

## 150W, WIDE INPUT RANGE INDUSTRIAL DC/DC CONVERTER DCW 162 and DCW 162-110 SERIES



- Competitively priced
- Dual output
- Rugged industrial quality
- Full electronic protection
- Convection/conduction cooled - no fan
- Field-proven design in a wide range of applications

The DCW 162 Series is a highly-reliable, ruggedly-designed DC/DC converter for heavy-duty industrial applications. It is cooled by convection and conduction via base plate. The use of components with many years of established reliability and generously-designed headroom contributes to the demonstrated MTBF, exceeding 1 million hours at typical operating temperatures. It is available in an enclosed F1 package, a 3U x160mm x10HP Eurocard plug-in module or an open- PCB version.

### SPECIFICATIONS

<p><b>Input Voltage</b> 20V - 60Vdc or 65V – 160Vdc</p> <p><b>Input Protection</b> Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than specified input min. will not damage unit</p> <p><b>Isolation</b> 1500VDC input to chassis, 2500VDC input to output, 500VDC output to chassis</p> <p><b>Standards</b> Designed to meet EN 60950 and corresponding UL and CSA standards</p> <p><b>EMI</b> EN 55022 Class B</p> <p><b>Switching Frequency</b> 47kHz +/- 2kHz</p> <p><b>Redundancy Diode</b> None on standard version</p>	<p><b>Output Voltage/Current</b> V1: any voltage 12 ...48V V2: any voltage 12 ...48V Outputs are floating, either terminal can be grounded Consult factory for other voltages</p> <p><b>Line/Load Regulation</b> V1: +/- 1.5% combined from zero load to full load. V2: +/-5% combined from 10% full load. (V1 must be loaded min. 10%) For symmetrical load, the regulation is better.</p> <p><b>Dynamic Response</b> Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time</p> <p><b>Output Ripple / Noise</b> Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)</p> <p><b>Output Overload Protection</b> Rectangular current limiting with hiccup type short-circuit protection on each output</p>	<p><b>Output Overvoltage Protection</b> Second regulator loop and transzorb on each output.</p> <p><b>Efficiency</b> Typically 80% at full load</p> <p><b>Operating Temperature Range</b> 0 to +50°C. Higher rating depends on available conduction and convection.</p> <p><b>Temperature Drift</b> 0.03% per °C over operating tempera range</p> <p><b>Cooling</b> Conduction to customer heatsink or chassis and natural convection</p> <p><b>Environmental Protection</b> Basic ruggedizing Conformal coating as option</p> <p><b>Humidity</b> 5 – 95% non-condensing</p> <p><b>MTBF</b> 150,000 hours @ 45 °C (calculated) Demonstrated MTBF exceeds 1,000,000 hours at typical operating temperatures</p>	<p><b>Indicators</b> None on standard version</p> <p><b>Control Input</b> None</p> <p><b>Alarm Output</b> None</p> <p><b>Dimensions and Connections</b> <i>Open PCB version:</i> PCB size 4" x 6.4" (100 x 160mm) 1.5" component height Barrier-type terminal block</p> <p><i>Enclosed case version F1:</i> F1: 7.8" x 4.4" x 2.0" (including terminal block and flanges) Barrier-type terminal block</p> <p><i>Plug-in Module version E1:</i> Eurocard size 3U x 160mm x 10HP H15 DIN connector</p> <p><b>Weight</b> Approx. 0.8kg (1.8 lbs) for enclosed version</p> <p><b>RoHS Compliance</b> (Directive 2002/95/EC) According to requirements</p> <p><b>Warranty</b> Twelve months subject to application within good engineering practice</p>
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Enhancements to these general specifications 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*



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