Wall Industries, Inc.

DATASHEET
Rev. B

DCHF300W SERIES

2:1 Input Voltage Range
12, 15, 24, & 48VDC Single Outputs
300W Output Power
DC/DC Chassis Mount Power Converters



FEATURES

- Single Output
- RoHS Compliant
- ±10% Voltage Adjustment Range
- 2:1 Input Voltage Range
- High Reliability
- Built-in Fan Speed Control
- 300W Output Power
- 12V, 15V, 24V, and 48V Output Voltages Available
- 100% Full Load Burn-in Tested
- Dimensions: 8.46 x 4.53 x 1.97 Inches
- Short Circuit, Over Voltage, Over Current, and Over Temperature Protected

DESCRIPTION

The DCHF300W series of DC/DC power converters offers 300W output power in an 8.46 x 4.53 x 1.97 enclosed case. This series has 2:1 input voltage ranges of 36-72VDC and 72-144VDC and 12V, 15V, 24V, and 48VDC single outputs available. Some features include ±10% output adjustability and built-in fan speed control. These supplies are RoHS compliant and are protected against short circuit, over voltage, over current, and over temperature conditions.

SPECIFICATIONS: *DCHF300W Series*

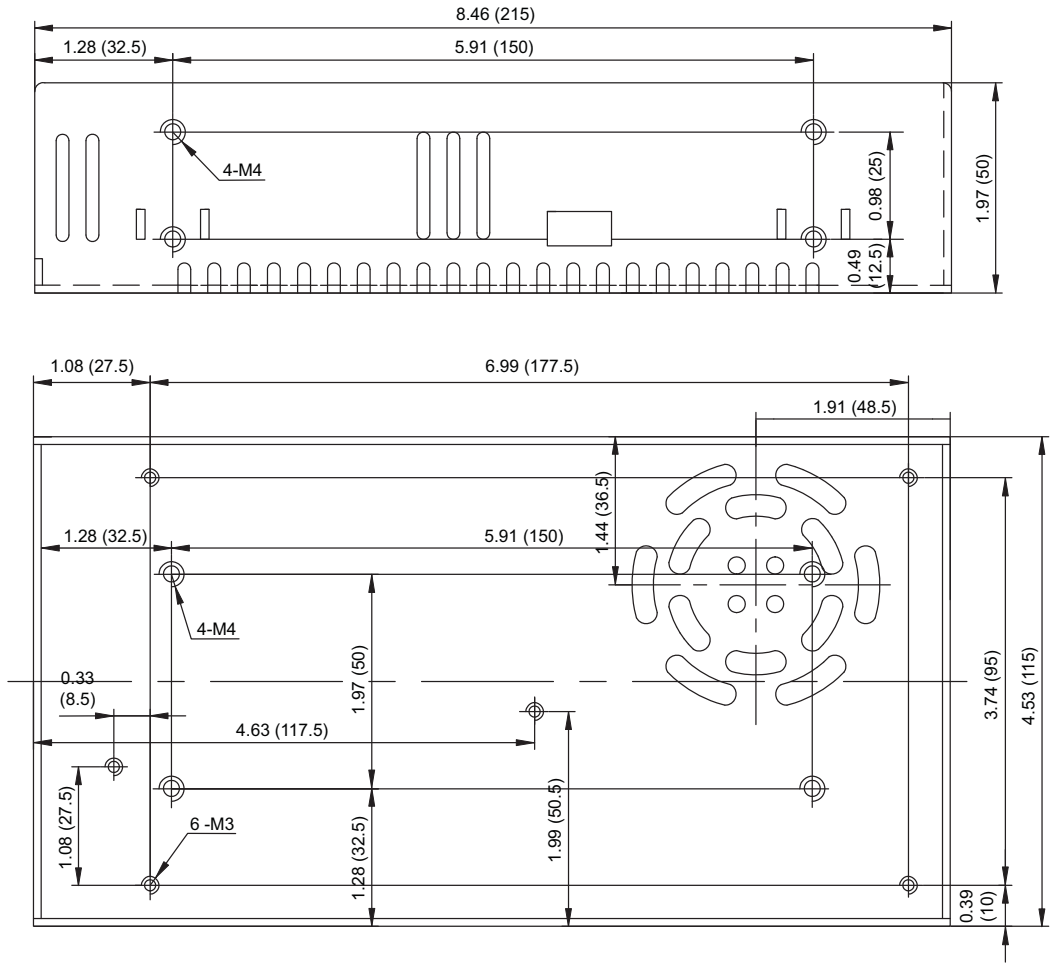
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS		Min	Nom	Max	Unit
INPUT SPECIFICATIONS						
Input Voltage Range	48VDC nominal input models		36	48	72	VDC
	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 Voltage Protection			115		150	% Vo
Over Load Protection			110		130	% Io
Short Circuit Protection			Yes			
Over Temperature 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			fan			
PHYSICAL SPECIFICATIONS						
Dimensions (L x W x H)			8.46 x 4.53 x 1.97 inches (215 x 115 x 50 mm)			
Weight			2.4 lbs (1100g)			
SAFETY & EMC CHARACTERISTICS						
Safety Standards			Design refer to LVD			
EMC Standards			Design refer to EN55022, EN61000-4			

MODEL SELECTION TABLE						
Model Number	**Input Voltage**	**Output Voltage**	**Output Current**	**Ripple & Noise**	**Output Power**	**Efficiency**
DCHF300W-SD48-12	48 VDC (36 - 72 VDC)	12 VDC	25 A	120mVp-p	300W	82%
DCHF300W-SD48-15		15 VDC	20 A	150mVp-p	300W	83%
DCHF300W-SD48-24		24 VDC	12.5 A	200mVp-p	300W	85%
DCHF300W-SD48-48		48 VDC	6.3 A	200mVp-p	302.4W	88%
DCHF300W-SD110-12	110 VDC (72 - 144 VDC)	12 VDC	25 A	120mVp-p	300W	82%
DCHF300W-SD110-15		15 VDC	20 A	150mVp-p	300W	83%
DCHF300W-SD110-24		24 VDC	12.5 A	200mVp-p	300W	85%
DCHF300W-SD110-48		48 VDC	6.3 A	200mVp-p	302.4W	88%

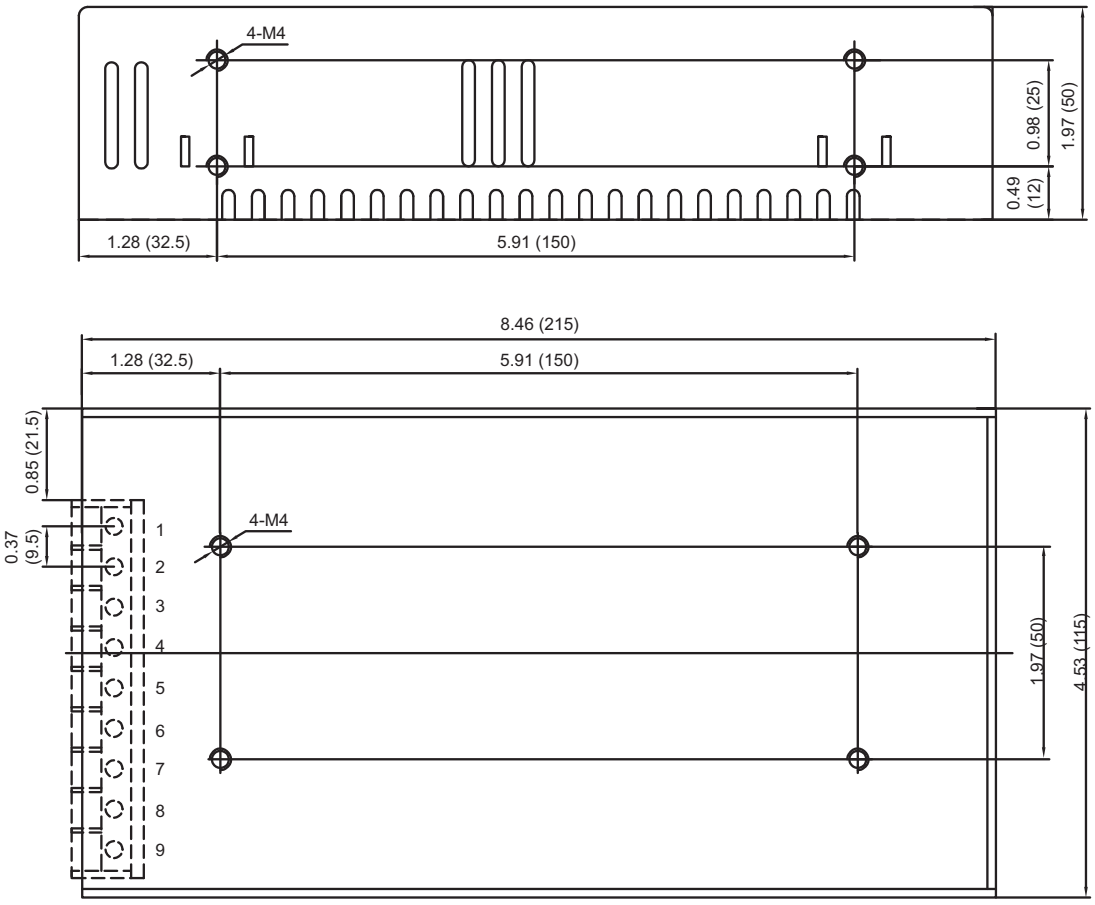
MECHANICAL DRAWING

Unit: inches (mm)



PIN CONNECTIONS

Unit: inches (mm)



PIN CONNECTIONS	
Pin No	Assignment
1, 2, 3	DC Input (V+)
4, 5, 6	DC Input (V-)
7	FG
8	DC Output (V+)
9	DC Output (V-)
Screw Size: M4*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 ISO9001-2008 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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