

## 750Vdc, Rugged, Industrial Quality Inverter with Sine Wave Output Voltage CSI 750-F6W Series



- Sinusoidal output voltage
- Rugged, industrial quality
- Field-proven design topology
- Cooling by high quality built in fans
- Full electronic protection

This rugged, industrial quality DC-AC sine wave inverter uses microprocessor controlled 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. The built-in fans provide sufficient airflow for operation without de-rating to the specified temperature. The fans draw air into the unit. 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

48V, 125V, 250Vdc  
± 15% are standard  
Consult factory for other  
input voltages and ranges

#### 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

1500Vdc input to chassis  
4300Vdc input to output  
2250Vdc output to chassis  
Isolated floating output

#### Standards

Designed to meet  
C22.2 No. 107.1 - 01, UL 458 and  
EN60950-1

#### EMI

EN55022 Class A with margins

#### Output Voltage

115Vac/6Arms continuous at  
60Hz or 400Hz; or  
230Vac/3Arms continuous at 50Hz  
Isolated floating output  
Consult factory for other output  
requirements

#### Output Wave Form

Sinusoidal

#### Total Harmonic Distortion

Less than 5% at full load

#### Line/load Regulation

±6% from no load to full load

#### Load Crest Factor

2 at 90% load

#### Output Noise

High frequency ripple is less  
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  
depending on input/output  
configuration

#### Operating Temperature

0 °C to +50°C for full specification  
Extended temperature ranges  
available on request

#### Temperature Drift

0.05% per °C over operating  
temperature range

#### Cooling

High quality built in fans draw air  
into the unit.

#### Environmental Protection

Basic ruggedizing  
Conformal coating

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

125,000 hours at 45 °C  
Fans not included  
Demonstrated MTBF is  
significantly higher

#### Indicators

None

#### Control Input

None

#### Alarm Output

None  
Output Fail Alarm (Form C)  
as option

#### Package/Dimensions (WxHxL)

F6W: 254 x 65 x 359mm  
(10" x 2.6" x 13.75")  
Mounting holes are clear

#### Weight

Approx. 4kg (9 lbs)

#### Connections

Input: 6-pole terminal block, 3/8"  
spacing  
Output: 12-pole terminal block,  
3/8" spacing

#### RoHS Compliance

Compliant

#### Warranty

Two years subject to application  
within good engineering practice

#### Terminal Block Pin-out

115VAC OUTPUT								GND		DC INPUT							
NOT USED	NOT USED	L1	L2	NOT USED	NOT USED	NOT USED	NOT USED	⊕	⊖	NOT USED	NOT USED	NOT USED	⊖	⊖	+	+	
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
		~	~					⊕	⊖				⊖	⊖	+	+	

Please note that ABSOPULSE inverters 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 converters, inverters, 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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