



Size: 6in x 4in x 1.18in

FEATURES

- Both ITE and Medical Approvals
- High Power Density, 360W in 6" x 4" Footprint
- Medical Applications Protection: Means of Patient Protection (MOPP)
- Altitude During Operation: ITE up to 5000 m, Medical below 3000M
- 5Vsb Meets ErP 0.5w @ No Load
- Meets Medical BF Rating
- Main Output and Standby Output Power ON LED Indicators
- Remote Control (Inhibit) Function
- RoHS Compliant
- Wide Input Range of 90-264VAC

DESCRIPTION

The PSIM360B series of AC DC open frame medical power supplies offers 360 watts of output power in a highly reliable 6" x 4" x 1.18" frame. This series consists of single output models, input range of 90-264VAC, and a frequency of 47-63Hz. All models have high efficiency above 90%, remote control (inhibit) function, and high power density. This series meets medical BF rating as well as ITE and medical approvals. Please call factory for order details.

MODEL SELECTION TABLE

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage	Maximum Load (V1)			Ripple & Noise ⁽⁴⁾	Output Regulation	Output Power ⁽³⁾		Standby Supply (V2)	Fan Output (V3) ⁽²⁾	Efficiency
			Convection	18 CFM Forced Air	20CFM Forced Air Total Power			20CFM Forced Air Total Power				
PSIM360B-1Y120Z	90-264VAC	12V	20.84A	30A	120mV	±3%	250W	360W	5V/0.5A	12V/0.3A	>90%	
PSIM360B-1Y240Z		24V	10.42A	15A	240mV	±3%	250W	360W	5V/0.5A	12V/0.3A		
PSIM360B-1Y280Z		28V	8.93A	12.86A	280mV	±2%	250W	360W	5V/0.5A	12V/0.3A		
PSIM360B-1Y480Z		48V	5.21A	7.5A	300mV	±2%	250W	360W	5V/0.5A	12V/0.3A		
PSIM360B-1Y540Z		54V	4.63A	6.67A	300mV	±2%	250W	360W	5V/0.5A	12V/0.3A		

SPECIFICATIONS

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage Range	See derating curve	90		264	VAC
Input Frequency		47		63	Hz
Power Factor	@115VAC @230VAC @Full Load		>0.95 >0.90		
Inrush Current	@115VAC @230VAC cold start @25°C		<40 <80		A Peak
Input Current (rms)	@115VAC @230VAC max		5 2.5		A
Earth Leakage Current	@264VAC		<100		uA
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Output Current		See Table			
Remote Control		Inhibit function			
Output Power	20CFM Forced Air Convection Cooling			360 250	W
Hold Up Time	@Full Load, 115VAC		>10		ms
Ripple & Noise (20MHz bandwidth)		See Table			
PROTECTION					
Short Circuit Protection		Auto-Recovery			
Over Power Protection	Auto-Recovery	105		150	% Max. Rating
Over Voltage Protection		Latching Type. AC Recycle			
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	See derating curve	0		70	°C
Storage Temperature		-20		85	°C
Humidity		0		90	%
MTBF	@Full load and 25°C ambient temperature per Telcordia (Bellcore TR-332)		>250,000		hours

SPECIFICATIONS

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We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
GENERAL SPECIFICATIONS					
Efficiency	@Full Load, 230VAC		>90		%
PHYSICAL SPECIFICATIONS					
Weight			1.06lbs (0.48kgs)		
Dimensions (L x W x H)			6in x 4in x 1.18in (152.4mm x 101.6mm x 30mm)		
SAFETY & EMC CHARACTERISTICS					
Safety Approvals		UL60601-1 3.1 Edition ⁽⁵⁾ UL/c-UL UL60950-1 ⁽⁵⁾ UL/c-UL UL62368-1 EN60601-1 3.1 Edition TUV EN60950-1 TUV EN62368-1 IEC EN60601-1 3.1 Edition CB IEC 60950-1 CB IEC 62368-1			
EMI (See Note 4)					Ed4:2014
					Ed4:2015
					EN55024
					EN55011 Class B
					EN55032 Class B
					FCC Part 15 Class B
					FCC Part 18 Class B
				CE	

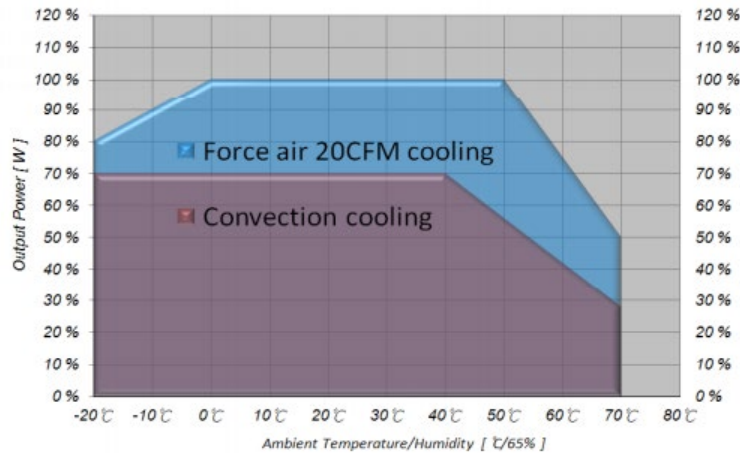
NOTES

- (1) Output connector options: Z=T (Terminal block type, pitch 8.25mm) Suitable for all voltages, or Z=C (Connector type, pitch=3.69mm): Suitable for 24V and up.
- (2) All models are equipped with 5Vsb & 12V fan outputs.
 - a. 5Vsb meets ErP 0.5W @ No Load
- (3) All models have total power 250W max. convection or 360W max. forced air cooling.
- (4) Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
- (5) This product is Listed to applicable standards and requirements by UL.

*Due to advances in technology, specifications subject to change without notice.

DERATING CURVES

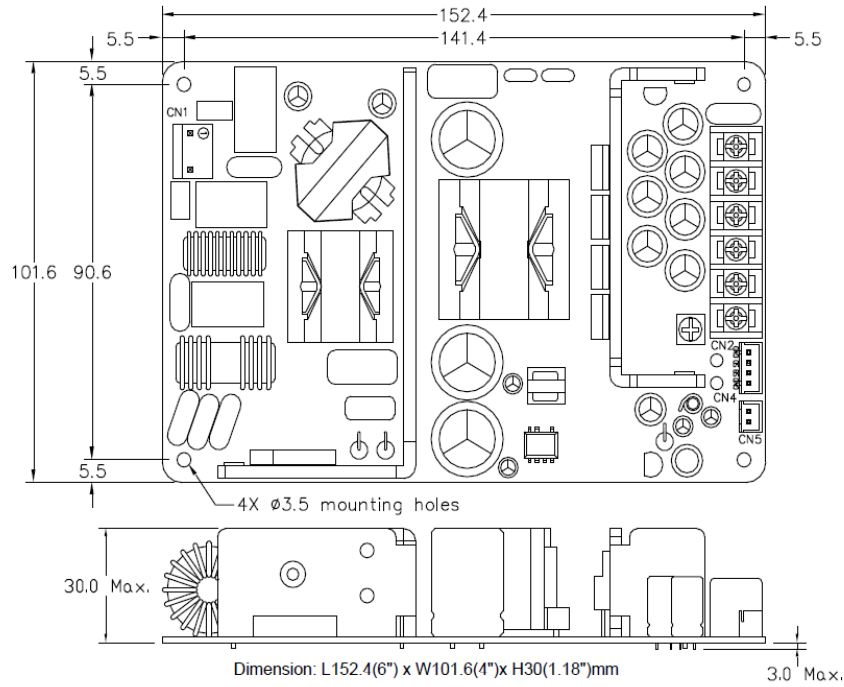
Power Derating Curve



Convection Cooling: Derate linearly 2.5% per °C from 47 to 70°C
 20CFM forced air cooling: Derate linearly 2.5% per °C from 51 to 70°C
 20CFM forced air cooling: Derate linearly 1.0% per °C from 0 to -20°C

MECHANICAL DRAWINGS

Mechanical Specification



Matching Connectors

CN1: Input Connector

JST B3P-VH-B pitch: 3.96mm or equivalent,
mates with JST VHR-3N or equivalent

Pin #	Signal
1	AC Neutral
2	AC Line

CN4: Remote Sense Connector

JST B6B-XH-A pitch: 2.5mm or equivalent,
mates with JST XHP-4 or equivalent

Pin #	Signal
1	GND
2	+5Vsb
3	SD (INHIBIT)
4	GND

CN5: FAN Output Connector

JST B2B-XH-A pitch: 2.5mm or equivalent,
mates with JST XHP-2 or equivalent

Pin #	Signal
1	+12V
2	GND

CN2: Main Output Connector

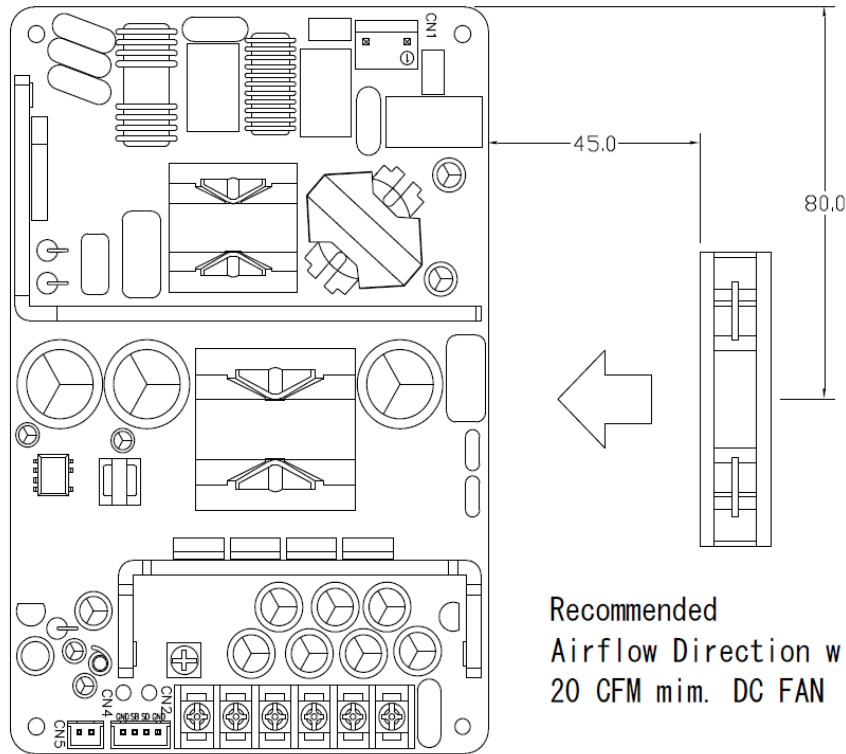
(T) 6-Pole Terminal block pitch: 8.25mm or equivalent,
rate 20A/300V

(C) JST B10P-VH-B pitch: 3.96mm or equivalent,
mates with JST VHR-10N or equivalent

Option : T	
Pin #	Signal
1	GND
2	GND
3	GND
4	+Vo
5	+Vo
6	+Vo

Option : C	
Pin #	Signal
1	GND
2	GND
3	GND
4	GND
5	GND
6	+Vout
7	+Vout
8	+Vout
9	+Vout
10	+Vout

DC FAN Recommended Direction



COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

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