

300W, AC-DC Power Supply with PFC-Input Rugged Industrial Quality PFC 65-F3 Series



- Electronic power factor correction (PFC)
- Rugged, field-proven design topology
- Conduction/convection cooling
- Full electronic protection
- N+1 redundancy as an option

This industrial quality AC-DC power supply with PFC-input utilizes field-proven technology to generate the required output power. 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. An optional built-in redundancy diode allows for parallel and N+1 operation. An output fail alarm is available on request. 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 Universal 95-264Vac, 47 - 63Hz Power Factor is min.0.97 at full load for the entire input range. Meets EN 61000-3-2</p>	<p>Output Voltage/Current 12Vdc, 24Vdc, 48Vdc or 125Vdc 300W continuous output power Output is floating; either terminal can be grounded Other outputs and increased output power on request</p>	<p>Efficiency Output voltage dependent. Typically higher than 80% at full load</p>	<p>Indicators None</p>
<p>Input Protection Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified min. input will not damage the unit</p>	<p>Redundancy Diode Not installed. Available as option</p>	<p>Operating Temperature Range 0°C to 50°C cold plate temperature for full specification Extended temperature range 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 Not installed Optional output Fail Alarm</p>
<p>Standards Designed to meet EN 62368-1 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 to customer heatsink or chassis and natural convection</p>	<p>Dimensions F3: 132 x 62 x 290 mm 5.2" x 2.43" x 11.4" Excludes terminal block and flanges Mounting holes are clear</p>
<p>EMI EN 55032 Class A as minimum</p>	<p>Output Ripple / Noise Less than 1% peak-to-peak or 0.2% RMS of the output voltage (20MHz BW)</p>	<p>Environmental Protection Basic ruggedizing Conformal coating</p>	<p>Weight 2 kg (4.4 lb)</p>
<p>Switching Frequency 50-150KHz Boost section (dependent on the load) 55 KHz ±3KHz for the DC-DC (half-bridge) section</p>	<p>Output Overload Protection Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)</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 Min. 10ms at any input for 5% drop in the output voltage</p>	<p>Output Over-voltage Protection Double regulator loop completely stable and independent of main loop</p>	<p>Humidity 5-95% non-condensing</p>	<p>RoHS Compliance Compliant</p>
		<p>MTBF 130,000 hours @ 45°C Demonstrated MTBF is significantly higher</p>	<p>Warranty Two years subject to application within good engineering practice</p>

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change.

OEM of industrial and railway quality DC-DC converters, AC-DC power supplies and battery chargers, DC-AC sine-wave inverters, phase and frequency converters, DC-output UPS systems and complete power systems in 19" and 23" racks since 1982. Custom or standard. ABSOPULSE is a BABT-approved Facility.



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