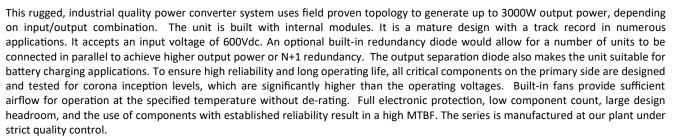
600Vdc Input, 2kW Rugged, Industrial Quality DC/DC Converter HVI 2K-3U3

- 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

EMI

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: $132 \times 187 \times 407$ 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

Warranty

Two years subject to application within good engineering practice

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.



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