

500VA, Rugged, Compact 3-Phase Industrial Quality DC-AC Sine Wave Inverter CTP 500-F7 and CTP 500-F7W Series

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



**F7 chassis for 48V,
110V, 125Vdc input**



**F7W chassis for
24V & 36Vdc input**

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. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate. 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

<p>Input Voltage 24V, 36V, 48V, 110V, 125Vdc ±15% are standard Consult factory for other inputs</p> <p>Input Protection Inrush current limiting Varistors Reverse polarity protection Internal safety fuses Lower voltage than the specified minimum input will not damage the unit</p> <p>Isolation According to input/output as minimum 1500Vdc input to chassis 1500Vdc input to output 2250Vdc output to chassis Floating output Neutral can be grounded if required</p> <p>Standards Designed to meet C22.2 No. 107.1 - 01, UL458 and EN60950-1</p> <p>EMI EN55022 Class A with margins</p>	<p>Output Voltage 208Vrms (L-L)/3-phase continuous at 60 or 400Hz or 380Vrms or 400Vrms (L-L)/ 3-phase continuous at 50 or 60Hz. Phase-to-neutral voltages can also be used Consult factory for other voltages, frequencies and options</p> <p>Output Wave Form Sinusoidal</p> <p>Total Harmonic Distortion Less than 5% at full load</p> <p>Line/Load Regulation ± 6% 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</p> <p>Output Overvoltage Protection By internal supply voltage limiting</p>	<p>Efficiency Typically 85% 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 By high quality built-in fans by additional conduction via the baseplate</p> <p>Environmental Protection Basic ruggedizing Conformal coating Full 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. 110,000 hours at 45°C Demonstrated MTBF is significantly higher</p>	<p>Indicators None</p> <p>Control Input None Remote shutdown or enable as an option</p> <p>Alarm Output None</p> <p>Package/Dimensions (W x H x L) <u>For 48V, 110V, 125Vdc inputs, F7:</u> 254 x 67 x 356mm (10" x 2.6" x 14") <u>For 24V and 36V inputs F7W chassis:</u> 280 x 67 x 356mm (11" x 2.6" x 14") Mounting holes are clear</p> <p>Weight F7: 3.2 kg, 7 lbs F7W: 4 kg; 9 lbs</p> <p>Connections Input: 6-pole terminal block, 3/8" spacing Output: 12-pole terminal block, 3/8" spacing</p> <p>RoHS Compliance Compliant</p> <p>Warranty Two years subject to application within good engineering practice.</p>
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TB pin-out

3-PHASE OUTPUT												DC INPUT					
GND	PH 1	NOT USED	NOT USED	NOT USED	PH 2	NOT USED	NOT USED	NOT USED	PH 3	NOT USED	GND	GND	GND	-	-	+	+
⊥	~				~				~		⊥	⊥	⊥				
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6

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.



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