



Size: 3.88 x 3.23 x 1.38 inches 98.5 x 82.0 x 35.0 mm Weight: 8.47oz (240g)

## **FEATURES**

- RoHS Compliant
- Compact Size
- High Efficiency up to 85%
- Up to 36 Watts Output Power
- ±10% Voltage Adjustment Range
- Over Load & Short Circuit Protection
- Free Air Convection

- 170~264VAC (210~370VDC) Input Voltage Range
- Single Output Voltages Available from 5VDC to 48VDC
- Electrolytic Capacitors all 105°C
- Japanese Brand Components for Key Parts
- GB4943, UL60950, & EN60950 Safety Approvals
- Meets GB9254 & EN55022 Class A EMC Standards
- 100% Full Load Burn-in Tested

## **DESCRIPTION**

The PSHF35W series of AC/DC switching power supplies offers up to 36 Watts of output power in a 3.88" x 3.23" x 1.38" enclosed case. This series consists of single output models ranging from 5VDC to 48VDC with a 170~264VAC (210~370VDC) input voltage range. Some features include ±10% output adjustability, high efficiency up to 85%, and over load and short circuit protection. The PSHF35W series has GB4943, UL60950, and EN60950 safety approvals and meets GB9254 and EN55022 Class A EMC standards. These supplies are also RoHS compliant and have been 100% full load burn-in tested.

# TECHNICAL SPECIFICATIONS: PSHF35W 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	Тур	Max	Unit
INPUT SPECIFICATIONS				<u>'</u>	
	AC input voltage range	170		264	VAC
Input Voltage	DC input voltage range	210		370	VDC
Input Frequency		47		63	Hz
Input Current			0.6		Α
Inrush Current	230VAC, cold start		40		Α
OUTPUT SPECIFICATIONS					
Output Voltage			See	Table	
Voltage Tolerance			See	Table	
Voltage Adjustability		-10		+10	%
Line Regulation	LL to HL, full load	-0.5		+0.5	%
Load Regulation	No load to full load	-0.5		+0.5	%
Output Power			See	Table	
Output Current			See	Table	
Ripple & Noise (20MHz BW)	Measured with 0.1µF ceramic and 47µF electrolytic capacitor in parallel		See	Table	
Rise Time	Full load		50		ms
Hold-up Time	Full load		20		ms
PROTECTION					
Over Load Protection	Hiccup mode; automatic recovery	105		150	%
Short Circuit Protection		Hiccu	ıp mode; aı	itomatic rec	overy
GENERAL SPECIFICATIONS					
Efficiency			See	Table	
	Input to Output	1500			VAC
Withstand Voltage	1 minute Input to FG	1500			
	Output to FG	500			
Input Leakage Current	230VAC			0.7	mA
ENVIRONMENTAL SPECIFICATI	ONS				
Operating Temperature	See derating curve	-20		+70	°C
Storage Temperature		-20		+85	°C
Operating Humidity	Non-condensing	20		93	%
Storage Humidity	Non-condensing	20		95	%
Cooling			Free air c	onvection	
Vibration	At 10~150Hz, 10 min per cycle for 30 minutes each test along the X, Y, &		2		G
	Z axis		_		
MTBF		100,000	_		hours
PHYSICAL SPECIFICATIONS		100,000	_		hours
			8.47oz	(240g)	
PHYSICAL SPECIFICATIONS			8.47oz 23 x 1.38 ind	(240g) ch (98.5 x 8 m)	
PHYSICAL SPECIFICATIONS Weight		3.88 x 3.2	8.47oz 23 x 1.38 ind m	ch (98.5 x 8	2.0 x 35.0
PHYSICAL SPECIFICATIONS Weight Dimensions (L x W x H) Connection		3.88 x 3.2	8.47oz 23 x 1.38 ind m	ch (98.5 x 8 m)	2.0 x 35.0
PHYSICAL SPECIFICATIONS Weight Dimensions (L x W x H)		3.88 x 3.2 5P/8	8.47oz 23 x 1.38 ind m .25mm scre	ch (98.5 x 8 m)	2.0 x 35.0 block

Wall Industries, Inc. • Tel: 603-778-2300 • Toll Free: 888-597-9255 • website: <a href="www.wallindustries.com">www.wallindustries.com</a> • e-mail: <a href="mailto:sales@wallindustries.com">sales@wallindustries.com</a>

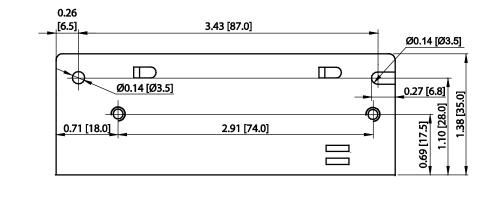


MODEL SELECTION TABLE								
Model Number (1)	Input Voltage Range	Output Voltage	Output Current	Voltage Tolerance	Ripple & Noise (2)	Output Power	Efficiency	
PSHF35W-SE-5	170~264 VAC (210~370 VDC)	5 VDC	7.0A	±2%	80mVp-p	35W	77%	
PSHF35W-SE-12		12 VDC	3.0A	±1%	120mVp-p	36W	81%	
PSHF35W-SE-15		15 VDC	2.4A	±1%	120mVp-p	36W	82%	
PSHF35W-SE-24		24 VDC	1.5A	±1%	150mVp-p	36W	83%	
PSHF35W-SE-48		48 VDC	0.7A	±1%	150mVp-p	33.6W	85%	

# **NOTES**

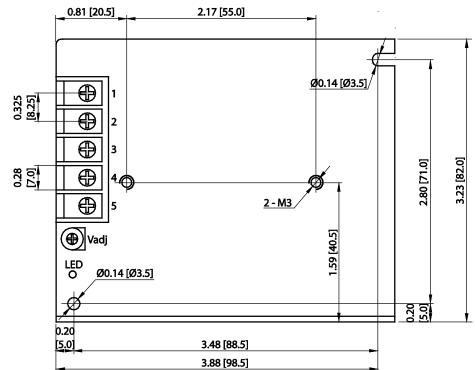
- 1. Single output voltages are available from 5~48VDC. If the desired output voltage is not listed in the table please call factory for more ordering options.
- 2. Ripple & noise is measured at 20MHz limited bandwidth and using a 12" twisted pair-wire terminated with a 0.1µF & 47µF capacitors in parallel.
- 3. 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.
- 4. This product is Listed to applicable standards and requirements by UL.
- \*Due to advances in technology, specifications subject to change without notice

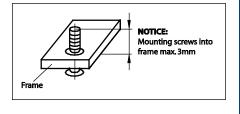
## MECHANICAL DRAWING



## Unit: inches [mm]

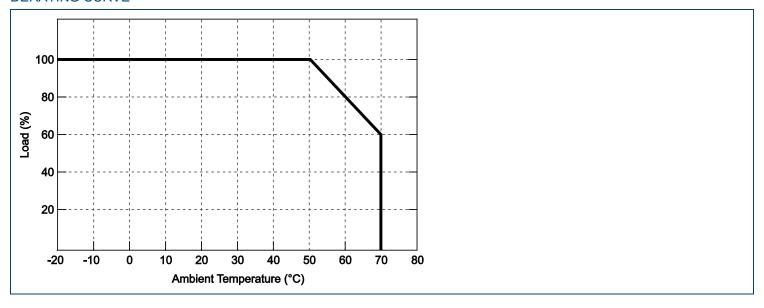
PIN CONNECTIONS				
Pin	Assignment			
1	AC/L			
2	AC/N			
3	PE			
4	DC OUTPUT (-V)			
5	DC OUTPUT (+V)			







## **DERATING CURVE**



## **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.

# Contact Wall Industries for further information:

Phone: **2**(603)778-2300 Toll Free: **1**(888)597-9255 Fax: **2**(603)778-9797

E-mail: sales@wallindustries.com Web: www.wallindustries.com Address: 37 Industrial Drive

Exeter, NH 03833

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