

Source Control Document.

Model: HVC 319-250FTND (Standard ND Stock Version)

OSD No.: 1562 0991 SPND

Summary description: 500W Single Output, AC/DC Power Supply, 250V/ 2A Output



Product description:

This power converter is a rugged industrial quality unit uses field proven topology.

It is a mature design with an excellent track record in hundreds of applications. The design headrooms are large. It is cooled by conduction by installing the unit on a heatsinking surface and by natural convection. A built-in redundancy diode allows parallel connection to achieve higher output power or N+1 redundancy. A Form C output fail alarm is also included. This chassis-mount design is optimized for low component count and high efficiency. The use of components with established reliability results in a high MTB.

The unit is manufactured at our plant under strict quality control. Customized versions are available.

Special Feature: These stock units are individually packed and ready for immediate delivery

SPECIFICATIONS

Input Voltage

115/230Vac +/-15% 47 – 63Hz

Jumper selectable

Input Current 10Arms max. at 95Vac

Input Protection

Inrush current limiting

Varistors

Internal safety fuse

Lower voltage than the specified minimum input will not damage the unit

Input Isolation/Safety

2250Vdc input to chassis

4300Vdc input to output

8mm spacing

1500VDC output to chassis

Standards

Designed to meet EN60950 and corresponding CSA and UL standards

EMI

EN55022 Class A with large headrooms

Hold Up Time

Minimum 5ms at full load for 5% drop of output voltage at nominal input

Switching Frequency

55KHz +/-3KHz

Output Voltage/Current

250Vdc/2A

Adjustable: 240-270V

Output is floating, either terminal can be grounded

Redundancy diode

Installed

Line/Load Regulation

+ 1% combined from zero load to full load including built-in redundancy diode

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple/Noise

Better than 150mVrms or 600mVpp (20MHz BW)

Output Overload Protection

Current limiting with short circuit protection (No hiccup)

Self-resetting thermostat for thermal protection

Current Limit: 2.3A +/-0.2A

Output Overvoltage Protection

Double regulator loop

OVP setting: 280V +/-10V

Efficiency

Min. 85% at full load

Operating Temperature Range

-20°C to +50°C for full specification with proper installation

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Conduction by installing unit on heat-sinking surface (chassis or cabinet wall) and convection via cooling slots

Environmental Protection

Basic ruggedizing

MTBF

100,000 hours @45°C

Demonstrated MTBF is significantly higher

Indicators

Green "Output ON" LED visible through the cooling slots

Control Input

None

Alarm Output

Form C contacts for output failure

Package / Dimensions (WxHxL)

F4: 129mm x 63.5mm x 355mm

(5.1" x 2.5" x 14")

Mounting holes are clear

Weight

2.2kg (4.9 lbs)

Connections


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

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice

Drawn by SS	Date Nov. 13, 2008
Checked by TS	Drawing No./ Rev. SCD 1562 0991NDA
Approved by TS	

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