

300W, Dual Output, Rugged, AC/DC Industrial Power Supply with Universal Input MIW 302-F3 Series



- Rugged industrial quality
- Two regulated and adjustable output
- Conduction/convection cooled
- Full electronic protection
- Wide selection of input/output combinations
- Field proven design
- 1+1 redundancy available

This rugged, dual output, industrial quality power supply uses field-proven technology to generate 300W output power. It is a mature design built on the KIW 302 PCB and has a track record in numerous of applications. The unit has two completely independent converter stages to provide 150W on each output. The outputs are floating and can be connected in series to generate high output voltage (100 – 250Vdc) or in parallel to increase the output current. Adjustments for both outputs are accessible. An optional built-in redundancy diode allows for the outputs to be connected in parallel for 1+1 redundancy, or handle high peak load currents. Other options include a built-in alarm and a wide range of output configurations. Cooling is by conduction via baseplate. Additional cooling is achieved by natural convection through the cooling slots. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate. This also provides exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, low component count, large design headroom and the exclusive use of components with established reliability contribute to a high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

<p>Input Voltage 95V to 264Vac 47 - 420Hz DC-input also available. Please consult factory.</p>	<p>Output Voltage/Current Up to 125Vdc per output Up to 15 Amps per output Outputs are floating and can be connected in series or parallel.</p>	<p>Efficiency Min. 80% at full load</p>	<p>Indicators None on standard version</p>
<p>Input Protection Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p>	<p>Redundancy Diode None Built-in redundancy diode available as option</p>	<p>Operating Temperature Range 0°C to 50°C cold plate temperature for full specification Extended temperature ranges available</p>	<p>Control Input None</p>
<p>Isolation 2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis</p>	<p>Line/Load Regulation ±1% combined from zero load to full load</p>	<p>Temperature Drift 0.03% per °C over operating temperature range</p>	<p>Alarm Output None on standard version Available as option</p>
<p>Standards Designed to meet EN 60950-1 and corresponding UL and CSA standards</p>	<p>Dynamic Response Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time</p>	<p>Cooling Conduction via base plate to customer heatsink or chassis and natural convection</p>	<p>Package/Dimensions (W x H x D) F3: 132 x 62 x 300 mm (5.2" x 2.4" x 11.8") including mounting flanges and terminals. Mounting holes are clear</p>
<p>EMI EN55032 Class A with wide margins</p>	<p>Output Ripple / Noise Less than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHz BW)</p>	<p>Environmental Protection Basic ruggedizing Full ruggedizing and conformal coating available as an option</p>	<p>Weight 2 kg (4.4 lb)</p>
<p>Switching Frequency 47 kHz ±2kHz</p>	<p>Output Overload Protection Rectangular current limiting with short-circuit protection on both outputs (hiccup mode) Thermal shutdown with automatic recovery in case of insufficient cooling</p>	<p>Shock/Vibration IEC 61373 Cat 1 A&B</p>	<p>Connections 12 pole barrier type terminal block with 3/8" spacing</p>
<p>Hold Up Time Minimum 5ms at full load for 5% drop of output voltage at > 120Vac input</p>	<p>Output Overvoltage Protection Second regulator loop on both outputs</p>	<p>Humidity 5 – 95% non-condensing</p>	<p>RoHS Compliance Fully compliant</p>
		<p>MTBF 140,000 hours @ 45°C Demonstrated MTBF is significantly higher.</p>	<p>Warranty Two years subject to application within good engineering practice</p>

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

Designer and manufacturer of DC-DC converters, AC-DC power supplies, DC-AC sine wave inverters, AC-AC frequency converters, DC-output 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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