



- Increases motor life
- Easy to integrate, install and service
- Operates in high ambient temperatures
- High performance and reliability
- Three-year warranty

## Quality motor protection for miles - literally.

Motor protection and power quality don't have to be a mystery. MTE makes it easy. Case in point: our SineWave Guardian® Filter. This best-in-class filter delivers unequaled performance in cleaning the PWM waveforms generated by Variable Frequency Drives (VFDs). It virtually eliminates high frequency content and voltage peaks, thereby reducing motor heating to give you extended motor life – and less downtime. The SineWave Guardian also offers incredible reliability and durability. It is more efficient and tolerates higher ambient temperatures, making it ideal for a variety of applications from steel mills to oil fields. Its modular design and smaller footprint make it easier to integrate and install. It all adds up to the best SineWave Filter, and the best value on the market today.



### Improve efficiency, improve motor life, and improve your bottom line with our new SineWave Guardian<sup>®</sup>.



SineWave Guardian® Filters transform the output of Variable Frequency Drives (VFDs) to a near perfect sinusoidal waveform for the best level of motor protection. MTE's unique, patented design offers higher performance with smaller size and better efficiency than traditional LC Filters.

**Increase motor life:** Reduce motor heating through reduction of high frequencies associated with VFD output and also reduce motor insulation stress through reduction of motor peak voltages.

**Reduce motor audible noise:** Reduce audible noise through reducing high frequencies associated with VFD output.

**Reduce radiated emissions:** Reduce emissions through reducing high frequencies associated with VFD output.

#### Performance Specifications Conventional 3 phase motors Standard step-up transformer Service Load Condition optional 208V - 600V +/- 10% Input Voltage 2A - 1500A (.75 HP - 1200 HP) Current Range Harmonic Voltage Distortion 5% maximum @ 2kHz 2kHz to 8kHz Inverter Switching Frequency 6Hz to 75Hz; >75Hz to Inverter Operating Frequency 120Hz with derating -40C to +60C modular filter Maximum Ambient -40C to +55C enclosed filter Temperature -40C to +90C storage Insertion Loss (Voltage) 6% maximum @ 60Hz Efficiency >98% 3,300 feet above sea level Altitude Without Derating 15,000 feet Maximum Motor Lead Length Relative Humidity 0% to 95% non-condensing 100% RMS continuous: 150% Current Rating for 1 minute intermittent

Final product specifications subject to change at anytime.







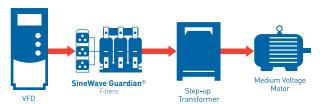
# SineWave Guardian®

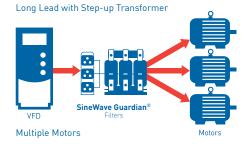


### **Application Configurations:**

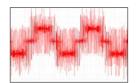


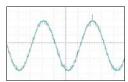
Extreme Long Lead to Motor





### **SineWave Guardian Performance:**





Without SineWave Guardian

With SineWave Guardian

The SineWave Guardian is a SineWave Filter which protects motors from damage by "cleaning" the sinewave waveform that is generated by the Variable Frequency Drive.



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