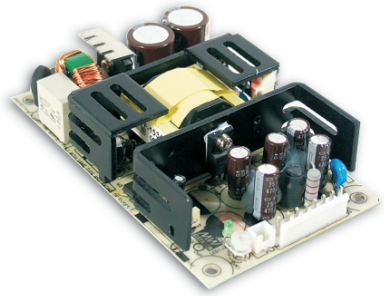
75W Single Output Medical Type

RPS-75 series



Features :

- Universal AC input/Full range
- Low leakage current<200uA
- Protections: Short circuit / Overload / Over voltage
- Free air convection for rated power and 23.5CFM forced air convection for peak load
- UL60601-1/IEC60601-1/EN60601-1 medical safety approved
- No load power consumption<0.75W
- Fixed switching frequency at 65KHz
- 3 years warranty

SPECIFICATION

MODEL		RPS-75-3.3	RPS-75-5	RPS-75-12	RPS-75-15	RPS-75-24	RPS-75-36	RPS-75-48
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	24V	36V	48V
	RATED CURRENT	15A	14A	6.3A	5A	3.2A	2.1A	1.6A
	CURRENT RANGE	0 ~ 20A	0 ~ 18.7A	0 ~ 8.3A	0 ~ 6.7A	0 ~ 4.2A	0 ~ 2.8A	0 ~ 2.1A
	RATED POWER	49.5W	70W	75.6W	75W	76.8W	75.6W	76.8W
	PEAK LOAD (23.5CFM)	66W	94W	99.6W	100.5W	100.8W	100.8W	100.8W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	150mVp-p	240mVp-p	300mVp-p	300mVp-p
	VOLTAGE ADJ. RANGE	2.9 ~ 3.6V	4.75 ~ 5.5V	11.4 ~ 13.2V	13.5 ~ 16.5V	22.8 ~ 27.6V	34.2 ~ 39.6V	45.6 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.5%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	500ms, 30ms/230VAC 500ms, 30ms/115VAC at full load						
	HOLD UP TIME (Typ.)	80ms/230VAC 20ms/115VAC at full load						
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~370VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY(Typ.)	73%	78%	82%	83%	85%	86%	86%
	AC CURRENT (Typ.)	1.5A/115VAC 1A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 25A/115VAC 50A/230VAC						
	LEAKAGE CURRENT	Earth leakage current <200uA / 264VAC, Patient leakage current <100uA/264VAC						
PROTECTION	OVERLOAD	140 ~ 180% rated output power						
		Protection type : Hiccup mode, recovers automatically after fault condition is removed.						
	OVER VOLTAGE	3.8 ~ 4.46V	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	41.4 ~ 48.6V	55.2 ~ 64.8V
		Protection type : Shut down o/p voltage, re-power to recover						
ENVIRONMENT	WORKING TEMP.	-20 ~ +70℃ (Refer to output load derating curve)						
	WORKING HUMIDITY	20 ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 45℃)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60601-1, TUV EN60601-1, IEC60601-1 approved						
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:1.5KVAC						
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC						
	EMI CONDUCTION & RADIATION	Compliance to EN55011 (CISPR11), 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, EN60601-1-2, EN61000-6-2, EN61204-3, heavy industry level, EN61204-3 medical level, criteria A						
OTHERS	MTBF	446.8K hrs min. MIL-HDBK-217F (25℃)						
	DIMENSION	127*76.2*31mm (L*W*H)						
	PACKING	0.23Kg; 63pcs/15.5Kg/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. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.

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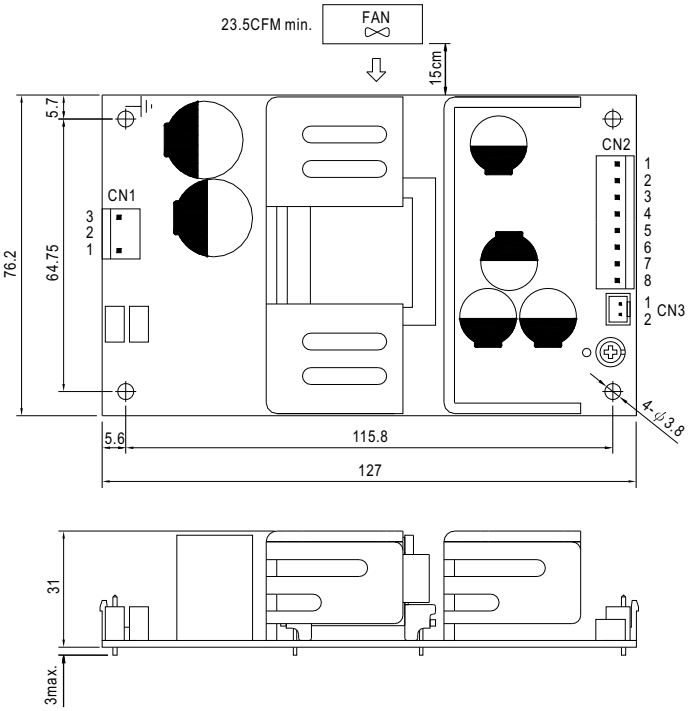
■ Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/L		

DC Output Connector (CN2) : JST B8P-VH or equivalent

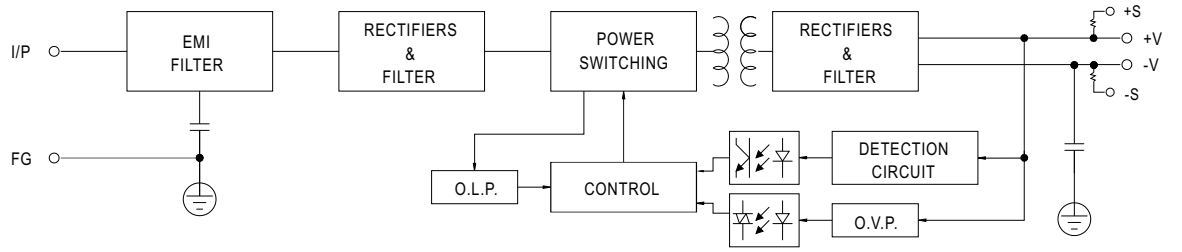
Pin No.	Assignment	Mating Housing	Terminal
1,2,3,4	+V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
5,6,7,8	-V		

Remote Sense(CN3) : JST B2B-XH or equivalent

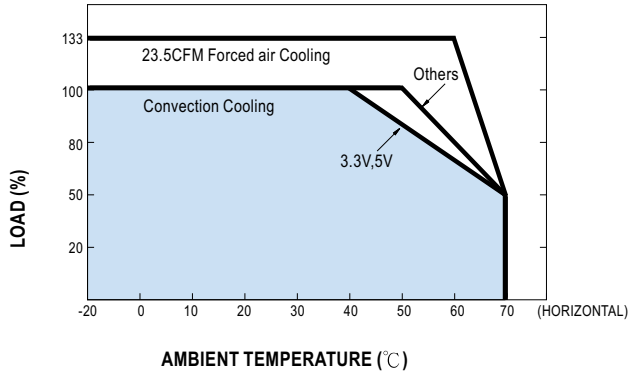
Pin No.	Assignment	Mating Housing	Terminal
1	RS+	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	RS-		

■ Block Diagram

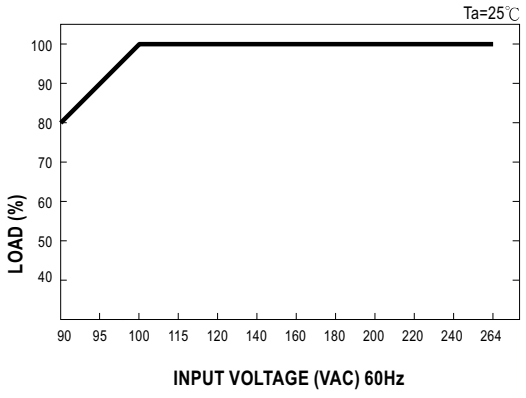
fosc : 65KHz



■ Derating Curve



■ Output Derating VS Input Voltage



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