

Wall Industries, Inc.

DCHF100W SERIES

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



FEATURES

- Single Output
- RoHS Compliant
- $\pm 10\%$ Voltage Adjustment Range
- Free Air Convection
- 2:1 Input Voltage Range
- High Reliability
- Built-in EMI Filter
- 100W Output Power
- 5, 12, 24, and 48VDC Output Voltages Available
- Dimensions: 7.83 x 3.86 x 1.54 Inches
- Short Circuit and Over Current Protection

DESCRIPTION

The DCHF100W series of DC/DC power converters offers 100W of output power in a 7.83" 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 DCHF100W 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 current and short circuit protection. These supplies are also RoHS compliant.

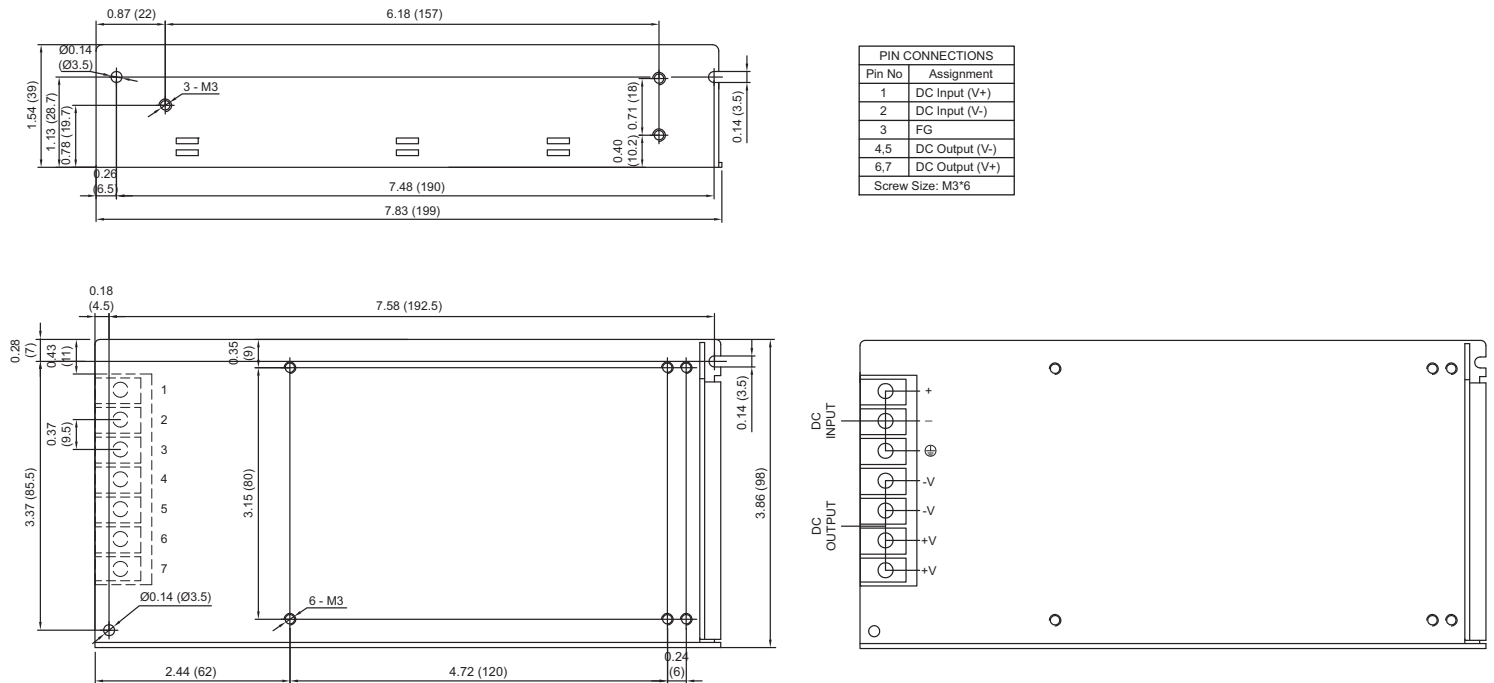
SPECIFICATIONS: DCHF100W Series					
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances.					
SPECIFICATION	TEST CONDITIONS	Min	Nom	Max	Unit
INPUT SPECIFICATIONS					
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	
OUTPUT SPECIFICATIONS					
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			
PROTECTION					
Over Current Protection		110		130	% Io
Short Circuit Protection		Yes			
GENERAL SPECIFICATIONS					
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
ENVIRONMENTAL SPECIFICATIONS					
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			
PHYSICAL SPECIFICATIONS					
Dimensions (L x W x H)		7.83 x 3.86 x 1.54 inches (199 x 98 x 39 mm)			
Weight		1.2 lbs (550g)			
SAFETY & EMC CHARACTERISTICS					
Safety Standards		Design refer to LVD			
EMC Standards		Design refer to EN55022, EN61000-4			

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
DCHF100W-SD24-5	24 VDC (18 - 36 VDC)	5 VDC	20A	100mVp-p	100W	74%
DCHF100W-SD24-12		12 VDC	8.5A	120mVp-p	100W	75%
DCHF100W-SD24-24		24 VDC	4.2A	150mVp-p	100W	78%
DCHF100W-SD24-48		48 VDC	2.1A	200mVp-p	100W	79%
DCHF100W-SD48-5	48 VDC (36 - 72 VDC)	5 VDC	20A	100mVp-p	100W	74%
DCHF100W-SD48-12		12 VDC	8.5A	120mVp-p	100W	75%
DCHF100W-SD48-24		24 VDC	4.2A	150mVp-p	100W	78%
DCHF100W-SD48-48		48 VDC	2.1A	200mVp-p	100W	79%
DCHF100W-SD110-5	110 VDC (72 - 144 VDC)	5 VDC	20A	100mVp-p	100W	74%
DCHF100W-SD110-12		12 VDC	8.5A	120mVp-p	100W	75%
DCHF100W-SD110-24		24 VDC	4.2A	150mVp-p	100W	78%
DCHF100W-SD110-48		48 VDC	2.1A	200mVp-p	100W	79%

MECHANICAL DRAWING

Unit: inches (mm)



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 ISO9001-2008 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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