

300VA Rugged, Industrial Quality Sine Wave Inverter with 24Vac Output

CSI 300-24/24FX Series



- Sinusoidal output voltage
- Rugged field-proven design
- Filtered input
- Conduction/convection cooling
- Full electronic protection
- Field-proven design topology

This rugged, industrial quality DC/AC inverter utilizes field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. It is a mature design with a track record in numerous applications. The DC/DC input stage boosts the input voltage to a higher DC voltage, which feeds the DC/AC inverter to generate the required AC output. High frequency conversion enables a compact construction, low weight and high efficiency. The input and output are filtered for low noise. 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 ensures exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, low component count, large design headrooms, 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 24Vdc nominal 21-30Vdc operating range Input current: 16A max Consult factory for other inputs, and range</p> <p>Input Protection Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p>Isolation 1000Vdc input to chassis 1500Vdc input to output 700V output to chassis Floating output</p> <p>Standards Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950-1</p> <p>EMI EN 55022 Class A with margins</p>	<p>Output Voltage 24Vac/12A, 50Hz 300VA continuous Isolated floating output Consult factory for other output requirements</p> <p>Output Wave Form Sinusoidal</p> <p>Total Harmonic Distortion Less than 5% at full load</p> <p>Line/Load Regulation ± 3% from no load to full load</p> <p>Load Crest Factor 2 at 90% load</p> <p>Output Noise High frequency ripple is better than 500mVrms (20MHz BW)</p> <p>Output Overload Protection Current limiting with short circuit protection Thermal shutdown with automatic recovery in case of insufficient cooling</p> <p>Output Overvoltage Protection By internal supply voltage limiting at 30Vac</p>	<p>Efficiency Typically 80% at full load</p> <p>Operating Temperature Range 0°C to +50°C for full specification Extended temperature ranges available</p> <p>Temperature Drift 0.05% per °C over operating temperature range</p> <p>Cooling Conduction via base plate to customer heatsink or chassis and by natural convection</p> <p>Environmental Protection Basic ruggedizing Conformal coating Heavy ruggedizing available as option</p> <p>Shock/Vibration IEC 61373 Cat 1 A&B</p> <p>Humidity 5 - 95% non-condensing</p> <p>MTBF Min. 130,000 hours at 45°C fans excluded Demonstrated MTBF is significantly higher</p>	<p>Indicators None</p> <p>Control Input None Remote shutdown as option</p> <p>Alarm Output None Option: output fail alarm (Form C)</p> <p>Package/Dimensions (W x H x L) FX: 153 x 67 x 357mm (6" x 2.7" x 14.1") Mounting holes are clear</p> <p>Weight 2.2 kg (4.9 lbs)</p> <p>Connections 12-pole barrier-type terminal block with 3/8" spacing</p> <p>RoHS Compliance Compliant</p> <p>Warranty Two years subject to application within good engineering practice</p> <p style="text-align: center;">Terminal Block Pin-out</p>
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AC OUTPUT							DC INPUT				
L1	L2	N/A	N/A	N/A	N/A	N/A	GND	-	-	+	+
1	2	3	4	5	6	7	8	9	10	11	12

Please note that ABSOPULSE power supplies are designed and built to customer specifications. The specifications on this data sheet are generic and will vary depending on input/output configuration and other customer requirements. Generic specifications are subject to change.

Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, 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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