

Open Frame (Suffix "-O")



Size: 4.00 x 2.00 x 1.14 inches

U-Chassis (Suffix "-U")



Size: 4.12 x 2.24 x 1.38 inches

**FEATURES**

- RoHS Compliant
- Single Outputs
- PF > 0.9 at 115/230VAC
- 100 Watts with Convection Cooling
- 150 Watts with Forced Air Cooling
- 90~264 VAC Input Voltage Range
- MTBF > 100,000 Hours
- High Efficiency up to 85%
- Over Voltage, Over Load, and Short Circuit Protection
- UL60950-1, Nemko EN60950-1, & CB IEC60950-1 Safety Approvals
- 100% Burn-in and Hi-pot Tested
- Open Frame and U-Chassis Mechanical Options Available

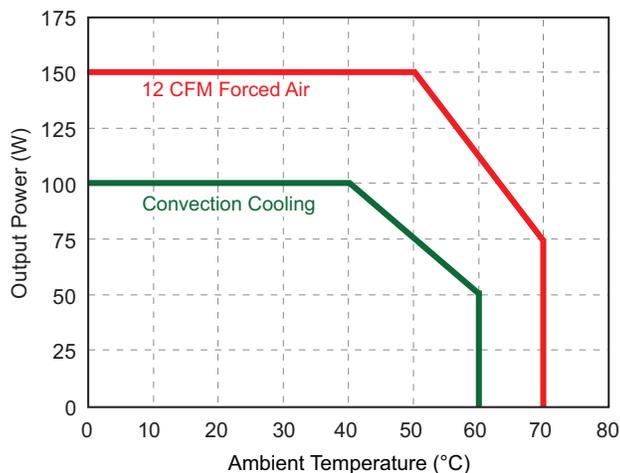
**DESCRIPTION**

The PSPW150 series of AC/DC power supplies provides 100 Watts of output power with convection cooling and 150 Watts with 12CFM forced airflow. This series consists of 12V, 15V, 19V, 24V, 28V, and 48VDC single output models with a 90-264VAC full range input which enables them to be used anywhere in the world. These supplies also feature a high efficiency up to 85% and a power factor > 0.9 at 115/230VAC. These supplies are also protected against short circuit, over voltage, and over load conditions. The PSPW150 series has UL60950-1, CSA-C22.2 NO.950-1, Nemko EN60950-1, and CB IEC60950-1 safety approvals. This series is also CE marked and meets EN55022 Class B, CISPR22 Class B, and FCC Part 15 Class B EMC standards. Both open frame and U-chassis mechanical options are available for this series.

**MODEL SELECTION TABLE**

Model Number	Input Voltage	Output Voltage	Output Current		Output Power		Ripple & Noise	Output Regulation	Package Type
			Convection	12 CFM Forced Air	Convection	12 CFM Forced Air			
PSPW150B-1Y12-O	90 - 264 VAC	12 VDC	8.33A	12.5A	100W	150W	150mVp-p	±3%	Open Frame
PSPW150B-1Y15-O		15 VDC	6.67A	10A	100W	150W	150mVp-p	±3%	
PSPW150B-1Y19-O		19 VDC	5.26A	7.89A	100W	150W	190mVp-p	±3%	
PSPW150B-1Y24-O		24 VDC	4.16A	6.25A	100W	150W	240mVp-p	±3%	
PSPW150B-1Y28-O		28 VDC	2.77A	4.16A	100W	150W	300mVp-p	±2%	
PSPW150B-1Y48-O		48 VDC	2.08A	3.12A	100W	150W	300mVp-p	±2%	
PSPW150B-1Y12-U	90 - 264 VAC	12 VDC	8.33A	12.5A	100W	150W	150mVp-p	±3%	U-Chassis
PSPW150B-1Y15-U		15 VDC	6.67A	10A	100W	150W	150mVp-p	±3%	
PSPW150B-1Y19-U		19 VDC	5.26A	7.89A	100W	150W	190mVp-p	±3%	
PSPW150B-1Y24-U		24 VDC	4.16A	6.25A	100W	150W	240mVp-p	±3%	
PSPW150B-1Y28-U		28 VDC	2.77A	4.16A	100W	150W	300mVp-p	±2%	
PSPW150B-1Y48-U		48 VDC	2.08A	3.12A	100W	150W	300mVp-p	±2%	

**DERATING CURVE**



Convection Cooling:

0 to +60°C derating linearly 2.5% per °C from +41°C to +60°C

12CFM Forced Air:

0 to +70°C derating linearly 2.5% per °C from +51°C to +70°C

**SPECIFICATIONS: PSPW150 SERIES**

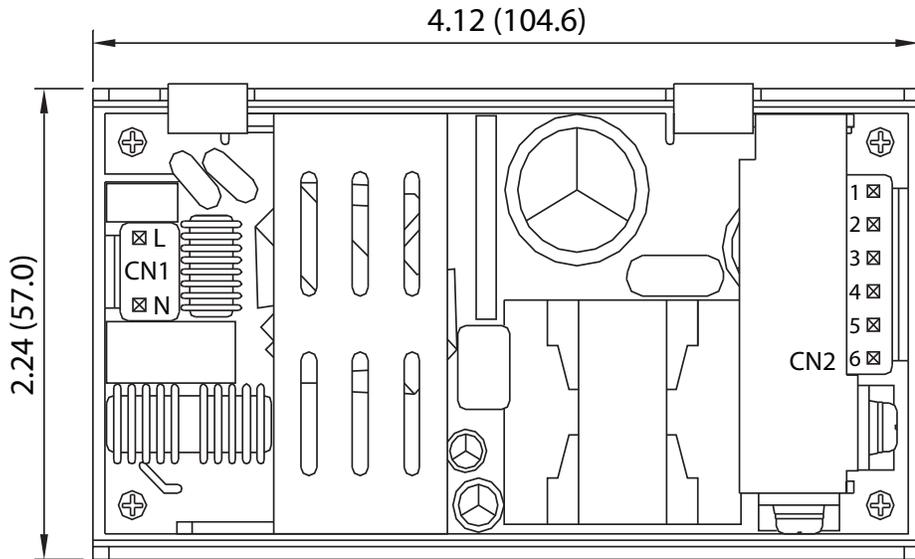
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.  
We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
<b>INPUT SPECIFICATIONS</b>					
Input Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Input Current (rms)	115VAC and full load			2.5	A
	230VAC and full load			1.25	
Inrush Current	115VAC, cold start, 25°C			40	A
	115VAC, cold start, 25°C			80	
Power Factor Correction	115/230VAC and full load	0.9			
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage		See Table			
Output Regulation		See Table			
Output Power	Convection cooling			100	W
	With 12CFM forced air			150	
Output Current		See Table			
Minimum Load		0			%
Ripple & Noise	Measured at 20MHz limited bandwidth and with 0.1µF ceramic and 10µF electrolytic capacitors in parallel across the output	12V output model		150	mVp-p
		15V output model		150	
		19V output model		190	
		24V output model		240	
		28V output model		300	
		48V output model		300	
Hold-up Time	115VAC and full load	16			ms
<b>PROTECTION</b>					
Over Voltage Protection		Automatic recovery			
Over Load Protection	Automatic recovery	105		160	%
Short Circuit Protection		Automatic recovery			
<b>GENERAL SPECIFICATIONS</b>					
Efficiency	115VAC and full load		85		%
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature	Convection cooling: 100W (with derating)	0		+60	°C
	12CFM forced air: 150W (with derating)	0		+70	
Storage Temperature Range		-10		+85	°C
Humidity	Non-condensing	5		95	%
MTBF	Full load, 25°C ambient temperature	100,000			hours
<b>PHYSICAL SPECIFICATIONS</b>					
Weight	Open Frame Models (Suffix "-O")	7.27oz (206g)			
	U-Chassis Models (Suffix "-U")	9.70oz (275g)			
Dimensions (L x W x H)	Open Frame Models (Suffix "-O")	4.00 x 2.00 x 1.14 in (101.6 x 50.8 x 29.0 mm)			
	U-Chassis Models (Suffix "-U")	4.12 x 2.25 x 1.38 in (104.6 x 57.0 x 35.0 mm)			
<b>SAFETY &amp; EMC</b>					
Safety Approvals	UL60950-1, CSA-C22.2 NO.950-1, Nemko EN60950-1, CB IEC60950-1				
EMC Standards	EN55022 Class B, CISPR22 Class B, FCC Part 15 Class B, CE				

MECHANICAL DRAWING

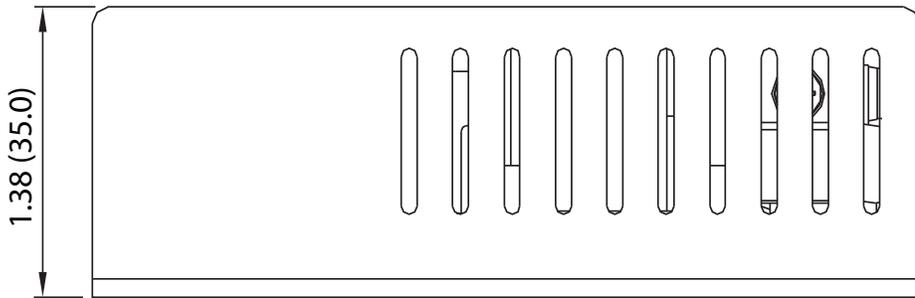
U-CHASSIS MODELS (SUFFIX "-U")

Unit: inches (mm)



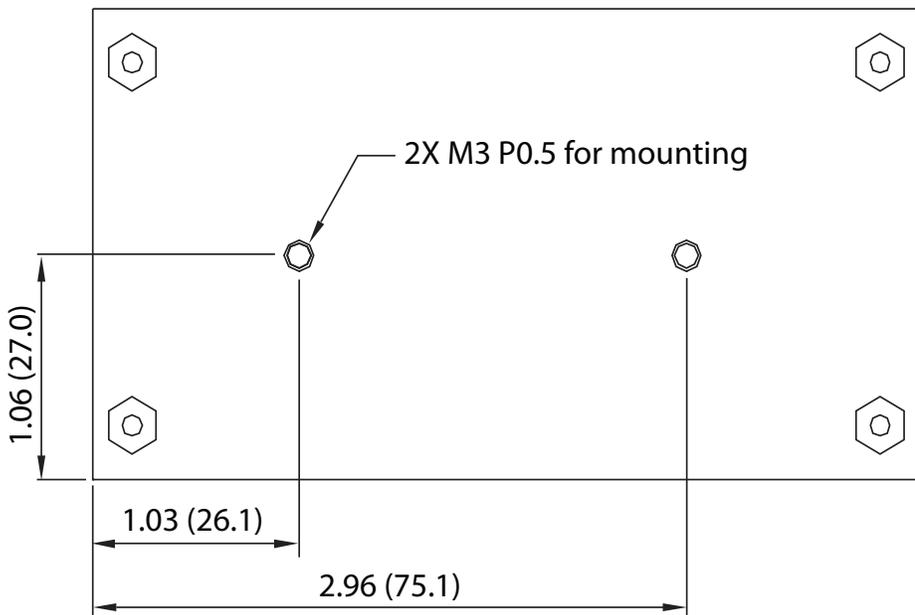
CN1: INPUT CONNECTOR	
Pin No.	Function
1	AC (N)
2	AC (L)

JST B3P-VH-B pitch: 7.92mm or equivalent, mates with JST VHR-3N or equivalent

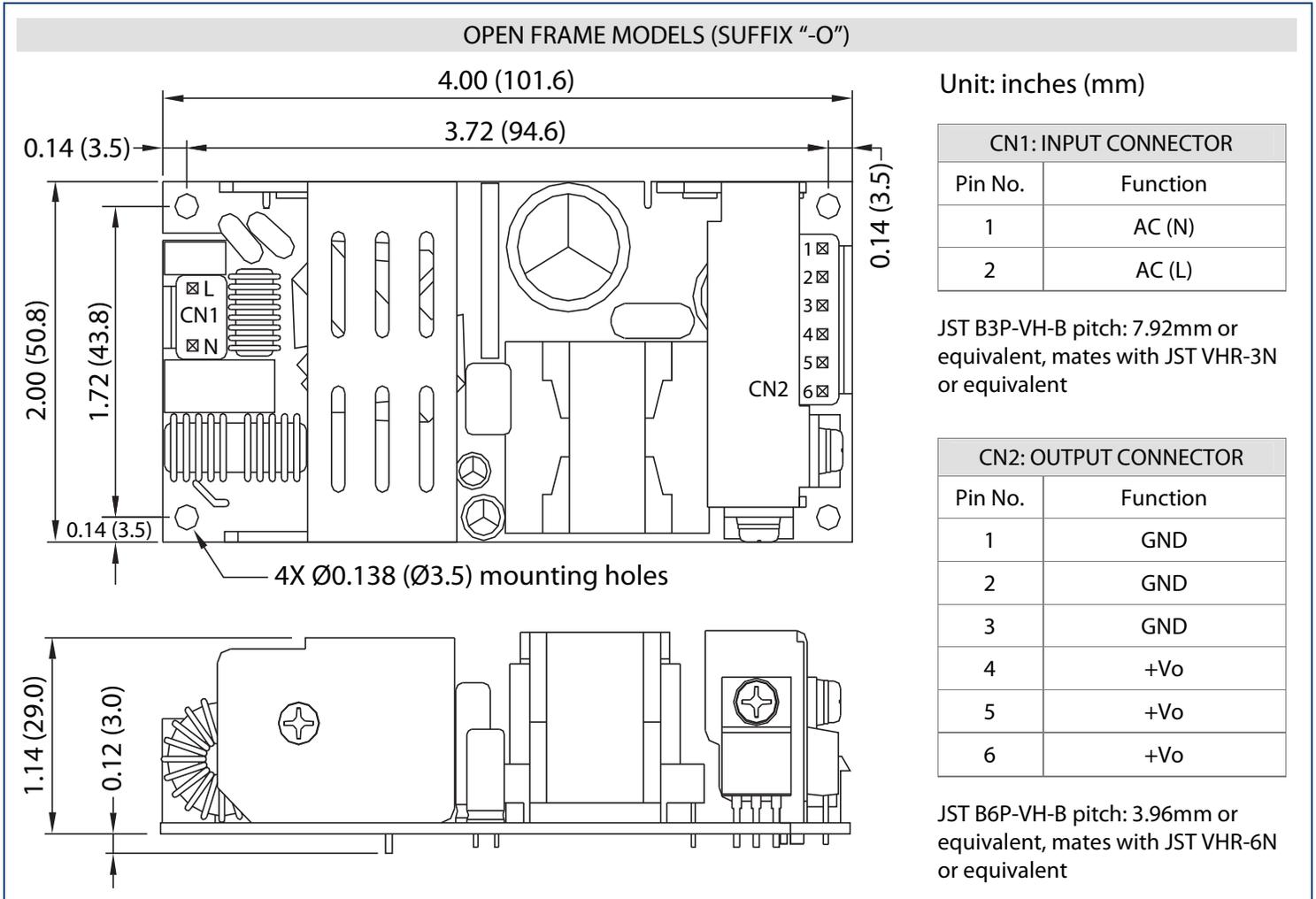


CN2: OUTPUT CONNECTOR	
Pin No.	Function
1	GND
2	GND
3	GND
4	+Vo
5	+Vo
6	+Vo

JST B6P-VH-B pitch: 3.96mm or equivalent, mates with JST VHR-6N or equivalent



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:

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