

PSHF100W SERIES

85~132 / 170~264VAC Input Selectable by Switch Up to 108 Watts Output Power 5, 7.5, 12, 13.8, 15, 24, & 48VDC Single Outputs AC/DC Switching Power Supplies



FEATURES

- RoHS Compliant
- ±10% Voltage Adjustment Range
- Free Air Convection
- 85~132/170~264VAC Input Selectable by Switch
- High Reliability
- Single Outputs

- 7.83" x 3.86" x 1.54" Enclosed Case
- Up to 108 Watts Output Power
- 100% Full Load Burn-in Tested
- 105°C Electrolytic Capacitors
- Short Circuit, Over Current, Over Voltage Protection
- UL, ETS/LVD/EMC, and CE Approvals

DESCRIPTION

The PSHF100W series of AC/DC power supplies offers up to 108W of output power in a 7.83" x 3.86" x 1.54" enclosed case. This series consists of 5, 7.5, 12, 13.8, 15, 24, and 48VDC single output models with an input voltage range of $85\sim132$ / $170\sim264$ VAC selectable by switch. These supplies have a $\pm10\%$ output adjustment range and are protected against short circuit, over current, and over voltage conditions. This series is RoHS compliant and has UL, ETS/LVD/EMC, and CE approvals.



SPECIFICATIONS: PSHF100W 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 CONDITIONS | | | Nom | Max | Unit | |
| INPUT SPECIFICATIONS | | | | | | | |
| Input Voltage Range | Selected by switch 85~132 / 170~264VAC | | | | | | |
| Inrush Current | At 115VAC | Cold start | | 20 | | \mathbf{A} | |
| | At 230VAC | Cold start | | 40 | | Α | |
| Input Frequency | | | 47 | | 63 | Hz | |
| OUTPUT SPECIFICATIONS | | | | | | | |
| Output Voltage | | | | See ' | Гable | | |
| Output Voltage Adjustment Range | | | -10 | | +10 | % | |
| Line Regulation | Full load | | -0.5 | | +0.5 | % | |
| Load Regulation | | | | 0.5 | | % | |
| Output Current | | | | See ' | Гable | | |
| Output Power | | | | See ' | Гable | | |
| Ripple & Noise | | | | See ' | Гable | | |
| Rise Time | Full load | | | 50 | | ms | |
| Hold-up Time | Full load | | | 20 | | ms | |
| PROTECTION | | | | | | | |
| Over Current Protection | | | 110 | | 130 | % | |
| Over Voltage Protection | | | 115 | | 150 | % | |
| Short Circuit Protection | | | | Y | es | | |
| GENERAL SPECIFICATIONS | | | | | | | |
| Efficiency | | | | See ' | Гable | | |
| | Input to Output | | 3000 | | | | |
| Withstand Voltage | Input to FG | All for 1 minute | 1500 | | | VAC | |
| , and the second | Output to FG | | 500 | | | | |
| Leakage Current | At 230VAC | | | | 0.7 | mA | |
| ENVIRONMENTAL SPECIFICATIONS | | | | | | | |
| 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 c | onvection | 1 | |
| PHYSICAL SPECIFICATIONS | | | | | | | |
| Weight | | | | | (650g) | | |
| Dimensions (L x W x H) | | | | 33 x 3.86 x (199 x 98 | | | |
| SAFETY & EMC CHARACTERIST | ICS | | | | | | |
| Safety Standards | | | UL6 | 50950 ⁽¹⁾ , E | EN60950, | GB4943 | |
| EMC Standards GB9254, EN55022 Class B, EN55024, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11 | | | | | | | |



NOTES

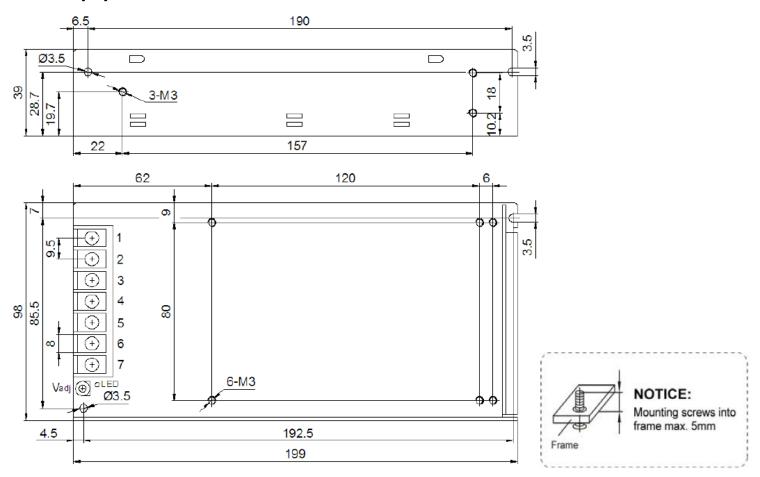
1. This product is Listed to applicable standards and requirements by UL.

*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 | |
| PSHF100W-SF-5 | 85~132 / 170~264 VAC (selectable by switch) | 5 VDC | 20.0A | 100mVp-p | 100W | 77% | |
| PSHF100W-SF-7.5 | | 7.5 VDC | 13.5 A | 100mVp-p | 101W | 78% | |
| PSHF100W-SF-12 | | 12 VDC | 8.5A | 100mVp-p | 102W | 82% | |
| PSHF100W-SF-13.8 | | 13.8 VDC | 7.5 A | 100mVp-p | 103.5W | 82% | |
| PSHF100W-SF-15 | | 15 VDC | 6.7A | 100mVp-p | 100.5W | 82% | |
| PSHF100W-SF-24 | | 24 VDC | 4.5A | 100mVp-p | 108W | 82% | |
| PSHF100W-SF-48 | | 48 VDC | 2.2A | 150mVp-p | 105.6W | 82% | |

MECHANICAL DRAWING

Unit: inches [mm]

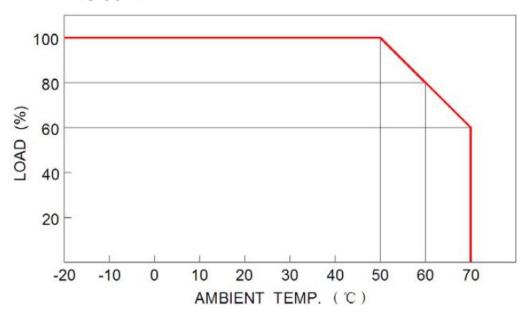


Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|--------------|
| 1 | AC/L | 4,5 | DC OUTPUT -V |
| 2 | AC/N | 6,7 | DC OUTPUT +V |
| 3 | PE | | |



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:

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