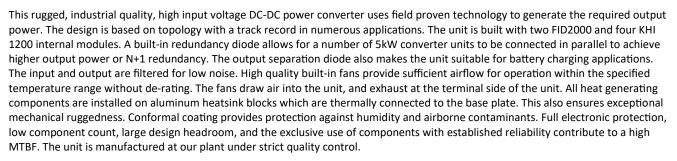
# 600Vdc Input, 5kW Rugged, Industrial Quality DC-DC Converters HVI 5K-3U7

- Rugged industrial quality
- Wide DC-input voltage range
- Field-proven design
- Full electronic protection
- Cooling by high quality built-in fans
- N+1 redundancy option



#### **SPECIFICATIONS**

#### **Input Voltage**

600Vdc nominal 400V-800Vdc 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 4300Vdc input-output 5600Vdc type test 1500Vdc output-chassis

#### Standards

Designed to meet EN 60950-1 and related standards

#### EMI

EN55032 Class A with margins

# Switching Frequency

55kHz ±3kHz

#### **Output Voltage**

24V, 48V, 110V or 125dc Other outputs on request Output is floating; either terminal can be grounded

# Output Separation Diode Installed internally

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# Line/Load Regulation

±1% combined from zero load to full load including output separation diode

## **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 85% 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 Conformal coating Heavy ruggedizing available as an ontion

# 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**

Green OUTPUT ON LED on each internal module visible through the rear perforation

#### **Control Input**

None on standard version Available as option

#### **Alarm Outputs**

None

Available as option

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

3U7: 132 x 432 x 407 mm 5.2" x 17" x 16" including terminal block and mounting flanges Mounting holes are clearz 19" rack-mounted version also available

# Weight

14 kg, 31 lb

#### Connections

Input: Terminal block HV assembly Output: Threaded studs, M6

#### **RoHS Compliance**

Compliant

#### Warranty

Two years subject to application within good engineering practice Contamination related failures and shipping costs excluded

The specifications on this data sheet are generic and are subject to change. Enhancements to these specifications can be provided upon request.

OEM of industrial and railway AC/DC power supplies and battery chargers, DC/DC converters, DC-AC sine-wave inverters, phase & frequency converters, DC-output UPS systems and complete power systems in 19" and 23" racks since 1982. Custom & standard.

