



Size:
7.87 x 4.33 x 1.97 inches
200.0 x 110.0 x 50.0 mm

Weight:
1.83 lbs (830g)

FEATURES

- RoHS Compliant
- High Efficiency up to 90%
- Up to 240 Watts Output Power
- 2:1 Wide Input Voltage Ranges
- ±10% Voltage Adjustment Range
- Over Load and Short Circuit Protection
- 5V, 12V, 24V, & 48VDC Single Output Models
- Electrolytic Capacitors all 105°C
- GB4943, UL60950, & EN60950 Safety Approvals
- Meets GB9254 & EN55022 Class A EMC Standards
- Free Air Convection
- 100% Full Load Burn-in Tested

DESCRIPTION

The DCHF200W series of DC/DC power converters offers up to 240 Watts of output power in a 7.87" x 4.33" x 1.97" enclosed case. This series consists of 5V, 12V, 24V, and 48VDC single output models with 2:1 input voltage ranges of 18-36VDC, 36-72VDC, and 72-144VDC. Some features include ±10% output adjustability, high efficiency up to 90%, and over load and short circuit protection. The DCHF200W series has GB4943, UL60950, and EN60950 safety approvals and meets GB9254 and EN55022 Class A EMC standards. These supplies are also RoHS compliant and have been 100% full load burn-in tested.

TECHNICAL SPECIFICATIONS: DCHF200W 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	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage	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			
Voltage Tolerance	5VDC output models	-2.0		+2.0	%
	12V, 24V, and 48VDC output models	-1.0		+1.0	
Voltage Adjustability		-10		+10	%
Line Regulation	LL to HL, full load	-0.5		+0.5	%
Load Regulation	No load to full load	-0.5		+0.5	%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise (20MHz BW)	Measured with 0.1µF ceramic and 47µF electrolytic capacitor in parallel	See Table			
Rise Time	Full load		50		ms
PROTECTION					
Over Load Protection	Hiccup mode. Automatic recovery	105		150	%
Short Circuit Protection		Hiccup mode, automatic recovery			
GENERAL SPECIFICATIONS					
Efficiency	230VAC, full load	See Table			
Withstand Voltage	1 minute	Input to Output	1500		VAC
		Input to PE	1500		
		Output to PE	500		
Isolation Resistance	At 500VDC	100			MΩ
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature		-20		+50	°C
Storage Temperature		-20		+85	°C
Operating Humidity	Non-condensing	20		93	%
Storage Humidity	Non-condensing	20		95	%
Cooling		Free air convection			
Vibration	At 10~150Hz, 10 min per cycle for 30 minutes each test along the X, Y, & Z axis		2		G
MTBF		100,000			hours
PHYSICAL SPECIFICATIONS					
Weight		1.83 lbs (830g)			
Dimensions (L x W x H)		7.87 x 4.33 x 1.97 inch (200.0 x 110.0 x 50.0 mm)			
Connection		7P/9.5mm screw terminal block			
SAFETY & EMC (See Note 2)					
Safety Approvals		GB4943; UL60950; EN60950			
EMC Standards		GB9254; EN55022 Class A			

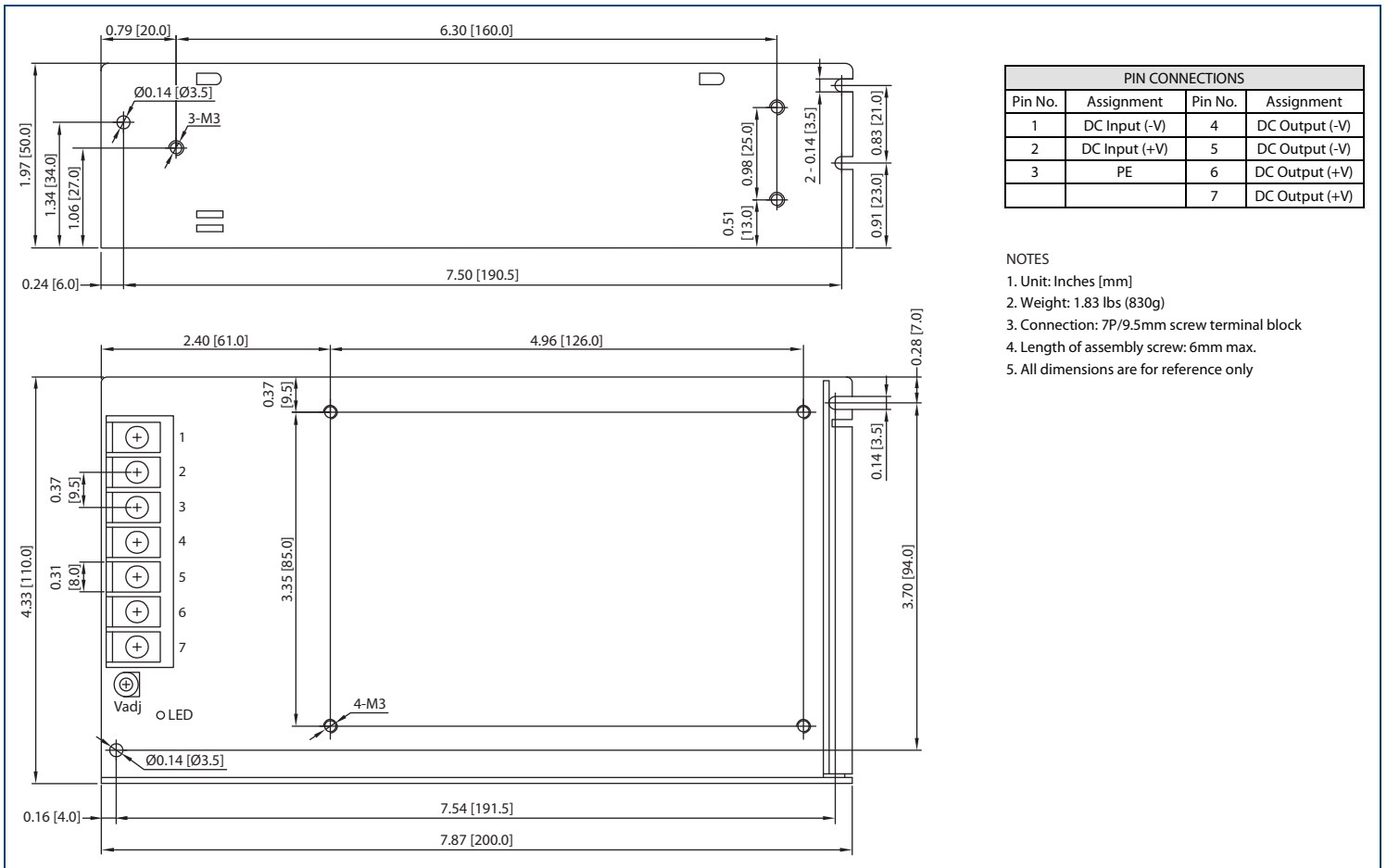
MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise ⁽¹⁾	Output Power	Efficiency
DCHF200W-SD24-5	24 VDC (18 - 36 VDC)	5 VDC	35A	100mVp-p	175W	79%
DCHF200W-SD24-12		12 VDC	16.7A	120mVp-p	200.4W	82%
DCHF200W-SD24-24		24 VDC	8.4A	150mVp-p	201.6W	85%
DCHF240W-SD24-24		24 VDC	10A	150mVp-p	240W	83%
DCHF200W-SD24-48		48 VDC	4.2A	150mVp-p	201.6W	84%
DCHF200W-SD48-5	48 VDC (36 - 72 VDC)	5 VDC	35A	100mVp-p	175W	81%
DCHF200W-SD48-12		12 VDC	16.7A	120mVp-p	200.4W	86%
DCHF200W-SD48-24		24 VDC	8.4A	150mVp-p	201.6W	88%
DCHF240W-SD48-24		24 VDC	10A	150mVp-p	240W	85%
DCHF200W-SD48-48		48 VDC	4.2A	150mVp-p	201.6W	90%
DCHF200W-SD110-5	110 VDC (72 - 144 VDC)	5 VDC	35A	100mVp-p	175W	81%
DCHF200W-SD110-12		12 VDC	16.7A	120mVp-p	200.4W	87%
DCHF200W-SD110-24		24 VDC	8.4A	150mVp-p	201.6W	91%
DCHF240W-SD110-24		24 VDC	10A	150mVp-p	240W	88%
DCHF200W-SD110-48		48 VDC	4.2A	150mVp-p	201.6W	90%

NOTES

1. Ripple & noise is measured at 20MHz limited bandwidth and using a 12" twisted pair-wire terminated with a 0.1µF & 47µF capacitors in parallel.
2. The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

MECHANICAL DRAWING



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.

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