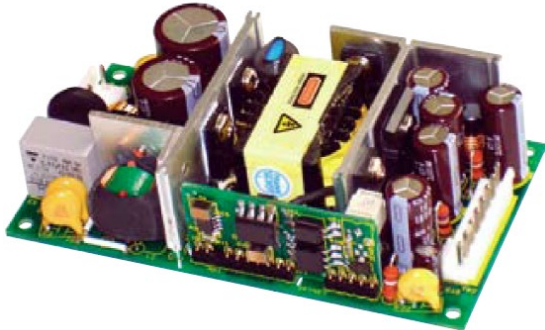


FEATURES

- Input Voltage Range of 90-264VAC
- High Efficiency
- Peak Output Power of 135 Watts
- ITE & Medical Safety
- Short Circuit, Over Load, and Over Voltage Protection
- UL 60950-1, UL 60601-1, CSA C22.2 No. 60950-1, 601.1, EN 60950-1, and EN 60601-1 Safety Approvals

DESCRIPTION

The PSSNP-Z08 series of AC/DC open frame power supplies offers rated output power of 85 watts and a peak output power of 135 watts in a 4.5" x 2.5" x 1.18" package. This series consists of single, dual, and triple output models with a wide input voltage range of 90-264VAC. Each model in this series has high efficiency as well as short circuit, over load and over voltage protection. This series also has UL 60950-1, UL 60601-1, CSA C22.2 No. 60950-1, 601.1, EN 60950-1, and EN 60601-1 safety approvals.



Size: 4.5in x 2.5in x 1.18in (114.3mm x 63.5mm x 30mm)

MODEL SELECTION TABLE

Single Output Models

Model Number	Input Voltage Range	Output Voltage	Output Current				Ripple & Noise	Voltage Accuracy ⁽¹⁾	Output Power		Load Regulation	Efficiency
			Min.	Rated	Max.	Peak			Rated	Peak ⁽²⁾		
PSSNP-Z086	90-264VAC	+5V	0A	15A	-	-	1%	+4.95V~+5.05V	85W	135W	±1%	81%
PSSNP-Z087-1		+12V	0A	7A	-	11A	1%	+11.88V~+12.12V	85W	135W	±1%	83%
PSSNP-Z089-1		+24V	0A	3.75A	-	5.6A	1%	+23.75V~+24.24V	85W	135W	±1%	86%
PSSNP-Z08T		+48V	0A	1.88A	-	2.8A	1%	+47.6V~+48.4V	85W	135W	±1%	87%

MODEL SELECTION TABLE

Dual Output Models

Model Number	Input Voltage Range	Output Voltage	Output Current				Ripple & Noise	Voltage Accuracy ⁽¹⁾	Output Power		Load Regulation	Efficiency
			Min.	Rated	Max.	Peak			Rated	Peak ⁽²⁾		
PSSNP-Z083	90-264VAC	+5V	0A	6A	8A	15A	1%	+4.9V~+5.1V	85W	135W	±3%	84%
		+12V	0A	4A	6A	10A		+11.4V~+12.6V				
PSSNP-Z087		+12V	0A	6.5A	-	11A	1%	+11.88V~+12.12V	85W	135W	±1%	82%
		+5V	0A	0.5A	-	-	+4.75V~+5.25V					
PSSNP-Z089		+24V	0A	3.6A	-	5.6A	1%	+23.75V~+24.24V	85W	135W	±1%	85%
	+5V	0A	0.5A	-	-	+4.75V~5.25V						

MODEL SELECTION TABLE

Triple Output Models

Model Number	Input Voltage Range	Output Voltage	Output Current				Ripple & Noise	Voltage Accuracy ⁽¹⁾	Output Power		Load Regulation	Efficiency
			Min.	Rated	Max.	Peak			Rated	Peak ⁽²⁾		
PSSNP-Z081	90-264VAC	+5V	0A	6A	8A	15A	1%	+4.9V~+5.1V	85W	135W	±3%	84%
		+12V	0A	4A	3A	10A		+11.4V~+12.6V				
		-12V	0A	0.5A	-	-	-11.4V~-12.6V					
PSSNP-Z08F			+5V	0A	6A	8A	15A	1%	+4.9V~+5.1V	85W	135W	±3%
	+24V	0A	2A	3A	5A	+22.8V~+25.2V						
	+12V	0A	0.5A	-	-	+11.4V~+12.6V						

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
Input Current	@115VAC, cold start at 25°C			30	A
	@230VAC, cold start at 25°C			60	
OUTPUT SPECIFICATIONS					
Output Voltage			See Table		
Voltage Accuracy			See Table		
Line Regulation ⁽³⁾			±1		%
Load Regulation ⁽⁴⁾			See Table		
Output Power			See Table		
Output Current			See Table		
Ripple & Noise ⁽⁵⁾			See Table		
Hold Up Time ⁽⁶⁾	@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	Derating: 2.5%/°C>50°C	0		70	°C
Storage Temperature		-40		85	°C
Cooling		Free Air Convection			
GENERAL SPECIFICATIONS					
Efficiency ⁽⁷⁾	@Rated Load and 115VAC	81		87	%
PHYSICAL SPECIFICATIONS					
Weight		Approx. 8.29oz (235g)			
Dimensions (L x W x H)		4.5in x 2.5in x 1.18in (114.3mm x 63.5mm x 30mm)			
SAFETY CHARACTERISTICS					
Safety Approvals		UL 60950-1, UL 60601-1 ⁽⁹⁾ CSA C22.2 No. 60950-1, 601.1 EN 60950-1, EN 60601-1			
EMI		FCC "B" EN55022 "B", EN55011 "B"			
EMS		EN61000-4-2, 3, 4, 5, 6, 8, 11			

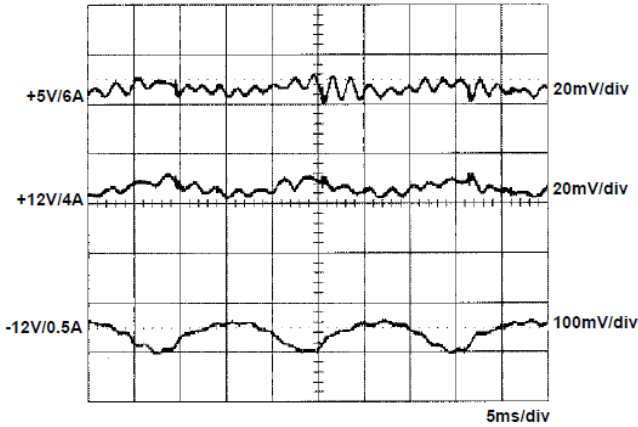
NOTES

- At factory, all outputs in 60% rated load condition, each output is checked to be within the accuracy range while the main output is set to within the specified accuracy range at rated load.
- At peak load, the output can last for 8 seconds without shutting down.
- Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
- Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
- 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.
- Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to regulation limit at rated load and nominal line.
- Efficiency is measured at nominal line and rated load.
- Model Selection:
 PSSNP-Z08x is for both ITE application and medical application
 PSSNP-Z086 is for medical use only.
- This product is Listed to applicable standards and requirements by UL.

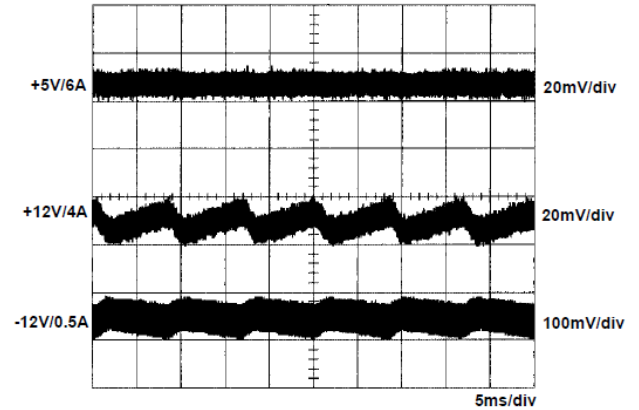
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

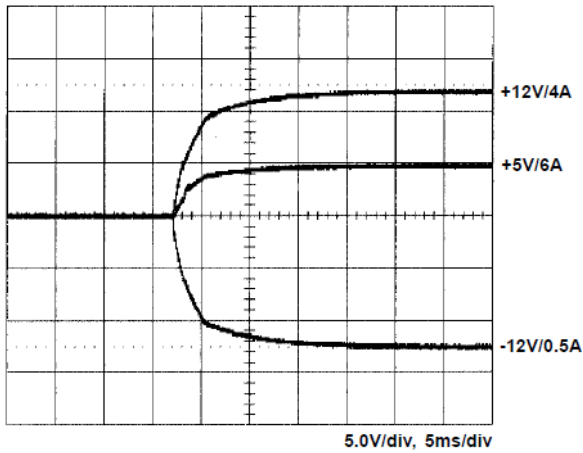
Switching Frequency Ripple



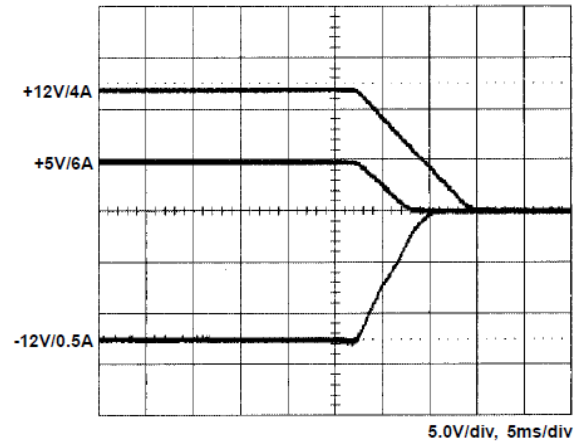
Line Frequency Ripple



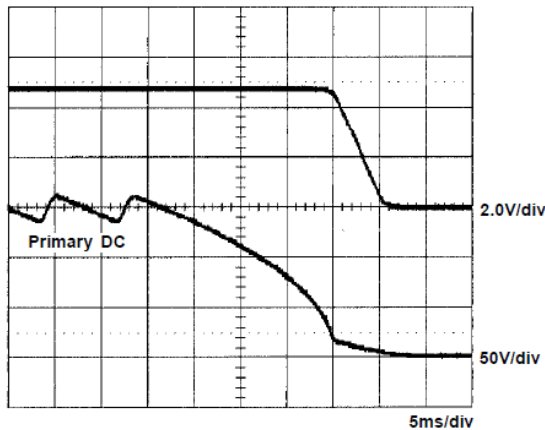
Output Turn On Wave Form



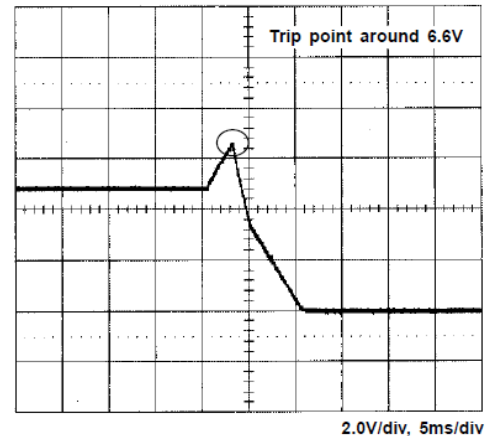
Output Turn Off Wave Form



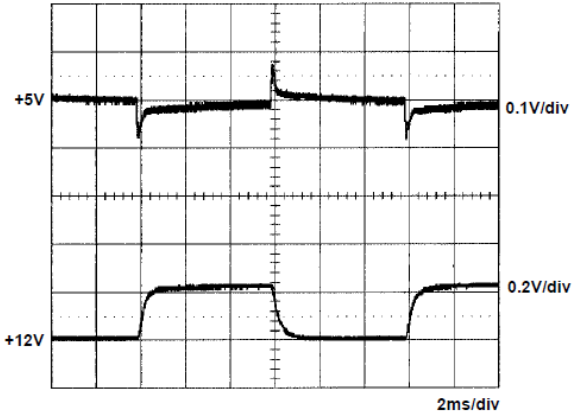
Hold-Up Time



Over Voltage Protection

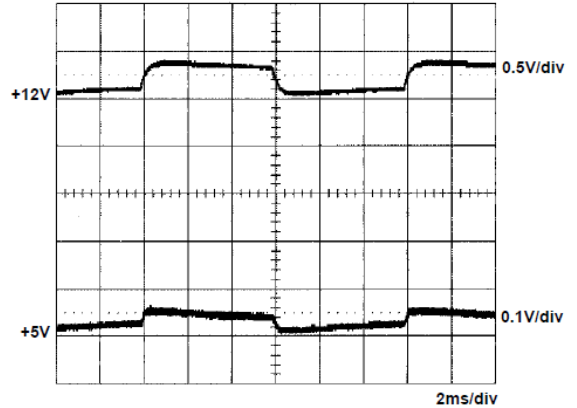


+5V Step Response



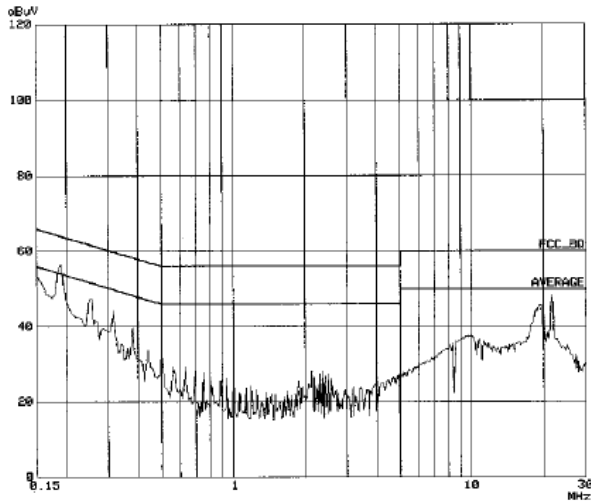
+5V step from 1.2A to 6A
 others are at 60% rated load

+12V Step Response

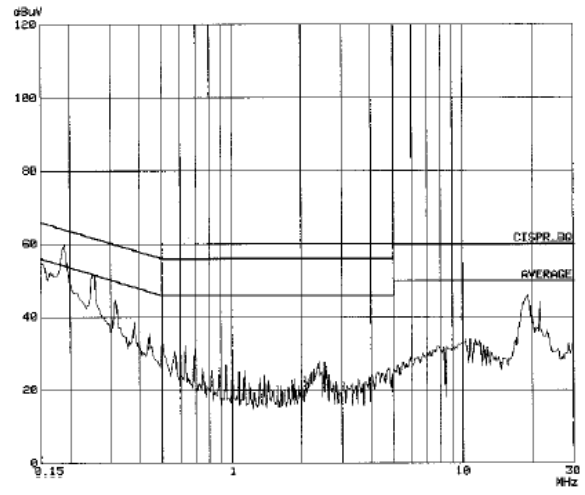


+12V step from 0.8A to 4A
 others are at 60% rated load

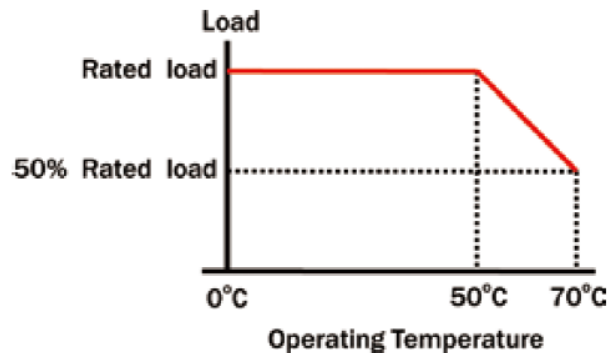
FCC B



EN 55022 B



Power Derating Curve



MECHANICAL DRAWINGS

TO CHASSIS GROUND, INDICATED "G" x 3

114.3(4.5")

55.88(2.2")

63.5(2.5")

TRANSFORMER

3.81(1.5")

106.68(4.2")

ø3.5TYP. MOUNTING HOLES x 4

30.0(1.18") Max.

2.4(0.095") Max.

Notes:

1. Mounting Hole: 55.88mm x 106.68mm
2. Connectors:
AC Input: JST B2P3-VH or equivalent
DC Output: JST B6P-VH or B8P-VH or equivalent
3. Output Pin Assignment:

Pin. No.	1	2	3	4	5	6	7	8
PSSNP-Z081	12V	12V	GND	GND	GND	5V	5V	-12V
PSSNP-Z083	12V	12V	GND	GND	GND	5V	5V	NC
PSSNP-Z08F	24V	24V	GND	GND	GND	5V	5V	12V
PSSNP-Z086	GND	GND	GND	GND	5V	5V	5V	5V
PSSNP-Z087	GND	GND	GND	12V	12V	12V	5V	
PSSNP-Z087-1	GND	GND	GND	12V	12V	12V	NC	
PSSNP-Z089	GND	GND	GND	24V	24V	24V	5V	
PSSNP-Z089-1	GND	GND	GND	24V	24V	24V	NC	
PSSNP-Z08T	GND	GND	GND	48V	48V	48V	NC	

4. Packing:
Net Weight: approx. 235g/unit
Gross Weight: approx. 16.5kg/carton, 60 units/carton
Carton Size (mm): 447 x 300 x 301

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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