

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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