RSG ELECTRONIC COMPONENTS
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65W Single Output Switching Power Supply — PS-65 series



Features :

- Universal AC input/Full range
- Low leakage current<0.5mA
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 65KHz
- 2 years warranty

SPECIFICATION

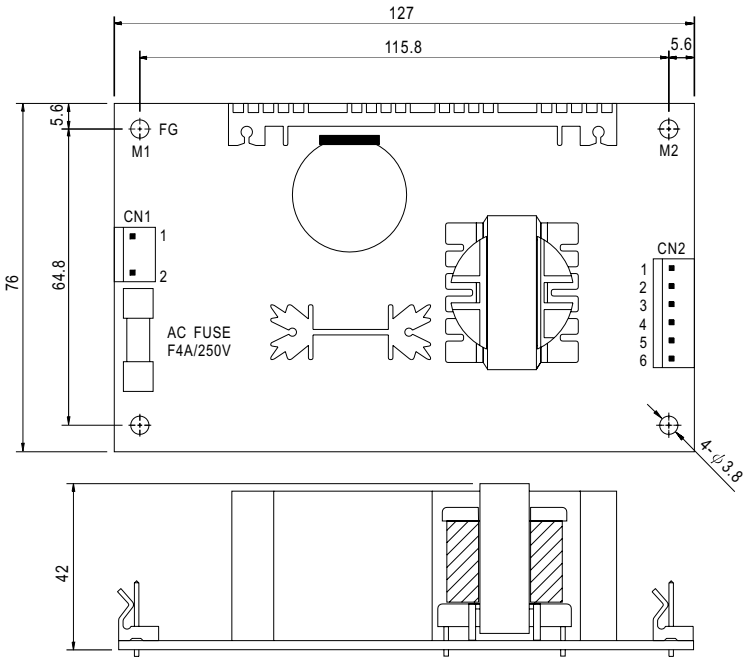
MODEL		PS-65-3.3	PS-65-5	PS-65-7.5	PS-65-12	PS-65-13.5	PS-65-15	PS-65-24	PS-65-27	PS-65-48
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
	RATED CURRENT	12A	12A	8A	5.2A	4.7A	4.2A	2.7A	2.4A	1.35A
	CURRENT RANGE	0 ~ 15.2A	0 ~ 13.8A	0 ~ 9.6A	0 ~ 6A	0 ~ 5.4A	0 ~ 4.8A	0 ~ 3A	0 ~ 2.7A	0 ~ 1.5A
	RATED POWER	39.6W	60W	60W	62.4W	63.5W	63W	64.8W	64.8W	64.8W
	OUTPUT POWER (max.)	Rated output power for convection; 72W (+3.3V : 50W;+5V:69W) with 18 CFM min. Forced air								
	RIPPLE & NOISE (max.) Note.2	80mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V	4.75 ~ 5.5V	7.13 ~ 8.25V	11.4 ~ 13.2V	12.8 ~ 14.9V	14.25 ~ 16.5V	22.8 ~ 26.4V	25.65 ~ 29.7V	45.6 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%
	SETUP, RISE TIME	800ms, 20ms at full load								
	HOLD UP TIME (Typ.)	60ms at full load								
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~370VDC								
	FREQUENCY RANGE	47 ~ 440Hz								
	EFFICIENCY(Typ.)	69%	76%	79%	79%	79%	79%	80%	80%	80%
	AC CURRENT (Typ.)	1.2A/115VAC 0.72A/230VAC								
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC								
	LEAKAGE CURRENT	<0.75mA / 240VAC								
PROTECTION	OVERLOAD	73 ~ 105W(3.3V : 51 ~ 75W)(5V : 70 ~ 105W) rated output power								
		Protection type : Hiccup mode, recovers automatically after fault condition is removed.								
	OVER VOLTAGE	3.8 ~ 4.46V	5.75 ~ 6.75V	8.63 ~ 10.1V	13.8 ~ 16.2V	15.5 ~ 18.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	31 ~ 36.45V	55.2 ~ 64.8V
		Protection type : Hiccup mode, recovers automatically after fault condition is removed.								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.04%/℃ (0 ~ 50℃)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950, TUV EN60950-1 Approved								
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B								
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3								
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A								
OTHERS	MTBF	300.7K hrs min. MIL-HDBK-217F (25℃)								
	DIMENSION	127*76*42mm (L*W*H)								
	PACKING	0.21Kg; 54pcs/14.2Kg/1.35CUFT								

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. 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.
5. Mounting holes M1 and M2 should be grounded for EMI purposes.

■ Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5277-02 or equivalent

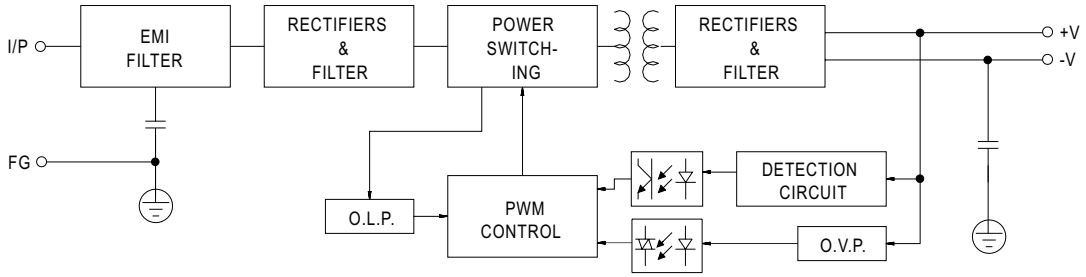
Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	Molex 5195 or equivalent	Molex 5194 or equivalent
2	AC/L		

DC Output Connector (CN2) : Molex 5273-06 or equivalent

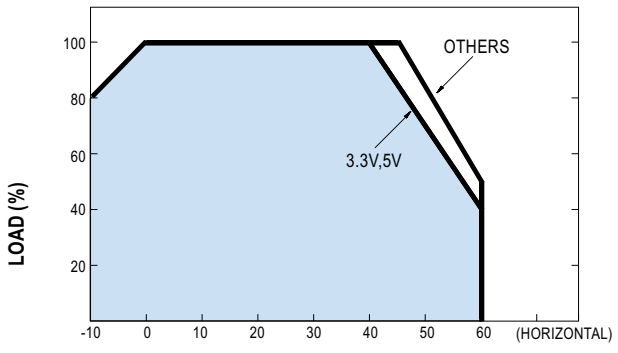
Pin No.	Assignment	Mating Housing	Terminal
1,2,3	+V	Molex 5195 or equivalent	Molex 5194 or equivalent
4,5,6	-V		

■ Block Diagram

fosc : 65KHz

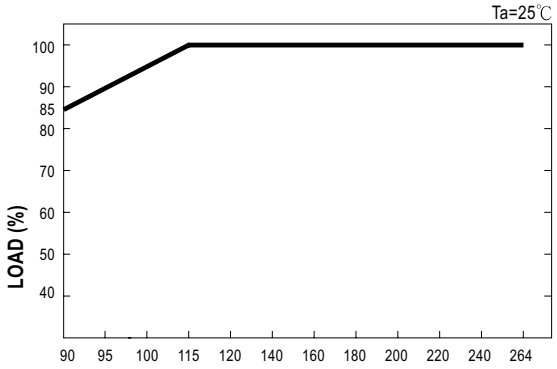


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz

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