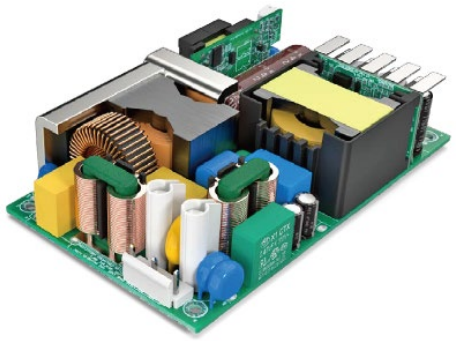


Size: 5in x 3in x 1.09in
(127mm x 76.2mm x 27.7mm)

FEATURES

- Input Range of 85-264VAC
- ITE & Medical Safety Standards
- AUX 12V Fan Power
- High Efficiency
- Power Good Signal
- Optional 5V Standby + Remote ON/OFF
- Optional AC/DC Input and Base Plate
- Class I
- Peak 400W (90-264VAC)
- Short Circuit, Over Load, Over Temperature, and Over Voltage Protection
- Optional OVC III
- IEC 62368-1 Edition 2.0, IEC 62368-1 Edition 3.0, EN 62368-1, UL62368-1, IEC 60601-1 Edition 3.1, IEC 60601-1 Edition 3.2, EN60601-1, ANSI/AAMI ES60601-1, CAN/CSA-C22.2 NO. 60601-1, and CAN/CSA-C22.2 NO.62368-1 Safety Approvals

DESCRIPTION

The PSMSG360 series of AC/DC power supplies offers 360 watts of output power and 400 watts at peak in an 5” x 3” x 1.09” open frame package. This series consists of single output models with an input voltage range of 85-264VAC. Several options are available for this series including 5V Standby + remote on/off, base plate, and OVC III. This series rated for ITE and medical applications and has IEC 62368-1 Edition 2.0, IEC 62368-1 Edition 3.0, EN 62368-1, UL62368-1, IEC 60601-1 Edition 3.1, IEC 60601-1 Edition 3.2, EN60601-1, ANSI/AAMI ES60601-1, CAN/CSA-C22.2 NO. 60601-1, and CAN/CSA-C22.2 NO.62368-1 safety approvals.

MODEL SELECTION TABLE

Open Frame and Open Frame with Baseplate (“P”) Models

Model Number(1)	Input Voltage Range	Output Voltage		Rated Output Current			Output Power		Efficiency	Ripple Noise	Max. No Load Consumption
		Vo	Fan	Convection	Forced Air(2)	Fan	Max.	Peak			
PSMSG360-12S	85~264VAC	12VDC	12VDC	16.66A	30A	0.5A	360W	400W	92%	120mV	0.3W
PSMSG360-19S		19VDC	12VDC	10.52A	18.94A	0.5A	360W	400W	92%	190mV	
PSMSG360-24S		24VDC	12VDC	8.33A	15A	0.5A	360W	400W	93%	240mV	
PSMSG360-48S		48VDC	12VDC	4.16A	7.5A	0.5A	360W	400W	94%	480mV	

MODEL SELECTION TABLE

Open Frame and Open Frame with Baseplate (“P”) Models with 5V Standby

Model Number(1)	Input Voltage Range	Output Voltage			Rated Output Current				Output Power		Efficiency	Ripple Noise	Max. No Load Consumption (Remote OFF)
		Vo	Standby	Fan	Convection	Forced Air(3)	Standby(3)	Fan	Max.	Peak			
PSMSG360-12S05	85~264VAC	12VDC	5VDC	12VDC	16.66A	30A	2A	0.5A	360W	400W	92%	120mV	0.15W
PSMSG360-19S05		19VDC	5VDC	12VDC	10.52A	18.94A	2A	0.5A	360W	400W	92%	190mV	
PSMSG360-24S05		24VDC	5VDC	12VDC	8.33A	15A	2A	0.5A	360W	400W	93%	240mV	
PSMSG360-48S05		48VDC	5VDC	12VDC	4.16A	7.5A	2A	0.5A	360W	400W	94%	480mV	

MODEL SELECTION TABLE

Enclosure and Top Fan Type (“T”) with 5V Standby

Model Number(1)	Input Voltage Range	Output Voltage		Rated Output Current		Output Power		Efficiency	Ripple Noise	Max. No Load Consumption (Remote OFF)
		Vo	Standby	Forced Air(4)	Standby(4)	Max.	Peak			
PSMSG360-12ST05	85~264VAC	12VDC	5VDC	30A	2A	360W	400W	92%	120mV	0.15W
PSMSG360-19ST05		19VDC	5VDC	18.94A	2A	360W	400W	92%	190mV	
PSMSG360-24ST05		24VDC	5VDC	15A	2A	360W	400W	93%	240mV	
PSMSG360-48ST05		48VDC	5VDC	7.5A	2A	360W	400W	94%	480mV	

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	Nominal Input Voltage	100		240	VAC
	Derate linearly from 100% Load at 115VAC to 80% Load at 85VAC	85		264	
Frequency	Sine Wave	47		63	Hz
Input Current (rms)	Low Line, Full Load, Vin=100VAC		4		A
	High Line, Full Load, Vin=240VAC		1.7		
Inrush Current	Low Line, Full Load, 25°C, Cool Start, Vin=100VAC			20	A
	High Line, Full Load, 25°C, Cool Start, Vin=230VAC			45	
Power Factor	@115VAC, Full Load	0.9		1	
Earth Leakage Current	Vin=240VAC. Fin=60Hz			0.3	mA
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Output Current		See Table			
Line Regulation	Full Load, Vin=100-120VAC or 200-240VAC			1	%
Load Regulation	Vin=100-240VAC			3	%
Total Regulation			±3.0		%
Output Power				360	Watts
Hold Up Time	Hold up time is measured from he 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		10		mS
Start Up Time	Full Load, Vin=100-240VAC		1[6]		s
Rise Time	At 115VAC & 230VAC			10	ms
No Load Power Consumption		See Table			
PROTECTION					
Short Circuit Protection	Hiccup Mode, Non-Latching	Automatic Recovery			
Over Load Protection	Hiccup Mode, Non-Latching, Automatic Recovery	105		150	%
Over Voltage Protection	Latch Mode	105		130	%
Over Temperature Protection	Input Circuit	Latch Mode			
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Derate linearly from 100% Load at 50°C to 40% Load at 85°C	-40		85	°C
Storage Temperature	Surrounding Air Temperature	-40		85	°C
Operating Humidity	Non-Condensing	10		95	%
Storage Humidity				95	%
Altitude				5000	m
Vibration	10-500Hz, 10min./1cycle, 60min. each along X, Y, Z axes			5	G
Fan Audio Noise	Background Noise 18dB at a distance of 50cm		35		dB
MTBF	@Full Load, 25°C Ambient Temperature per Telcodia (Bellcore TR-332)	200,000			Hours
GENERAL SPECIFICATIONS					
Efficiency	Full Load, Vin=230VAC	See Table			
Isolation	Input to Output		4000		VAC
	Input to PE		2000		VAC
	Output to STB Output		500		VDC
PHYSICAL SPECIFICATIONS					
Weight	Weight varies depending on the model and accessories	12.88oz ~ 13.51oz (365-383g)			
Dimensions (L x W x H)		5in x 3in x 1.09in (127mm x 76.2mm x 27.7mm)			
SAFETY CHARACTERISTICS					
Safety Standards[7]	IEC 62368-1	Edition 2.0			
	IEC 62368-1	Edition 3.0			
	EN 62368-1				
	UL62368-1				
	IEC 60601-1	Edition 3.1			
	IEC 60601-1	Edition 3.2			
	EN60601-1				
	ANSI/AAMI ES60601-1				
	CAN/CSA-C22.2 NO. 60601-1				
	CAN/CSA-C22.2 NO.62368-1				

NOTES

1. To indicate model with baseplate, add “P” to end of model number.
   To indicate model with enclosure and top fan, add “T” to end of model number.
2. With 29 CFM Forced Air to max load.
3. With 29 CFM Forced Air to max load. Standby = 2A with Forced Air
4. With 29 CFM Forced Air. Standby = 1A with Convection; Standby = 2A with Forced Air
5. Total output power = Vo + standby = 360W max.
6. For models equipped with 5V STB, the startup time is 2 seconds maximum.
7. This product is Listed to applicable standards and requirements by UL

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

EMC EMISSION

Description	Parameter	Standard	Test Level
Medical	Conducted	EN55011	Class B
	Radiated	EN55011	Class A/Class B*(1)
	Harmonics	EN61000-3-2	-
	Flicker	EN61000-3-3	-
ITE	Conducted	EN55032	Class B
	Radiated	EN55032	Class A/Class B*(1)
	Harmonics	EN61000-3-2	N/A
	Flicker	EN61000-3-3	-

* The EMC test requires the integration of the switching power supply with the load of an end system.
Consequently, variations in the application or assembly of the end system will influence the test results.
*(1) Condition: Install a metal grounded shielding enclosure & add K5B material cores to both the AC input and DC output wires, with 2 turns of winding.

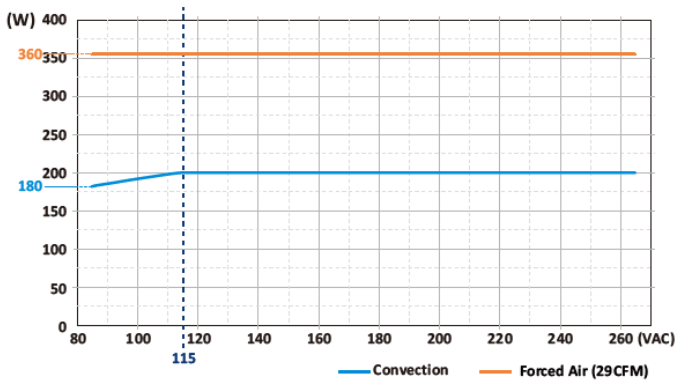
EMC EMISSION

Description	Parameter	Standard	Test Level	Criteria
Medical	ESD	EN61000-4-2	15kV Air Discharge, 8kV Discharge Coupling Plane	A
	RS	EN61000-4-3	-	A
	EFT	EN61000-4-4	2kV	A
	Surge	EN61000-4-5	Line to Line ±1kV, Line to Ground ±2kV	A
	CS	EN61000-4-6	0.15-80(MHz)	A
	PFMF	EN61000-4-8	-	A
	Voltage Dips (230V & 100V)	EN61000-4-11	0% UT, 0.5 cycle (10 ms) @ Full Load 0°/45°/90°/135°/180°/225°/270°/315°/360°	A
			0% UT, 1 cycle (20ms), 0° @ Full Load	B
			70% UT, 25 cycle (500ms), 0° @ Full Load	A
	Voltage Interruptions (230V & 100V)	EN61000-4-11	0% Ut, 250 cycle (5s) @ Full Load 0°/45°/90°/135°/180°/225°/270°/315°/360°	B
	Radiated Fields in Close Proximity	EN61000-4-39	-	A
ITE	ESD	EN61000-4-2	8kV Air Discharge, 4kV Discharge Coupling Plane	A
	RS	EN61000-4-3	80-1000 (MHz) 1800, 2600, 3500, 5000 (MHZ) (±1%)	A
	EFT	EN61000-4-4	2kV	A
	Surge	EN61000-4-5	Line to Line ±1kV, Line to Ground ±2kV	A
	CS	EN61000-4-6	0.15-80(MHz)	A
	PFMF	EN61000-4-8	-	A
	Voltage Dips (230V & 100V)	EN61000-4-11	0% UT, 0.5 cycle (10 ms) @ Full Load 0°/45°/90°/135°/180°/225°/270°/315°/360°	A
			0% UT, 1 cycle (20ms), 0° @ Full Load	B
			70% UT, 25 cycle (500ms), 0° @ Full Load	A
	Voltage Interruptions (230V & 100V)	EN61000-4-11	0% Ut, 250 cycle (5s) @ Full Load 0°/45°/90°/135°/180°/225°/270°/315°/360°	B

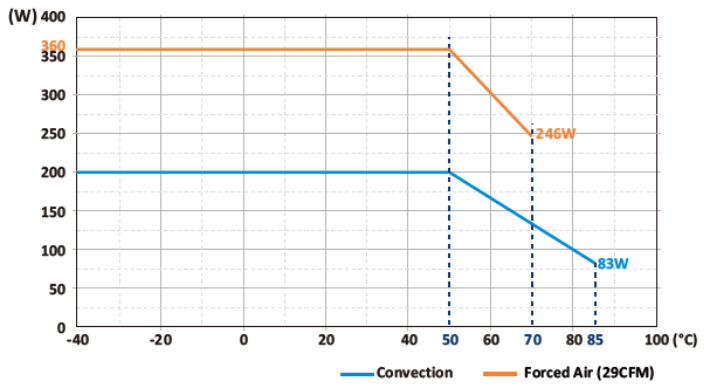
* The EMC test requires the integration of the switching power supply with the load of an end system.
Consequently, variations in the application or assembly of the end system will influence the test results.

DERATING CURVES

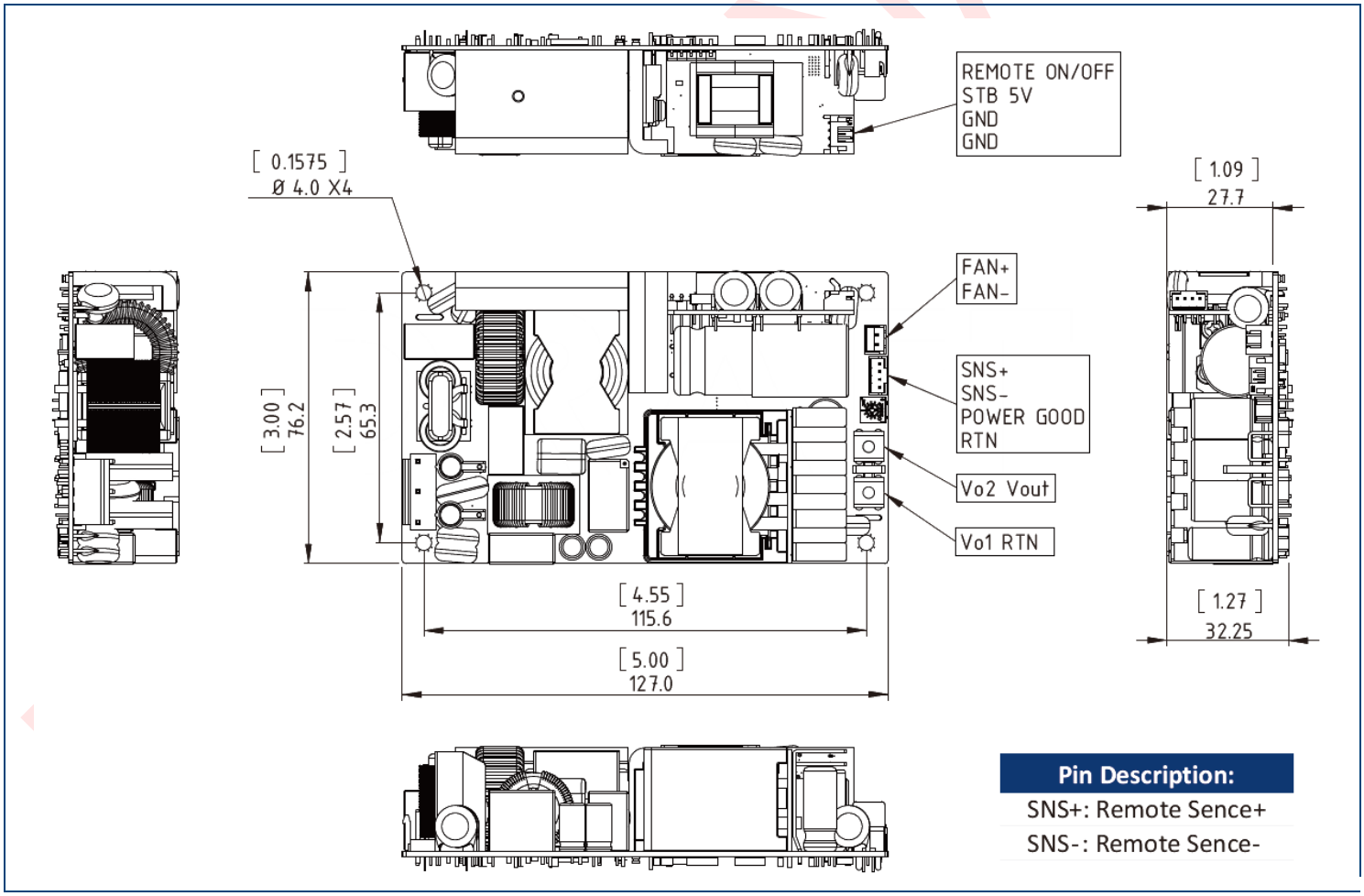
Power Derating Curve



Temperature Derating Curve



MECHANICAL DRAWINGS



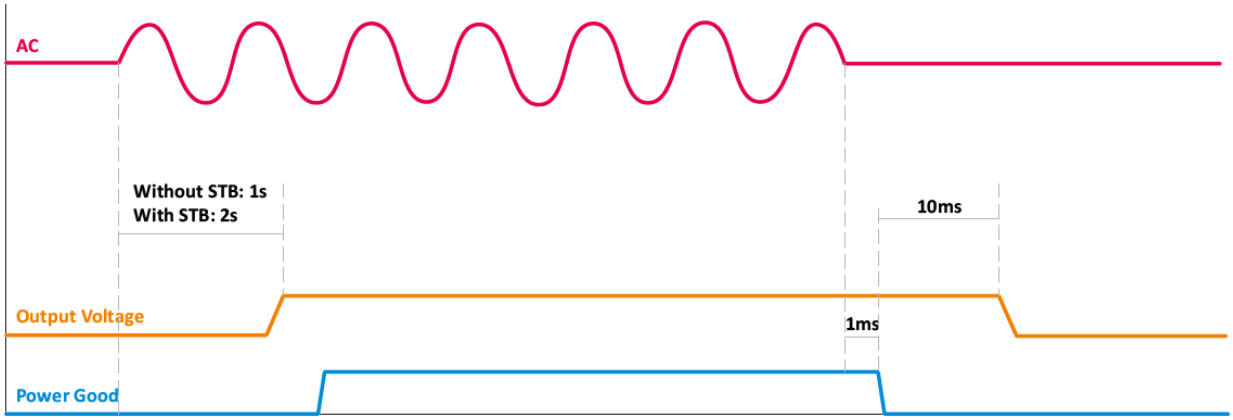
Pin Description:

SNS+: Remote Sence+

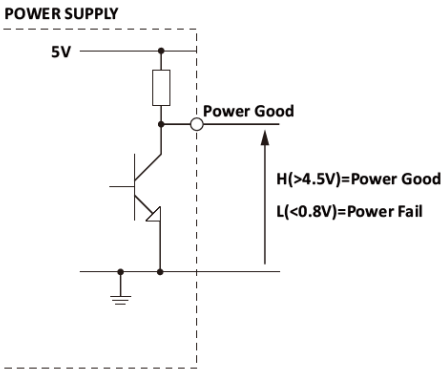
SNS-: Remote Sence-

TIMING DIAGRAMS

Hold Up Time and Power Good

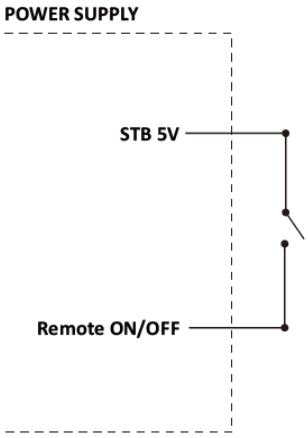


POWER GOOD

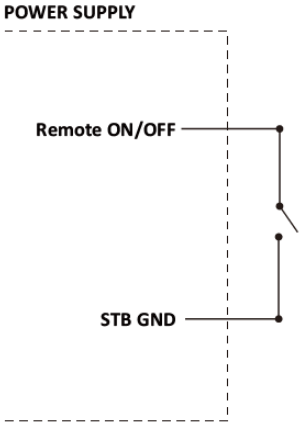


REMOTE ON/OFF

Remote On (Enable)



Remote On (Inhibit)



MODEL NUMBER SETUP

PSMSG	360	-	12	S	P	05
Series Name	Output Power		Input Voltage	Output Quantity	Product Type	Standby Power
			12: 12VDC **19:** 19VDC **24:** 24VDC **48:** 48VDC	**S:** Single	**Blank:** Open Frame **P:** Open Frame + Base Plate **T:** Enclosure + Top Fan	**Blank:** Without 5V Standby Power **05:** With 5V Standby Power

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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