100VA Rugged, Industrial Quality DC-AC Sine Wave Inverter with High Input Voltage

CSI 100-F2 Series

- Sinusoidal output voltage
- Up to 300Vdc input voltage
- Rugged, industrial quality
- Field-proven design topology
- Cooling by conduction/convection
- Full electronic protection

This rugged, industrial quality DC-AC sine wave inverter uses microprocessor controlled CFC 100 high frequency PWM technology to generate the required output power. The DC-DC input stage converts the input voltage to a DC bus voltage, which feeds DC-AC output stage to generate the required AC output. The input and output are filtered for low noise. The use of high frequency conversion enables a compact construction, low weight and high efficiency. Cooling is via baseplate to a heat-sinking surface and by natural convection. Most 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 headroom, and the exclusive use of components with established reliability contribute to a high MTBF. It is manufactured at our plant under strict quality control.

SPECIFICATIONS

**Input Voltage**
- 24Vdc (21-30Vdc)
- 48Vdc (42-60Vdc)
- 110Vdc (95-130V)
- 125Vdc (105-145V)
- 250Vdc (210-280V)
- 300Vdc (250-350V)

**Output Voltage**
- 115Vac/0.8Arms continuous at 60Hz or 400Hz; or
- 230Vac/0.4Arms continuous at 50Hz

**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**
Compliant to input and output voltages according to the corresponding standards

**Standards**
- Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN 60950-1
- EN 55022 Class A
- EN 61373 Cat 1 A&B

**EMI**
- EN 55022 Class A
- EN 60950-1

**Efficiency**
- Typically 80% at full load

**Operating Temperature Range**
- 0°C to +50°C for full specification
- Extended temperature ranges available

**Temperature Drift**
- 0.05% per °C over operating temperature range

**Cooling**
- Conduction to customer heat-sink or chassis and natural convection

**Environmental Protection**
- Basic ruggedizing
- Conformal coating

**Shock/Vibration**
- IEC 61373 Cat 1 A&B

**Humidity**
- 5 - 95% non-condensing

**MTBF**
- 120,000 hours at 45°C
- Demonstrated MTBF is significantly higher

**Indicators**
- None

**Control Input**
- None

**Alarm Output**
- None

**Package/Dimensions (W x H x D)**
- F2: 114 x 58 x 256 mm (4.5” x 2.3” x 10.1”)
- Includes terminal block and flanges
- Mounting holes are clear

**Weight**
- Approx. 1.2 kg; 2.6 lb

**Connections**
- 9-pole barrier type terminal block, 3/8" spacing

**RoHS Compliance**
- Compliant

**Warranty**
- Two years subject to application within good engineering practice.

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<thead>
<tr>
<th>Terminal Block Pin-out</th>
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<tbody>
<tr>
<td>AC OUTPUT</td>
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<tr>
<td>NOT USED</td>
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The specifications on this data sheet are generic and are subject to change. Enhancements to these specifications can be provided upon request.

OEM of professional quality AC/DC power supplies and battery chargers, DC/DC converters, 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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