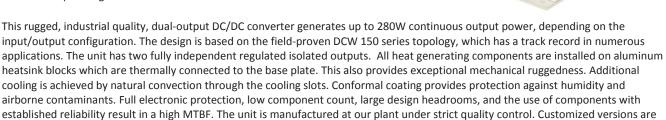
# 280W, Rugged Dual-output, Industrial Quality DC/DC Converter with Wide Input Range DCW 282-F1W Series

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



#### **SPECIFICATIONS**

#### Input Voltage

also available.

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 EN 60950-1 and related standards

#### EMI

EN55022 Class A with margins conducted and radiated

# Switching Frequency

47kHz ±2kHz

## **Output Voltage**

V1: Any voltage 5V to 125Vdc
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.

#### Redundancy diode

None 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**

Individual current limiting with short circuit protection on both outputs (cycling) 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 Heavy ruggedizing and conformal coating is available as option

## 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 slots

## **Control Input**

None

## **Alarm Output**

None on standard version Available as option

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

F1W: 163 x 51 x 200 mm (6.4" x 2" x 7.9") including terminal block and flanges 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



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