



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

SPECIFICATIONS

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								
nput Voltage Range	Output Voltage	Output Current	Max. Ripple & Noise	Output Power	Efficiency				
48VDC	12VDC	42A	150mVp-p	504W	82%				
	24VDC	21A	150mVp-p	504W	84%				
(30~73700	48VDC	11A	240mVp-p	504W	88%				
110VDC	12VDC	42A	150mVp-p	504W	82%				
	24VDC	21A	150mVp-p	504W	88%				
(12~144VDC	48VDC	11A	240mVp-p	504W	92%				
	48VDC (36~75VDC	48VDC (36~75VDC 24VDC 48VDC 110VDC 12VDC (72~144VDC 24VDC	48VDC 42A (36~75VDC 24VDC 21A 48VDC 11A 110VDC 12VDC 42A (72~144VDC 24VDC 21A	48VDC (36~75VDC)	48VDC (36~75VDC)				

SPECIFICATION	We reserve the right to change specifications based on technol TEST CONDITIONS	Min	Тур	Max	Unit
INPUT SPECIFICATIONS	TEST CONDITIONS	IVIIII	ТУР	IVIAA	Offic
INI 01 31 EOII ICATIONS	48VDC Nominal Input Models	36	48	72	
Input Voltage Range	110VDC Nominal Input Models	72	110	144	VDC
OUTPUT SPECIFICATIONS	TTOVDC Nominal input Models	12	110	144	
Output Voltage			See Table	Δ	
Voltage Adjustment Range			±10	-	%
Line Regulation ⁽¹⁾	Full Load		±0.5		%
_oad Regulation ⁽²⁾	T un Loud		0.5		%
Voltage Tolerance			±1		%
Output Power			See Tabl	e	70
Output Current		See Table			
Ripple & Noise		See Table			
Rise Time			50		mS
PROTECTION			00		1110
Short Circuit Protection	Current Limiting		Automatic Red	covery	
Over Load Protection	Current Limiting, Automatic Recovery	110	/ tatomatio rec	130	%
Over Voltage Protection	Shut off, Re-Power On to Recover	115		150	%
Over Temperature Protection	Office off, the Fower off to receive	110	Yes	100	/0
ENVIRONMENTAL SPECIFICAT	FIONS				
Operating Temperature		-20		+50	οС
Storage Temperature		-20		+85	°C
Operating Humidity	Non-Condensing	20		93	%RH
Storage Humidity	Non-Condensing	20		95	%RH
Cooling	Then containing	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		1.00,000			
Efficiency			See Tabl	e	
	I/P-O/P	1.5KVAC/1min			
Withstand Voltage	I/P-PE	1.5KVAC/1min			
	O/P-PE		0.5KVAC/1min		
Isolation Resistance	@500VDC	100			ΜΩ
PHYSICAL SPECIFICATIONS	3333123				.,,,,,,
Weight			6.17lbs (280)()(a)	
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 Te	rminal R	ack
Output Connection		Output: Ф6mm Copper Pole			
SAFETY CHARACTERISTICS			.pat. +011111 00	, ppc1 1 01	
Safety Standards	Design Refer to GB4943, UL60950, El	N60950			
EMC Standards	Design Refer to GB9254, EN55022				



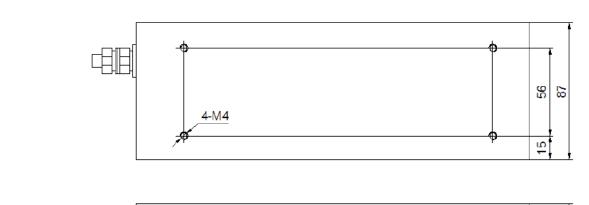
NOTES

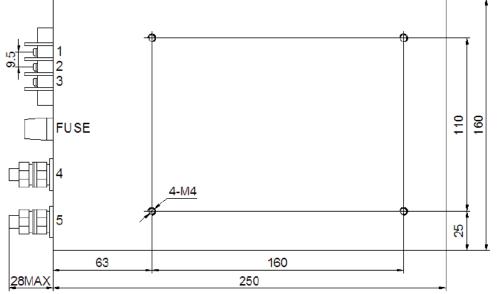
- Line regulation is measured from low line to high line at rated load.
- Load regulation is measured from 0% to 100% of rated load for single output models.

 Ripple & Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
- 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.

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 ISO9001-2008 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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