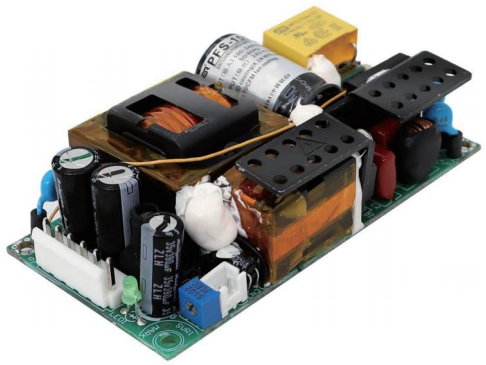
150W Single Output Medical Power Supply

AIPUPOWER®

PFS-150-R0 series



Features:

- Universal AC input 80~264VAC
- Protections : Short circuit / Overload / Over voltage / Over temperature
- 4"X2" miniature size
- High efficiency up to 94%
- No load power consumption<0.5W
- LED indicator for power on
- Cooling by free air convection for 100W and 150W with 10CFM forced air
- Built-in 12V/0.5A FAN supply
- Refer to medical safety (2XMOPP) according to ANSI/AAMI ES60601-1 and IEC/BS EN60601-1
- 3 years warranty

Specification

MODEL			PFS-150-12	PFS-150-15	PFS-150-24	PFS-150-27	PFS-150-36	PFS-150-48
INPUT	VOLTAGE RANGE		80~264VAC (Refer to"Static characteristics")					
	FREQUENCY RANGE		47~63Hz					
	POWER FACTOR		PF>0.93/230VAC PF>0.97/115VAC at full load					
	EFFICIENCY(Typ.)		92.5%	93%	93%	93%	93%	94%
	AC CURRENT(Typ.)		3A/115VAC 1.5A/230VAC					
	INRUSH CURRENT(Typ.)		30A/115VAC 60A/230VAC (cold start)					
	LEAKAGE CURRENT		Earth leakage current<130uA/264VAC, touch current<40uA/264VAC					
OUTPUT	DC VOLTAGE		12V	15V	24V	27V	36V	48V
	RATED CURRENT	10CFM	12.5A	10A	6.25A	5.56A	4.17A	3.13A
		Convection	8.4A	6.7A	4.2A	3.73A	2.8A	2.1A
	RATED POWER	10CFM	150W	150W	150W	150.12W	150.12W	150.24W
		Convection	100.8W	100.5W	100.8W	100.17W	100.8W	100.8W
	RIPPLE&NOISE (max.)		100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ.RANGE		11.4~12.6V	14.2~15.8V	22.8~25.2V	25.6~28.4V	34.2~37.8V	45.6~50.4V
	VOLTAGE TOLERANCE		±2%	±2%	±1%	±1%	±1%	±1%
	LINE REGULATION		±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION		±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME		500ms,50ms/230VAC 500ms,50ms/115VAC					
	HOLD UP TIME(Typ.)		16ms/230VAC 16ms/115VAC					
PROTECTION	OVER LOAD		105%~135% rated output power					
			Protection type: Shunt down , recovers after repower on					
	OVER VOLTAGE		15~18V	18~24V	29~35V	35~42V	43.5~52V	56~66V
			Protection type : Shunt down , recovers after repower on					
	OVER TEMPERATURE		Protection type : Shunt down , recovers after repower on					
FUNCTION	FAN SUPPLY		12V@ 0.5A for driving a fan; tolerance ±15% at main output 20% rated current(10CFM)					
ENVIRONIMENT	WORKING TEMP., HUMIDITY		-30~+70℃ (Refer to " Derating curve") , 20~90%RH non-condensing					
	STORAGE TEMP., HUMIDITY		-40~+85℃ , 10~95%RH					
	TEMP. COEFFICIENT		±0.03%/℃(0~50℃)					
	VIBRATION		10~500Hz , 2G 10min./1 cycle , each along X、Y、Z axes					

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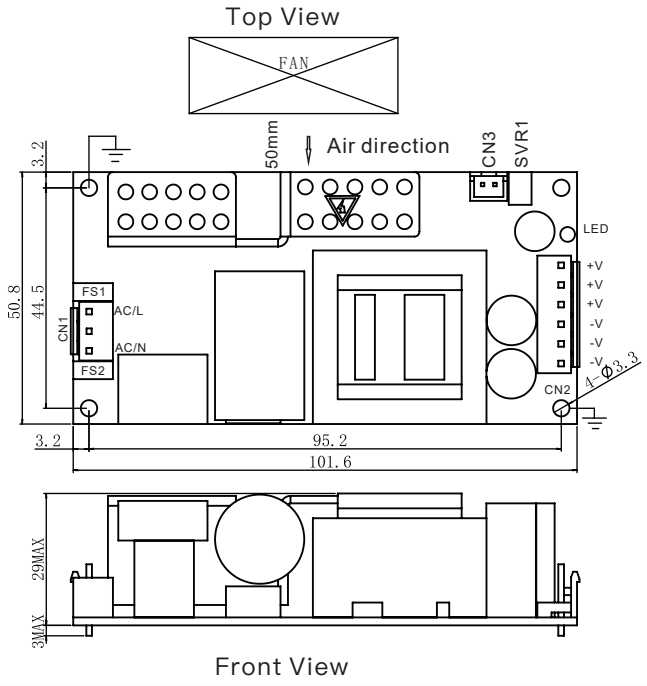
Safety and electromagnetic compatibility	Safety standards	Refer to UL62368-1,TUV EN62368-1,CCC GB4943.1,EN60601-1(2XMOPP)		
	Withstand voltage and isolation resistance	I/P-O/P: 4KVac; 100MΩ / 500Vdc / 25℃ / 70%RH		
		I/P-FG: 2KVac; 100MΩ / 500Vdc / 25℃ / 70%RH		
		O/P-FG: 1.5KVac; 100MΩ / 500Vdc / 25℃ / 70%RH		
	Electromagnetic	**Parameter**	**Standard**	**Test Level / Note**
		Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1	Class B
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1	Class B
		Harmonic current	BS EN/EN61000-3-2,GB17625.1	Class A
		Voltage flicker	BS EN/EN61000-3-3	----
	Electromagnetic compatibility immunity	BS EN/EN55035		
		Parameter	**Standard**	**Test Level /Note**
		ESD	BS EN/EN61000-4-2	Level 4, 8KV air, Level 2, 4KV contact, criteria A
		RF field susceptibility	BS EN/EN61000-4-3	Level 3, criteria A
		EFT bursts	BS EN/EN61000-4-4	Level 3, criteria A
		Surge susceptibility	BS EN/EN61000-4-5	Level 3, 1KV/L-N, 2KV/L/N-FG criteria A
		Conducted susceptibility	BS EN/EN61000-4-6	Level 3, criteria A
		Magnetic field immunity	BS EN/EN61000-4-8	Level 4, criteria A
		Voltage dips and interruptions	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods , >95% interruptions 250 periods
OTHERS	MTBF	≥500Khrs MIL-HDBK-217F(25℃)		
	DIMENSION	PCB: 101.6*50.8*29mm(L*W*H)		
	PACKING	0.19Kg; 72pcs/ 14.7Kg/ 1.18CUFT		

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. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 0% to 100% rated load
6. Length of set up time is measured at cold first start, Turning ON/OFF the power supply very quickly may lead to increase of the set up time.
7. The ambient temperature derating of 5℃/1000m is needed for operating altitude great than 2000m(6500ft).
8. 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.

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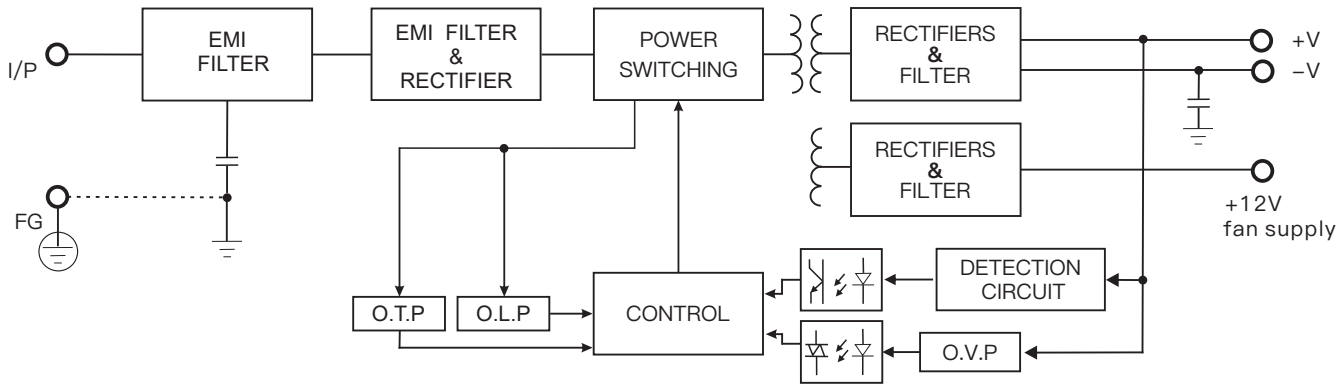
Mechanical specification



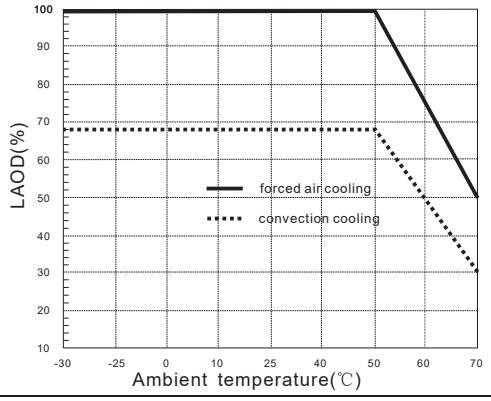
NOTE:
Unit: mm
SVR1:Output adjustable resistor
TOL: ±1.00

Designator	Function	Connector
CN1	AC input	CJT A3963WV-3P-A or equivalent
CN2	DC output	CJT A3963WV-6P or equivalent
CN3	12V Fan supply	CJT A2501WV-2P or equivalent

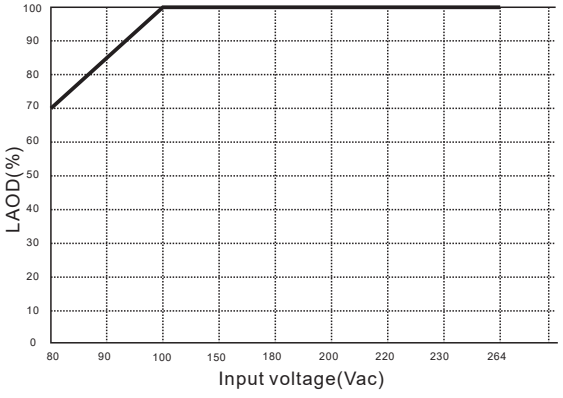
Block diagram



Derating curve



Static characteristics



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