



**Size:**  
1.12 x 1.02 x 0.67 inches  
28.5 x 25.8 x 17.0 mm

### FEATURES

- RoHS Compliant
- Isolation Class II
- 3000VAC I/O Isolation
- 2 Watts Output Power
- Fully Encapsulated Plastic Case
- < 0.3W No Load Input Power
- 3.3V, 5V, 12V, 15V, and 24V Single Output Models
- PCB Mountable Switching Power Supply
- -40°C to +80°C Operating Temperature Range
- Universal Input Voltage Range: 90-305VAC (120-430VDC)
- Short Circuit and Over Voltage Protection
- UL/cUL, CE, and CB Safety Approvals (Pending)

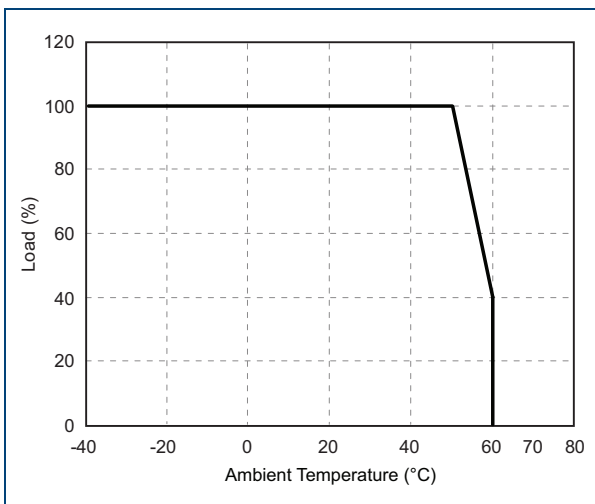
### DESCRIPTION

The PSAZC series of AC/DC power supplies provides 2 watts of output power in a 1.12" x 1.02" x 0.67" encapsulated PCB mountable package. This series consists of 3.3V, 5V, 12V, 15V, and 24V single output models with a universal input range of 90-305VAC (120-430VDC). Some features include 3000VAC I/O isolation, -40°C to +80°C operating temperature range, and over power and short circuit protection. All models are RoHS compliant and have UL/cUL, CE, and CB (pending) safety approvals.

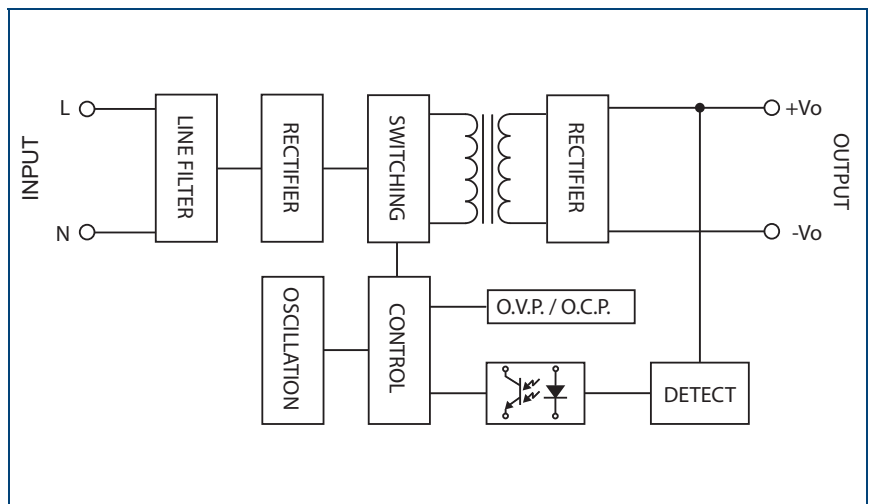
### MODEL SELECTION TABLE

Model Number	Input Voltage	Output Voltage	Output Current		Ripple & Noise	Output Power	Efficiency	Maximum Capacitive Load
			Min Load	Max Load				
PSAZC-3.3S	90~305 VAC (120~430 VDC)	3.3 VDC	0%	600mA	300mVp-p	2W	66%	7000µF
PSAZC-5S		5 VDC	0%	400mA	300mVp-p	2W	70%	4000µF
PSAZC-9S		9 VDC	0%	222mA	300mVp-p	2W	73%	1200µF
PSAZC-12S		12 VDC	0%	167mA	300mVp-p	2W	73%	500µF
PSAZC-15S		15 VDC	0%	133mA	300mVp-p	2W	73%	350µF
PSAZC-24S		24 VDC	0%	83mA	300mVp-p	2W	75%	110µF

### DERATING



### BLOCK DIAGRAM

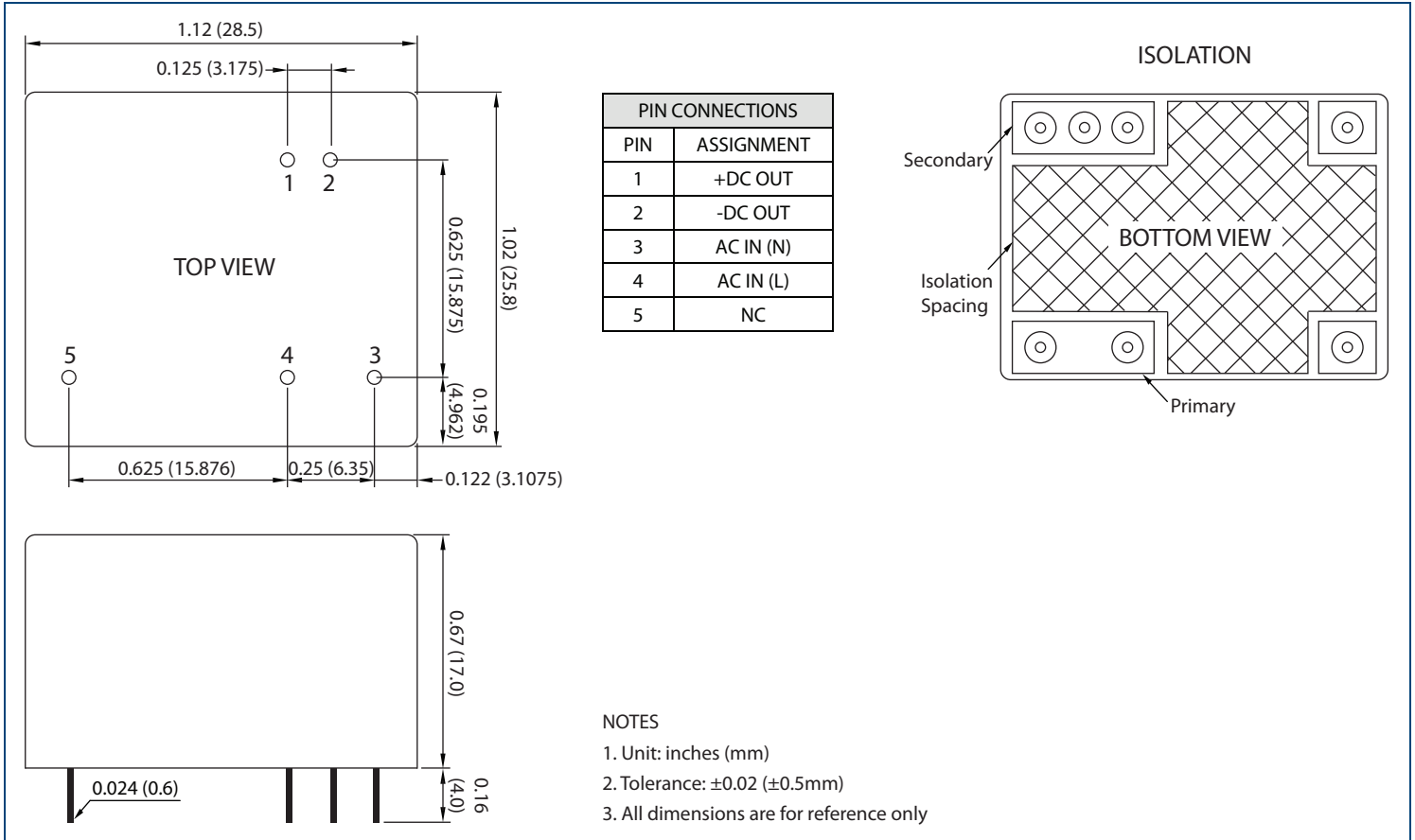


**SPECIFICATIONS: PSAZC SERIES**

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	AC input voltage range	90		305	VAC
	DC input voltage range	120		430	VDC
Input Frequency		47		63	Hz
Input Current	At 115VAC and full load			75	mA
	At 230VAC and full load			55	
Inrush Current (<2ms)	At 115VAC and cold start			30	A
	At 230VAC and cold start			50	
No Load Input Power				0.3	W
External Fuse (recommended)		3.15A slow blow type			
External Varistor		10S471K			
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage		See Table			
Voltage Accuracy		-6		+6	%
Line Regulation	Low Line to High Line	-5		+5	%
Load Regulation	10% - 100% full load	-6		+6	%
Output Power		See Table			
Output Current		See Table			
Minimum Load		0			%
Ripple & Noise (20MHz BW)	Measured with 0.1µF and 47µF capacitors in parallel		300		mVp-p
Max Capacitive Load	At 100~240VAC	See Table			
Hold-up Time	At 230VAC	15			ms
Temperature Coefficient		-0.02		+0.02	%/°C
<b>PROTECTION</b>					
Short Circuit Protection		Hiccup mode, indefinite (auto-recovery)			
Over Power Protection		Hiccup technique, auto-recovery			
<b>GENERAL SPECIFICATIONS</b>					
Efficiency	At 230VAC	See Table			
Isolation Voltage	Input to Output	3000			VAC
Leakage Current	< 240VAC			0.25	mA
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature	With derating (see derating curve)	-40		+80	°C
Storage Temperature		-40		+85	°C
Humidity				95	% RH
Cooling		Free air convection			
MTBF	25°C (MIL-HDBK-217F)	350,000			hours
<b>PHYSICAL SPECIFICATIONS</b>					
Weight		TBD			
Case Material		Plastic resin with fiberglass (Flammability to UL 94V-0)			
Dimensions (L x W x H)		1.12 x 1.02 x 0.67 inches (28.5 x 25.8 x 17.0 mm)			
<b>SAFETY &amp; EMC</b>					
Safety Approvals		UL/cUL, CE, CB (Pending)			
EMC	EMI (Conducted and Radiated Emissions)	EN 55022 class B (Pending)			
	EMS (Noise Immunity)	EN 55024 (Pending)			

MECHANICAL DRAWING



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 ISO9001-2008 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:

Phone: ☎ (603)778-2300  
 Toll Free: ☎ (888)597-9255  
 Fax: ☎ (603)778-9797  
 E-mail: [sales@wallindustries.com](mailto:sales@wallindustries.com)  
 Web: [www.wallindustries.com](http://www.wallindustries.com)  
 Address: 5 Watson Brook Rd.  
 Exeter, NH 03833