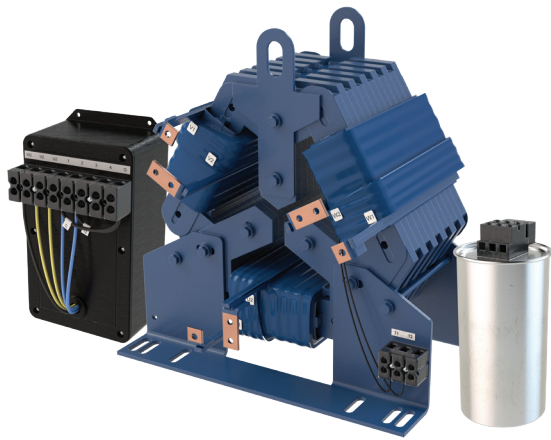


SineWave Nexus[®]

An Integrated Solution for Both
Differential and Common Mode
Filtering



- **Increases motor life**
- **Eliminates motor failures due to bearing currents**
- **Reduces motor noise and heating**
- **Reduces cable heating**
- **Allows for multiple cables in the same conduit**
- **VFD cable and insulated bearings not required**
- **Three-year warranty**
- **Five-year motor bearing warranty**

The latest in motor protection. From the leaders in motor protection.

MTE's SineWave Nexus[®] filter combines the performance of a sinewave filter with our patented common mode protection technology into a single passive device. The SineWave Nexus not only cleans the PWM waveform generated by Variable Frequency Drives (VFDs), it virtually eliminates common mode voltage which causes motor bearing failures. By filtering out the damaging common mode voltage, motor bearings are never subject to those harmful voltages that cause pitting, frosting, or fluting damage that leads to motor failure.

Eliminate the need for costly isolation transformers, or shaft grounding rings that require regular maintenance and replacement, with the SineWave Nexus - an electrical solution for an electrical problem.

The optimal solution for reducing common mode and differential mode voltages and currents.



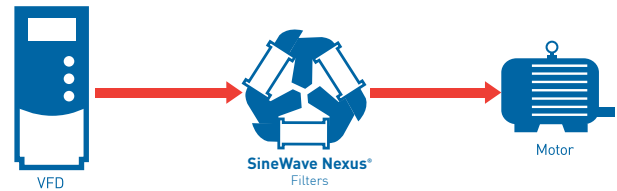
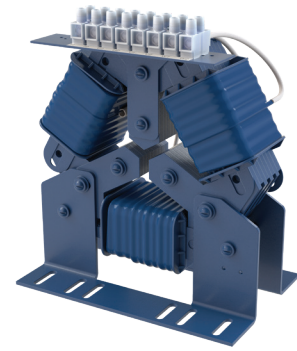
Differential and common mode power quality issues have adverse affects on motors. SineWave Nexus® filters provide complete motor protection - for any application - at any cable length.

Increase motor life by reducing high frequencies and peak voltages caused by VFD output which result in excessive motor heating and motor insulation stress.

Eliminate common mode voltages that cause pitting to motor bearings and premature motor insulation failure leading to unexpected downtime.

Save time and money associated with sourcing and installing multiple solutions as the all-in-one design combines the performance of a sinewave filter and isolation transformer into one compact solution. The SineWave Nexus also eliminates the need for costly VFD cables.

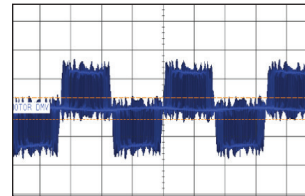
SineWave Nexus®



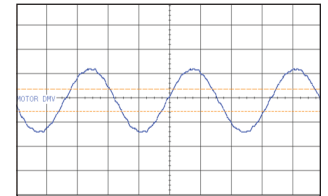
Performance Specifications		
Current Range	2A - 160A	200A and Up
Input Voltage	380V - 480V +/- 10%; 50/60Hz	380V - 480V +/- 10%; 50/60Hz
Harmonic Voltage Distortion	<5% maximum @ 4kHz	<10% maximum @ 2kHz
Inverter Switching Frequency	2kHz to 8kHz	2kHz to 8kHz
Inverter Operating Frequency	6Hz to 75Hz	6Hz to 75Hz
Insertion Loss (Voltage)	10% maximum @ 60Hz	10% maximum @ 60Hz
Efficiency	>98%	>98%
Common Mode Attenuation	-20dB (>90% PWM common mode RMS voltage reduction) @ 4-8kHz	-20dB (>90% PWM common mode RMS voltage reduction) @ 4-8kHz
Maximum Ambient Temperature	Modular Filter -40C to +60C Enclosed Filter -40C to +55C Storage -40C to +90C	Modular Filter -40C to +40C Enclosed Filter -40C to +40C Storage -40C to +90C
Altitude Without Derating	3,300 feet above sea level	3,300 feet above sea level
Maximum Motor Lead Length	15,000 feet	15,000 feet
Relative Humidity	0% to 95% non-condensing	0% to 95% non-condensing
Current Rating	100% RMS continuous; 150% for 1 minute intermittent	100% RMS continuous; 150% for 1 minute intermittent

SineWave Nexus Performance:

Total Harmonic Voltage Distortion

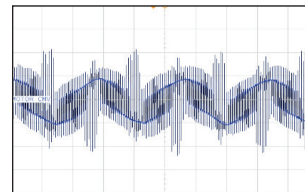


Without SineWave Nexus

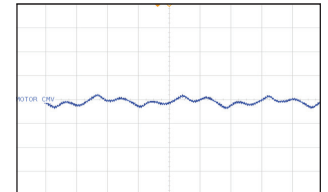


With SineWave Nexus

Common Mode Voltage



Without SineWave Nexus

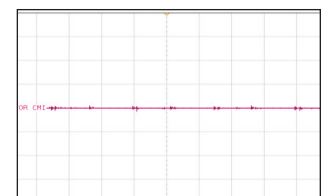


With SineWave Nexus

Common Mode Current



Without SineWave Nexus



With SineWave Nexus

Final product specifications subject to change at anytime.



MTE Corporation

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POWER QUALITY. SOLVED.

A STEEL PARTNERS COMPANY