Size: 9.84in x 6.30in x 3.43in
(250mm x 160mm x 87mm)

FEATURES

- 2:1 Input Voltage Range
- Forced Air Cooling By Built-In Fan
- RoHS Compliant
- High Reliability
- Over Load, Over Voltage, Over Temperature, and Short Circuit Protection
- 100% Full Load Burn-In Test
- GB4943, UL60950, EN60950

DESCRIPTION

The DCHF500W series of DC/DC power converters offers output power of 504W in a 9.84" x 6.30" x 3.43" enclosed case. This series has 2:1 input voltage ranges of 38-60VDC and 72-144VDC and 12V, 24V, and 48VDC single outputs available. Some features include ±10% output adjustability, cooling fan, and a built-in EMI filter. These supplies are also RoHS compliant. All models are protected against short circuit, over voltage, over current, and over temperature conditions.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Max. Ripple & Noise	Output Power	Efficiency
DCHF500W-SD48-12	48VDC (36~75VDC	12VDC	42A	150mVp-p	504W	82%
DCHF500W-SD48-24		24VDC	21A	150mVp-p	504W	84%
DCHF500W-SD48-48		48VDC	11A	240mVp-p	504W	88%
DCHF500W-SD110-12	110VDC (72~144VDC	12VDC	42A	150mVp-p	504W	82%
DCHF500W-SD110-24		24VDC	21A	150mVp-p	504W	88%
DCHF500W-SD110-48		48VDC	11A	240mVp-p	504W	92%

SPECIFICATIONS

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

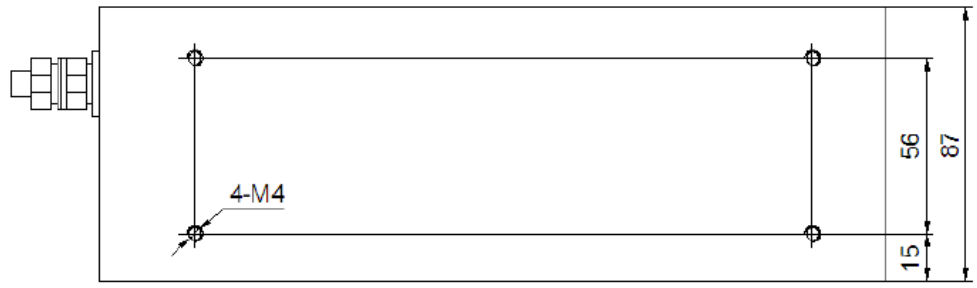
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage Range	48VDC Nominal Input Models	36	48	72	VDC
	110VDC Nominal Input Models	72	110	144	
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Voltage Adjustment Range			±10		%
Line Regulation[1]	Full Load		±0.5		%
Load Regulation[2]			0.5		%
Voltage Tolerance			±1		%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise		See Table			
Rise Time			50		mS
PROTECTION					
Short Circuit Protection	Current Limiting	Automatic Recovery			
Over Load Protection	Current Limiting, Automatic Recovery	110		130	%
Over Voltage Protection	Shut off, Re-Power On to Recover	115		150	%
Over Temperature Protection		Yes			
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature		-20		+50	ºC
Storage Temperature		-20		+85	ºC
Operating Humidity	Non-Condensing	20		93	%RH
Storage Humidity	Non-Condensing	20		95	%RH
Cooling		Fan, Full Speed when Power On			
Vibration	2G 10min/1cycle, 30min each along X, Y, Z axes	10		150	Hz
MTBF		100,000			Hours
GENERAL SPECIFICATIONS					
Efficiency		See Table			
Withstand Voltage	I/P-O/P	1.5KVAC/1min			
	I/P-PE	1.5KVAC/1min			
	O/P-PE	0.5KVAC/1min			
Isolation Resistance	@500VDC	100			MΩ
PHYSICAL SPECIFICATIONS					
Weight		6.17lbs (2800g)			
Dimensions (L x W x H)		9.84in x 6.30in x 3.43in (250 x 160 x 87mm)			
Packing		2.8kg, 6pcs/18.5kgs/0.045CBM per carton			
Input Connection		3P/9.5mm Screw Terminal Black			
Output Connection		Output: Φ6mm Copper Pole			
SAFETY CHARACTERISTICS					
Safety Standards	Design Refer to GB4943, UL60950[5], EN60950				
EMC Standards	Design Refer to GB9254, EN55022 Class A				

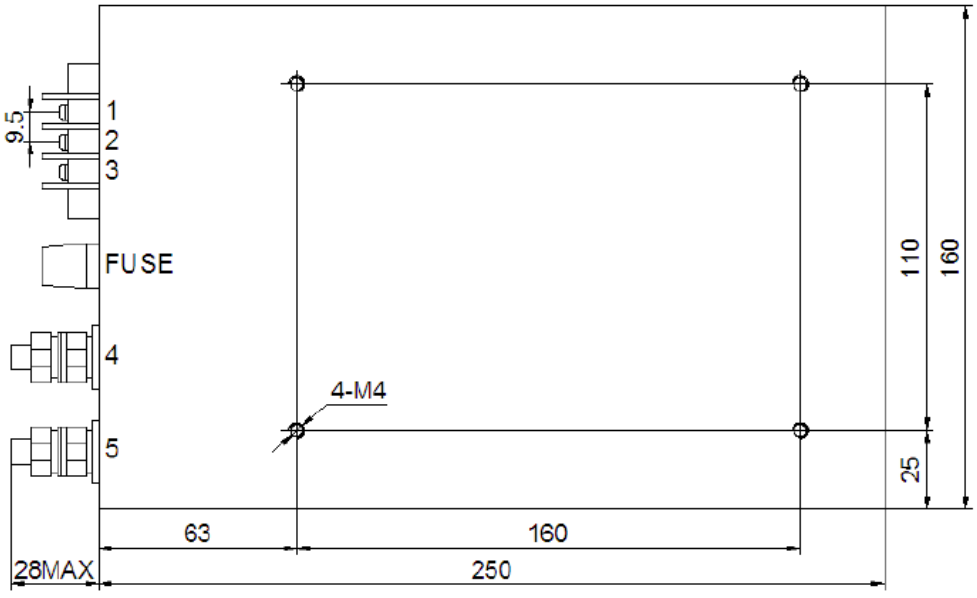
NOTES

1. Line regulation is measured from low line to high line at rated load.
2. Load regulation is measured from 0% to 100% of rated load for single output models.
3. Ripple & Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
4. This power supply is regarded as a component which will be installed into final equipment. Final equipment must be re-confirmed that it still meets EMC directives.
5. This product is Listed to applicable standards and requirements by UL.

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

MECHANICAL DRAWINGS





Length of assembly screw: max. 6mm

Terminal Pin No. Assignment

Pin No.	Assignment
1	DC INPUT +V
2	DC INPUT –V
3	PE
4	DC OUTPUT +V
5	DC OUTPUT -V

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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