



Size: 2.76in x 1.57in x 0.93in (70.1mm x 37.88mm x 23.62mm)

FEATURES

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

DESCRIPTION

The PSSNP-HF3 series of AC/DC medical open frame power supplies offers rated output power of 30 watts, max output power of 40 watts, or peak output power of 45 watts in a 2.76" x 1.57" x 0.93" package. This series consists of single output models with a wide input voltage range of 90 to 264VAC. Each model in this series has high mechanical torque start-up as well as over load, short circuit, and over voltage protection. This series has UL/CSA/EN60950-1, 2nd Edition and ANSI/AMMI/CSA/EN60601-1, 3rd Edition safety approvals. Please call factory for order details.

MODEL SELECTION TABLE

Model Number ⁽¹⁾	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-HF37	90-264VAC	12V	0A	2.5A	3.3A	3.75A	11.8~12.2V	30W	40W	45W	86%	87%	86%	86%
PSSNP-HF37-A			0A	2.5A	3.3A	3.75A					72%	80%	82%	
PSSNP-HF38		15V	0A	2A	2.67A	3A	14.8~15.2V	30W	40W	45W	86%	87%	86%	86%
PSSNP-HF38-A			0A	2A	2.67A	3A					84%	81%	82%	
PSSNP-HF39		24V	0A	1.25A	1.67A	1.88A	23.8~24.2V	30W	40W	45W	86%	87%	86%	86%
PSSNP-HF39-A			0A	1.25A	1.67A	1.88A					74%	80%	84%	
PSSNP-HF3T	48V	0A	0.63A	0.83A	0.94A	47.6~48.4V	30W	40W	45W	86%	87%	86%	86%	
PSSNP-HF3T-A ⁽⁶⁾										79%	85%	86%		83%

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		90		264	VAC
Input Frequency		47		63	Hz
Inrush Current	@115VAC @230VAC			40 80	A
OUTPUT SPECIFICATIONS					
Output Voltage				See Table	
Voltage Accuracy				See Table	
Output Power				See Table	
Output Current				See Table	
Hold Up Time			16		mS
PROTECTION					
Short Circuit Protection				Automatic Recovery	
Over Load Protection				Automatic Recovery	
Over Voltage Protection				Latch Off	
ENVIRONMENTAL SPECIFICATIONS					
Operating Case Temperature	Derating: 2.5%/°C >50°C	-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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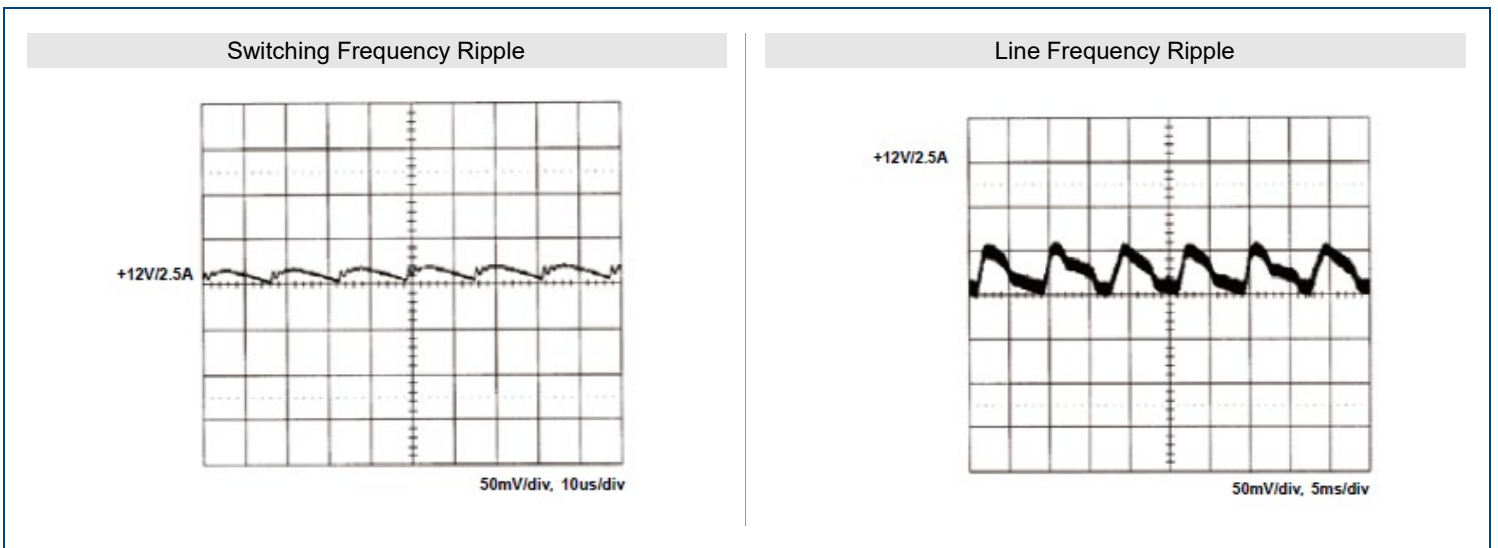
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
GENERAL SPECIFICATIONS					
Efficiency		See Table			
Isolation Grade	Primary ↔ Ground	1MOPP(1500VAC)			
	Primary ↔ Secondary	2MOPP(4000VAC)			
	Secondary ↔ Ground	1MOPP(1500VAC)			
Leakage Current	Earth Leakage Current			300	uA
	Touch Current			100	
PHYSICAL SPECIFICATIONS					
Weight		2.15oz(61g)			
Dimensions (L x W x H)		2.76in x 1.57in x 0.93in (70.10mm x 37.88mm x 23.62mm)			
SAFETY CHARACTERISTICS					
Safety Approvals	UL/CSA/EN60950-1, 2 nd Edition ⁽⁷⁾ ANSI/AMMI/CSA/EN60601-1, 3.1 Edition CB Report CE Mark RM Report/File				
EMI	EN55011 "B", EN61000-3-3				
Harmonics	EN61000-3-2				
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

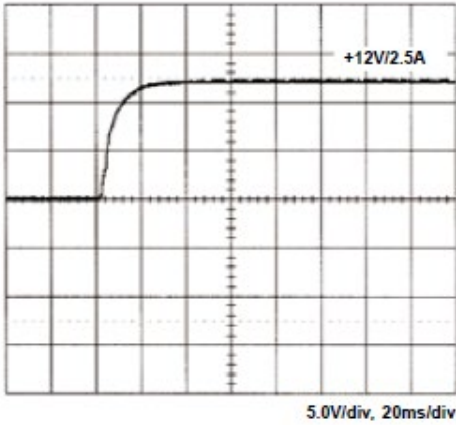
- Most of the power supplies will create audible burst sound at light load, if the application wants to meet input power <0.5W at standby mode. PSSNP-HF3x is for ITE & Medical applications which require standby mode. PSSNP-HF3xA is for ITE & Medical applications but without burst sound and no standby mode.
- 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: 30W for convection cooling, 40W for forced air cooling.
- Peak load duration 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.
- Safety application will be proceeded upon request.
- This product is Listed to applicable standards and requirements by UL.

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

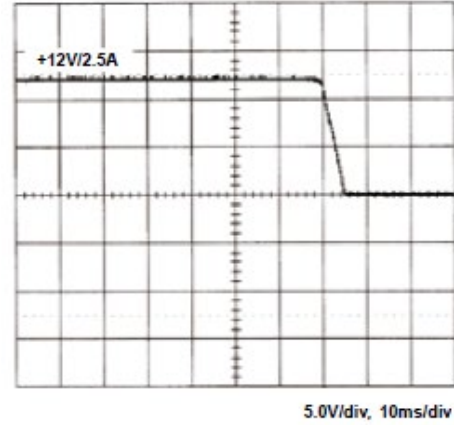
PERFORMANCE CURVES (PSSNP-HF37-A)



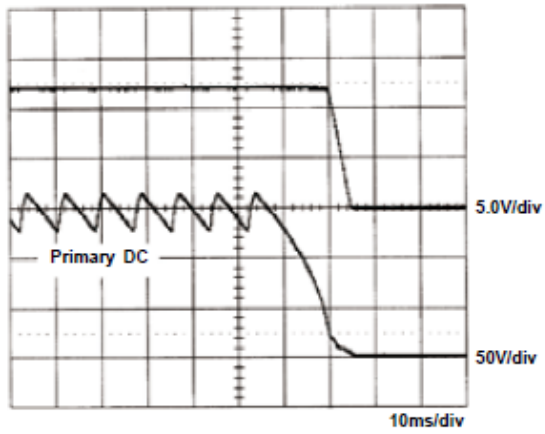
Output Turn On Wave Form



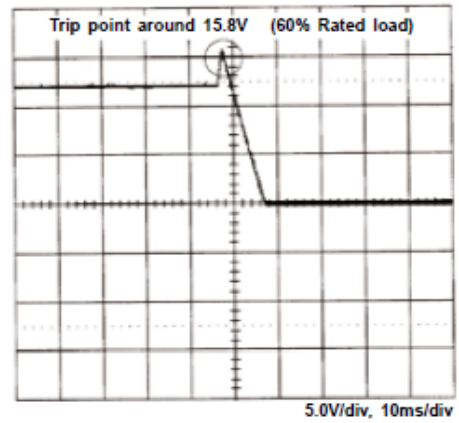
Output Turn Off Wave Form



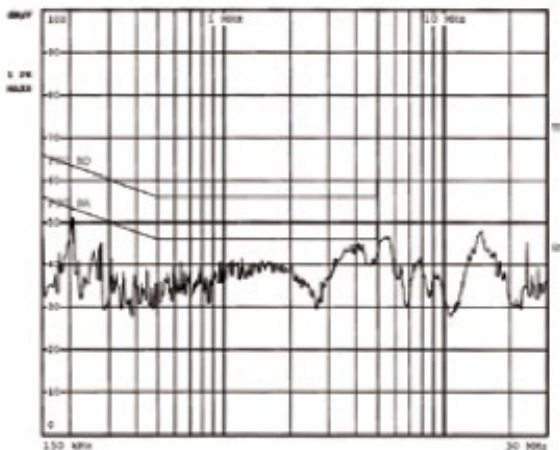
Hold-Up Time



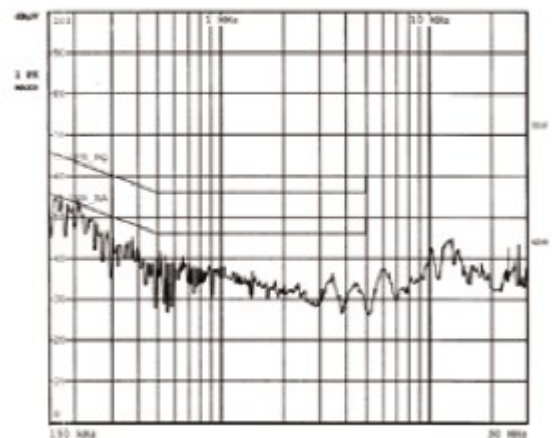
Over Voltage Protection



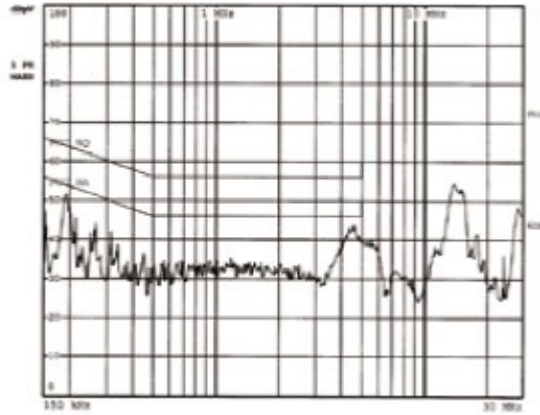
FCC B Class I



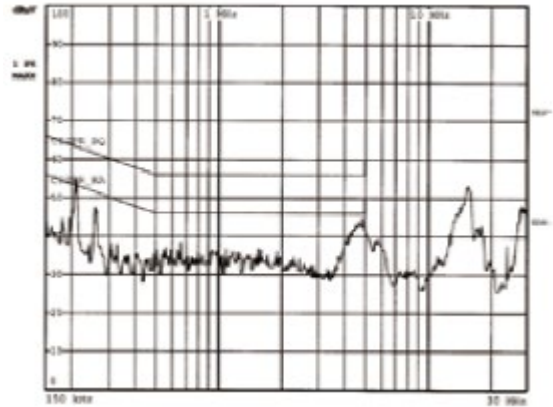
EN55011 22 B Class I



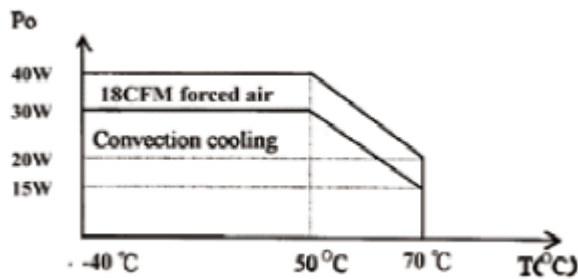
FCC B Class II



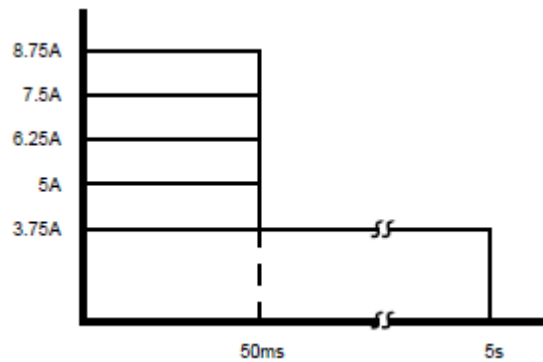
EN55011 22 B Class II



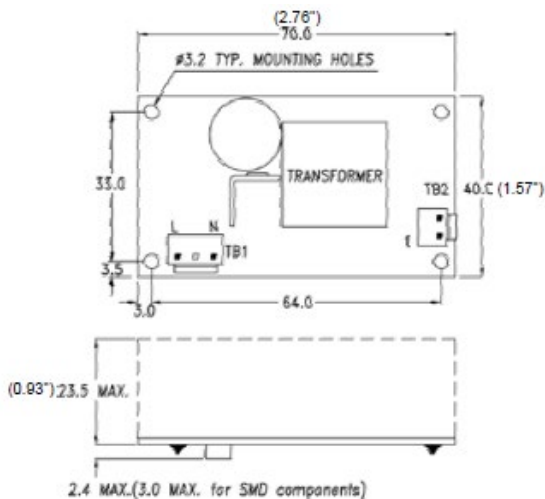
Power Derating Curve



Torque Capability



MECHANICAL DRAWINGS



Notes:

1. Mounting Hold: 33mm x 64mm
2. Connectors:
AC Input: JST B2P3-VH or Molex 5277-02A or equivalent
DC Output: JST B2P-VH or Molex 5273-02A or equivalent
3. Output Pin Assignment

1	2
Vo	GND
4. Packing:
Net Weight: Approx. 61g/unit
Gross Weight: Approx. 12kg/carton, 150 units/carton
Carton size (mm): 412mm (L) x 327mm (W) x 283mm (H)

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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