



Size: 5.08 x 3.90 x 1.50 inches

129.0 x 99.0 x 38.0 mm

Weight: 1.04 lbs (473g)

## **FEATURES**

- RoHS Compliant
- Up to 77.8 Watts Output Power

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- 3000VAC I/O Isolation
- High Efficiency up to 89%
- Operating Altitude up to 5000M
- Easy Assembly from Top Side
- Suitable for Critical Applications
- Miniature Size, High Reliability
- High Power Density
- 100% Full Load Burn-in Test

- No Load Power Consumption < 0.5W</li>
- PCB Soldering Side with Conformal Coating
- -25°C to +70°C Wide Operating Temperature Range
- All Using 105°C Long Life Electrolytic Capacitors
- Withstand 300VAC Surge Input for 5 Sec.
- Universal Input Voltage Range: 90-264VAC (127-370VDC)
- Over Load, Over Voltage, and Short Circuit Protection
- 5V, 12V, 15V, 24V, & 48VDC Single Output Models
- UL60950-1 (2nd edition), IEC60950-1:2005 (2nd edition), EN60950-1:2006 Safety Approvals

### DESCRIPTION

The PSPSD-75 series of AC/DC switching power supplies provides up to 77.8 Watts of output power in a 5.08" x 3.90" x 1.50" enclosed case. This series consists of single output models ranging from 5VDC to 48VDC with an input voltage range of 90~264VAC (127~370VDC). Standard features include high efficiency up to 89%, 3000VAC I/O isolation, and a -25°C to +70°C operating temperature range. This series also has short circuit, over load, and over voltage protection. All models are RoHS compliant and have UL60950-1 (2nd edition), IEC60950-1:2005 (2nd edition), and EN60950-1:2006 safety approvals.

MODEL SELECTION TABLE								
Model Number	Input Voltage Range	Output Voltage	Output Current		Ripple & Noise	Output	Efficiency	
			Min	Max	(1)	Power	At 115VAC	At 230VAC
PSPSD-75-5	90 ~ 264 VAC (127 ~ 370 VDC)	5 VDC	0A	12A	80mVp-p	60W	79%	80%
PSPSD-75-12		12 VDC	0A	6A	120mVp-p	72W	84%	85%
PSPSD-75-15		15 VDC	0A	5A	150mVp-p	75W	85%	86%
PSPSD-75-24		24 VDC	0A	3.2A	200mVp-p	76.8W	87%	88%
PSPSD-75-48		48 VDC	0A	1.62A	200mVp-p	77.8W	88%	89%

#### NOTES

1. Ripple & noise is measured at 20MHz limited bandwidth and using a 12" twisted pair-wire terminated with a 0.1µF & 10µF capacitors in parallel.

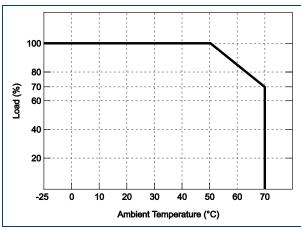
2. The power supply is considered a component which will be installed into final equipment. The final equipment must be re- confirmed that it still meets EMC directives.

3. DIN-35 rail bar accessories are available for this series. Please call factory for ordering details.

4. This product is Listed to applicable standards and requirements by UL.

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

## DERATING CURVE



# SPECIFICATIONS: PSPSD-75 SERIES

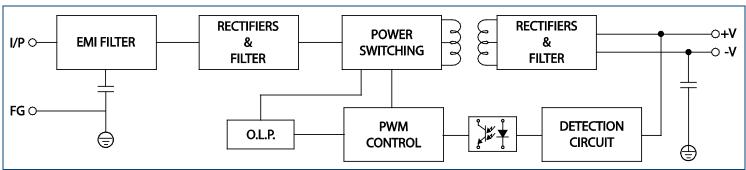
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances.

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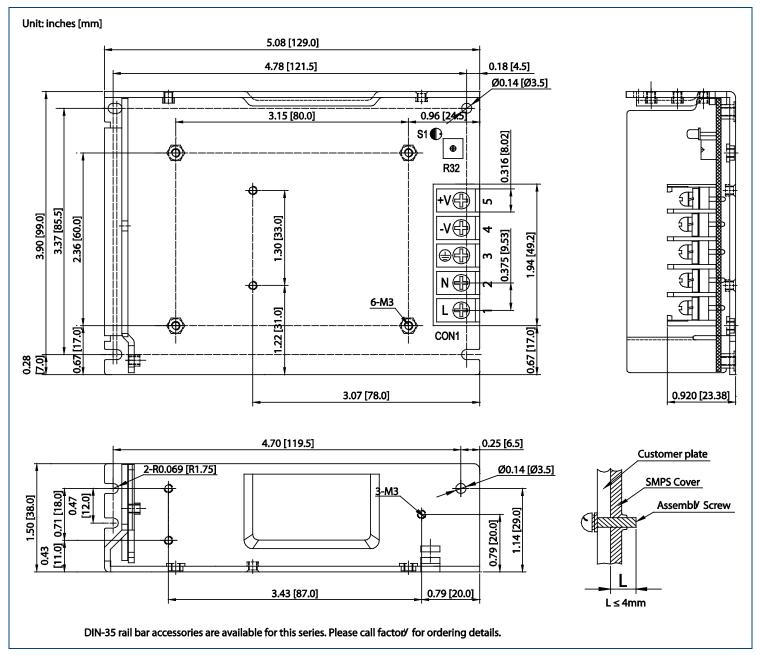
SPECIFICATION	TEST CO	NDITIONS	Min	Тур	Max	Unit			
INPUT SPECIFICATIONS									
	AC input voltage range		90		264	VAC			
Input Voltage	DC input voltage range		127		370	VDC			
Input Frequency						Hz			
AC Current						Α			
Inrush Current	At 115VAC and cold start			20	А				
	At 230VAC and cold start	At 230VAC and cold start				A			
OUTPUT SPECIFICATIONS									
Output Voltage				See	Table				
Voltage Accuracy			-3.0		+3.0	%			
Voltage Adjustability			-5		+10	%Vo			
Line Regulation	Low Line to High Line		-0.5		+0.5	%			
Load Regulation	0% to 100% full load		-2.0		+2.0	%			
Output Power					See Table				
Output Current						See Table			
Ripple & Noise	Measured at 20MHz BW and with parallel	Measured at 20MHz BW and with $0.1\mu F$ and $10\mu F$ capacitors in parallel			See Table				
Hold-up Time	At 115VAC and full load	At 115VAC and full load				ms			
		At 230VAC and full load							
Setup Time	At 115VAC and full load			2.0	ms				
-	At 230VAC and full load			1.5					
Temperature Coefficient		-0.03		+0.03	%/°C				
Overshoot and Undershoot						%			
PROTECTION									
Short Circuit Protection						covery			
Over Voltage Protection	Constant voltage	Constant voltage			150	%Vo			
Over Load Protection	Constant power	Constant power			150	%lo			
GENERAL SPECIFICATIONS									
Efficiency				See <sup>-</sup>	Table				
	Primary to Secondary	≤ 10mA	3000			VDC			
Withstand Voltage	Primary to PG	≤ 10mA	1500						
	Secondary to PG	≤ 10mA	500						
Isolation Resistance			100	0.25		MΩ			
Leakage Current		Input to Output				mA			
-	Input to PG		0.75						
ENVIRONMENTAL SPECIFIC	ATIONS					ļ			
Operating Temperature	See derating curve		-25		+70	°C			
Storage Temperature			-40		+85	°C			
Operating Humidity	Non-condensing	20		90	% RH				
Storage Humidity	Non-condensing	10		95	% RH				
Cooling			Free air convection						
MTBF	MIL-HDBK-217F; 25°C and full loa	ad	200,000			hours			
PHYSICAL SPECIFICATIONS									
Weight		1.04 lbs (473g)							
Dimensions (L x W x H)		5.08 x	3.90 x 1.50 incl	nes (129.0	) x 99.0 x	38.0 mm)			
SAFETY & EMC (See Note 2)									
Safety Approvals	L	JL60950-1 (2nd edition) <sup>(4)</sup> , IEC6	0950-1:2005 (2	nd edition	n), EN6095	50-1:2006			
EMC Emission	EN55022, EN55024 Class B				iss B				
Harmonic Current		EN61000-3-2,-3							
EMC Immunity		EN61000-4-2,3,4,5,6,8,11;	EN55024, EN61	1000-6-2	neavy indu	ustry leve			



**BLOCK DIAGRAM** 



## MECHANICAL DRAWING



Wall Industries, Inc. • Tel: 603-778-2300 • Toll Free: 888-597-9255 • website: www.wallindustries.com • e-mail: sales@wallindustries.com



### 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.

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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:	<b>☎</b> (603)778-2300
Toll Free:	<b>2</b> (888)597-9255
Fax:	<b>2</b> (603)778-9797
E-mail:	sales@wallindustries.com
Web:	www.wallindustries.com
Address:	37 Industrial Drive
	Exeter, NH 03833

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