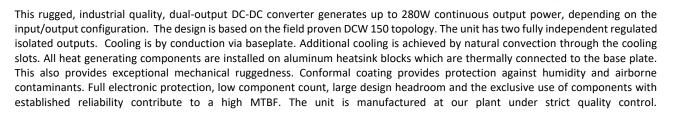
# 280W, Rugged Dual-output, Industrial Quality DC-DC Converter with Wide Input Range DCW 282-F1W Series

- Rugged industrial quality
- Two regulated outputs
- Wide DC-input voltage range
- Conduction/convection cooled no fans
- Field-proven design
- Full electronic protection



## **SPECIFICATIONS**

### Input Voltage

24Vdc (21-30V) 36Vdc (31-41V) 48Vdc (42-56V) 125Vdc (105-145V) 250Vdc (205-300V) Wide input range models: 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

Corresponding to input/output voltage: 1500Vdc input to chassis 2250VDC input to output 500VDC min. output to chassis 500VDC min. between outputs

## Standards

Designed to meet FN62368-1 and related standards

## **FMI**

EN55032 Class A with margins

## **Switching Frequency** 47kHz ±2kHz

## **Output Voltage**

V2: Any voltage 5V to 125Vdc The current on each output is limited to 10A Both outputs are fully regulated The outputs are floating; either terminal can be grounded Returns are separated.

V1: Any voltage 5V to 125Vdc

## Redundancy diode

Available as option

# Line/Load Regulation

±1% combined from no load to full load on both outputs

# **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 (20MHz BW)

## **Overload Protection**

Rectangular current limiting with hiccup type short-circuit protection (hiccup mode) on both outputs. The other output is not affected. Thermal shutdown with automatic recovery in case of insufficient cooling

# **Output Overvoltage Protection**

Double regulator loop and transzorbs on both outputs

## Efficiency

Typically 85% at full load depending on input/output configuration

### **Operating Temperature**

0 °C to 50°C for full specification Extended temperature ranges available

#### **Temperature Drift**

0.03% per °C over operating temperature range

# Cooling

Conduction via base plate to customer heat-sink or chassis and natural convection

## **Environmental Protection**

Basic ruggedizing Conformal coating

# Shock/Vibration

IEC 61373 Cat 1 A&B

# Humidity

5 – 95% non-condensing

## MTBF

140.000 hours @45°C Demonstrated MTBF is significantly higher

### Indicators

Green output ON LED on both outputs, visible through cooling

## **Control Input**

None

# **Alarm Output**

None on standard version Available as option

# Package/Dimensions (W x H x L)

F1W: 163 x 51 x 198 mm 6.43" x 2" x 7.78" Includes baseplate, excludes terminals. Mounting holes are clear.

# Weight

1.4 kg (3 lbs)

## Connections

12-pole barrier-type terminal block, 3/8" spacing

## **RoHS**

Compliant

## Warranty

Two years subject to application within good engineering practice

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change.

OEM of industrial and railway quality DC-DC converters, AC-DC power supplies and battery chargers, DC-AC sine-wave inverters, phase and frequency converters, DC-output UPS systems and complete power systems in 19" and 23" racks since 1982. Custom or standard. ABSOPULSE is a BABT-approved Facility.



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