



Size: 1.62in x 1.07in x 0.75in (41.2mm x 27.2mm x 19.1mm)

**FEATURES**

- AC Input Voltage Range of 90-264VAC or 120-370VDC
- Switching Power Module for PCB Mount
- Fully Encapsulated Plastic Case
- No-Load Watts <0.1W
- High Efficiency up to 85%
- Isolation Class II
- Over Power, Over Voltage, and Short Circuit Protection
- CE, UL, cUL Safety Approvals

**DESCRIPTION**

The PSAVC series of AC/DC PCB mount power supplies offers up to 15 watts of output power in a compact 1.62" x 1.07" x 0.75" package. This series consists of single output models with an input voltage range of 90-264VAC. Each model in this series has over power, over voltage, and short circuit protection and CE, UL, cUL safety approvals. Please call factory for order details.

**MODEL SELECTION TABLE**

Model Number	Input Voltage Range	Output Voltage	Output Current		Ripple & Noise	No Load Input Current	Output Power	Maximum Capacitive Load	Efficiency
			Min Load	Max Load					
PSAVC-5S	90-264VAC or 120-370VDC	5V	0%	2700mA	100mVp-p	<0.1W	13.5W	7000uF	80%
PSAVC-12S		12V	0%	1250mA	120mVp-p		15W	1500uF	84%
PSAVC-15S		15V	0%	1000mA	150mVp-p		15W	1000uF	84%
PSAVC-24S		24V	0%	625mA	240mVp-p		15W	470uF	85%

**SPECIFICATIONS**

All specifications are based on 25°C After Warm up, Normal Input Voltage, and Full Load 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 <sup>(1)</sup>		90		264	VAC
		120		370	VDC
Input Frequency		47		63	Hz
Input Current	@115VAC, Full Load			340	mA
	@230VAC, Full Load			220	
Inrush Current	@115VAC, Cold Start			25	A
	@230VAC, Cold Start			45	
Leakage Current	@<240VAC			0.25	mA
External Fuse (Mandatory)	Slow Blow Type			2	A
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage				See Table	
Voltage Accuracy			±2		%
Line Regulation	LL-HL		±0.5		%
Load Regulation	10-100%		±1		%
Output Power				See Table	
Output Current				See Table	
Minimum Load		0			%
Maximum Capacitive Load				See Table	
Ripple & Noise <sup>(2)</sup>				See Table	
Hold-Up Time	@230VAC	35			Ms
Temperature Coefficient		-0.05		+0.05	%/°C
<b>PROTECTION</b>					
Short Circuit Protection		Hiccup Mode, Indefinite (Automatic Recovery)			
Over Power Protection		Hiccup Technique, Automatic Recovery			
Over Voltage Protection		Zener Diode Clamp			
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Case Temperature		-40		+70	°C
Storage Temperature		-40		+85	°C
Humidity			95		%RH
MTBF	@25°C (MIL-HDBK0217F)	450,000			Hours

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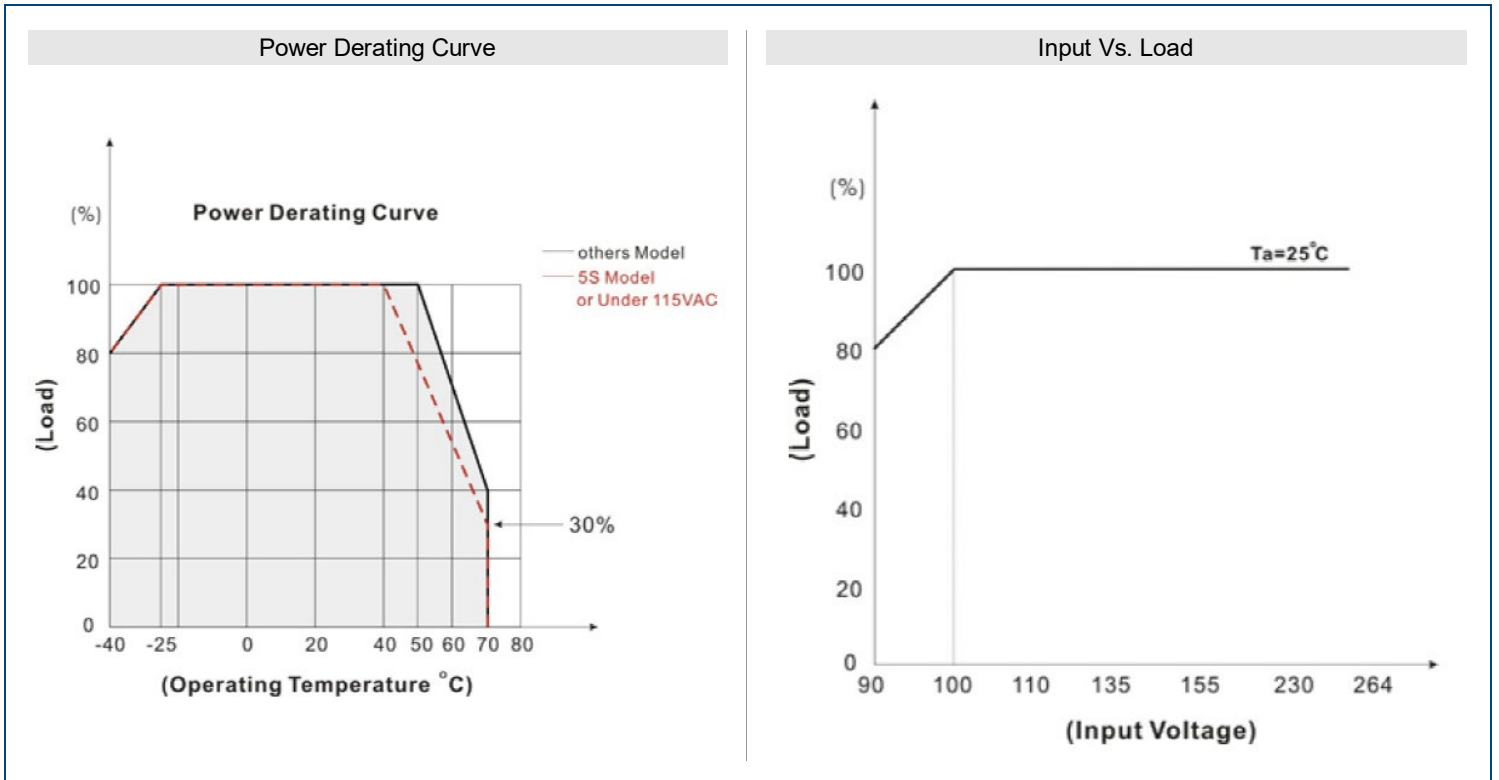
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
<b>GENERAL SPECIFICATIONS</b>					
Efficiency		See Table			
Isolation	Input-Output VAC		4000		VAC
<b>PHYSICAL SPECIFICATIONS</b>					
Weight		1.41oz (40g)			
Dimensions (L x W x H)		1.62in x 1.07in x 0.75in (41.2mm x 27.2mm x 19.1mm)			
Case Material		Plastic Resin (Flammability to UL 94V-0)			
Cooling		Free Air Convection			
<b>SAFETY CHARACTERISTICS</b>					
Safety Approvals		CE, UL, cUL <sup>(7)</sup>			
EMI	Conducted & Radiated Emission; EN55022				Class B
EMS	Noise Immunity; EN55024				

**NOTES**

1. N Connect +Vin; L Connect -Vin
2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
3. It's necessary Varistor 14S471K at L/N input side in parallel.
4. It's necessary 10R/15φ thermistor at L input side in series connection.
5. Safety approvals cover frequency 47-63Hz.
6. Natural convection is about 20LFM but is not equal to still air (0 LFM)
7. This product is Listed to applicable standards and requirements by UL.

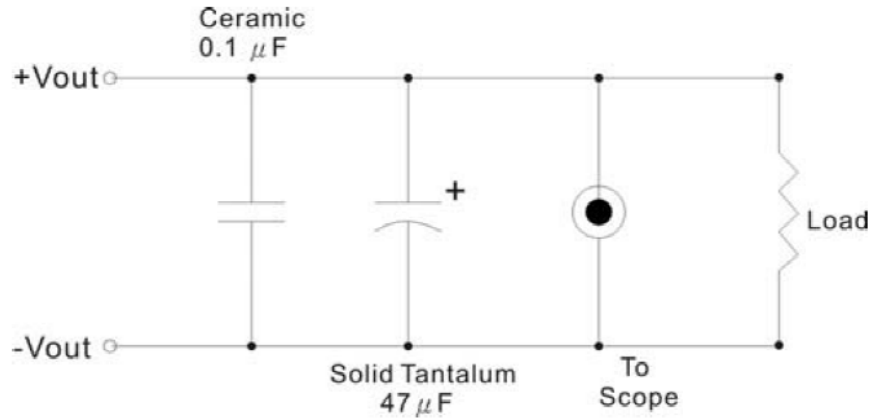
\*Due to advances in technology, specifications subject to change without notice.

**DERATING CURVES**

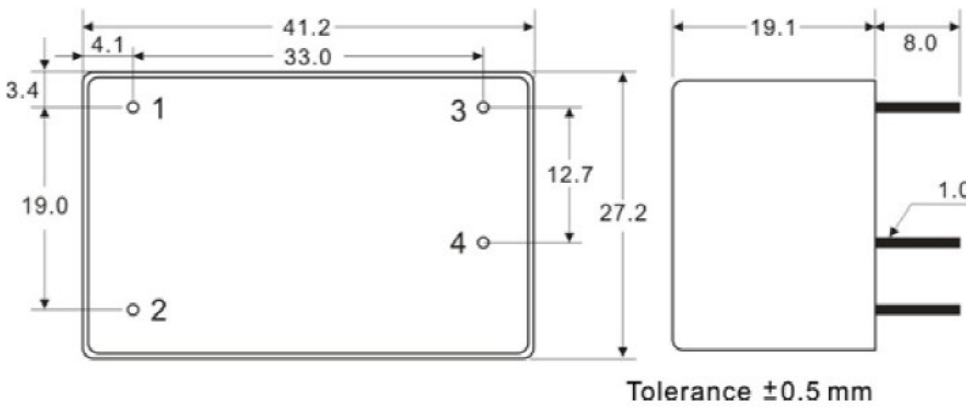


OUTPUT NOISE

The output noise is measured with 47 $\mu$ F tantalum capacitor and 0.1 $\mu$ F ceramic capacitor across output.



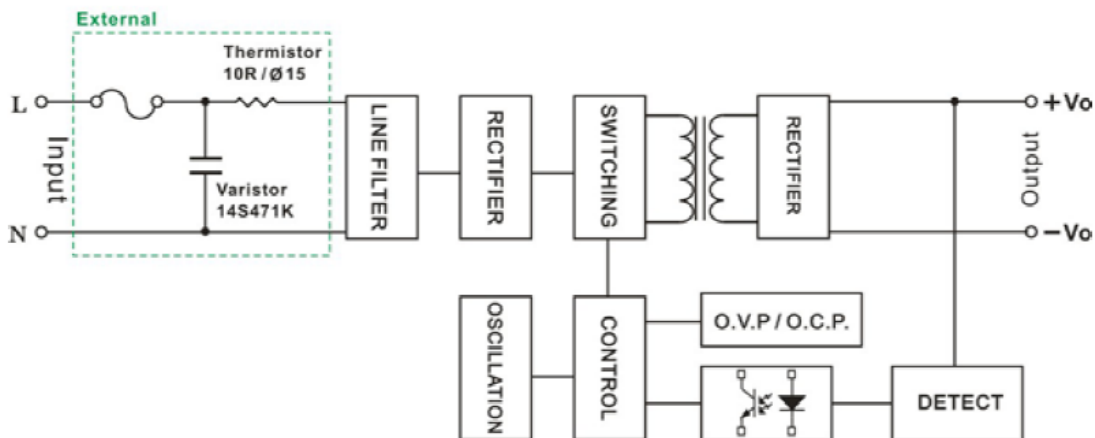
MECHANICAL DRAWINGS



PIN #	Single
1	AC IN (L)
2	AC IN (N)
3	-DC OUT
4	+DC OUT

BLOCK DIAGRAM

Single Output



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**COMPANY INFORMATION**

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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.

Contact **Wall Industries** for further information:

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