

100VA Rugged, Industrial Quality DC/AC Sine Wave Inverter

CSI 100-24/24-F2 Series



- Sinusoidal output voltage
- Rugged, field-proven design
- Filtered input
- Conduction/convection cooling
- Full electronic protection
- Plug-in format available

This rugged DC/AC inverter 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 concept with a track record in numerous applications. The DC/DC input stage converts the input voltage to a DC bus voltage, which feeds the DC/AC inverter to generate the required AC output. The use of high frequency conversion enables a compact construction, low weight and high efficiency. The input and output are filtered for low noise. 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. Full electronic protection, generous design headroom and the exclusive use of components with established reliability also contribute to high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

24Vdc ±15%
12V, 36V, 48V or 125Vdc and other inputs available on request

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
Floating output

Standards

Designed to meet
C22.2 No. 107.1 - 01,
UL 458 and EN 60950-1

EMI

EN 55022 Class A
with margins

Output Voltage

24Vac/4Arms/50Hz
100VA continuous
Output is floating, either terminal can be grounded
Other outputs are available on request.

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

± 3% from no load to full load

Load Crest Factor

2 at 90% load

Output Noise

High frequency ripple is better than 500mVrms (20MHz BW)

Output Overload Protection

Current limiting with short circuit protection

Output Overvoltage Protection

Output voltage is limited by internal supply voltage

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 via baseplate 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
Optional output fail alarm (Form C)

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.

Terminal Block Pin-out

AC OUTPUT						DC INPUT		
NOT USED	L1	L2	NOT USED	NOT USED	NOT USED	GND	+	-
1	2	3	4	5	6	7	8	9

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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