

# **Dyna**Verter TA Series

### Dynamic DC to AC Power Inverters

True sine-wave for continuous AC power to run thumpers, test equipment, splicing systems, electrofusion systems, high-surge air conditioning compressors, variable speed drills, traffic signal control systems, and more!



### TA Series Dynamic Inverters with TruSine® Technology

Vanner dynamic inverters with TruSine® technology are high performance inverters with features ideal for continuous power needs. The TA Series inverter delivers 6000 watts of

120Vac pure sine-wave power from a heavy-duty 12 volt alternator with AC taps. This unit is fully capable of handling rigorous wattage requirements of equipment on service, utility and specialty vehicles, including tools, auxiliary air conditioners/heaters and lighting equipment.

### What Is TruSine® Technology?

TruSine® technology incorporates high frequency switching techniques with Insulated Gate Bipolar Transistors (IGBTs) to achieve a constant peak pure sine-wave output, the same as utility power. This waveform is not distorted under any load - even the most waveform-sensitive instruments can be operated simultaneously with motors or other low power factor loads. When operating inductive loads such as a motor, the TA Series dynamic inverter actually recycles the reactive energy so that it maintains high efficiency. Vanner TA Series inverters have no limitations on the power factor of loads, either leading or lagging.

### The Advantages of Sine-wave Output

Sine-wave delivers the most power when you need it - at the peak. Power output at the peak of a sine-wave is double the RMS power. This results in motors that start easier and faster, and run more efficiently.

Sine-wave increases the efficiency of the load, especially with motor loads. Motors designed to operate on sine-wave power can utilize the total input power only from a sine-wave - this is why sine-wave input increases the efficiency.

Other types of loads which incorporate electronic circuits are designed to take advantage of the characteristics of sine-wave and function better than on other wave forms. These loads include electronic instruments, televisions and microwave ovens.

Sine-wave voltage regulation is more accurate because it regulates both the peak and RMS voltage.

#### **TA Series Standard Features**

**Load demand-auto start/stop:** When the inverter is turned on, it operates in a dormant state until a load is applied, then switches to full capacity. When the load is removed, the inverter returns to a dormant state.

**Pure sine-wave output:** The TA Series utilizes technology to provide a pure sine waveform with less than 3% total harmonic distortion (THD).

**Crystal-controlled frequency:** Frequency is maintained at a constant 60 Hz  $\pm$  -0.1 Hz under all load conditions.

Output voltage regulation: The TA Series regulates the 120Vac output within +/-5% under all load conditions.

No power factor limitation: The TA Series deals efficiently with induction motors by recycling the reactive energy. As a result, the TA can handle any kind of load, no matter what the power factor.

**Automatic inverter protection circuitry:** The TA Series turns itself off when it senses an over-temperature or an overload condition.







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Vanner TA Series Inverter Specifications	
Model Number:	TA60-100
Output:	6000 watts at 120Vac
Surge Capacity:	80 amps, AC
DC Charging Capacity:	100 amps maximum at 14Vdc
Output Voltage:	120Vac +/-5%
Frequency:	60 Hz +/- 0.1 Hz
Output Waveform:	Pure sine-wave, <3% THD
Control Technology:	High frequency pulse width modulation
Operating Temperature:	-40 to 105F (-40 to +40C)
Cooling Air:	120 cfm. Fan cooled
Chassis:	Heavy-duty aluminum
Dimensions:	19.625"W x 10"H x 13.5"D
Weight:	80 lbs.

Extensive performance testing has shown that TA Series inverters perform best with Leece Neville 4000 Series alternators. We recommend model numbers LN 4600, LN 4700 or LN 4805.

Vanner's policy is one of continuous improvement. We reserve the right to change specifications without notice.

#### Your authorized Vanner distributor is:

### **Corporate Office:**

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Installation photo of the TA on this van on page 1. Both photos courtesy of Fleet Electric.



### **800-AC POWER**

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