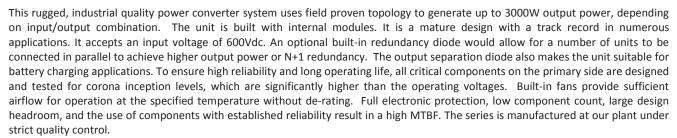
# 600Vdc Input, 2kW Rugged, Industrial Quality DC/DC Converter **HVI 2K-3U3**

- Rugged industrial quality
- Wide DC-input voltage range
- Field-proven design
- Full electronic protection
- Fan cooling
- N+1 redundancy possible



#### **SPECIFICATIONS**

# **Input Voltage**

600Vdc nominal 450V - 800V operating range Other input range on request

#### Input Protection

Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit

#### Isolation

3000Vdc input-chassis 3000Vdc input-output 5600Vdc type test 1000Vdc output-chassis

# Standards

Designed to meet EN 60950-1 and related standards

EN55022 Class A with margins

# **Switching Frequency**

55kHz ±3kHz

# **Output Voltage**

24V, 36V, 48V or 110Vdc Other outputs on request Output is floating; either terminal can be grounded

#### **Redundancy Diode**

Included for the separation of the internal modules

#### Line/Load Regulation

Better than ±1% combined from zero 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 0.2% Vrms or 1% Vpp of the output voltage (20MHz BW)

#### Output Overload Protection

Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient airflow (self-resetting)

# **Output Overvoltage Protection**

Second regulator loop, completely stable and independent of main regulator loop

# Efficiency

Min 80% at full load depending on input/output configuration

#### **Operating Temperature Range**

0°C to 50°C for full specification Wider range available as option

## **Temperature Drift**

0.03% per °C over operating temperature range

#### Cooling

Forced air by high quality built-in fans and conduction to customer heat sink or chassis.

Fans draw air into the unit.

# **Environmental Protection**

Basic ruggedizing and conformal coating Full ruggedizing available as an option

# Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### **MTBF**

85,000 hours @45°C (fans excluded) Demonstrated MTBF is significantly higher.

# **Indicators**

Not on standard version Available as option

#### **Control Input**

None on standard version Available as option

# **Alarm Outputs**

None Available as option

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

3U3: 132 x 187 x 407 mm 5.2 x 7.4 x 16" including terminal block and mounting flanges Mounting holes are clear

#### Weight

Approx7 kg (15 lb)

# Connections

Input: Terminal block Output: Threaded studs, M6

# **RoHS Compliance**

Compliant

# Warrantv

Two years subject to application within good engineering practice

