



Leading Power Management Technologies for Defense & Aerospace Applications

Variable Frequency Drives



Variable Frequency Drives

Calnetix Technologies Defense & Aerospace offers high-performance, power dense and energy efficient variable speed drives and inverters for power generation and power conversion. Calnetix has adopted traditional silicon and silicon carbide (SiC) technologies in its power conversion systems at power levels ranging from 10 kW to over 1 MW.

Calnetix Vericycle™ Bidirectional Drives and Enercycle™ Inverters are the ideal choice for any type of high-speed rotating machinery in defense and aerospace applications. Calnetix offers both off-the-shelf and custom solutions that are cost effective, robust and delivered on time by leveraging its existing technology and advanced engineering capabilities.

From electric motor to position control applications, Calnetix's motor drives adjust to the needs of the process and help increase the overall efficiency of the system. Calnetix currently offers the following variable speed drive inverter solutions:

Products

- » Vericycle™ 75 – 0-480 VAC, 60 A, 0-2000 Hz
- » Vericycle™ 450 – 0-480 VAC, 400 A, 0-600 Hz
- » Vericycle™ 600 - 0-480 VAC, 575 A, 0-1000 Hz
- » Vericycle™ DC-1200 – 0-48 V, 1,200 A, 0-600 Hz
- » Vericycle™ 300 – 0-480 VAC, 220 A, 0-1000 Hz
- » Vericycle SiC 300 – 0-480 V, 3PH, 0-2000 Hz
- » Vericycle SiC 600 - 0-480 V, 3PH, 0-2000 Hz
- » Electrocycle™ DC-150 - 36-52 VDC, 150 A (Max)
- » Enercycle™ DC-1000 -600-750 VDC, 1000 A (Max)

**Enercycle™
DC-1000**



**Vericycle™
300**



Calnetix Vericycle™ drives technology provides the following advantages:

Advantages

- » Enables system level design optimization
- » High temperature operation (>105C)
- » Low total harmonic distortion (THD)
- » Sensorless space vector modulation
- » Active or passive front end
- » Power densities exceeding 15kW/L
- » High durability for harsh environments
- » Low-impedance and high-speed machine drives
- » Bidirectional operation
- » High reliability and long operating life
- » Configurable for new applications
- » Latest DSP Control Hardware