

FEATURES

120W Open Frame Medical Grade

SPMJ120 Series

- Universal AC 85~264VAC & 390Vdc Input
- 2x3x1 Inch Form Factor
- 120 Watt Output With 200LMF Airflow, 100 Watts Convection Cooled
- High Efficiency , No Load Power Consumption <0.3W
- Operation from -40°C to 70°C (See Curve Below)
- Certified to UL/cUL 60601 3rd Edition & CE(LVD) Pending
- BF Certification
- Class I & II Input Options
- Fan Output & Thermal Shutdown Feature
- Active PFC
- Short Circuit, Over Temperature & Over Voltage Protection
- RoHS Compliant



SPECIFICATIONS

Model #	Output Voltage (1)	Minimum Load	Maximum Load (2)		Ripple(3)	Efficiency
			Convention	200LFM		
SPMJ120-120-x	12Vdc	0.0A	8.3A	10A	1%	TBA
SPMJ120-150-x	15Vdc		6.7A	8A		TBA
SPMJ120-240-x	24Vdc		4.2A	5A		TBA
SPMJ120-300-x	30Vdc		3.3A	4A		TBA
SPMJ120-480-x	48Vdc		2.1A	2.5A		TBA
SPMJ120-580-x	58Vdc		1.7A	2.1A		TBA

PART NUMBER BUILDER

SPMJ120-vvv-x-zzz

SPMJ= Openframe Medical, "J" Series

120 =Output Power (Watts)

-zzz = Non-standard indicator or blank, TBA by Autec as needed

X= Input Type, 1= Class I, 2 = Class II

Vvv = Output Voltage



Output	Line & Load Regulation (4)	+/-0.5%	
	Voltage Adjustment	+/-3%	
	Turn-on Delay	55ms (Typ.)	
	Hold-up Time	16mS	
	Transient Response	25% step load change, at 0.1A/uS slew rate, 50% duty cycle, 50Hz=4% , recovery time < 5 mS	
Input	Voltage Range	85-264Vac, 390Vdc	
	Frequency Range	47Hz ~63Hz	
	Inrush Current	115VAC: 25A, 230VAC: 45A, 264VAC: 75A	
	AC Current	1A: 110Vac, 0.5A: 220Vac (Max.)	
	Leakage	300uA (Typ.), (N.A. For Class II Option), Touch current <100uA	
	Power Factor	>.95 @ Full Load	
Protections	Short Circuit	Protection type : Hiccup mode, recovers automatically after fault condition is removed	
	Over Current	>110% Of Load, Hiccup mode, recovers automatically after fault condition is removed	
	Over Voltage	110-140% of output voltage	
Environment	Temperature Range	Operational	- 40°C ~ 70°C, See curve below
		Storage	- 40 ~ +85°C
	Humidity	5% ~ 95% RH	

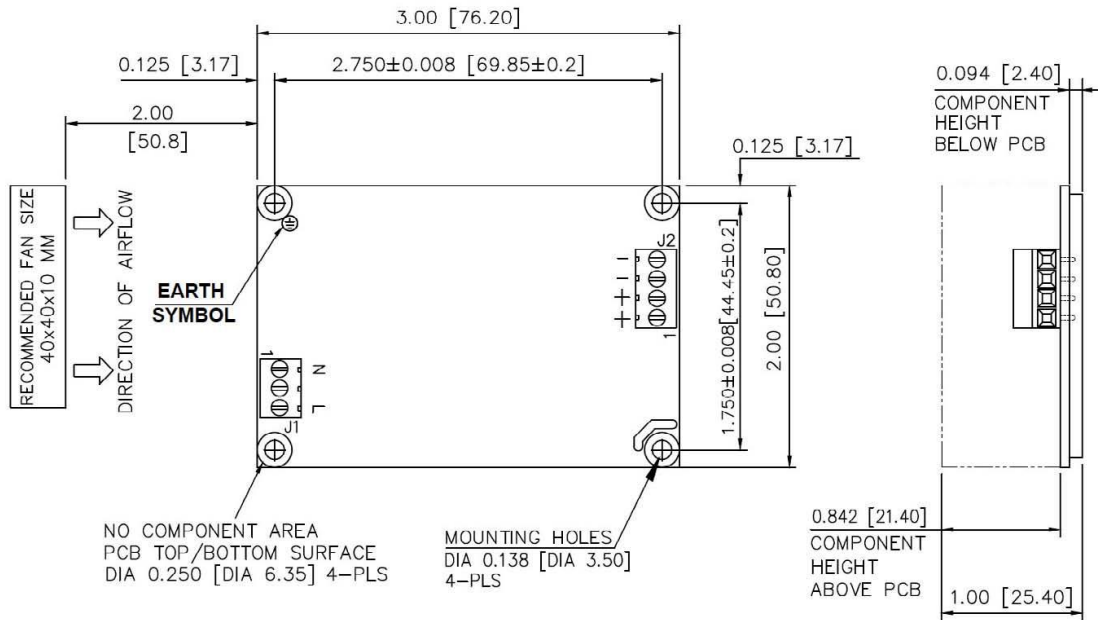
Safety & EMC	Safety Standards	UL/cUL 60601 3rd Ed., CSA C22.2 No. 60601-1	
	EMI Conduction & Radiation	Conducted: EN55022-B, CISPR22-B, FCC PART15-B. Radiated: Level A, <u>Level B with external core</u> (6).	
	EMS Immunity	EN61000-4-2, Level-3, EN61000-4-3, Level-3, EN61000-4-4, Level-3, EN61000-4-5, Level-3, EN61000-3-2, Class D	
	Isolation	Input to Output – 4000 VAC medical applications. Input to Ground - 1500 VAC (Class I Option) Output to Ground- 1500VAC for type BF , 500 VAC for type B (Class I Option)	
Others	MTBF	33,000k Hours, Telcordia -SR332-issue 3	
	RoHS	Compliance to European RoHS directive (2011 / 65 / EU)	
	Dimensions	2x3x1 in, 76.2x50.8x25.4 mm	
	Weight	TBA	

NOTES:

1. +/-1% for main, 10% for fan output
2. Combined main and fan
3. Ripple is peak to peak with 20 MHz bandwidth and 10 μ F (Tantalum capacitor) in parallel with a 0.1 μ F capacitor at rated line voltage and load ranges. <10% for fan output
4. +/-10% for fan output
5. Unless otherwise stated specs are at 25C, -40 to 0°C startup is guaranteed with spec deviation.
6. Contact us for recommended core and assembly



Mechanical Specifications

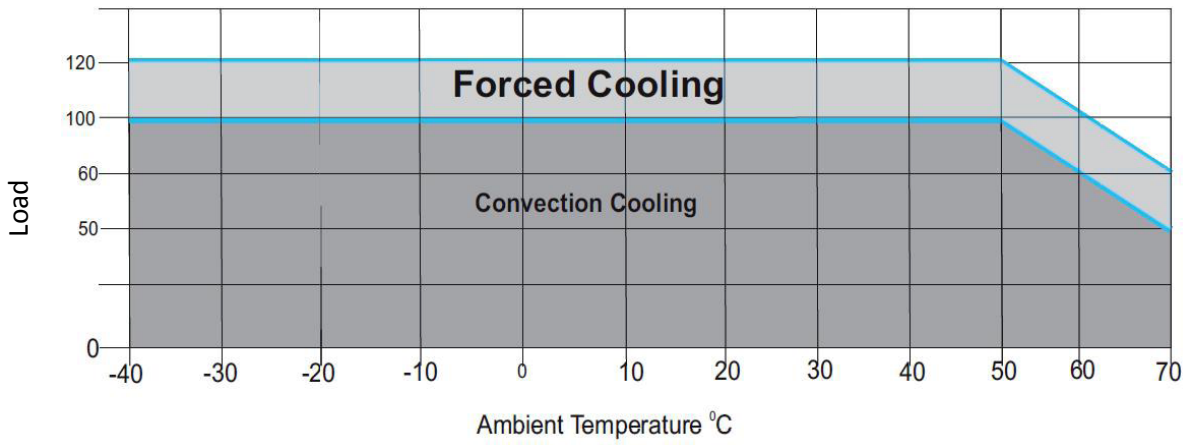


MECHANICAL OUTLINE DIMENSIONS
 ALL DIMENSIONS ARE IN INCHES[MM]
 GEN TOLERANCE: ±0.04 [±1.0MM]

Connectors				
Function	Designation	Model Number	Pin	Connection
AC Input	J1	Molex: 39357-0003 Tyco-2-1776112-3	1	N
			2	NC
			3	L
DC Output	J2	Tyco-1776112-4	1,2	+V
			3,4	-V
Aux. Fan	J3	AMP :640456-2	1	+V(Fan)
			2	-V(Fan)



Derating Curve



SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AUTEC IS NOT RESPONSIBLE FOR ISSUES ARISING FROM ERRORS OR OMMISIONS

