE	3.3V	5V	12V	24V
	RATED CURRENT	6A	6A	2.5A	1.25A
	CURRENT RANGE	0 ~ 6A	0 ~ 6A	0 ~ 2.5A	0 ~ 1.25A
	RATED POWER	19.8W	30W	30W	30W
	RIPPLE & NOISE (max.) Note.2	70mVp-p	70mVp-p	60mVp-p	50mVp-p
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.3%	±0.2%
	LOAD REGULATION	±0.5%	±0.5%	±0.3%	±0.2%
	SETUP, RISE TIME	120ms, 85ms at full load			
	HOLD UP TIME (Typ.)	H-type comply with S2 level(10ms) @ full load			
INPUT	VOLTAGE RANGE CONTINUOUS	40 ~ 160VDC			
	EFFICIENCY (Typ.)	87%	89%	89%	89%
	DC CURRENT (Typ.)	0.23A/110V	0.35A/110V		
	INRUSH CURRENT (Typ.)	20A/110VDC			
PROTECTION	OVERLOAD	105 ~ 135% rated output power			
		Protection type : Constant current limiting, recovers automatically after fault condition is removed			
	OVER VOLTAGE	3.8 ~ 4.5V	5.75 ~ 7V	13.8 ~ 16.2V	27.6 ~ 32.4V
		Protection type : Shut down o/p voltage, re-power on to recover			
ENVIRONMENT	WORKING TEMP.	-40 ~ +55℃ (no derating) ; +70℃ @ 60% load by free air convection ; +70℃ (no derating with external base plate)			
	WORKING HUMIDITY	5 ~ 95% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH non-condensing			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)			
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes ; Mounting : compliance to IEC61373			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	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℃/ 70% RH			
	EMC EMISSION	**Parameter**	**Standard**	**Test Level / Note**	
		Conducted	EN55032	Class A	
		Radiated	EN55032	Class B	
		Harmonic Current	EN6100-3-2	Class A	
		Voltage Flicker	EN6100-3-3	-----	
	EMC IMMUNITY	**Parameter**	**Standard**	**Test Level / Note**	
		ESD	EN61000-4-2	Level 3, ±8KV air ; Level 3, ±6KV contact	
		Radiated Field	EN61000-4-3	Level X	
		EFT / Burst	EN61000-4-4	Level 3, 2KV at power	
				Level 4, 2KV at signal	
		Surge	EN61000-4-5	Level 3,1KV Line-Line, Level 3, 2KV Line-Earth	
		Conducted	EN61000-4-6	Level 3	
	RAILWAY STANDARD	Compliance to EN45545-2 for fire protection ; EN50155 / IEC60571 including IEC61373 for shock & vibration, EN50121-3-2 for EMC			
OTHERS	MTBF	396.9K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	113*60*25mm (L*W*H)			
	PACKING	0.25Kg; 56pcs/15Kg/0.83CUFT			

NOTE

1. All parameters NOT specially mentioned are measured at 110VDC 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. 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)
5. Strongly recommended that external output capacitance should not exceed 5000uF.

Block Diagram

fosc : 110KHz



Input Fuse

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

Type	Fuse Type	Reference and Rating
G	Time-Lag	CONQUE MST, 6.3A, 250V
L	Time-Lag	CONQUE MST, 3.15A, 250V
H	Time-Lag	CONQUE MST, 2A, 250V

Input Reverse Polarity Protection

There is a MOSFET connected in series to the negative input line. If the input polarity is connected reversely, the MOSFET opens and there will be no output to protect the unit.

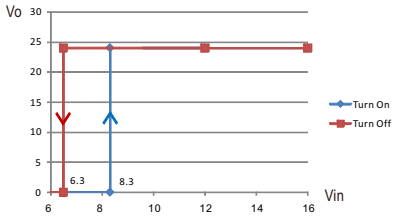
Input Range and Transient Ability

The series has a wide range input capability. With ±40% of rated input voltage, it can withstand that for 1 second.

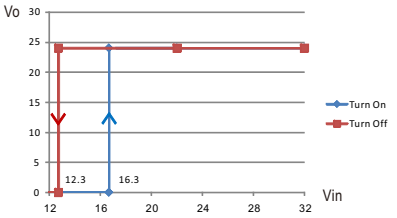
Input Under-Voltage Protection

If input voltage drops below Vimin, the internal control IC shuts down and there is no output voltage. It recovers automatically when input voltage reaches above Vimin, please refer to the cruve below.

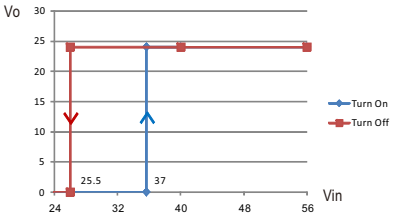
RSD-30G-24



RSD-30L-24



RSD-30H-24



Inrush Current

Inrush current is suppressed by a resistor during the initial start-up, and then the resistor is bypassed by a MOSFET to reduce power consumption after accomplishing the start-up.