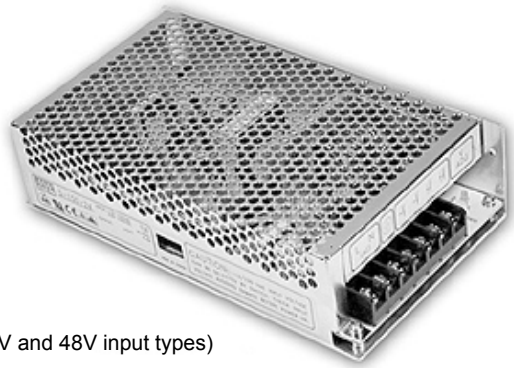
Wall Industries, Inc.

DCSD-150 Series
150 Watt
Single Output
Chassis Mount DC/DC Converter

FEATURES

- **105°C Output Capacitor**
- **Low Cost, High Reliability**
- **Compact Size, Light Weight**
- **100% Full Load Burn-In Tested**
- **Built-In EMI Filter, Low Ripple Noise**
- **High Efficiency, Low Working Temperature**
- **Short Circuit, Overload, and Over Voltage Protected**



CE (for 24V and 48V input types)

SPECIFICATIONS: *DCSD-150 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.

INPUT SPECIFICATIONS	
Input Voltage	DCSD-150**B**: 19 ~ 36VDC DCSD-150**C**: 36 ~ 72VDC DCSD-150**D**: 72 ~ 144VDC or 85~132VAC
Input Current	DCSD-150**B**: 8.5A at 24VDC DCSD-150**C**: 4.2A at 48VDC DCSD-150**D**: 2.1A at 96VDC
Inrush Current	DCSD-150**D**: 25A at 96VDC
Leakage Current	DCSD-150**D**: <0.75mA at 120VAC
OUTPUT SPECIFICATIONS	
Output Voltage	See Table
Output Voltage Tolerance (See Note 3)	±1%
Voltage Adjustability	See Table
Output Current	See Table
Line Regulation	12V outputs: ±0.5% 24V outputs: ±0.3%
Load Regulation	12V outputs: ±0.5% 24V outputs: ±0.3%
Ripple & Noise	12V outputs: 120mVp-p 24V outputs: 150mVp-p
Output Power	See Table
Setup, Rise, Hold Up Time	DCSD-150**D** (only): 2s, 50ms, 10ms/20ms
PROTECTION	
Over Voltage Protection	12V outputs: 16.8 ~ 20V / 10% Load 24V outputs: 31.5 ~ 37.5V / 10% Load
Over Load Protection	105%~135% Type: Foldback Current Limiting Reset: Auto recovery.
GENERAL SPECIFICATIONS	
Efficiency	See Table
Withstand Voltage	1.5KVAC (input to output), 1.5KVAC (input to FG), 0.5KVAC (output to FG)
Isolation Resistance	500VDC / 100MΩ (input to output, input to FG, output to FG)
ENVIRONMENTAL SPECIFICATIONS	
Working Temperature	-10°C to +60°C (refer to output derating curve)
Storage Temperature	-20°C to +85°C
Working Humidity	20% to 90% RH
Storage Humidity	10% to 95% RH
Vibration	10~500Hz, 2G 10min./1cycle, Period for 60min. each axes
Temperature Coefficient	±0.03%/°C (0°C~50°C)
PHYSICAL SPECIFICATIONS	
Weight	850 grams
Dimensions	199(L) x 110(W) x 50(H) mm
SAFETY & EMC	
EMC Standards	EN55022 CLASS B (Radiation), EN61000-4-2,3,4,6,8 ENV50204 Verification for DCSD-150B/C Series only, not including DCSD-150D series.

Wall Industries, Inc. 5 Watson Brook Road Exeter, NH 03833
603-778-2300 www.wallindustries.com Fax 603-778-9797

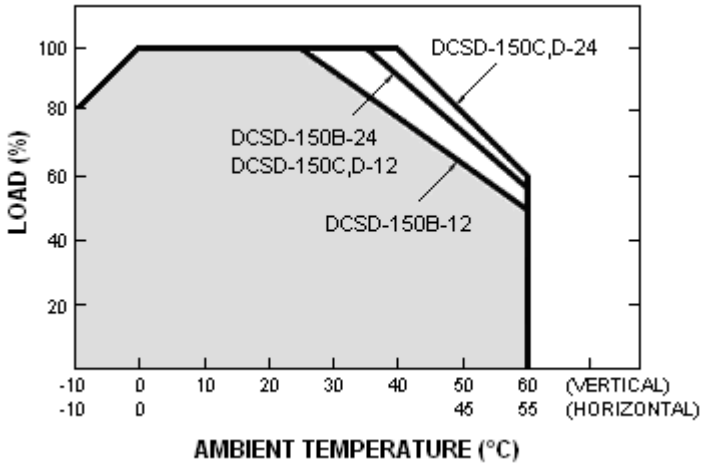
OUTPUT VOLTAGE / CURRENT RATING CHART

Model	Input Voltage	Output Voltage	Voltage Adjustability	Rated Output Current	Output Ripple & Noise	Output Power	Efficiency
DCSD-150B-12	24 VDC (19 ~ 36 VDC)	12 VDC	11 ~ 16VDC	12.5A	120mVp-p	150W	75%
DCSD-150B-24		24 VDC	23 ~ 30VDC	6.3A	150mVp-p	151.2W	80%
DCSD-150C-12	48 VDC (36 ~ 72 VDC)	12 VDC	11 ~ 16VDC	12.5A	120mVp-p	150W	77%
DCSD-150C-24		24 VDC	23 ~ 30VDC	6.3A	150mVp-p	151.2W	79%
DCSD-150D-12	96 VDC (72 ~ 144 VDC)	12 VDC	11 ~ 16VDC	12.5A	120mVp-p	150W	77%
DCSD-150D-24		24 VDC	23 ~ 30VDC	6.3A	150mVp-p	151.2W	82%

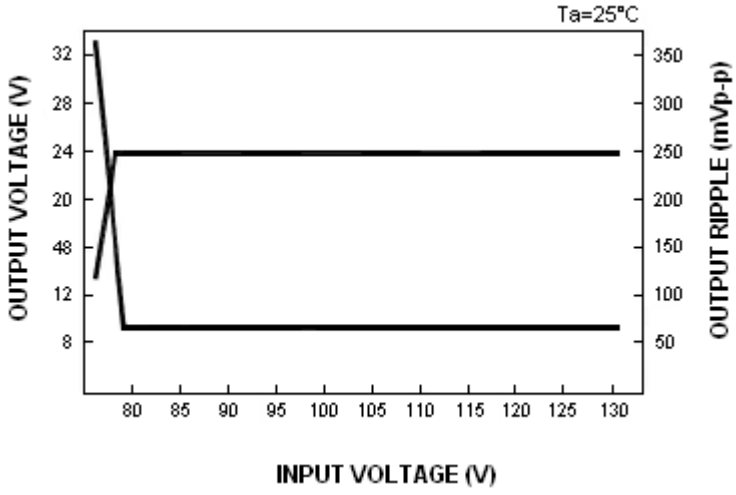
NOTES

1. The DCSD-150 Series is designated as DCSD-150x-y where x can be **B** (19 ~ 36 VDC input voltage), **C** (36 ~ 72 VDC input voltage), or **D** (72 ~ 144 VDC input voltage) and y can be 12 or 24 for output voltage.
2. All parameters are specified at rated input, rated load and 25ºC 70% RH. ambient.
3. Tolerance includes setup tolerance, line regulation, and load regulation.
4. Ripple & noise are measured at 20MHz using a 12" twisted pair terminated with a 0.1uF & 47uF capacitor.
5. Line regulation is measured from low line to high line at rated load.
6. Load regulation is measured from 0% to 100% rated load.

DERATING CURVE

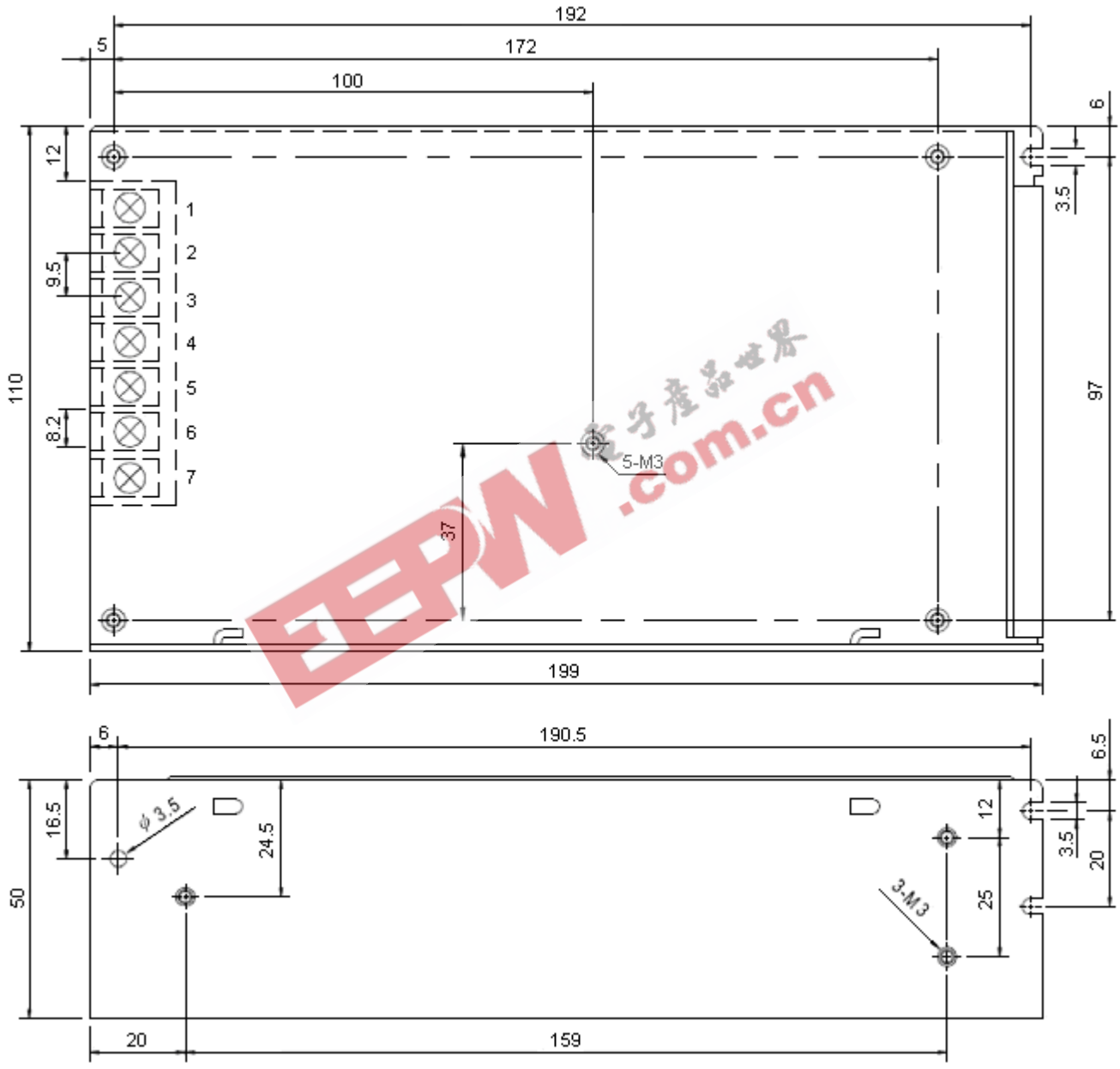


STATIC CHARACTERISTICS (DCSD-100D-24)



MECHANICAL DRAWING

Unit: mm



Terminal Pin No. Assignment			
Pin No.	Assignment	Pin. No	Assignment
1,2	INPUT	4,5	DC OUTPUT (-V)
3	FG	6,7	DC OUTPUT (+V)

DCSD-150B,C	
Pin No.	Assignment
1	DC INPUT (V+)
2	DC INPUT (V-)

DCSD-150D	
Pin No.	Assignment
1,2	AC/DC INPUT