

## Wall Industries, Inc.

### PSHF240W SERIES

85~132 / 170~264VAC Input Selectable by Switch  
Up to 240 Watts Output Power  
5, 7.5, 12, 15, 24, 30, & 48VDC Single Outputs  
AC/DC Switching Power Supplies



#### FEATURES

- RoHS Compliant
- $\pm 10\%$  Voltage Adjustment Range
- Free Air Convection
- 85~132/170~264VAC Input Selectable by Switch
- High Reliability
- Single Outputs
- 7.83" x 4.33" x 1.97" Enclosed Case
- Up to 240W Output Power
- Short Circuit, Over Current, Over Voltage Protection
- UL60950, EN60950, GB4943, and CE Approvals

#### DESCRIPTION

The PSHF240W series of AC/DC power supplies offers up to 240W of output power in a 7.83" x 4.33" x 1.97" enclosed case. This series consists of 5, 7.5, 12, 15, 24, 30 and 48VDC single output models with an input voltage range of 85~132 / 170~264VAC selectable by switch. These supplies have a  $\pm 10\%$  output adjustment range and are protected against short circuit, over current, and over voltage conditions. This series is RoHS compliant and has UL60950, EN60950, GB4943, and CE approvals.

| SPECIFICATIONS: PSHF240W Series   |                    |                  |  |     |      |      |
|---|--------------------|------------------|--|-----|------|------|
| All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.<br>We reserve the right to change specifications based on technological advances. |                    |                  |  |     |      |      |
| SPECIFICATION   | TEST CONDITIONS    |                  | Min  | Nom | Max  | Unit |
| <b>INPUT SPECIFICATIONS</b>   |                    |                  |  |     |      |      |
| Input Voltage Range   | Selected by switch |                  | 85~132 / 170~264VAC                              |     |      |      |
| Inrush Current  | At 115VAC          | Cold start       |  | 20  |      | A    |
|   | At 230VAC          |                  |  | 40  |      |      |
| Input Frequency   |                    |                  | 47   |     | 63   | Hz   |
| <b>OUTPUT SPECIFICATIONS</b>  |                    |                  |  |     |      |      |
| Output Voltage  |                    |                  | See Table  |     |      |      |
| Output Voltage Adjustment Range   |                    |                  | -10  |     | +10  | %    |
| Line Regulation   | Full load          |                  | -0.5   |     | +0.5 | %    |
| Load Regulation   |                    |                  |  | 0.5 |      | %    |
| Output Current  |                    |                  | See Table  |     |      |      |
| Output Power  |                    |                  | See Table  |     |      |      |
| Ripple & Noise  |                    |                  | See Table  |     |      |      |
| Rise Time   | Full load          |                  |  | 50  |      | ms   |
| Hold-up Time  | Full load          |                  |  | 20  |      | ms   |
| <b>PROTECTION</b>   |                    |                  |  |     |      |      |
| Over Current Protection   |                    |                  | 110  |     | 130  | %    |
| Over Voltage Protection   |                    |                  | 115  |     | 150  | %    |
| Short Circuit Protection  |                    |                  | Yes  |     |      |      |
| <b>GENERAL SPECIFICATIONS</b>   |                    |                  |  |     |      |      |
| Efficiency  |                    |                  | See Table  |     |      |      |
| Withstand Voltage   | Input to Output    | All for 1 minute | 3000   |     |      | VAC  |
|   | Input to FG        |                  | 1500   |     |      |      |
|   | Output to FG       |                  | 500  |     |      |      |
| Leakage Current   | At 230VAC          |                  |  |     | 0.7  | mA   |
| <b>ENVIRONMENTAL SPECIFICATIONS</b>   |                    |                  |  |     |      |      |
| Operating Temperature   |                    |                  | -10  |     | +50  | °C   |
| Operating Humidity  | non-condensing     |                  | 20   |     | 93   | % RH |
| Storage Temperature   |                    |                  | -20  |     | +85  | °C   |
| Storage Humidity  | non-condensing     |                  | 20   |     | 95   | % RH |
| Cooling Method  |                    |                  | Free air convection                              |     |      |      |
| <b>PHYSICAL SPECIFICATIONS</b>  |                    |                  |  |     |      |      |
| Weight  |                    |                  | 2 lbs (910g)                                     |     |      |      |
| Dimensions (L x W x H)  |                    |                  | 7.83 x 4.33 x 1.97 inches<br>(199 x 110 x 50 mm) |     |      |      |
| <b>SAFETY &amp; EMC CHARACTERISTICS</b>   |                    |                  |  |     |      |      |
| Safety Standards  |                    |                  | UL60950 <sup>(1)</sup> , EN60950, GB4943         |     |      |      |
| EMC Standards   |                    |                  | GB9254, EN55022 Class A                          |     |      |      |

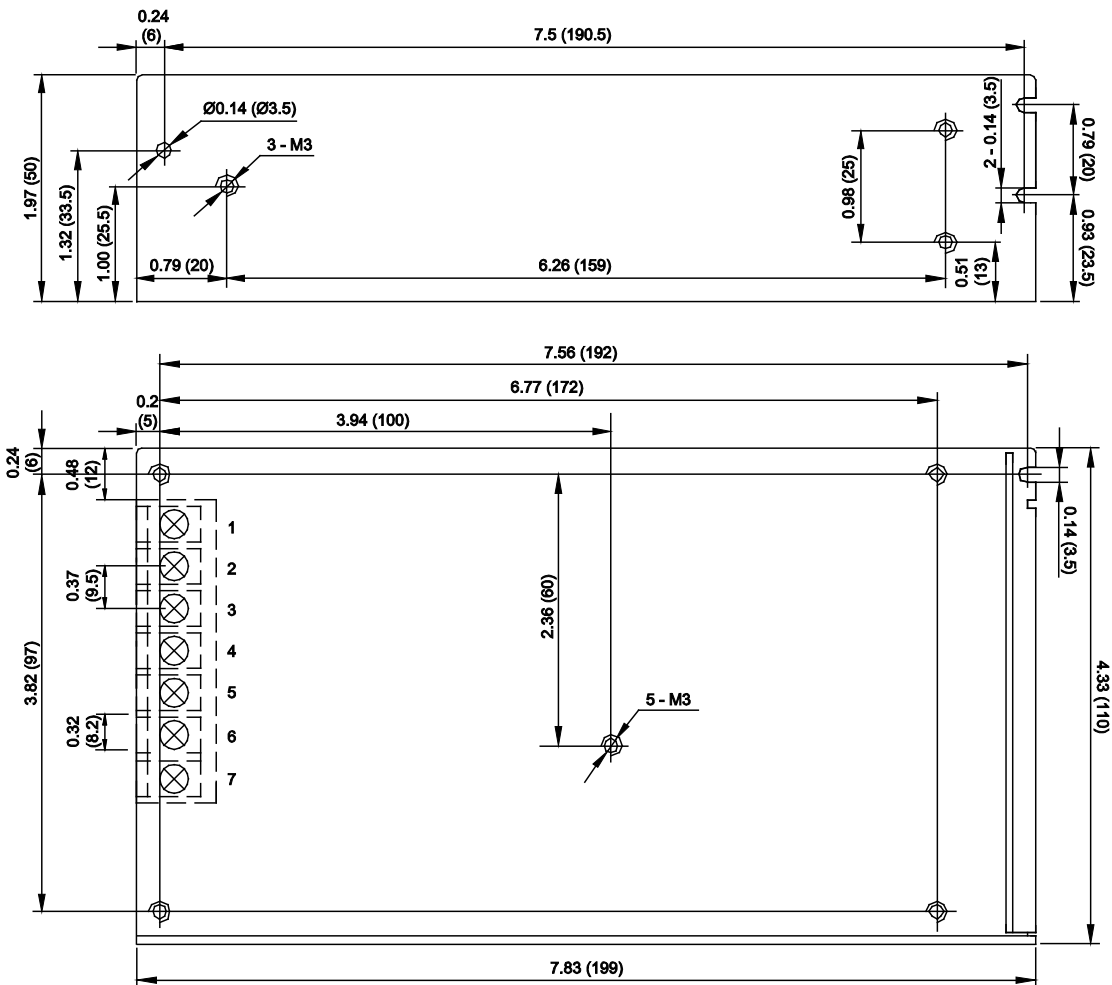
**NOTES**

- This product is Listed to applicable standards and requirements by UL.  
*\*Due to advances in technology, specifications subject to change without notice.*

| MODEL SELECTION TABLE |  |                |                |                |              |            |
|-----------------------|--|----------------|----------------|----------------|--------------|------------|
| Model Number          | Input Voltage Range                            | Output Voltage | Output Current | Ripple & Noise | Output Power | Efficiency |
| PSHF240W-SF-5         | 85~132 / 170~264 VAC<br>(selectable by switch) | 5 VDC          | 40A            | 100mVp-p       | 200W         | 80%        |
| PSHF240W-SF-7.5       |  | 7.5 VDC        | 30A            | 100mVp-p       | 225W         | 82%        |
| PSHF240W-SF-12        |  | 12 VDC         | 18A            | 100mVp-p       | 216W         | 83%        |
| PSHF240W-SF-15        |  | 15 VDC         | 15A            | 100mVp-p       | 225W         | 84%        |
| PSHF240W-SF-24        |  | 24 VDC         | 10A            | 120mVp-p       | 240W         | 85%        |
| PSHF240W-SF-30        |  | 30 VDC         | 8A             | 150mVp-p       | 240W         | 86%        |
| PSHF240W-SF-48        |  | 48 VDC         | 5A             | 150mVp-p       | 240W         | 87%        |

**MECHANICAL DRAWING**

Unit: inches (mm)



| Pin | Assignment     |
|-----|----------------|
| 1   | AC/L           |
| 2   | AC/N           |
| 3   | FG             |
| 4,5 | DC Output (-V) |
| 6,7 | DC Output (+V) |

|                       | Pin Distance | Pin Quantity |
|-----------------------|--------------|--------------|
| Input Screw Terminal  | 9.5mm        | 3            |
| Output Screw Terminal | 9.5 mm       | 4            |
| Size of Screw: Ø4mm   |              |              |



## 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: ☎(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: 37 Industrial Drive  
Exeter, NH 03833

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