

700Vdc Input, 800VA Rugged, Compact 3-Phase Industrial Quality DC-AC Sine Wave Inverter CTPH 800-F7W Series

- 3-Phase sinusoidal output voltage
- High input voltage, wide input range
- Filtered input/output
- Cooling by built-in fans
- Compact construction
- Full electronic protection
- Rugged, field-proven design



This rugged industrial quality DC-AC inverter uses field-proven, microprocessor controlled high frequency PWM technology to generate the required output power with 3-phase sine wave output voltage. 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 by high quality built-in fans and by additional conduction via the baseplate. The fans draw air into the unit. This also provides exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. 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

700Vdc nominal
500-900Vdc operating range
1100Vdc peak
Input Current: 2A max
Consult factory for other inputs

Input Protection

Inrush current limiting
Varistors
Reverse polarity protection
Internal safety fuses
Lower voltage than the specified minimum input will not damage the unit

Isolation

According to input/output as minimum
3400Vdc input to chassis
5000Vdc input to output
2250Vdc output to chassis
Floating output
Neutral can be grounded if required

Standards

Designed to meet
C22.2 No. 107.1 - 01,
UL458 and EN60950-1

EMI

EN55032 Class A with margins

Output Voltage

208Vrms (L-L)/3-phase continuous,
60 or 400Hz or
400Vac (L-L)/3-phase continuous,
50Hz
Output is floating
Output neutral can be connected to the chassis if required

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

± 5% 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
Thermal shutdown with automatic recovery in case of insufficient cooling

Output Overvoltage Protection

By internal supply voltage limiting

Efficiency

Typically 85% 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

By high quality built-in fans and by additional conduction via the baseplate

Environmental Protection

Basic ruggedizing
Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

Min. 110,000 hours at 45°C
Demonstrated MTBF is significantly higher

Indicators

None

Control Input

None
Remote shutdown or enable as an option

Alarm Output

Not installed

Package/Dimensions (W x H x L)

F7W: 280 x 67 x 356mm
(11" x 2.6" x 14")
Mounting holes are clear

Weight

Approx. 4kg (9 lbs)

Connections

Input: 2-pole terminal block, Phoenix FRONT type
Output: 12-pole terminal block, 3/8" spacing

RoHS Compliance

Compliant

Warranty

Two years subject to application within good engineering practice. Contamination related failures and shipping cost excluded

Terminal block pin-out

AC (L-L) OUTPUT											
GND	PH1	NOT USED	NOT USED	NOT USED	PH2	NOT USED	NOT USED	NOT USED	PH3	NOT USED	GND
1	2	3	4	5	6	7	8	9	10	11	12

DC INPUT	
VIN	RTN
1	2

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

Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, dc-output UPS systems, and complete rack mount systems in 19" or 23" racks. Custom or standard. ABSOPULSE is a BABT-approved Facility.



ABSOPULSE ELECTRONICS LTD

110 Walgreen Road, Ottawa, Ontario. K0A 1L0. CANADA

Tel: +1-613-836-3511 | Fax: +1-613-836-7488

E-mail: absopulse@absopulse.com | <http://www.absopulse.com>