



**Size:**  
7.83 x 3.86 x 1.97 inches  
199.0 x 98.0 x 50.0 mm

**Weight:**  
1.46 lbs (660g)

**FEATURES**

- RoHS Compliant
- High Efficiency up to 86%
- Up to 151.2 Watts Output Power
- 2:1 Wide Input Voltage Ranges
- ±10% Voltage Adjustment Range
- Over Load and Short Circuit Protection
- 12V, 24V, & 48VDC Single Output Models
- Electrolytic Capacitors all 105°C
- GB4943, UL60950, & EN60950 Safety Approvals
- Meets GB9254, EN55022 Class A, & EN61000 EMC Standards
- Free Air Convection
- 100% Full Load Burn-in Tested

**DESCRIPTION**

The DCHF150W series of DC/DC power converters offers up to 151.2 Watts of output power in a 7.83" x 3.86" x 1.97" enclosed case. This series consists of 12V, 24V, and 48VDC single output models with 2:1 input voltage ranges of 18-36VDC, 36-72VDC, and 72-144VDC. Some features include ±10% output adjustability, high efficiency up to 86%, and over load and short circuit protection. The DCHF150W series has GB4943, UL60950, and EN60950 safety approvals and meets GB9254, EN55022 Class A, and EN61000 EMC standards. These supplies are also RoHS compliant and have been 100% full load burn-in tested.

**TECHNICAL SPECIFICATIONS: DCHF150W 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	24VDC nominal input models		18	24	36	VDC
	48VDC nominal input models		36	48	72	
	110VDC nominal input models		72	110	144	
<b>OUTPUT SPECIFICATIONS</b>						
Output Voltage			See Table			
Voltage Tolerance			-1.0		+1.0	%
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
<b>PROTECTION</b>						
Over Load Protection	Hiccup mode. Automatic recovery		105		150	%
Short Circuit Protection			Hiccup mode, automatic recovery			
<b>GENERAL SPECIFICATIONS</b>						
Efficiency	230VAC, full load		See Table			
Withstand Voltage	1 minute	Input to Output	1500			VAC
		Input to PE	1500			
		Output to PE	500			
Isolation Resistance	At 500VDC		100			MΩ
<b>ENVIRONMENTAL SPECIFICATIONS</b>						
Operating Temperature			-20		+50	°C
Storage Temperature			-20		+85	°C
Operating Humidity	Non-condensing		20		93	%
Storage Humidity	Non-condensing		20		95	%
Cooling			Free air convection			
Vibration	At 10~150Hz, 10 min per cycle for 30 minutes each test along the X, Y, & Z axis			2		G
MTBF			100,000			hours
<b>PHYSICAL SPECIFICATIONS</b>						
Weight			1.46 lbs (660g)			
Dimensions (L x W x H)			7.83 x 3.86 x 1.97 inch (199.0 x 98.0 x 50.0 mm)			
Connection			7P/9.5mm screw terminal block			
<b>SAFETY &amp; EMC (See Note 2)</b>						
Safety Approvals			GB4943; UL60950 <sup>(3)</sup> ; EN60950			
EMC Standards			GB9254; EN55022 Class A; EN61000			

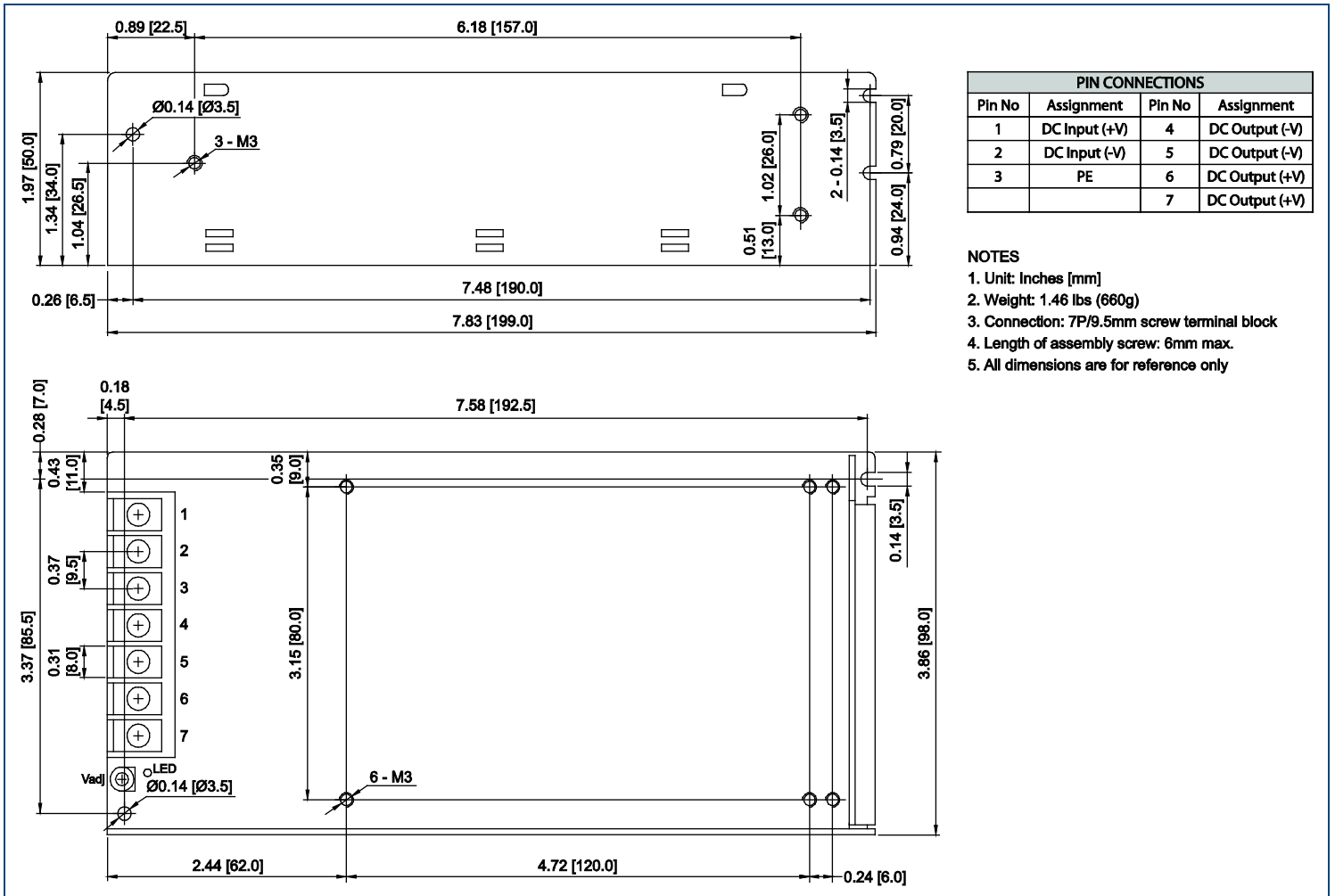
**MODEL SELECTION TABLE**

Model Number	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise <sup>(1)</sup>	Output Power	Efficiency
DCHF150W-SD24-12	24 VDC (18 - 36 VDC)	12 VDC	12.5A	120mVp-p	150W	81%
DCHF150W-SD24-24		24 VDC	6.3A	150mVp-p	151.2W	80%
DCHF150W-SD24-48		48 VDC	3.1A	150mVp-p	148.8W	82%
DCHF150W-SD48-12	48 VDC (36 - 72 VDC)	12 VDC	12.5A	120mVp-p	150W	83%
DCHF150W-SD48-24		24 VDC	6.3A	150mVp-p	151.2W	87%
DCHF150W-SD48-48		48 VDC	3.1A	150mVp-p	148.8W	86%
DCHF150W-SD110-12	110 VDC (72 - 144 VDC)	12 VDC	12.5A	120mVp-p	150W	84%
DCHF150W-SD110-24		24 VDC	6.3A	150mVp-p	151.2W	86%
DCHF150W-SD110-48		48 VDC	3.1A	150mVp-p	148.8W	86%

**NOTES**

- Ripple & noise is measured at 20MHz limited bandwidth and using a 12" twisted pair-wire terminated with a 0.1µF & 47µF capacitors in parallel.
  - 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.
  - This product is Listed to applicable standards and requirements by UL.
- Due to advances in technology, specifications are subject to change without notice.*

**MECHANICAL DRAWING**



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## 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 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.

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