



Size: 5in x 3in x 1.42in (127mm x 76.2mm x 36.1mm)

**FEATURES**

- Safety Class II
- High Mechanical Torque Start-Up
- Convection Cooling for Rated Load
- Forced Air for Max. Load
- Output Voltages Ranging from 12V~48V
- Energy Star Version 6.0 (for models without A Suffix)
- High Average Efficiency up to 88%
- U-Shape Case or Metal Box Case Options
- Optional Burst Mode
- Optional Standby Mode
- Over Load, Short Circuit, and Over Voltage Protection
- UL/CSA/EN60950-1 2<sup>nd</sup> Edition, ANSI/AMMI/CSA/EN60601-1 3.1 Edition, CB Report, CE Mark, and RM Report Safety Approvals

**DESCRIPTION**

The PSSNP-G20 series of AC/DC power supplies offers rated output power of 200 watts, max output power of 300 watts, and peak output power of 400 watts. Single outputs are available for this series with output voltages ranging from 12 to 48V and an input voltage range of 90 to 264VAC. This series is protected against over load, short circuit, and over voltage conditions and has high average efficiency up to 88%. Both burst mode and standby mode are options for this series and either a u-shaped case or metal box case are available. This series has UL/CSA/EN60950-1 2<sup>nd</sup> Edition, ANSI/AMMI/CSA/EN60601-1 3.1 Edition, CB report, CE mark, and RM report safety approvals. Please call factory for order details.

**MODEL SELECTION TABLE**

Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage	Load				Initial Accuracy	Step Efficiency			Average Efficiency
			Min Load	Rated Load	Max Load	Peak Load		20% Load	50% Load	100% Load	
PSSNP-G207	90~264VAC	12V	0A	16.5A	25A	33A	+11.9V~12.1A	82%	88.5%	89.5%	86.5%
PSSNP-G207-A											
PSSNP-G207-M											
PSSNP-G207-MA											
PSSNP-G208	90~264VAC	15V	0A	12A	18A	22.5A	+14.9V~15.1V	82%	88.5%	89.5%	86.5%
PSSNP-G208-A											
PSSNP-G208-M											
PSSNP-G208-MA											
PSSNP-G205	90~264VAC	18V	0A	11.1A	16.6A	23.3A	+17.9V~18.1V	82%	88.5%	89.5%	86.5%
PSSNP-G205-A											
PSSNP-G205-M											
PSSNP-G205-MA											
PSSNP-G209	90~264VAC	24V	0A	8.4A	12.5A	16.7A	+23.9V~24.1V	83%	89.5%	91%	88%
PSSNP-G209-A											
PSSNP-G209-M											
PSSNP-G209-MA											
PSSNP-G20G	90~264VAC	28V	0A	7.2A	10.7A	13A	+27.9V~28.1V	83%	89.5%	91%	88%
PSSNP-G20G-A											
PSSNP-G20G-M											
PSSNP-G20G-MA											
PSSNP-G20J	90~264VAC	36V	0A	5.6A	8.3A	11A	+35.8V~36.2V	84%	90.6%	91%	88%
PSSNP-G20J-A											
PSSNP-G20J-M											
PSSNP-G20J-MA											
PSSNP-G20T	90~264VAC	48V	0A	4.2A	6.3A	8.4A	+47.8V~48.2V	84%	90.6%	91%	88%
PSSNP-G20T-A											
PSSNP-G20T-M											
PSSNP-G20T-MA											

**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	@115/230VAC			30/60	A
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage		See Table			
Voltage Accuracy		See Table			
Output Power	Rated		200		W
	Max.		300		
	Peak		400		
Output Current		See Table			
Minimum Load		0			A
Hold-Up Time			20		ms
Peak Load Duration	Peak 400W			5	sec
Output Load	Convection Cooling		200		W
	Forced Air Cooling		300		
<b>PROTECTION</b>					
Short Circuit Protection		Automatic Recovery			
Over Load Protection		Automatic Recovery			
Over Voltage Protection		Latch Off			
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature	No Derating	-20		70	°C
	Derating 2.5%/°C for convection cooling	50			
Storage Temperature		-40		+85	°C
Cooling	Rated Load	Convection			
	Max. Load	Forced Air			
Operation Altitude			5,000		m
<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			300	uA
	Touch Current			100	
<b>PHYSICAL SPECIFICATIONS</b>					
Weight		12.45oz (353g)			
Dimensions (L x W x H)		5in x 3in x 1.42in (127mm x 76.2mm x 36.1mm)			
Connectors	AC Input	Molex 5277-02A or Equivalent			
	DC Output	Terminal Blocks (default for PSSNP-G207) or Molex 5273-08A (default for others) or Equivalent			
Fan, Remote Sense		Molex 5045-02A or Equivalent			
<b>SAFETY &amp; EMC CHARACTERISTICS</b>					
Safety Approvals		UL/CSA/EN60950-1 2 <sup>nd</sup> Edition <sup>(6)</sup> ANSI/AMMI/CSA/EN60601-1, 3.1 Edition CB Report, CE Mark, RM Report/File			
EMI		EN55022 "B", EN61000-3-3			
Harmonics		EN61000-3-2			
EMS		EN61000-4-2, 3, 4, 5, 6, 8, 11			
Energy Saving <sup>(4)</sup>		Energy Star Version 6.0 for Computers and Displays. ErP Regulation EC(No) 1275/2008			

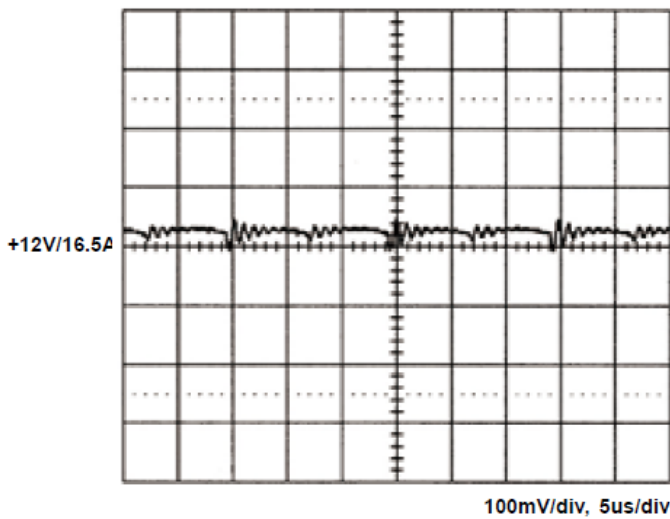
**NOTES**

1. Model Selection:
  - Most of the power supplies will create an audible burst sound at light load, if the application wants to meet input power <0.5 at standby mode.
  - PSSNP-G20x is for ITE application which requires standby mode.
  - PSSNP-G20x-A is for ITE application but without burst sound and no standby mode.
  - PSSNP-G20x-M is for medical applications which require standby mode.
  - PSSNP-G20x-MA is for medical applications but without burst sound and no standby mode.
2. Standby power consumption with system: For computers and displays, Energy Star in U.S. and ErP regulation in Europe require the input power to be less than 0.5W at standby mode.
3. EMI Grounding: If there is a metal sheet under the power supply, connect the EMI ground to the metal sheet.
4. For models without -A suffix
5. This product is Listed to applicable standards and requirements by UL.

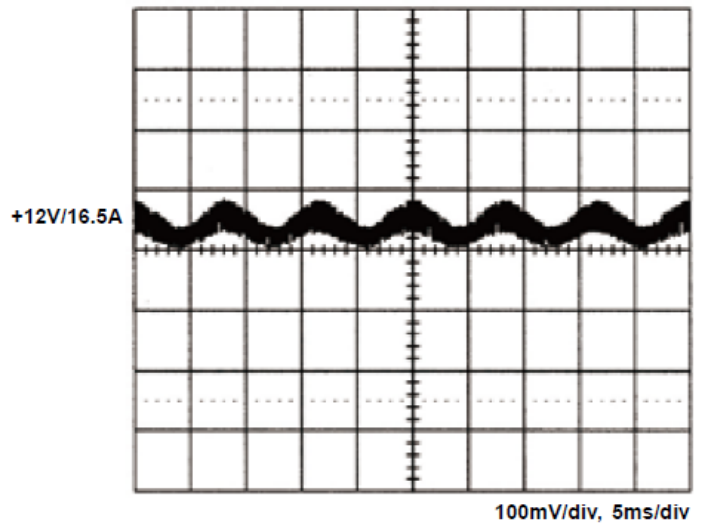
*Due to advances in technology, specifications are subject to change without notice.*

**PERFORMANCE CURVES**

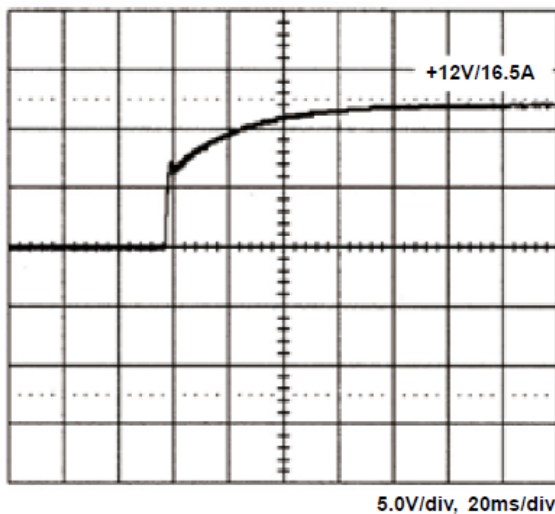
Switching Frequency Ripple



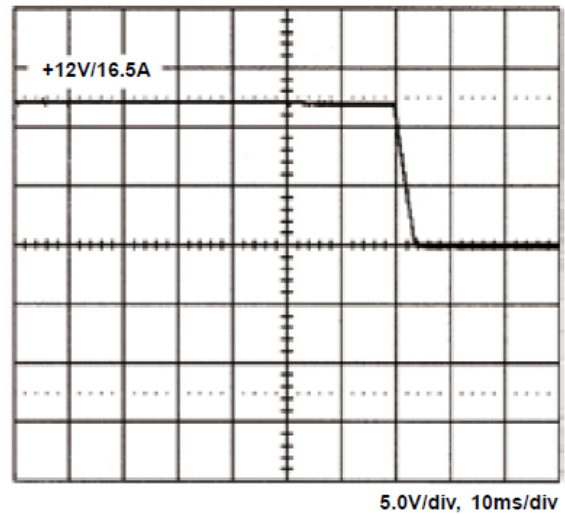
Line Frequency Ripple



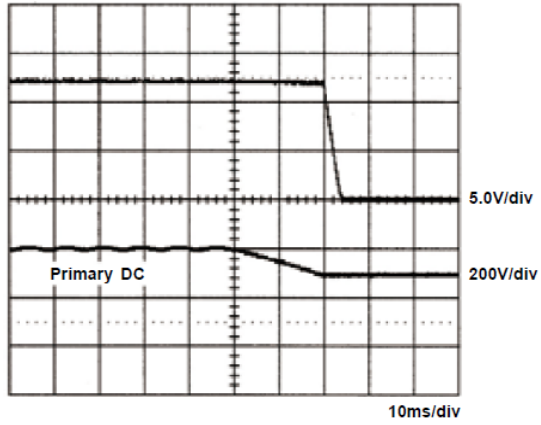
Output Turn On Wave Form



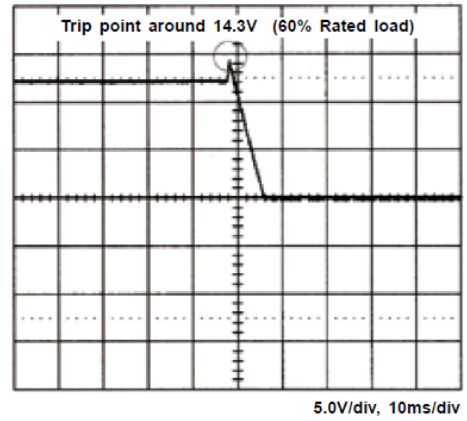
Output Turn Off Wave Form



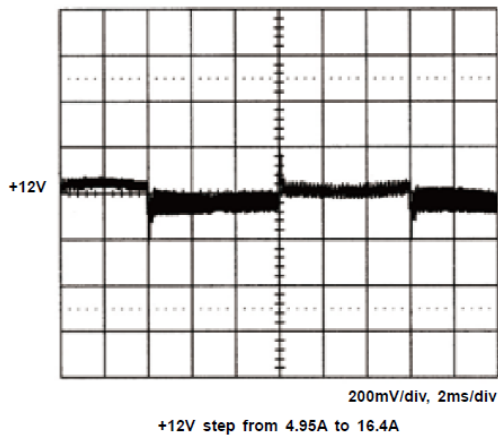
Hold Up Time



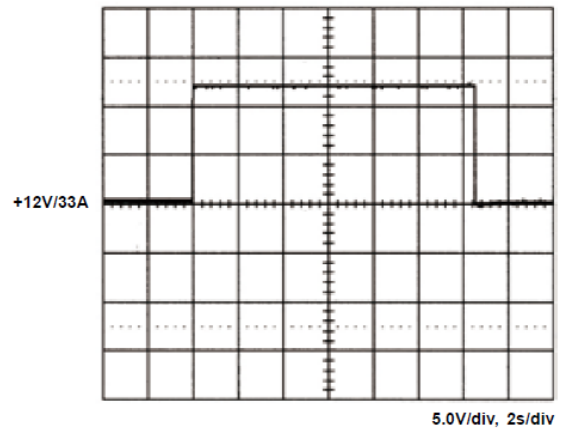
Over Voltage Protection



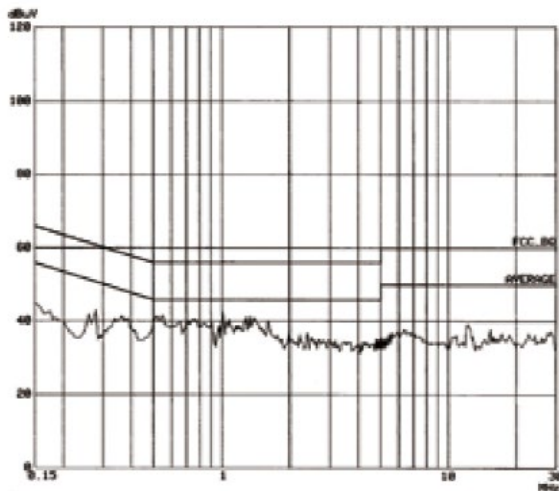
+12V Step Response



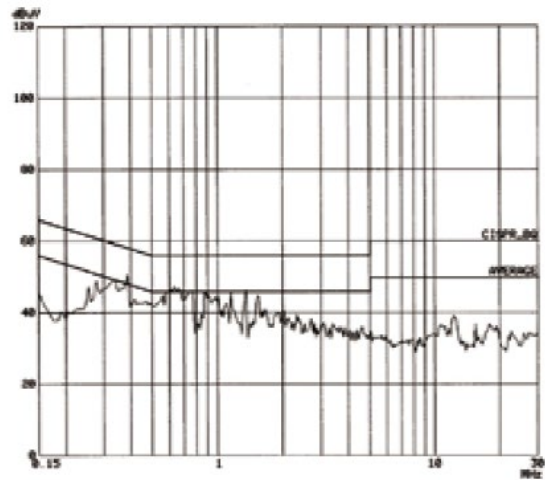
Peak Load



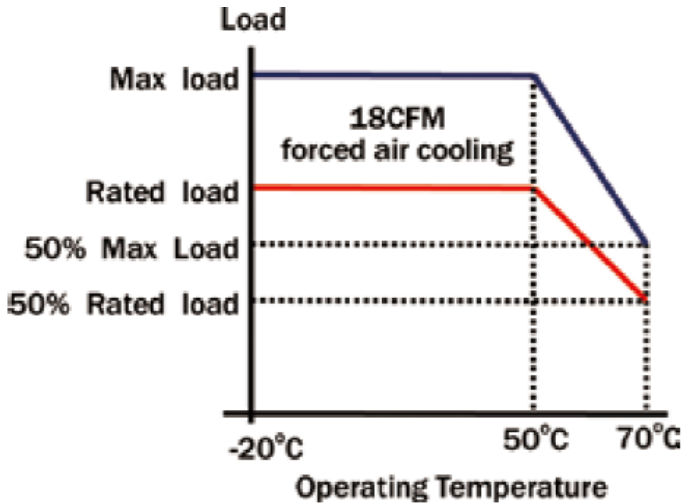
FCC B



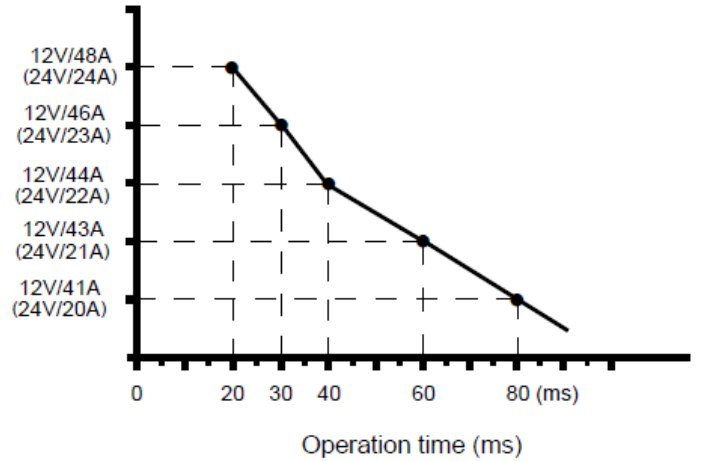
EN55022 B



Power Derating Curve



PSSNP-G207 (PSSNP-G209) Capability for Driving Motor



MECHANICAL DRAWINGS

Notes:

1. Mounting Hole: 64.8mm x 115.6mm
2. Connectors:  
AC Input: Molex 5277-02A or Equivalent  
DC Output: Terminal Blocks (default for PSSNP- G207) or Molex 5273-08A (default for others) or equivalent
3. 4 Output Pin Assignment:

Pin	1	2	3	4	5	6	7	8
PSSP-G207	+Vo	+Vo	GND	GND				
Others	+Vo	+Vo	+Vo	+Vo	GND	GND	GND	GND

Function Pin Assignment:

Function		TB3	TB4
		FAN Output	Remote Sense
Pin	1	GND	Sense -
	2	+12V	Sense +

4. Packing:  
Net Weight: 353g approx./unit  
Gross weight: 15kg approx./carton, 16 units/carton  
Carton size: 384mm (L) x 339mm (W) x 327mm (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.

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