



Size: 4in x 2in x 1.12in (101.6mm x 50.8mm x 28.5mm)

**FEATURES**

- Input Voltage Range of 90-264VAC
- Design for BF application
- Meets 2 X MOPP and Contact Leakage <100uA
- Follows ErP Directive of EU
- High Mechanical Torque Startup
- Safety Class II & EMI Class B
- Convection Cooling for Rated Load
- Forced Air for Max. Load
- Over Load, Short Circuit, Over Voltage Protection
- UL/CSA/EN60950-1, 2<sup>nd</sup> Edition and ANSI/AMMI/CSA/EN60601-1, 3.1 edition Safety Approvals

**DESCRIPTION**

The PSSNP-HF8 series of AC/DC medical open frame power supply offers rated output power of 80 watts, maximum output power of 100 watts, and peak output power of 120 watts in a 4" x 2" x 1.12" package. This series consists of single output models with a wide input voltage range of 90-264VAC. Each model in this series has over load, short circuit, and over voltage protection and a high mechanical torque startup. This series has UL/CSA/EN60950-1 2<sup>nd</sup> edition and ANSI/AMMI/CSA/EN60601-1, 3.1 edition safety approvals. Please call factory for order details.

**MODEL SELECTION TABLE**

Model Number <sup>(2)</sup>	Input Voltage Range	Output Voltage	Output Current				Initial Accuracy	Output Power			Step Efficiency			Average Efficiency
			Min	Rated	Max	Peak		Rated	Max.	Peak	20% Load	50% Load	100% Load	
PSSNP-HF87	90-264VAC	12V	0A	6.66A	7.5A	9A	11.8~12.2V	80W	100W	120W	85%	86%	87%	86%
PSSNP-HF87A			0A	5.33A	6.66A	8A	14.8~15.2V	80W	100W	120W	80%	83%	83%	82%
PSSNP-HF88		15V	0A	3.33A	4.6A	5.3A	23.8~24.2V	80W	100W	120W	85%	86%	87%	86%
PSSNP-HF88A			0A	1.67A	2.1A	2.71A	47.6~48.4V	80W	100W	120W	80%	84%	86%	82%
PSSNP-HF89		24V	0A	3.33A	4.6A	5.3A	23.8~24.2V	80W	100W	120W	85%	86%	87%	86%
PSSNP-HF89A			0A	1.67A	2.1A	2.71A	47.6~48.4V	80W	100W	120W	82%	85%	86%	85%
PSSNP-HF8T	48V	0A	1.67A	2.1A	2.71A	47.6~48.4V	80W	100W	120W	85%	86%	87%	86%	
PSSNP-HF8TA <sup>(2)</sup>		0A	1.67A	2.1A	2.71A	47.6~48.4V	80W	100W	120W	83%	87%	86%	85%	

**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
<b>INPUT SPECIFICATIONS</b>					
Input Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Inrush Current	@115VAC			30	A
	@230VAC			60	
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage			See Table		
Voltage Accuracy			See Table		
Output Power			See Table		
Output Current			See Table		
Hold-Up Time			16		ms
<b>PROTECTION</b>					
Short Circuit Protection			Automatic Recovery		
Over Load Protection			Automatic Recovery		
Over Voltage Protection			Latch Off		
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Case Temperature	Derating: 2.5%/°C >50°C for convection cooling	-40		+70	°C
Storage Temperature		-40		+85	°C
Operating Altitude			5,000		M
Cooling	Rated Load		Convection Cooling		
	Max. Load		Forced Air		

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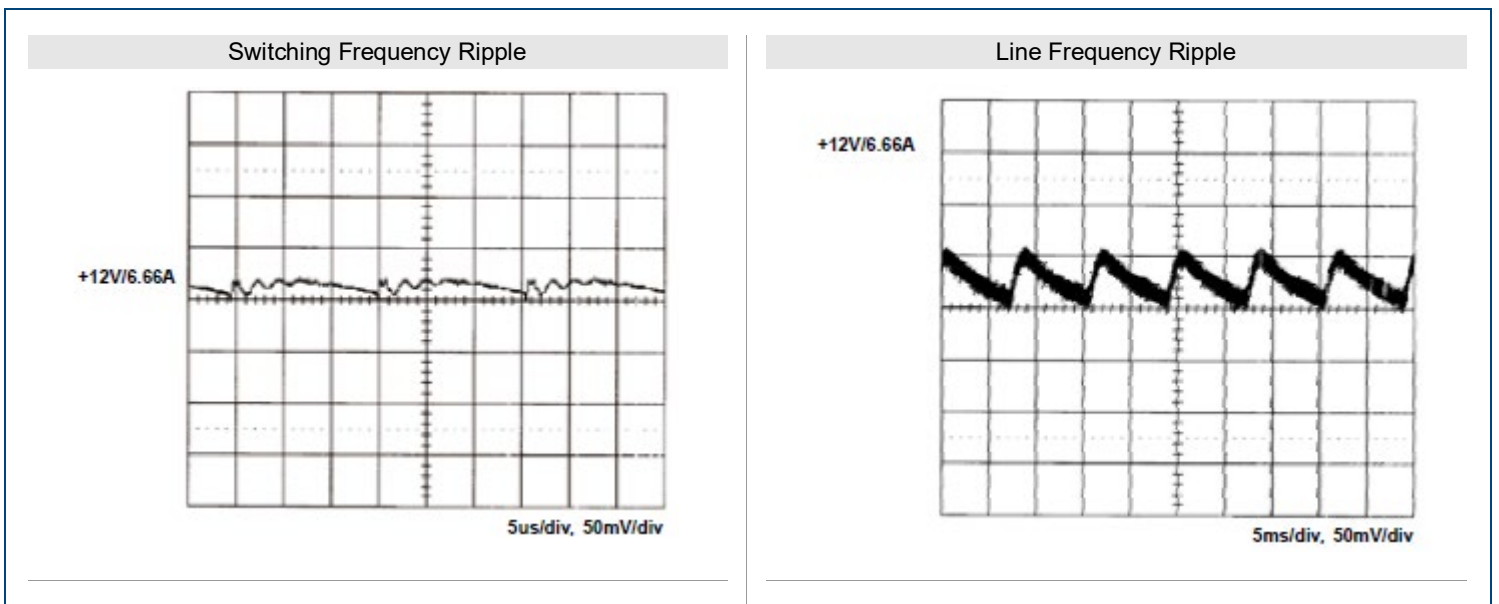
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
<b>GENERAL SPECIFICATIONS</b>					
Efficiency		See Table			
Isolation Grade	Primary ↔ Ground	1MOPP (1500VAC)			
	Primary ↔ Secondary	2MOPP (4000VAC)			
	Secondary ↔ Ground	1MOPP (1500VAC)			
Leakage Current	Earth Leakage Current			300	uA
	Touch Current			100	
<b>PHYSICAL SPECIFICATIONS</b>					
Weight		5.64oz (160g)			
Dimensions (L x W x H)		4in x 2in x 1.12in (101.6mm x 50.8mm x 28.5mm)			
<b>SAFETY CHARACTERISTICS</b>					
Safety Approvals	UL/CSA/EN60950-1, 2 <sup>nd</sup> Edition <sup>(7)</sup> ANSI/AAMI/CSA/EN60601-1, 3.1 Edition CB Report CE Mark RM Report/File				
EMI	EN55011 "B" EN61000-3-3				
Harmonics	EN61000-3-2	Class A			
EMS	EN61000-4-2, 3, 4, 5, 6, 8, 11				
Energy Saving	Energy Star 6.0 for computers and displays ErP Regulation EC(No) 1275/2008				

**NOTES**

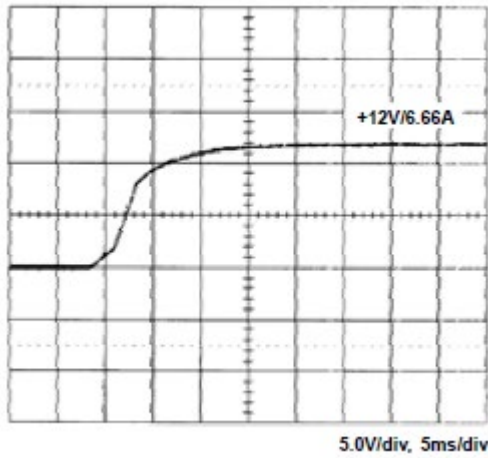
- Most power supplies will create audible burst sound at light load, if the application wants to meet input power <0.5W at standby mode. PSSNP-HF8x is for ITE & Medical applications which require standby mode. PSSNP-HF8x-A is for ITE & Medical applications but without burst sound and no standby mode.
- The safety application will be proceeded upon request.
- Standby power consumption with system: for computers and displays, Energy Star in U.S. and ErP regulation in Europe require the input power should be less than 0.5W at standby mode.
- Output Load: 80W for convection cooling; 100W for forced air cooling.
- Peak load duration: peak 120W can last for 5 sec.
- EMI Grounding: if there is a metal sheet under the power supply, connect the EMI ground to that metal sheet.
- This product is Listed to applicable standards and requirements by UL.

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

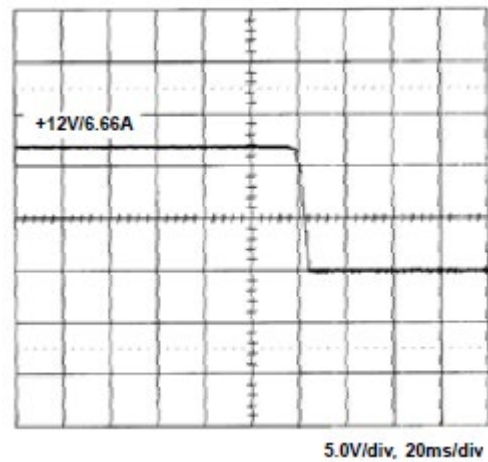
**CHARACTERISTIC CURVES**



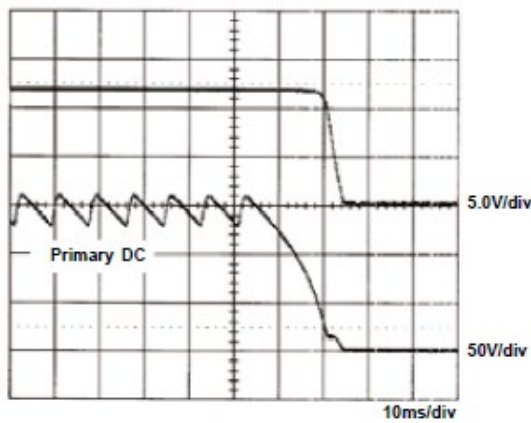
Output Turn On Wave Form



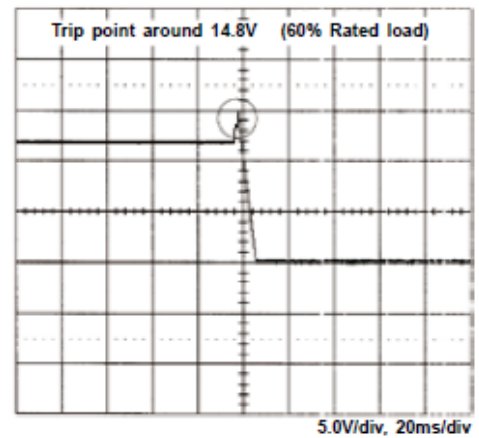
Output Turn Off Wave Form



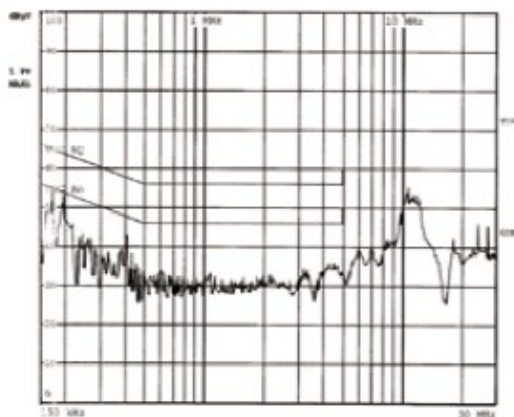
Hold Up Time



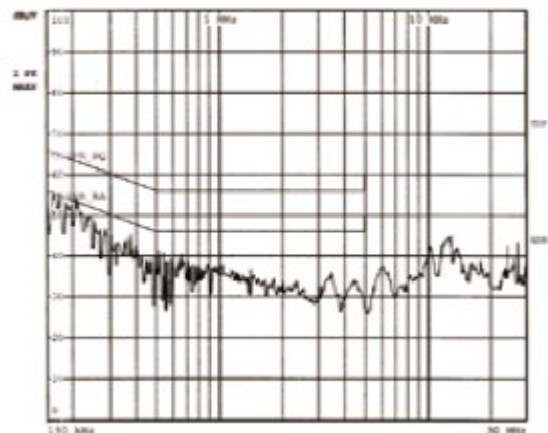
Over Voltage Protection



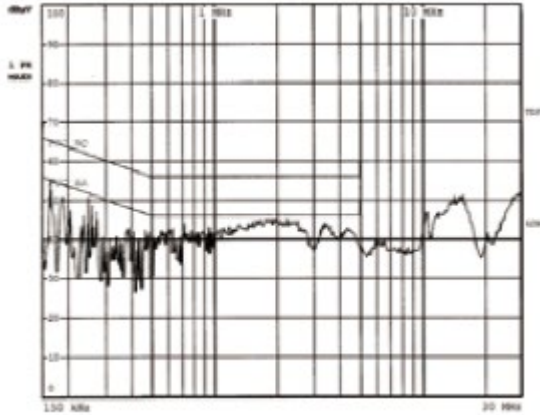
FCC B Class I



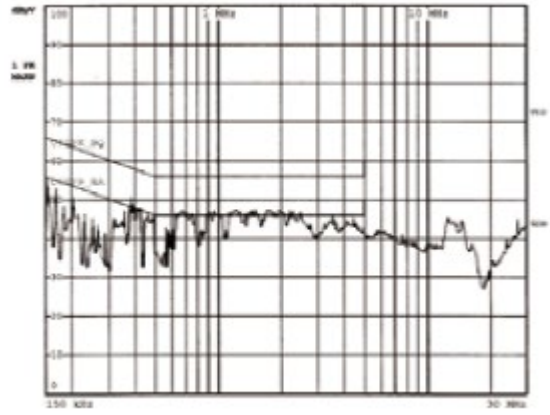
EN55011 22 Class I



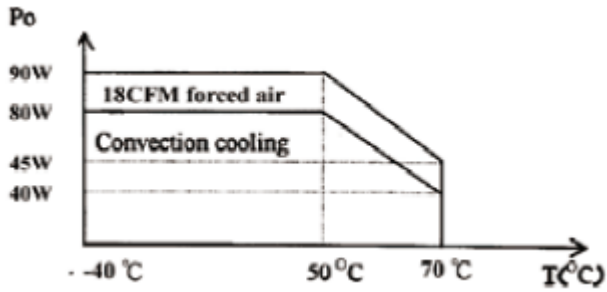
FCC B Class II



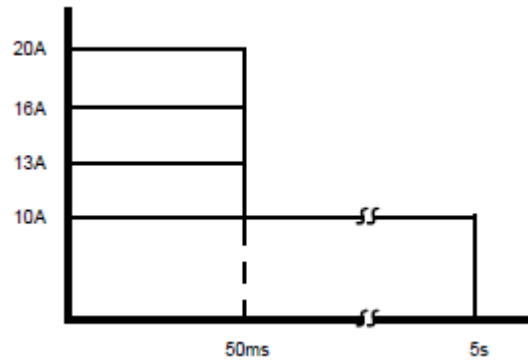
EN55011 22 B Class II



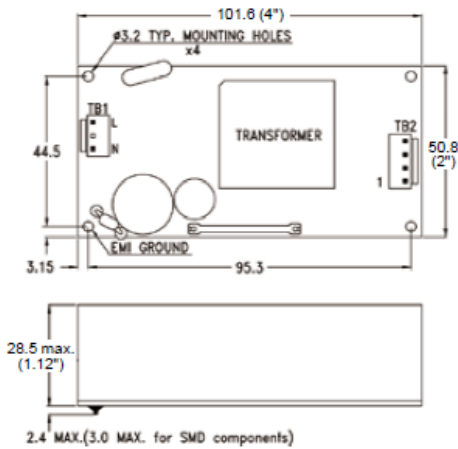
Power Derating Curve



Torque Capability



**MECHANICAL DRAWINGS**



Notes:

1. Mounting Hole: 44.5mm x 95.3mm

2. Connectors:

AC Input: JST B2P3-VH or Molex 5277-02A or equivalent

DC Output: JST B4P-VH or Molex 5273-04A or equivalent

3. Output Pin Assignment

1	2	3	4
Vo	Vo	GND	GND

4. Packing:

Net Weight: Approx. 160g/unit

Gross Weight: Approx. 15kg/carton, 80 units/carton

Carton Size (mm): 382mm (L) x 374mm (W) x 277mm (H)

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**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.

Contact **Wall Industries** for further information:

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