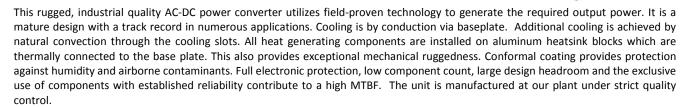
# 100W, Rugged, Industrial Quality DC-DC Converter with Wide Input Range DCW 100-F0 Series

- Rugged industrial quality
- Conduction/convection cooled
- Full electronic protection
- Field-proven design
- Wide input ranges



#### **SPECIFICATIONS**

#### **Input Voltage**

Two standard input ranges are available: 20 - 60Vdc or 65 - 160Vdc Consult factory for other input voltages and ranges

#### Input Protection

Inrush current limiting
Varistor
Reverse polarity protection
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

Designed to meet EN 60950-1 and corresponding UL and CSA standards

#### EMI

EN55032 Class A with margins

## **Switching Frequency**

47kHz ±2kHz

## **Output Voltage/Current**

12V/8A, 24V/4A, 48V/2A or 125V/0.8A are standard. Consult factory for other voltages

#### **Redundancy Diode**

Not installed

#### 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 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHzBW)

#### **Output Overload Protection**

Current limiting with short circuit protection (hiccup)

### **Output Overvoltage Protection**

Double regulator loop and transzorb clamp

## Efficiency

Output voltage dependent. Typically 80% at full load

## **Operating Temperature Range**

0°C to 50°C for full specification Wider temperature ranges available.

## Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Conduction via base plate to customer heatsink or chassis and/or natural convection

#### **Environmental Protection**

Basic ruggedizing Heavy ruggedizing and conformal coating as option

#### Shock/Vibration

IEC 61373 Cat 1 A&B

## Humidity

5 – 95% non-condensing

## MTBF

150,000 hours @ 45 °C Demonstrated MTBF is significantly higher

# Indicators

None

# Control Input

None

# **Alarm Output**

None

## Package/Dimensions (W x H x L)

F0: 88 x 48.3 x 160 mm 3.5 x 1.9 x 6.3") including terminal block and flanges. Mounting holes are clear

## Weight

0.55kg (1.2lbs)

#### Connections

6-pole barrier-type terminal block or 90° header pins with 0.156″ spacing Open PCB versions are also available with header pins with 0.156 spacing, or terminal block PCB size: 3″x 5″

## **RoHS Compliance**

Compliant

#### Warranty

Two years subject to application within good engineering practice

Enhancements to these general specifications and customizing can be accommodated upon request. Specifications are subject to change.

Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, dc-output UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. ABSOPULSE is a BABT-approved Facility.



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