

## 300VA, 3-Phase Industrial Quality DC-AC Sine Wave Inverter, Rugged, Compact CTP 300-F7 Series

- 3-Phase sinusoidal output voltage
- Filtered input/output
- Conduction/convection cooled
- 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 conduction via baseplate. Additional cooling is achieved by natural convection through the cooling slots. 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. A railway quality version of this design, the CTP-300R-F7, is also available.

### SPECIFICATIONS

<p><b>Input Voltage</b> 24V, 36V, 48V, 110V, 125Vdc Consult factory for other inputs</p> <p><b>Input Protection</b> Inrush current limiting Varistors Reverse polarity protection Internal safety fuses Lower voltage than the specified minimum input will not damage the unit</p> <p><b>Isolation</b> According to input/output as minimum 700Vdc input to chassis 1500Vdc input to output 1000Vdc output to chassis Floating output Neutral can be grounded if required</p> <p><b>Standards</b> Designed to meet C22.2 No. 107.1 - 01, UL458 and EN62368-1</p> <p><b>EMI</b> EN55032 Class A with margins</p>	<p><b>Output Voltage</b> 208Vrms (L-L)/3-phase continuous at 60 or 400Hz or 115Vrms phase-to-neutral voltages can also be used Consult factory for other voltages, frequencies and options</p> <p><b>Output Wave Form</b> Sinusoidal</p> <p><b>Total Harmonic Distortion</b> Less than 5% at full load</p> <p><b>Line/Load Regulation</b> ±6% from no load to full load</p> <p><b>Load Crest Factor</b> 2 at 90% load</p> <p><b>Output Noise</b> High frequency ripple is better than 500mVrms (20MHz BW)</p> <p><b>Output Overload Protection</b> Current limiting with short circuit protection</p> <p><b>Output Overvoltage Protection</b> By internal supply voltage limiting</p>	<p><b>Efficiency</b> Typically 80% at full load</p> <p><b>Operating Temperature Range</b> 0°C to +50°C for full specification Extended temperature ranges available</p> <p><b>Temperature Drift</b> 0.05% per °C over operating temperature range</p> <p><b>Cooling</b> By conduction via baseplate and by natural convection</p> <p><b>Environmental Protection</b> Basic ruggedizing Conformal coating Full ruggedizing available as option</p> <p><b>Shock/Vibration</b> IEC 61373 Cat 1 A&amp;B</p> <p><b>Humidity</b> 5 - 95% non-condensing</p> <p><b>MTBF</b> Min. 110,000 hours at 45°C Demonstrated MTBF is significantly higher</p>	<p><b>Indicators</b> None</p> <p><b>Control Input</b> None Remote shutdown or enable as an option</p> <p><b>Alarm Output</b> None</p> <p><b>Package/Dimensions (W x H x L)</b> F7: 254 x 73 x 350.5 mm 10" x 2.875" x 13.8" includes baseplate, excludes connectors. Mounting holes are clear.</p> <p><b>Weight</b> 3.2 kg (7 lb)</p> <p><b>Connections</b> Terminal blocks</p> <p><b>RoHS Compliance</b> Compliant</p> <p><b>Warranty</b> Two years subject to application within good engineering practice.</p>
--	---	---	---

#### 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	-	-	+	+	
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
⏏	~				~				~		⏏	⏏	-	-	+	+	

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change.

OEM of industrial and railway quality DC-DC converters, AC-DC power supplies and battery chargers, 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.



#### ABSOPULSE ELECTRONICS LTD

110 Walgreen Road, Ottawa, Ontario, K0A 1L0, CANADA  
Tel: +1-613-836-3511 | Fax: +1-613-836-7488

<https://absopulse.com/contact> | <https://www.absopulse.com>