

# **DCHF70W SERIES**

2:1 Input Voltage Ranges
12, 15, 24, & 48VDC Single Outputs
70.5~72 Watts Output Power
DC/DC Chassis Mount Power Converters



#### **FEATURES**

- Single Output
- RoHS Compliant
- ±10% Voltage Adjustment Range
- Free Air Convection
- 2:1 Input Voltage Ranges
- High Reliability
- Built-in EMI Filter
- 70.5~72 Watts Output Power
- Short Circuit and Over Load Protected
- Dimensions: 6.30" x 3.86" x 1.54" Dimensions (Optional): 5.75" x 3.19" x 1.50"

### DESCRIPTION

The DCHF70W series of DC/DC power converters offers up to 72W 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 DCHF70W series also has 12V, 15V, 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: DCHF70W 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 CON	NDITIONS	Min	Nom	Max	Unit	
INPUT SPECIFICATIONS							
Input Voltage Range	24VDC nominal inp	24VDC nominal input models		24	36		
	48VDC nominal inp	48VDC nominal input models		48	72	VDC	
	110VDC nominal in	110VDC nominal input models		110	144		
OUTPUT SPECIFICATIONS					<u>'</u>		
Output Voltage				See 7	Γable		
Output Voltage Adjustment Range			-10		+10	%	
Line Regulation	Full load		≤ -0.5		≤+0.5	%	
Load Regulation				0.5		%	
Output Current				See 7	Table	1	
Output Power				See 7	Γable		
Ripple & Noise				See 7	Γable		
PROTECTION							
Over Load Protection			110		150	%	
Short Circuit Protection				Y	es	1	
GENERAL SPECIFICATIONS							
Efficiency				See Table			
	Input to Output	All for 1 minute	1000			VDC	
Withstand Voltage	Input to FG		1000				
	Output to FG		500				
Isolation Resistance	At 500VDC		> 100			ΜΩ	
ENVIRONMENTAL SPECIFICATIONS	S				<u>'</u>		
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 c	onvection		
PHYSICAL SPECIFICATIONS							
Dimensions (L x W x H)	Standard	Standard		6.30" x 3.86" x 1.54" (160 x 98 x 39 mm)			
	Optional	Optional		5.75" x 3.19" x 1.50" (146 x 81 x 38 mm)			
Weight				15.9oz	(450g)		
SAFETY & EMC CHARACTERISTICS							
Safety Standards				Design refer to LVD			
EMC Standards			Design	refer to EN	55022, EN6	1000-4	

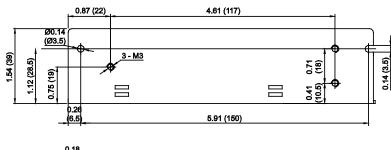
Due to advances in technology, specifications are subject to change without notice.



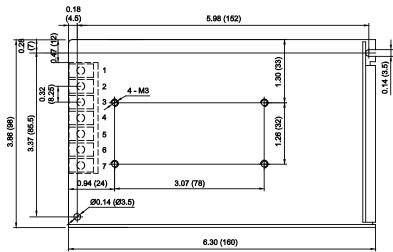
MODEL SELECTION TABLE						
Model	Input Voltage	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
DCHF70W-SD24-12	24 VDC (18 – 36 VDC)	12 VDC	6.0 A	120mVp-p	72W	72%
DCHF70W-SD24-15		15 VDC	4.7 A	150mVp-p	70.5W	72%
DCHF70W-SD24-24		24 VDC	3.0 A	150mVp-p	72W	76%
DCHF70W-SD24-48		48 VDC	1.5 A	200mVp-p	72W	82%
DCHF70W-SD48-12	48 VDC (36 – 72 VDC)	12 VDC	6.0 A	120mVp-p	72W	72%
DCHF70W-SD48-15		15 VDC	4.7 A	150mVp-p	70.5W	72%
DCHF70W-SD48-24		24 VDC	3.0 A	150mVp-p	72W	76%
DCHF70W-SD48-48		48 VDC	1.5 A	200mVp-p	72W	82%
DCHF70W-SD110-12	110 VDC (72 – 144 VDC)	12 VDC	6.0 A	120mVp-p	72W	72%
DCHF70W-SD110-15		15 VDC	4.7 A	150mVp-p	70.5W	72%
DCHF70W-SD110-24		24 VDC	3.0 A	150mVp-p	72W	76%
DCHF70W-SD110-48		48 VDC	1.5 A	200mVp-p	72W	82%

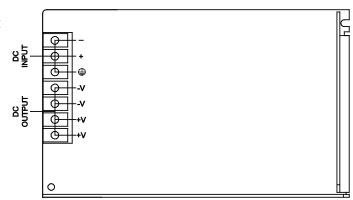
## **MECHANICAL DRAWING**

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:

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