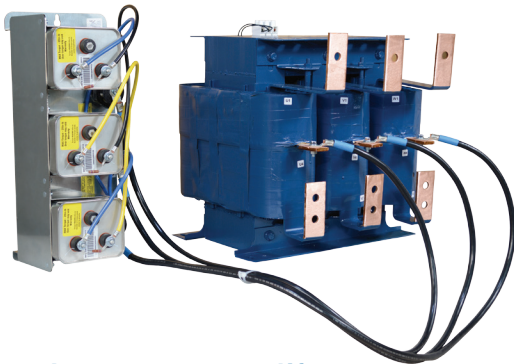


# SineWave Guardian™

Best-in-class SineWave Filter for  
cleaning PWM waveforms  
out to 15,000 ft



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

## For motor protection, there is nothing better.

Motor protection and power quality don't have to be a mystery. MTE makes it easy. Case in point: our new 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.

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, patent-pending design offers high 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.

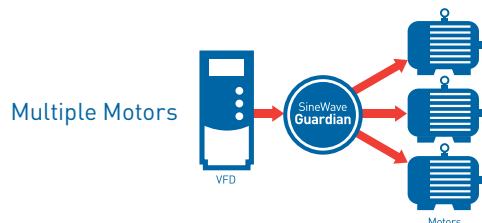
**Protect your motor cable:** The reduction of high frequencies associated with VFD output eliminates the need for special motor cables.

## Performance Specifications:

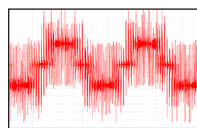
Voltage	380V - 480V
Inverter Switching Frequency	2kHz - 8kHz
Inverter Operating Frequency	0Hz to 75Hz, 120Hz with de-rating
Harmonic Voltage Distortion	5% maximum @ 2kHz
Altitude without de-rating	3,300 feet
Maximum Ambient Temperature	-40C to +60C Modular Filter -40C to +55C Enclosed Filter -40C to +90C Storage
Insertion Loss (Voltage)	6% maximum @ 60Hz
Efficiency	>98%
Current range	2A - 720A
Available form factors	Modular NEMA 1 & 2 NEMA 3R



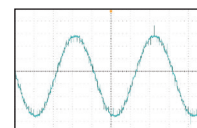
## Application Configurations:



**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.



**MTE**  
AN SL INDUSTRIES COMPANY

Power quality.  
Solved.

## MTE Corporation

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