



Size: 10.83in x 5in x 2.95in
(275mm x 127mm x 75mm)

FEATURES

- Universal AC Input of 90~264VAC
- Vertical or Horizontal Assembly Available
- Medical Version Available
- DIN Rail Assembly Available
- Over Load, Over Voltage, and Short Circuit Protection
- Peak Load up to 1000W for 8 Sec.
- Built-In Active PFC
- For ITE, Medical, and Industrial Applications

DESCRIPTION

The PSSNP-F600 series of AC/DC power supplies offers rated output power of 600 watts and a peak output power of 1000 watts. This series consists of single output models with a universal input range of 90~264VAC and high efficiency. Several options are available for this series including: vertical or horizontal assembly, DIN rail assembly, and a medical version. Each model in this series has active PFC and is protected against over load, over voltage, and short circuit conditions. This series can be used in ITE, medical, and industrial applications and has UL/EN/CSA 60950-1 and UL/EN/CSA 60601-1 safety approvals. Please contact factory for ordering information.

MODEL SELECTION TABLE

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage	Output Current			Ripple & Noise ⁽²⁾	Typical Efficiency	Output Power	
			Min Load	Rated Load	Peak Load			Rated	Peak ⁽³⁾
PSSNP-F60012	90~264VAC	12V	0.2A	45.8A	83.5A	120mVp-p	86%	600W	1000W
PSSNP-F60024		24V	0.2A	25A	42A	240mVp-p	88%		
PSSNP-F60036		36V	0.2A	16.67A	27.8A	260mVp-p	90%		
PSSNP-F60048		48V	0.2A	12.5A	20.8A	480mVp-p	90%		

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	@Nominal			20	A
Power Factor		0.93			
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Voltage Accuracy ⁽⁴⁾	12V Model	11.9		12.1	V
	24V Model	23.9		24.1	
	36V Model	35.6		36.4	
	48V Model	47.8		48.2	
Line Regulation ⁽⁵⁾			±1		%
Load Regulation ⁽⁶⁾			±1		%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise (20MHz bandwidth)		See Table			
Hold Up Time ⁽⁷⁾	@Rated Load and 115VAC		16		ms
PROTECTION					
Short Circuit Protection		Automatic Recovery			
Over Load Protection		Automatic Recovery			
Over Voltage Protection		Latch Off			
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature		0		50	°C
Storage Temperature		-20		+85	°C
Cooling		Convection			
GENERAL SPECIFICATIONS					
Efficiency	@Rated load and nominal line	See Table			
PHYSICAL SPECIFICATIONS					
Weight		Approx. 5.07lbs (2300g)			
Dimensions (L x W x H)		10.83in x 5in x 2.95in (275mm x 127mm x 75mm)			
Connectors	AC Input & DC Output	Terminal Blocks			
SAFETY CHARACTERISTICS					
Safety Approvals ⁽⁸⁾		UL/EN/CSA 60950-1, UL/EN/CSA 60601-1			
EMI		FCC "B", EN55022 "B"			
Harmonics		EN61000-3-2			
EMS		EN61000-4-2, -3, -4, -5, -6, -11			

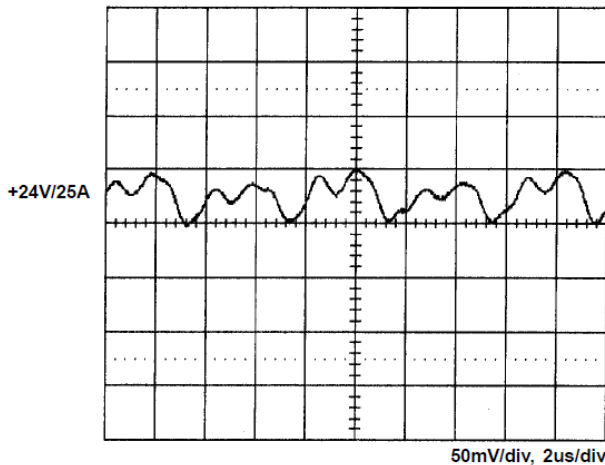
NOTES

1. Several assembly options are available for this series:
 For Vertical Assembly with bracket and AC input on lower side, add -A1 to the end of model number. Ex: PSSNP-F6007-A1
 For Vertical Assembly with bracket and AC input on upper side, add -A2 to the end of the model number. Ex: PSSNP-F6007-A2
 For Horizontal Assembly without bracket, add -B to end of the model number. Ex: PSSNP-F6007-B
 For DIN Rail Assembly with AC input at lower side, add -D to end of model number. Ex: PSSNP-F6007-D
 For DIN Rail Assembly with AC input at upper side, add -D1 to end of the model number. Ex: PSSNP-F6007-D1.
 This series is available as a medical grade product. To indicate medical grade, add -M to end of product model before any other suffixes. Ex: PSSNP-F6007-MA2 would indicate a medical grade model with vertical assembly with bracket and AC input on the upper side.
2. Ripple & Noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
3. At peak load, the output can last for 8 seconds without shutdown.
4. At factory, in 60% rated load condition, the output is checked to be within voltage accuracy.
5. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
6. Load regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load at another output set to 60% rated load.
7. Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
8. This product is Listed to applicable standards and requirements by UL.

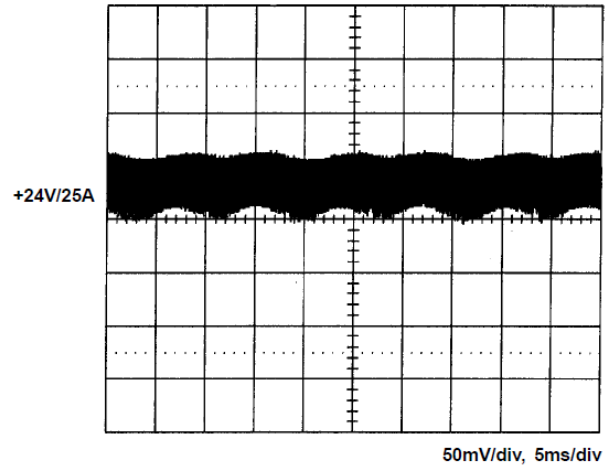
**Due to advances in technology, specifications subject to change without notice.*

PERFORMANCE CURVES

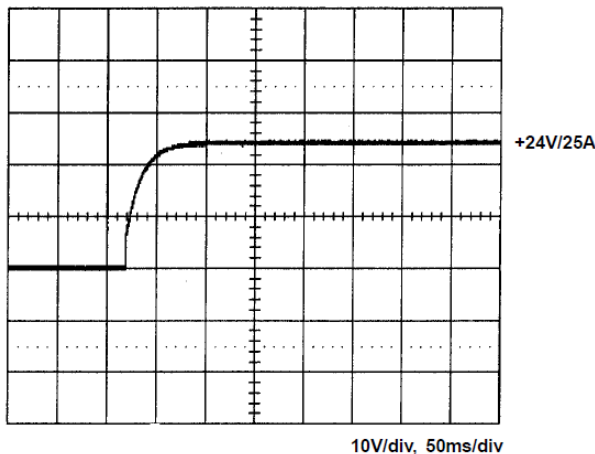
Switching Frequency Ripple



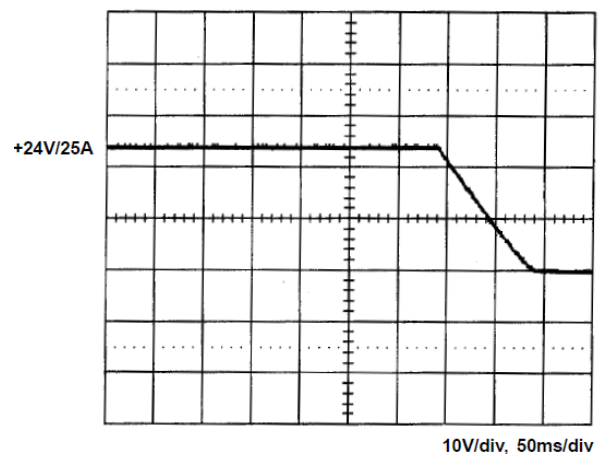
Line Frequency Ripple



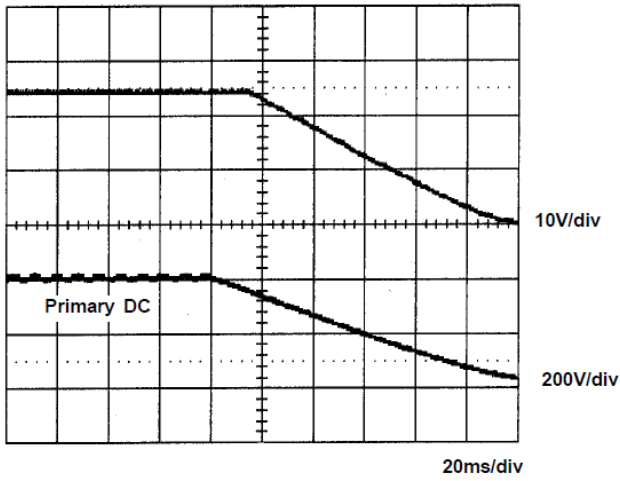
Output Turn On Wave Form



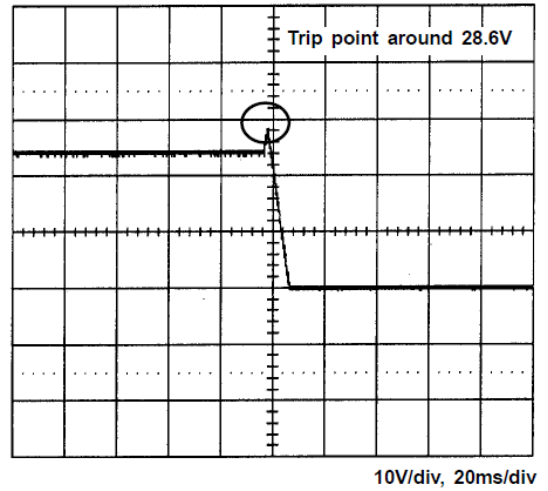
Output Turn Off Wave Form



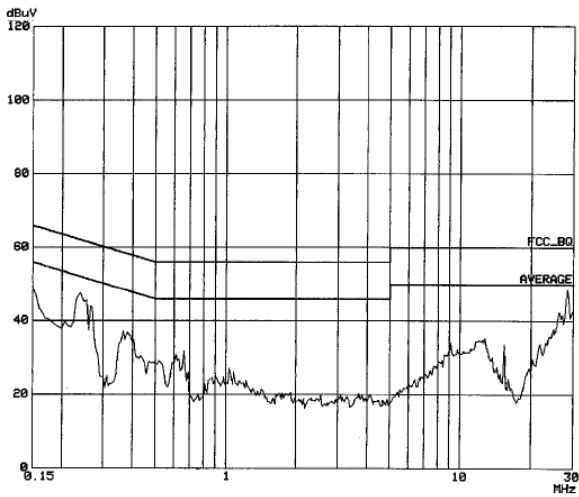
Hold-Up Time



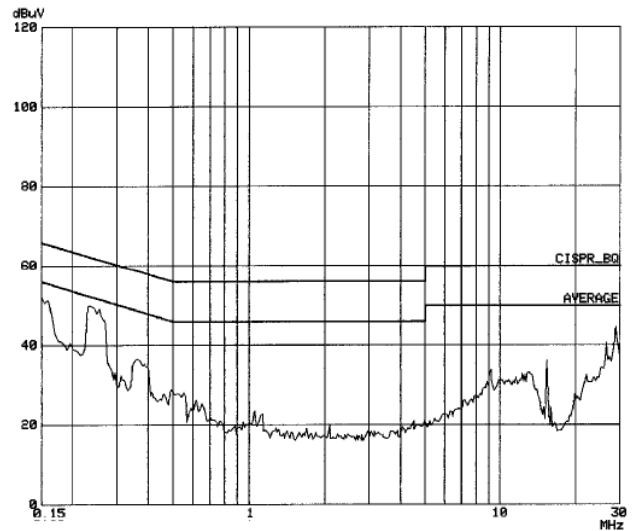
Over Voltage Protection



FCC B



EN 55022 B



MECHANICAL DRAWINGS

Accessories

For Vertical Assembly:
Bracket x 2pcs & M4 screws x 4

Bracket **M4 Screw**

Holes \varnothing 4.5 x2

For 35mm Carrier Rail Application
Rail Hook x 2 & #6-32 screw x 6 (Optional)

Rail hook **#6-32 Screw**

Packing:
Net Weight: Approx. 2300g/unit
Gross Weight: Approx. 14kg/carton, 5 units/carton
Carton size: 558mm x 356mm x 233mm

INSTALLATION INSTRUCTIONS

Installation -A1
AC Input at lower side
Vertical assembly with bracket

Installation -A2
AC Input at upper side
Vertical assembly with bracket

Installation -B
Horizontal assembly without bracket

Installation -D
AC Input at lower side
Din Rail hook assembly

Installation -D1
AC input at upper side
Din rail hook assembly

MODEL NUMBER SETUP

PSSNP	-	F600	12	-	M	A2
Series Name		Output Power	Output Voltage		Medical Grade	Assembly Options
		F600: 600 Watts	12: 12VDC 24: 24VDC 36: 36VDC 48: 48VDC		Blank: Standard M: Medical Grade	A1: AC Input @ Low Side, Vertical Assembly w/ bracket A2: AC Input @ Upper Side, Vertical Assembly w/ bracket B: Horizontal Assembly without bracket D: AC Input @ Low Side, DIN rail hook assembly D1: AC Input at Upper Side, DIN rail hook assembly

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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