

## Wall Industries, Inc.

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### DCHF60W SERIES

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2:1 Input Voltage Ranges  
5, 12, 24, & 48VDC Single Outputs  
60 Watts Output Power  
DC/DC Chassis Mount Power Converters

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#### FEATURES

- High Reliability
- Built-in EMI Filter
- 60W Output Power
- Dimensions: 6.30 x 3.86 x 1.54 Inches
- Short Circuit and Over Load Protected
- Single Output
- RoHS Compliant
- $\pm 10\%$  Voltage Adjustment Range
- Free Air Convection
- 2:1 Input Voltage Ranges

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#### DESCRIPTION

The DCHF60W series of DC/DC power converters offers 60W of output power in a 6.30" x 3.86" x 1.54" enclosed case. This series has 2:1 input voltage ranges of 18-36VDC, 36-72VDC, and 72-144VDC. The DCHF60W series also has 5V, 12V, 24V, and 48VDC single outputs available. Some features include  $\pm 10\%$  output adjustability, a built-in EMI filter, and over load and short circuit protection. These supplies are also RoHS compliant.

SPECIFICATIONS: DCHF60W SERIES					
<p style="color: red;">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.</p>					
SPECIFICATION	TEST CONDITIONS	Min	Nom	Max	Unit
<b>INPUT SPECIFICATIONS</b>					
Input Voltage Range	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			
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			
<b>PROTECTION</b>					
Over Load Protection		110		150	%
Short Circuit Protection		Yes			
<b>GENERAL SPECIFICATIONS</b>					
Efficiency		See Table			
Withstand Voltage	Input to Output	All for 1 minute	1000		VDC
	Input to FG		1000		
	Output to FG		500		
Isolation Resistance	At 500VDC	> 100			MΩ
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature		-10		+50	°C
Operating Humidity (non-condensing)		20		90	% RH
Storage Temperature		-20		+85	°C
Storage Humidity (non-condensing)		20		95	% RH
Cooling Method		Free air convection			
<b>PHYSICAL SPECIFICATIONS</b>					
Dimensions (L x W x H)		6.30 x 3.86 x 1.54 inches (160 x 98 x 39 mm)			
Weight		15.5oz (440g)			
<b>SAFETY &amp; EMC CHARACTERISTICS</b>					
Safety Standards		Design refer to LVD			
EMC Standards		Design refer to EN55022, EN61000-4			

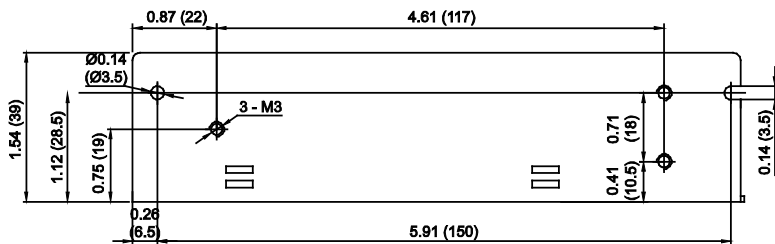
Due to advances in technology, specifications are subject to change without notice.

**MODEL SELECTION TABLE**

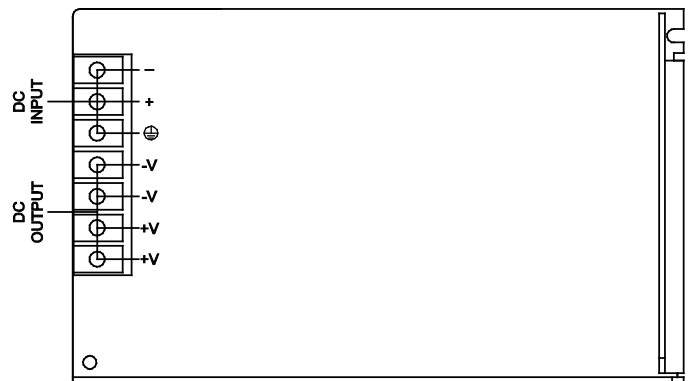
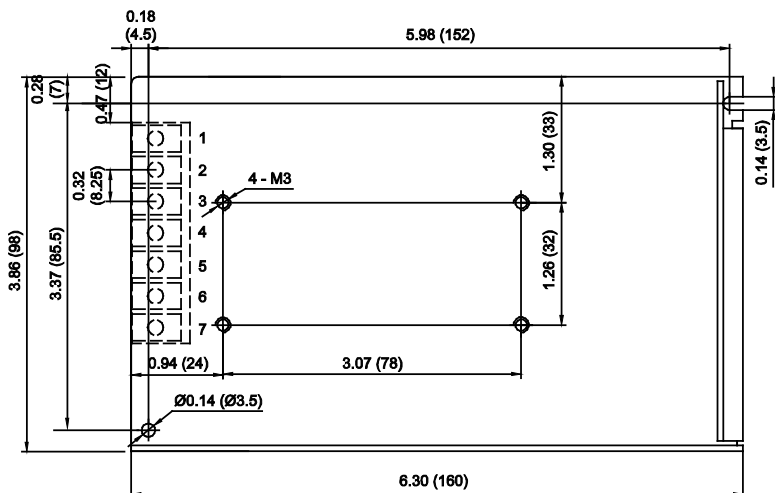
Model	Input Voltage	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
DCHF60W-SD24-5	24 VDC (18 – 36 VDC)	5 VDC	12.0 A	100mVp-p	60W	70%
DCHF60W-SD24-12		12 VDC	5.0 A	120mVp-p	60W	72%
DCHF60W-SD24-24		24 VDC	2.5 A	150mVp-p	60W	74%
DCHF60W-SD24-48		48 VDC	1.3 A	200mVp-p	62.4W	75%
DCHF60W-SD48-5	48 VDC (36 – 72 VDC)	5 VDC	12.0 A	100mVp-p	60W	70%
DCHF60W-SD48-12		12 VDC	5.0 A	120mVp-p	60W	72%
DCHF60W-SD48-24		24 VDC	2.5 A	150mVp-p	60W	74%
DCHF60W-SD48-48		48 VDC	1.3 A	200mVp-p	62.4W	75%
DCHF60W-SD110-5	110 VDC (72 – 144 VDC)	5 VDC	12.0 A	100mVp-p	60W	70%
DCHF60W-SD110-12		12 VDC	5.0 A	120mVp-p	60W	72%
DCHF60W-SD110-24		24 VDC	2.5 A	150mVp-p	60W	74%
DCHF60W-SD110-48		48 VDC	1.3 A	200mVp-p	62.4W	75%

**MECHANICAL DRAWING**

Unit: inches (mm)



PIN CONNECTIONS	
Pin No	Assignment
1	DC Input (V-)
2	DC Input (V+)
3	FG
4,5	DC Output (V-)
6,7	DC Output (V+)
Screw Size: M3*6	



## 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.

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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