150W, DC/DC, Triple Output, Plug-in (Eurocard) Converter
DCE 67-EH Series

- Rugged, industrial quality
- Triple regulated and adjustable output
- Convection cooling
- 3U x 14HP x 220mm plug-in module
- Full electronic protection
- Field-proven design
- Also available in stand-alone package
- N+1 redundancy available

This rugged, industrial quality, triple output plug-in type DC/DC converter uses field-proven technology to generate 150W output power. It is a mature design with a track record in numerous applications. All three outputs are individually regulated and current limited. A built-in redundancy diode is available as an option for parallel connection or N+1 redundant operation, including hot-insertion. Cooling is by natural air convection. Heat generating components are installed on an aluminum heatsink block, which is connected to the heatsink plate on the side of the module. The unit has input and output filtering in compliance with EN 55022 EMI standards. Full electronic protection, low component count, large design headrooms, and the use of components with established reliability result in a high MTBF. It is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage
24Vdc (21 – 30V)
48Vdc (42 – 60V)
125Vdc (105 – 140V)
Please consult factory for other voltages and ranges

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

Isolation
1000VDC input to chassis and 1500VDC input to chassis
500VDC output to chassis as a minimum
Isolation voltages correspond to input/output combination

Standards
Designed to meet EN 60950 and corresponding UL and CSA standards

EMI
EN55022 Class A as a minimum

Switching Frequency
55kHz +/-3kHz

Output Voltage/Current
5V/15A, 12-15V/3A and 12-15V/3A
150W per module
Consult factory for other voltages

Redundancy Diode
None
Installed internally as option

Line/Load Regulation
+/- 1% combined from 10% load to full load, including redundancy diode

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

Output Ripple / Noise
Less than 1% peak to peak or 0.2%rms of the output voltage (20MHz BW)

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

Output Over-voltage Protection
Second regulator loop and transzorbs

Efficiency
80% typical depending on the input/output configuration

Operating Temperature Range
0ºC to +50°C without derating
Extended temperature range available

Temperature Drift
0.03% per °C over operating tempera range

Cooling
Natural air convection

Environmental Protection
Basic ruggedizing
Full ruggedizing and conformal coating as option

Shock/Vibration
IEC61371 Cat 1 A&B

Humidity
5 - 95% non-condensing

MTBF
140,000 hours @ 45ºC
Demonstrated MTBF is significantly higher

Indicators
Output ON LED
Optional Test Points on front-panel

Control Input
Optional adjustment potentiometer on front-panel of plug-in module

Alarm Output
Optional optocoupler alarm on the module

Mechanical (H x W x D)
3U x 14HP x 220mm

Connections:
H15 DIN connector

RoHS Compliance
Fully compliant

Warranty
Two years subject to application within good engineering practice

Enhancements to these general specifications and customizing can be accommodated upon request. Specifications subject to change.

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

ABSOPULSE ELECTRONICS LTD.

ABSOPULSE ELECTRONICS LTD
110 Walgreen Road
Ottawa, Ontario. K0A 1L0. CANADA
Tel: (613) 836-3511 Fax: (613) 836-7488
E-mail: absopulse@absopulse.com
www.absopulse.com