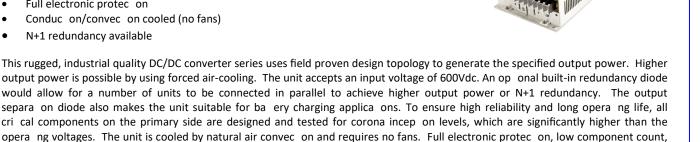
600Vdc Input, Rugged 300W Industrial Quality DC/DC Converter **HVI 300-F3 Series**

- Rugged industrial quality
- Wide DC-input voltage range
- Field-proven design
- Full electronic protec on
- Conduc on/convec on cooled (no fans)
- N+1 redundancy available



SPECIFICATIONS

large design headroom, and the use of components with established reliability result in a high MTBF. The unit is manufactured at our

Input Voltage

600Vdc nominal 450 - 800Vdc opera ng range Other input range on request

plant under strict quality control.

Input Protec on

Inrush current limi ng Varistors Reverse polarity protec on Internal safety fuse Lower voltage than the specified minimum input will not damage the unit

Isola on

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

Standards

Designed to meet EN 60950-1 and related standards

EN55022 Class A with margins

Switching Frequency

55kHz ±3kHz

Output Voltage/Current

12V/20A, 24V/12A, 48V/6A or 110V/2.5A Output is floa ng; either terminal can be grounded

Redundancy Diode

Available as op on

Line/Load Regula on

±1.5% combined from zero load to full load

Other outputs on request

Dynamic Response

Max 5% voltage devia on for 10% to 50% load step, with be er than 1msec recovery me

Output Ripple/Noise

Be er than 0.2% rms or 1% pp of the output voltage (20MHz BW)

Output Overload Protec on

Rectangular current limi ng with short-circuit protec on (no hiccup) Thermal shutdown in case of insufficient airflow (self-rese ng)

Output Overvoltage Protec on

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

Efficiency

Typically 80% at full load

Opera ng Temperature Range

0°C to 50°C cold plate temperature for full specifica on without dera ng Extended temperature ranges available

Temperature Dri

0.03% per °C over opera ng temperature range

Cooling

Conduc on to customer heatsink or chassis and natural convec on

Environmental Protec on

Ruggedizing Conformal coa ng Heavy ruggedizing available on request

Shock/Vibra on

IEC 61373 Cat 1 A&B

Humidity

5 – 95%, non condensing

MTBF

150,000 hours at 45 °C Demonstrated MTBF is significantly higher.

Indicators

Green "Output ON" LED visible through cooling slots

Control Input

None on standard version Available as op on

Alarm Outputs

None. Available as op on

Package/Dimensions (W x H x L)

F3: 132mm x 64mm x 300mm (5.2" x 2.5" 11.8") including terminal block and moun ng flanges Moun ng holes are clear

Weight

2 kg (4.4 lbs)

Connec ons

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

RoHS Compliance

Fully compliant

Warranty

Two years subject to applica on within good engineering prac ce

Terminal Block Pint Out

DC OUTPUT							DC INPUT				
+	+	0V	ov	NOT USED	NOT USED	NOT USED	NOT USED	RTN	NOT USED	+	NOT
1	2	3	4	5	6	7	8	9	10	11	12

Enhancements to these general specifica ons can be accommodated upon request. Designed to meet common approval requirements

Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard.



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