

## Source Control Document.

**Model: DCW 100-24FTND (Standard ND Stock Version)**

**OSD: 1840 4456 SPND**

**Summary description: 100W, Single Output DC/DC Converter  
20-60Vdc to 24V/4A**



### Product description:

The unit is a rugged, single output DC/DC converter uses a field proven topology to generate 100W output power. It is a mature design with a track record in hundreds of applications. It is cooled by conduction via baseplate to a heatsinking surface and by natural convection. This chassis-mount design is optimized for low component count and high efficiency. The use of components with established reliability results in a high MTBF. The DCW 100 is manufactured at our plant under strict quality control.

**Special Feature:** These stock units are individually packed and ready for immediate delivery

## SPECIFICATIONS

### Input Voltage

24Vdc, 36V or 48Vdc nominal  
20-60Vdc operating range  
Input current: 6A max. (at 20V)

### Input Protection

Inrush current limiting  
Varistor  
Reverse polarity protection by crossbar diode  
Internal safety fuse  
Lower voltage than the specified minimum input will not damage the unit.

### Isolation

1500Vdc input to chassis  
1500Vdc input to output  
500Vdc output to chassis

### Standards / Approvals

Designed to meet EN60950  
and corresponding standards  
Meets all requirements for CE mark

### EMI

EN55022 Class B conducted and radiated.

### Switching Frequency

47KHz +/- 2KHz

### Output Voltage/Current

24Vdc +/-0.1V / 4A  
Output is floating, either terminal can be grounded

### Redundancy Diode

None

### Line/Load Regulation

+/-1% combined from no load to full load.

### Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

### Output Ripple / Noise

Better than 60mVrms or 300mVpp (20MHz BW)

### Output Overload Protection

Rectangular current limiting with hiccup-type short-circuit protection  
Current Limit set to: 4.6A +/- 0.3A

### Output Overvoltage Protection

Double regulator loop and transorb across the output

### Efficiency

80% minimum at full load

### Operating Temperature Range

0°C to +50°C temperature

### Temperature Drift

0.03% per °C over operating temperature range

### Cooling

Conduction via base plate and natural air convection

### Environmental Protection

Basic ruggedizing

### MTBF

160,000 hours @ 45°C

### Indicators

None

### Control Input

None

### Alarm Output

None

### Package / Dimensions

F0: 86 x 48x x155mm  
(3.4" x 1.9" x 6.1")  
Mounting holes are clear

### Weight

0.55kg (1.2 lbs.)

### Connections


6-pole barrier type terminal block with 3/8" spacing, 6 poles

### RoHS Compliance

Fully compliant

### Warranty

Two years subject to application within good engineering practice

Drawn by SS	Date Nov. 13, 2008
Checked by T.S.	Drawing No./ Rev. SCD 1840 4456NDA
Approved by T.S.	

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