



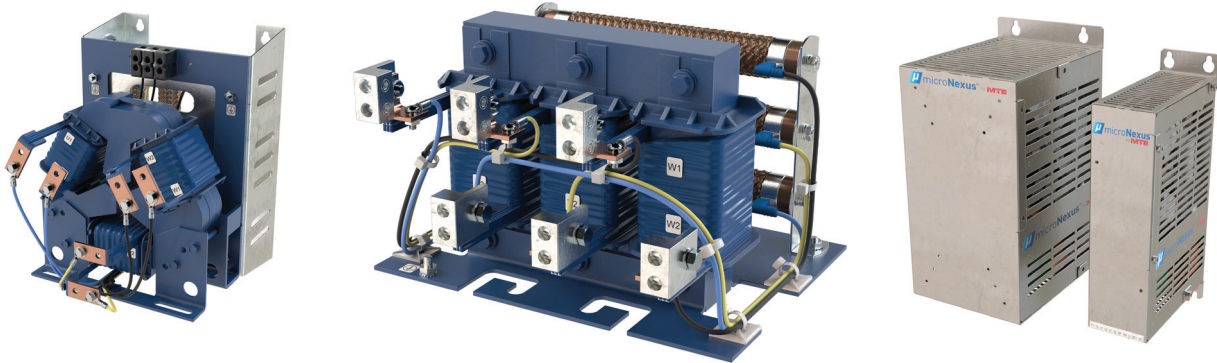
Motor Protection Filters

Product Catalog



mtecorp.com

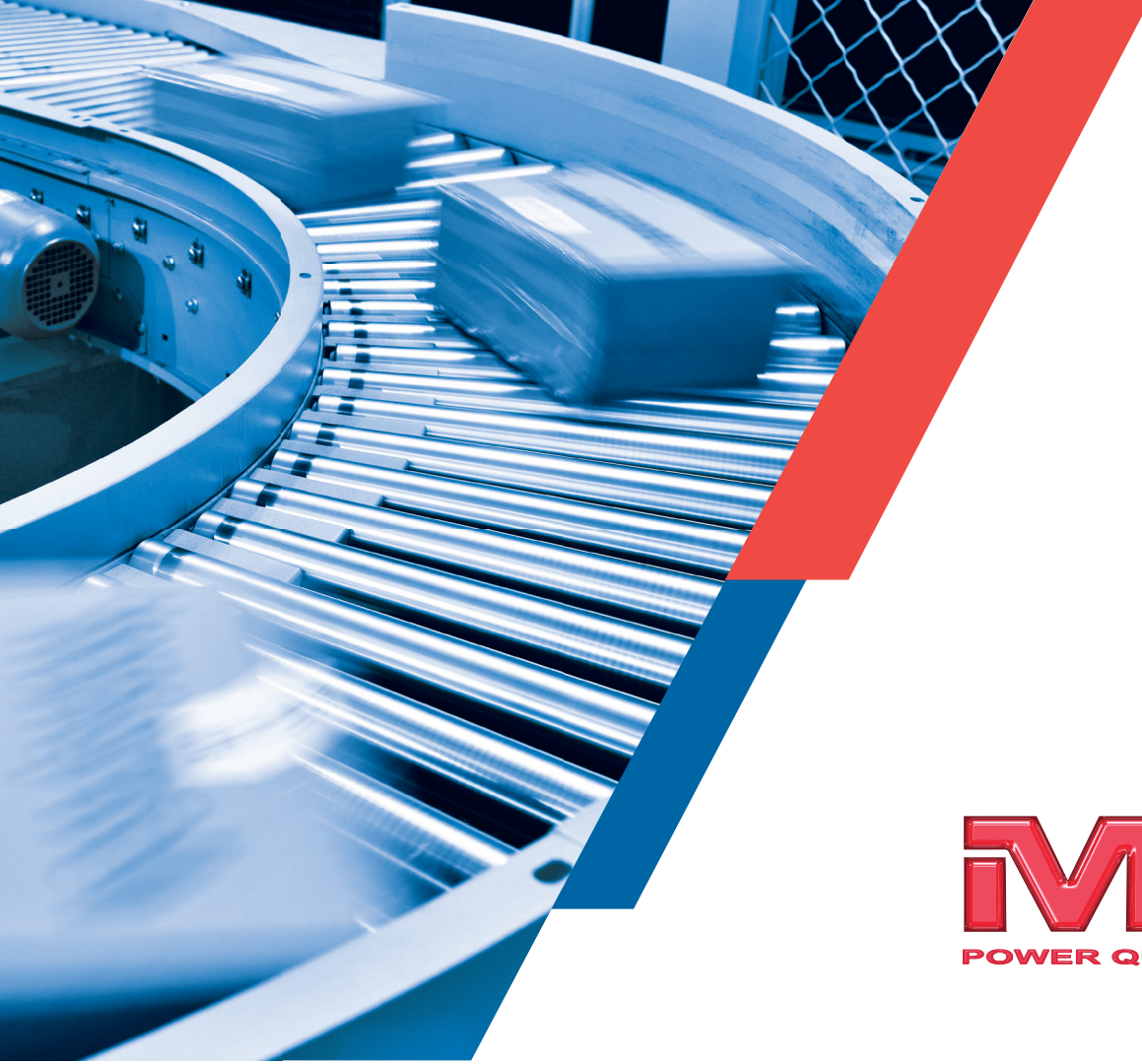
Next level motor protection filters.



Variable Frequency Drives (VFDs) are used in a variety of industries to control the speed of AC motors. While VFDs allow for precise control of motors and greater energy savings, they also can create power distortions that cause premature motor failures, unexpected ground fault trips, and erratic behavior.

MTE's best-in-class motor protection filters effectively mitigate, and in some cases eliminate, these challenges. Our unbeatable line of Nexus filters are the only product in the market today that can eliminate harmful common mode over-voltage ensuring your operations run longer and more efficient. Backed by the industry's only 5-year motor bearing warranty, the Nexus is proven to increase productivity and your bottom line.

Whether you need protection at 50 ft or 15,000 ft, MTE's motor protection filters are built to withstand the hottest, harshest, and most remote locations in the world.



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Next level power protection from the power quality leaders

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

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Optimized motor protection solution for high frequency motors

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An integrated solution for both differential and common mode filtering

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microNexus™

Powerful protection in a small, compact size

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What Effect Does a VFD Have on a Motor?

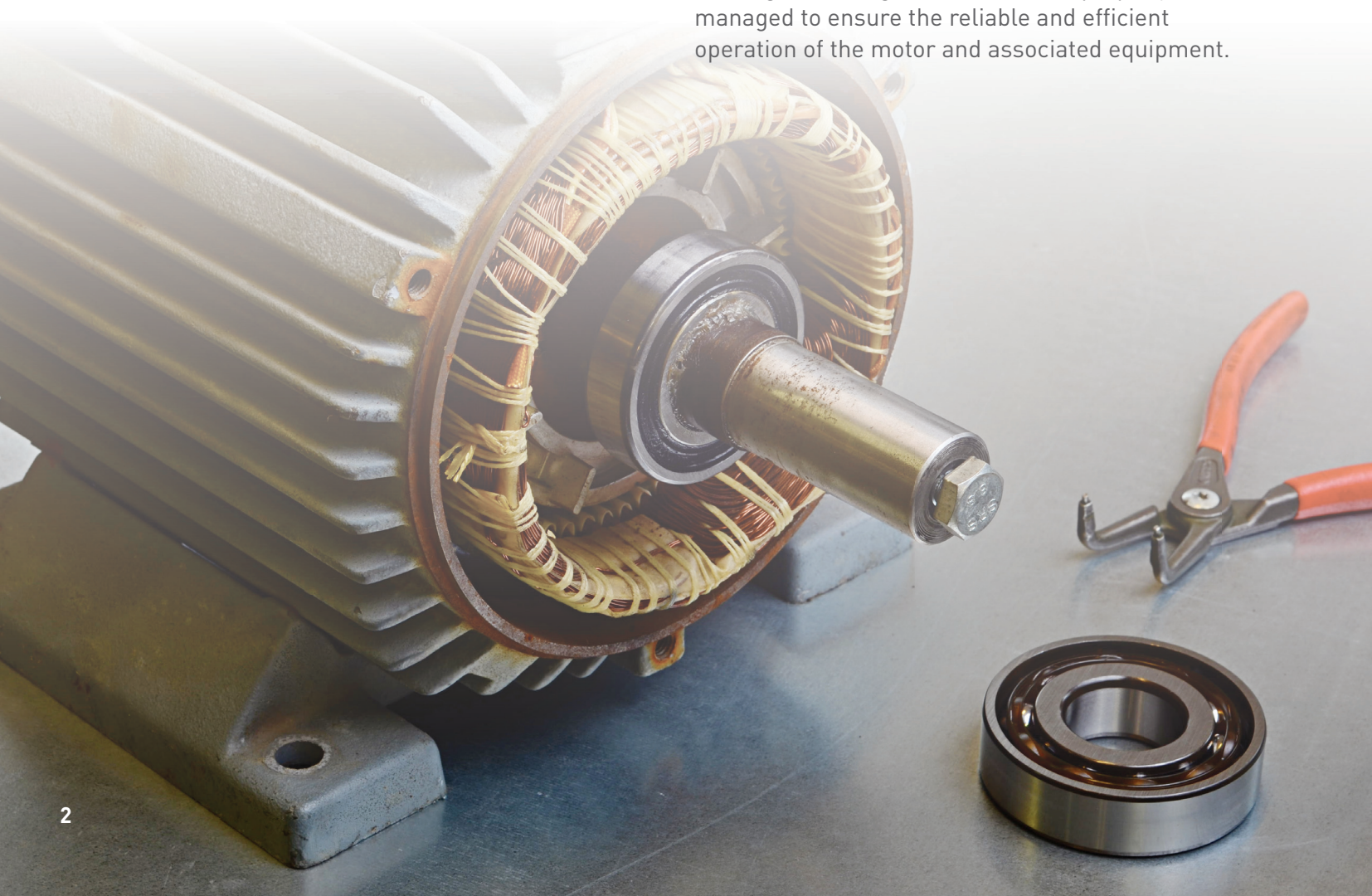
Running a motor directly from the power source produces uniform, sinusoidal waveforms but wastes energy due to continuous speed operation regardless of the load. To enhance efficiency, Variable Frequency Drives (VFDs) control motor speed, reduce energy consumption, and minimize equipment wear. However, VFDs use pulse-width modulation (PWM) to supply electrical pulses instead of a true voltage waveform, generating harmful harmonics that can damage motors, cables, and bearings when the VFD-to-motor distance is significant.

Understanding Differential Mode and Common Mode

Harmonic issues between the VFD and motor are often related to differential mode or common mode voltage and current.

Differential mode voltage is the voltage that energizes the motor. Increased differential mode voltages can cause premature failures in both the motor and the cable. As the motor is farther from the VFD, the adverse effects worsen due to increased cable resistance. This leads to a surge in peak voltage and rise time, known as the reflective wave, amplifying the impact.

Common mode refers to the voltage or current that appears between all conductors and ground in an electrical system. It can cause interference, damage to components, and unexpected behaviors. VFDs generate power pulses that can introduce common mode voltage and current issues, such as premature motor failure, cable degradation, and electrical fluting, pitting, and frosting of bearings. These must be properly managed to ensure the reliable and efficient operation of the motor and associated equipment.



The Destructive Effects of Differential and Common Mode Voltage and Current

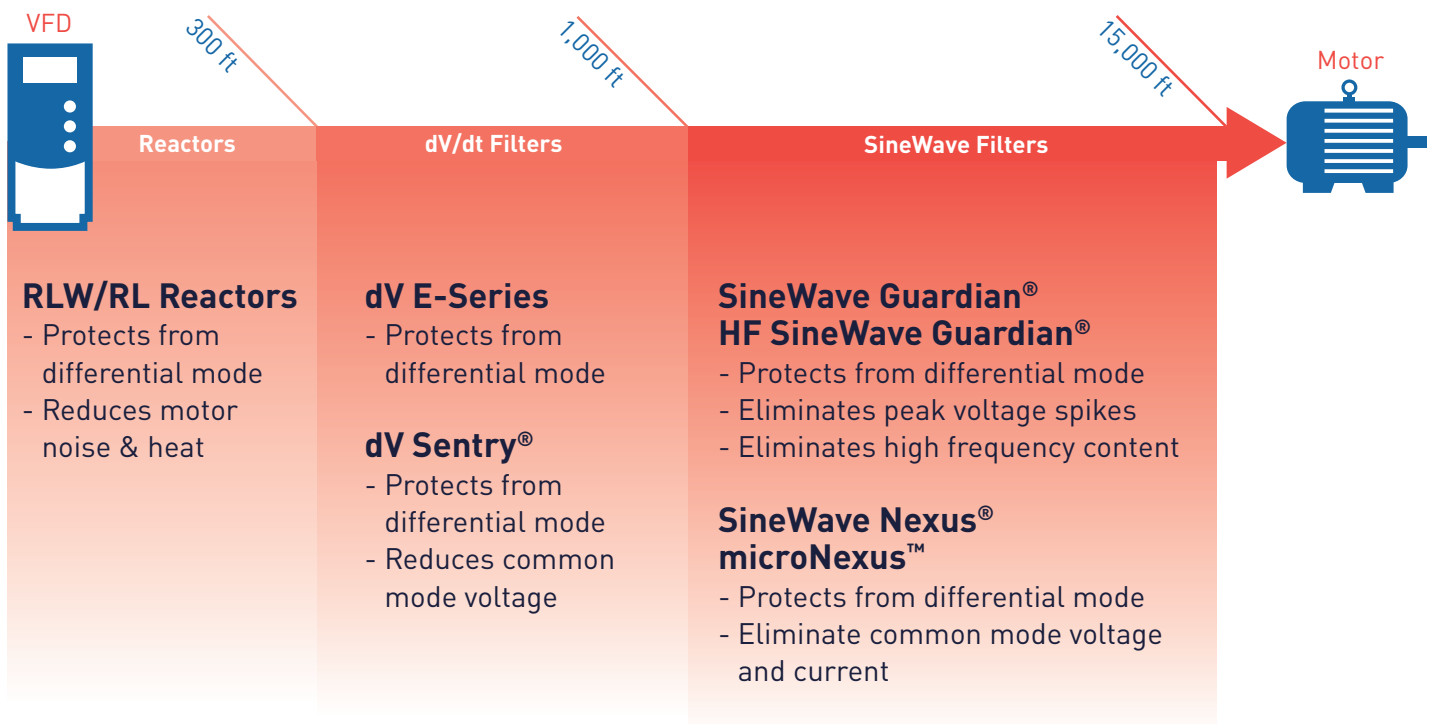
Damaged equipment due to differential mode voltage spikes jeopardize productivity and decrease profitability. Moreover, common mode problems occur outside of the VFD, which is why they are difficult to diagnose making them extremely problematic for everyday operations.

Problems that can occur without motor protection filtering:

- **Damage** to motor bearings
- **Erratic behavior** of VFDs and PLCs
- **Cable damage**
- Unexpected **ground fault trips**
- Premature **motor insulation failure**

What Level Of Motor Protection Do You Need?

MTE offers a family of application engineered products designed for the performance you need.



Motor Protection Filters

dV E-Series

Next level power quality you've come to expect from the power quality experts

dV Sentry®

Next generation dV/dt Filters for motor protection

SineWave Guardian®

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

High Frequency SineWave Guardian®

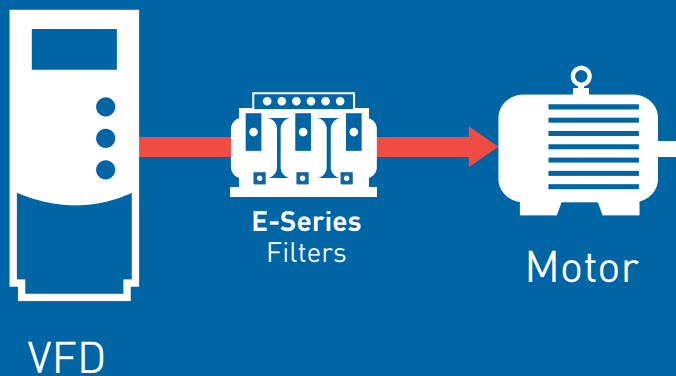
The optimized motor protection solution for high frequency motors

SineWave Nexus®

An integrated solution for both differential and common mode filtering

microNexus™

Powerful protection in a small, compact size



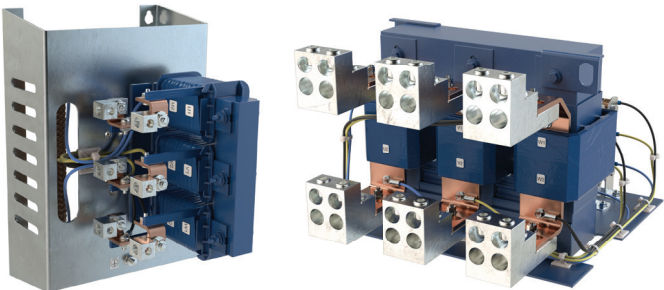


dV E-Series

Complete protection; convenient design.

Downtime in any operation comes at a cost. Damage to motor windings and premature motor insulation failure can result in lost revenue and safety concerns. MTE's dV E-Series dV/dt motor protection filters ensure your operation runs smoothly during your most critical times. The dV E-Series delivers premium motor protection, extends cable life, and is backed by MTE's industry-leading Performance Guarantee.

Compared to the competition, the dV E-Series offers similar electrical performance in a more compact and optimized design:

- 
- **Triple Protection:** Reflective wave mitigation, rise time reduction, and peak voltage production
 - **Efficient:** Low watts (heat) loss
 - **Size-optimized design:** Lightweight and compact form factor
 - **Ease of installation:** Footprint and mounting compatible with competitive options
 - **Silent operation:** As quiet as a conversation

- **Up to 60% more efficient**
Saves money & runs cooler
- **Up to 73% lighter and 35% smaller footprint**
Convenient setup and handling

MTE
POWER QUALITY. SOLVED.
A STEEL PARTNERS COMPANY

The dV E-Series delivers premium protection in a convenient package.

A proven filter that provides TRIPLE PROTECTION, by eliminating reflective waves, providing peak voltage protection, as well as, rise time reduction for any application out to 1,000 feet of cable.

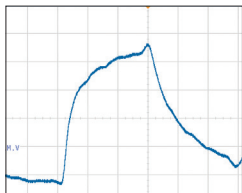
Reflective wave mitigation matches the impedance of the cable and prevents voltage pulses from reflecting and causing higher peak voltage.

Rise time reduction lowers motor heating, and meets NEMA MG 1-1998 Section 31 motor standards.

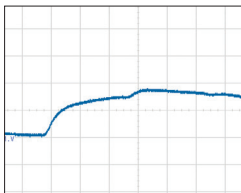
Peak voltage protection when voltage spikes reach dangerous levels.

Includes Three-Year Warranty

Peak Rise Protection:

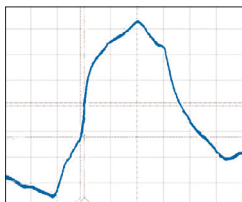


Without dV E-Series

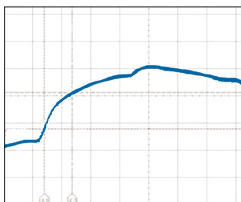


With dV E-Series

Rise Time Reduction:



Without dV E-Series



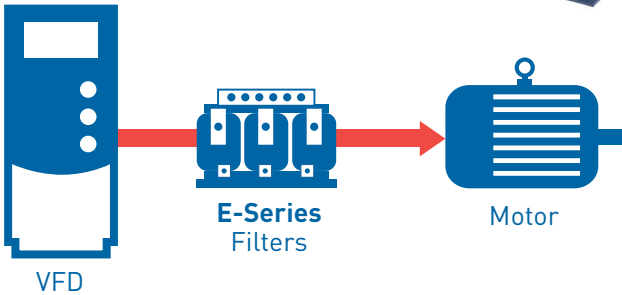
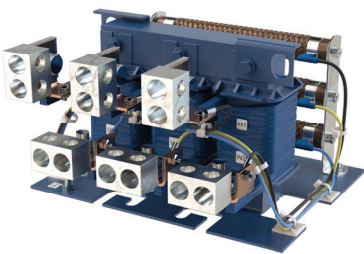
With dV E-Series

DV E-SERIES PERFORMANCE GUARANTEE

MTE Corporation guarantees that the peak voltage at the input of the motor terminals will be limited to 150% when the following conditions are met:

- The appropriate size dV E-Series filter is selected and installed in a variable torque AC variable frequency drive application.
- Published system limits are adhered to.
- Wire lead length does not exceed 1,000 ft.
- Carrier frequency is 4 kHz.

dV E-Series



Performance Specifications	
Service Load Condition	Inverter Duty Three Phase Motors
Voltage	208 – 600 VAC +/- 10%, 60Hz
Input Voltage Wave Form	PWM
Inverter Switching Frequency	2kHz – 4kHz (3A – 750A)
Inverter Operating Frequency	0-60Hz without derating
Maximum Ambient Temperature	-40C to +60C modular filter -40C to +50C enclosed filter -40C to +90C Storage
Insulation System	Class N (200° C)
Insertion Loss (Voltage)	1.7% at 60 Hz
Efficiency	>99%
Current Range	3A – 750A
Available Form Factors	Kit, Open Panel, NEMA 1/2, NEMA 3R
Altitude without derating	6,600 feet above sea level
Maximum Motor Lead Length	1,000 feet (VFD rated cable recommended)
Relative Humidity	0% to 99% non-condensing
Current Rating	100% RMS Continuous 150% for 1 minute 200% for 10 seconds *Operating in overload will result in increased proportional voltage drop
Audible Noise	<65db at 1 meter
Rise Time	Greater than 0.1 uS
Peak Voltage @ Motor	150% of DC bus voltage up to 1,000 feet

Final product specifications subject to change at anytime.

How to properly size your filter

- **Determine input voltage and frequency requirements**
- **Reference motor nameplate to determine motor HP or kW and Full Load Amps**
- **Verify motor meets inverter duty standards per NEMA MG1 Section 31**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter's maximum current rating (amps)
- **Specify enclosure style**
Kit (No Enclosure)
Open (No enclosure)
NEMA 1/2 (General Purpose Enclosure)
NEMA 3R (Outdoor Enclosure)
- **Determine derating requirements**
Reference Performance Specifications table on previous page as well as derating tables listed below:
Table 1: Drive Output Frequency
Table 2: Altitude Derating Curve
- **Note: Filters can be paralleled for higher current ratings. Contact MTE Application Engineering for more information. appengrg@mtecorp.com**

Derating Curves:

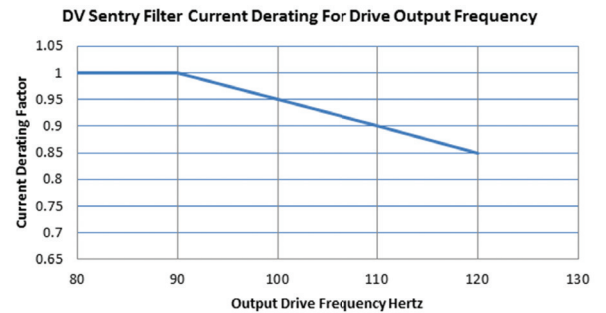


Table 1: Drive Output Frequency

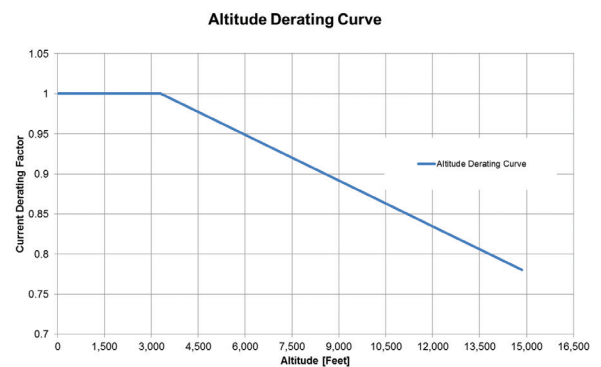
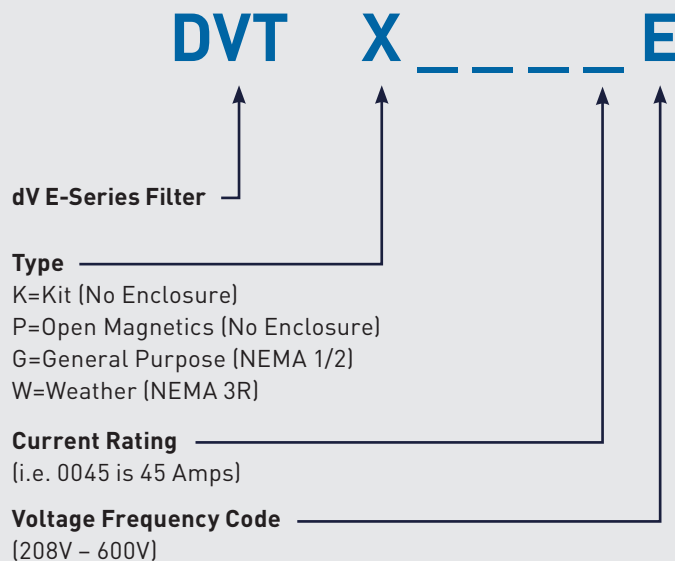


Table 2: Altitude Derating Curve

Understanding the dV E-Series Part Number:



dV E-Series SELECTION TABLES

208 – 600V 50/60Hz

Motor					Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Resistor Dimensions (H x W x D)		Ref Fig
208V HP	240V HP	380V kW	480V HP	550- 600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters	
0.5	0.75	0.5- 1.1	0.5- 1.5	0.5-2	3	DVTK0003E	KIT	3.7 x 4.5 x 1.5	94 x 114 x 38	3	1	2	51	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0003E	OPEN	8.9 x 5.5 x 7.7	226 x 140 x 196	6	3	7		Preinstalled on reactor panel		
						DVTG0003E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	20	9	12		Preinstalled in cabinet		
						DVTW0003E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	30	14	13		Preinstalled in cabinet		
0.75	1	1.5	2	3	4	DVTK0004E	KIT	3.7 x 4.5 x 1.5	94 x 114 x 38	3	1	2	54	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0004E	OPEN	8.9 x 5.5 x 7.7	226 x 140 x 196	6	3	7		Preinstalled on reactor panel		
						DVTG0004E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	20	9	12		Preinstalled in cabinet		
						DVTW0004E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	30	14	13		Preinstalled in cabinet		
1.5	2	2.2-3	3	5	7	DVTK0007E	KIT	3.7 x 4.5 x 1.5	94 x 114 x 38	3	1	2	64	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0007E	OPEN	8.9 x 5.5 x 7.7	226 x 140 x 196	6	3	7		Preinstalled on reactor panel		
						DVTG0007E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	20	9	12		Preinstalled in cabinet		
						DVTW0007E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	30	14	13		Preinstalled in cabinet		
2	3	4	5	7.5	9	DVTK0009E	KIT	3.7 x 4.5 x 1.5	94 x 114 x 38	3	1	2	70	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0009E	OPEN	8.9 x 5.5 x 7.7	226 x 140 x 196	6	3	7		Preinstalled on reactor panel		
						DVTG0009E	NEMA 1/2	13.2 x 5.5 x 7.7	335 x 140 x 196	20	9	12		Preinstalled in cabinet		
						DVTW0009E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	30	14	13		Preinstalled in cabinet		
3	4	5.5	7.5	10	12	DVTK0012E	KIT	3.7 x 4.5 x 1.5	94 x 114 x 38	3	1	2	86	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0012E	OPEN	8.9 x 5.5 x 7.7	226 x 140 x 196	6	3	7		Preinstalled on reactor panel		
						DVTG0012E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	20	9	12		Preinstalled in cabinet		
						DVTW0012E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	30	14	13		Preinstalled in cabinet		
5	5.5	7.5	10	15	17	DVTK0017E	KIT	4.0 x 4.2 x 4.0	102 x 107 x 102	4	2	3	111	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0017E	OPEN	8.9 x 5.5 x 8.0	226 x 140 x 203	7	3	7		Preinstalled on reactor panel		
						DVTG0017E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	21	10	12		Preinstalled in cabinet		
						DVTW0017E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	31	14	13		Preinstalled in cabinet		
5.5	7.5	11	15	20	22	DVTK0022E	KIT	4.0 x 4.2 x 4.0	102 x 107 x 102	4	2	3	97	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0022E	OPEN	8.9 x 5.5 x 8.0	226 x 140 x 203	7	3	7		Preinstalled on reactor panel		
						DVTG0022E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	21	10	12		Preinstalled in cabinet		
						DVTW0022E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	31	14	13		Preinstalled in cabinet		
7.5	10	-	20	25	27	DVTK0027E	KIT	4.0 x 4.2 x 4.0	102 x 107 x 102	4	2	3	95	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0027E	OPEN	8.9 x 5.5 x 8.0	226 x 140 x 203	7	3	7		Preinstalled on reactor panel		
						DVTG0027E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	21	10	12		Preinstalled in cabinet		
						DVTW0027E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	31	14	13		Preinstalled in cabinet		
10	12.5	15	25	30	35	DVTK0035E	KIT	4.0 x 4.2 x 4.0	102 x 107 x 102	4	2	3	91	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0035E	OPEN	12.0 x 8.0 x 8.1	305 x 203 x 206	9	4	7		Preinstalled on reactor panel		
						DVTG0035E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	21	10	12		Preinstalled in cabinet		
						DVTW0035E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	31	14	13		Preinstalled in cabinet		
12.5	15	18.5- 22	30	40	45	DVTK0045E	KIT	4.4 x 4.2 x 4.0	112 x 107 x 102	6	3	3	54	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0045E	OPEN	12.0 x 8.0 x 8.1	305 x 203 x 206	11	5	7		Preinstalled on reactor panel		
						DVTG0045E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	23	10	12		Preinstalled in cabinet		
						DVTW0045E	NEMA 3R	15.5 x 10.9 x 12.0	394 x 277 x 305	33	15	13		Preinstalled in cabinet		
15	20	-	40	50	55	DVTK0055E	KIT	5.0 x 5.9 x 4.3	127 x 150 x 109	8	4	3	102	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0055E	OPEN	12.0 x 8.0 x 9.0	305 x 203 x 229	12	5	7		Preinstalled on reactor panel		
						DVTG0055E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	25	11	12		Preinstalled in cabinet		
						DVTW0055E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	66	30	14		Preinstalled in cabinet		
20	25	30	50	60	65	DVTK0065E	KIT	5.0 x 5.9 x 4.7	127 x 150 x 119	10	5	3	152	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0065E	OPEN	12.0 x 8.0 x 9.0	305 x 203 x 229	14	6	7		Preinstalled on reactor panel		
						DVTG0065E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	27	12	12		Preinstalled in cabinet		
						DVTW0065E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	68	31	14		Preinstalled in cabinet		

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

208 – 600V 50/60Hz

Motor (Ref Only)					Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Resistor Dimensions (H x W x D)		Ref Fig
208V HP	240V HP	380V kW	480V HP	550- 600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters	
25	30	37	60	75	80	DVTK0080E	KIT	3.7 x 4.5 x 1.5	94 x 114 x 38	3	1	3	122	5.0 x 8.1 x 0.8	127 x 206 x 19	1
						DVTP0080E	OPEN	12.0 x 9.0 x 11.1	305 x 229 x 282	32	15	7		Preinstalled on reactor panel		
						DVTG0080E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	42	19	12		Preinstalled in cabinet		
						DVTW0080E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	85	39	14				
30	40	45- 55	75	100	110	DVTK0110E	KIT	5.5 x 7.1 x 5.1	140 x 180 x 130	15	7	4	92	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0110E	OPEN	12.0 x 8.0 x 9.5	305 x 203 x 241	19	9	7		Preinstalled on reactor panel		
						DVTG0110E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	32	15	12		Preinstalled in cabinet		
						DVTW0110E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	73	33	14				
40	50	-	100	125	130	DVTK0130E	KIT	5.5 x 7.1 x 5.1	140 x 180 x 130	13	6	4	113	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0130E	OPEN	6.4 x 10.5 x 8.6	163 x 267 x 218	15	7	8		Preinstalled on reactor panel		
						DVTG0130E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	64	29	15		Preinstalled in cabinet		
						DVTW0130E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	72	33	14				
50	60	75- 90	125	150	160	DVTK0160E	KIT	5.5 x 7.1 x 5.1	140 x 180 x 130	22	10	4	148	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0160E	OPEN	6.4 x 10.5 x 9.9	163 x 267 x 251	24	11	8		Preinstalled on reactor panel		
						DVTG0160E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	73	33	15		Preinstalled in cabinet		
						DVTW0160E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	80	36	14				
60	75	110	150	200	200	DVTK0200E	KIT	6.9 x 8.9 x 6.1	175 x 226 x 155	29	13	4	175	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0200E	OPEN	6.9 x 11.0 x 9.5	175 x 279 x 241	32	15	8		Preinstalled on reactor panel		
						DVTG0200E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	107	49	15		Preinstalled in cabinet		
						DVTW0200E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	118	54					
75	100	132	200	250	250	DVTK0250E	KIT	6.9 x 8.9 x 6.1	175 x 226 x 155	29	13	4	207	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0250E	OPEN	7.0 x 11.0 x 9.5	178 x 279 x 241	32	15	9		Preinstalled on reactor panel		
						DVTG0250E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	107	49	15		Preinstalled in cabinet		
						DVTW0250E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	118	54					
100	125	160	250	300	305	DVTK0305E	KIT	7.0 x 8.9 x 6.6	178 x 226 x 168	30	14	4	205	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0305E	OPEN	7.3 x 11.5 x 11.0	185 x 292 x 279	35	16	9		Preinstalled on reactor panel		
						DVTG0305E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	110	50	15		Preinstalled in cabinet		
						DVTW0305E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	120	54					
125	150	185- 200	300	350	365	DVTK0365E	KIT	7.3 x 8.9 x 7.2	185 x 226 x 183	41	19	5	239	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0365E	OPEN	7.3 x 11.5 x 11.6	185 x 292 x 295	45	20	9		Preinstalled on reactor panel		
						DVTG0365E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	120	54	15		Preinstalled in cabinet		
						DVTW0365E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	131	59					
150	175	-	350	450	415	DVTK0415E	KIT	7.4 x 9.6 x 8.1	188 x 244 x 206	49	22	5	330	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0415E	OPEN	7.3 x 11.5 x 13.0	185 x 292 x 330	57	26	9		Preinstalled on reactor panel		
						DVTG0415E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	128	58	15		Preinstalled in cabinet		
						DVTW0415E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	139	63					
175	225	250	400- 450	500- 550	515	DVTK0515E	KIT	8.3 x 10.8 x 7.9	211 x 274 x 201	62	28	6	381	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0515E	OPEN	8.4 x 12.3 x 16.4	213 x 312 x 417	72	33	10		Preinstalled on reactor panel		
						DVTG0515E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	240	109	15		Preinstalled in cabinet		
						DVTW0515E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	253	115					
200	250	315	500	600	600	DVTK0600E	KIT	8.4 x 10.8 x 8.6	213 x 274 x 218	71	32	6	350	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0600E	OPEN	8.4 x 12.3 x 16.4	213 x 312 x 417	82	37	10		Preinstalled on reactor panel		
						DVTG0600E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	249	113	15		Preinstalled in cabinet		
						DVTW0600E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	262	119					
250	300	375	600- 650	700	750	DVTK0600E	KIT	11.1 x 14.3 x 9.5	282 x 363 x 241	113	51	6	411	6.3 x 10.3 x 1.3	160 x 262 x 32	1
						DVTP0600E	OPEN	11.4 x 15.0 x 18.0	290 x 381 x 457	129	59	11		Preinstalled on reactor panel		
						DVTG0600E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	296	134	15		Preinstalled in cabinet		
						DVTW0600E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	309	140					

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

dV E-Series REFERENCE FIGURES

FIGURE 1 RESISTOR

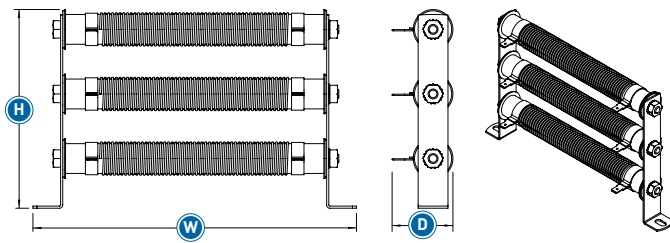


FIGURE 2 KIT

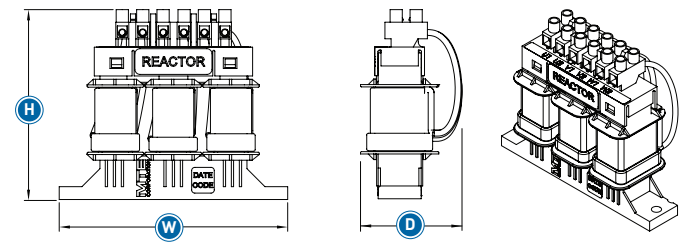


FIGURE 3 KIT

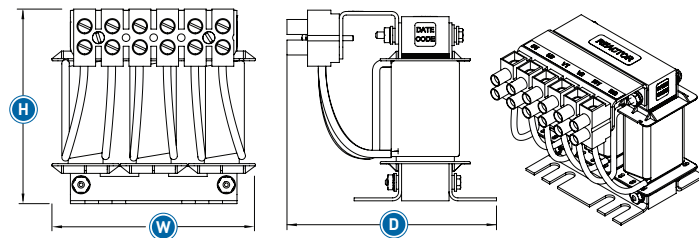


FIGURE 4 KIT

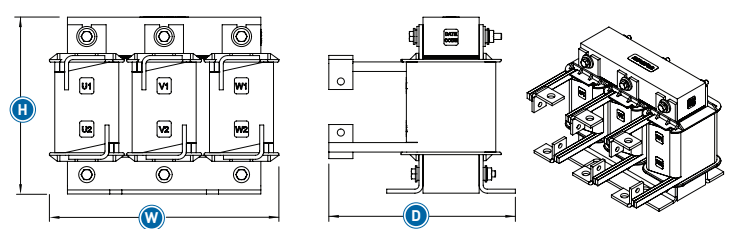


FIGURE 5 KIT

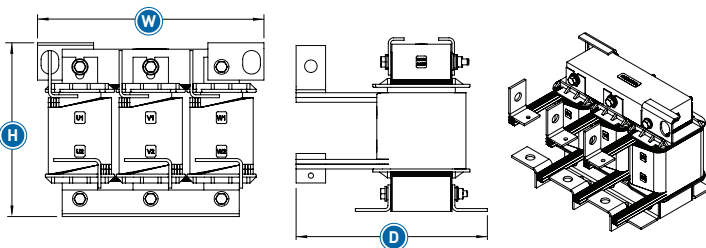


FIGURE 6 KIT

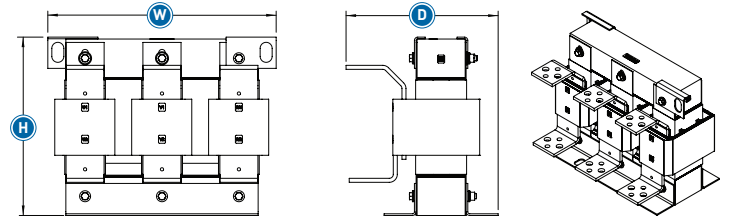


FIGURE 7 PANEL MOUNT

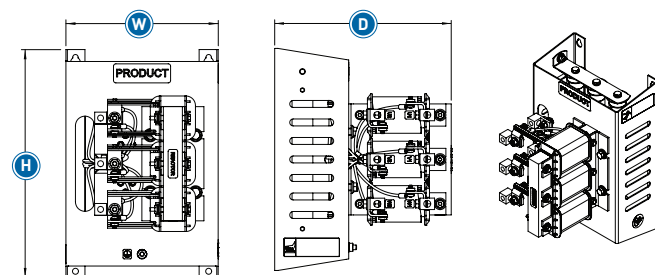


FIGURE 8 PANEL MOUNT

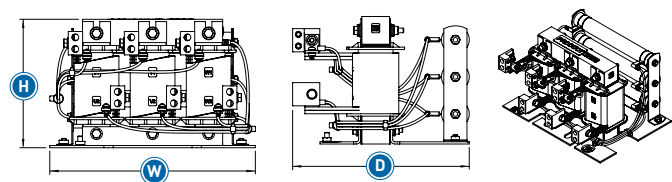


FIGURE 9 PANEL MOUNT

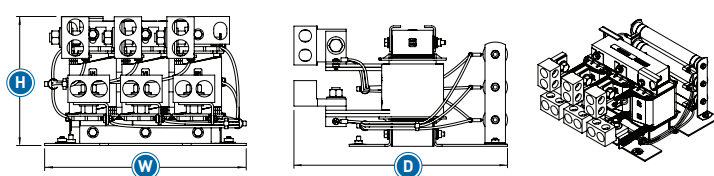
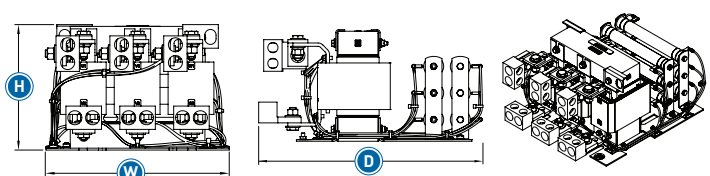
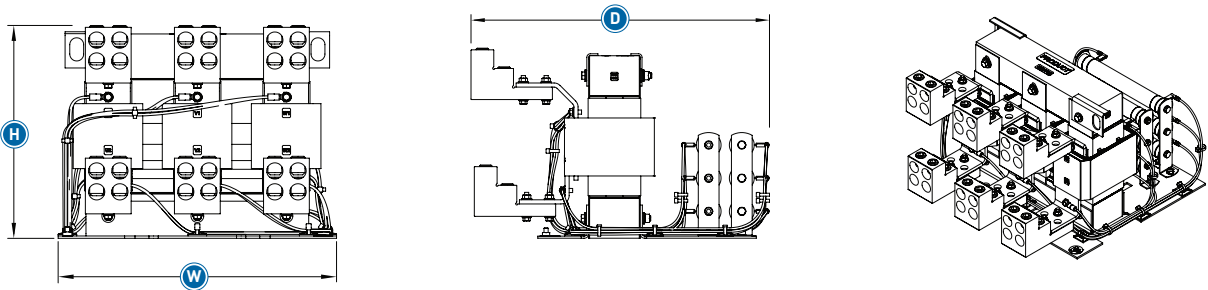


FIGURE 10 PANEL MOUNT



PANEL MOUNT

FIGURE 11



ENCLOSURES

FIGURE 12

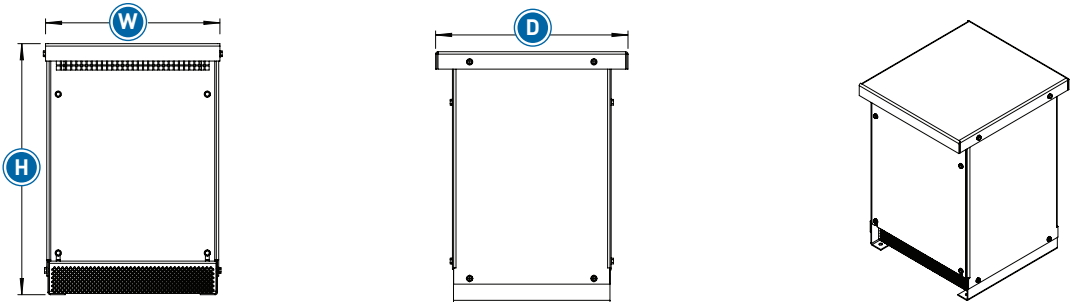
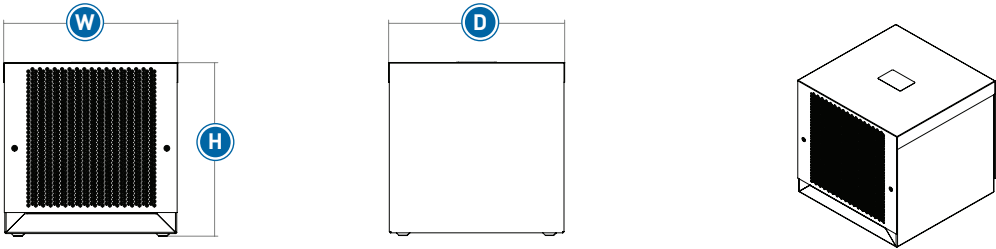


FIGURE 13

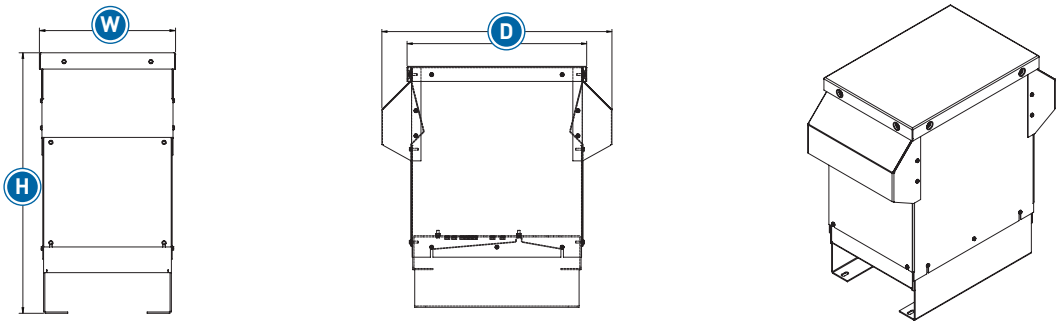


FIGURE 14

NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

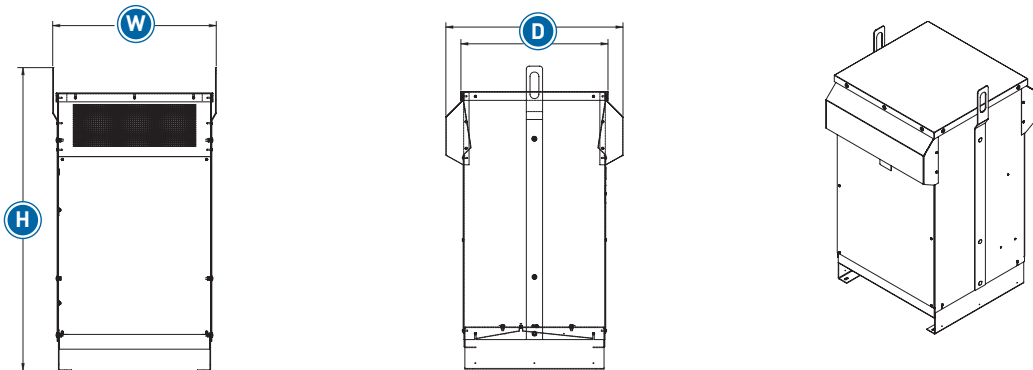


FIGURE 15

NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtcorp.com for detailed information.

Motor Protection Filters

dV E-Series

Next level power quality you've come to expect from the power quality experts

dV Sentry®

Next generation dV/dt Filters for motor protection

SineWave Guardian®

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

High Frequency SineWave Guardian®

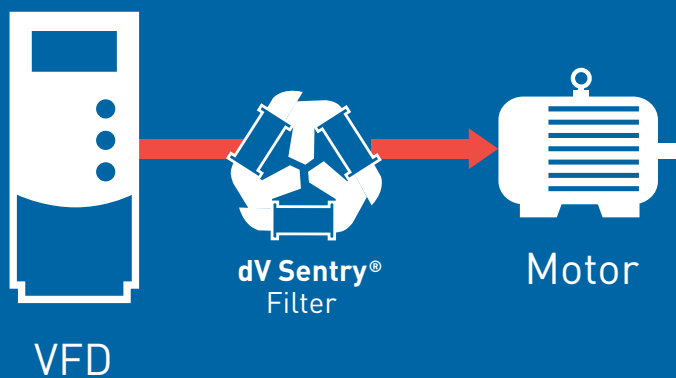
The optimized motor protection solution for high frequency motors

SineWave Nexus®

An integrated solution for both differential and common mode filtering

microNexus™

Powerful protection in a small, compact size



dV Sentry®



- **True common mode reduction, peak voltage protection, and rise time reduction**
- **World leading motor protection technology in the market**
- **Low watts loss**
- **Small, advanced, robust design, easily installed**
- **Quiet as a conversation**
- **Three-year warranty**

The future is here.

The dV Sentry® is the revolutionary solution for motor protection with its unique all-in-one design. It is the only filter on the market proven to provide common mode and rise time reduction, as well as peak voltage protection. This gives greater motor protection over time.

It features a small footprint and easy terminations to make installation faster and easier. Plus, it runs quietly and radiates less heat than previous filters. The dV Sentry is unique, and when it comes to motor protection, there is nothing better.

MTE
POWER QUALITY. SOLVED.
A STEEL PARTNERS COMPANY

With the patented dV Sentry®, you get the most advanced motor protection in its class.

The unique design of the dV Sentry® allows for greater load side protection from voltage spikes and common mode voltages for your AC motors cable and VFDs.

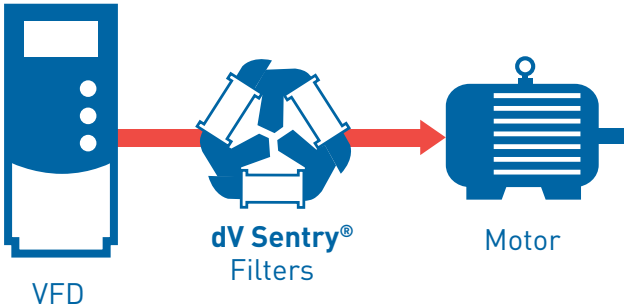
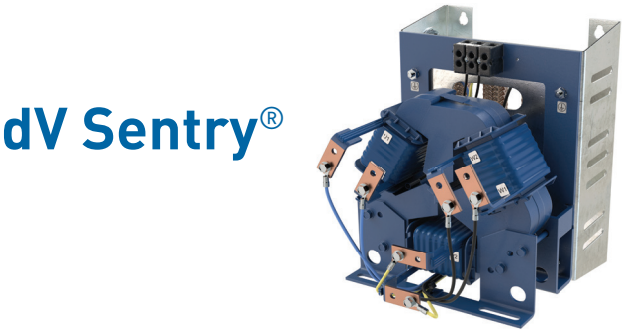
Patented design provides over 50% common mode reduction, peak voltage protection, and rise time reduction – all in one filter.

Low watts loss reduces heating in systems.

Small footprint, with a unique flat design, allows filter to be easily integrated.

Strong robust design allows the filter to withstand installation and other difficult environments.

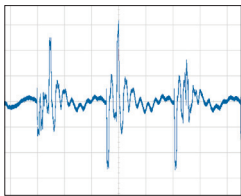
Runs quieter, comparable to a normal conversation.



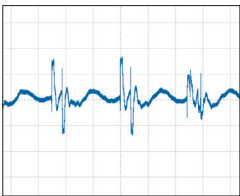
Performance Specifications	
Input Voltage	208V - 600V +/- 10%; 60Hz
Inverter Operating Frequency	0 – 90Hz without derating
Maximum Ambient Temperature	-40°C to +60°C modular filter -40°C to +50°C enclosed filter
Insertion Loss (Voltage)	1.7% @ 60Hz; 2.6% @ 90Hz
Efficiency	>99%
Altitude Without Derating	3,300 feet above sea level
Maximum Motor Lead Length	1,000 feet
Relative Humidity	0% to 99% non-condensing
Current Rating	100% RMS continuous; 150% for 1 minute; 200% for 10 sec* *Operating in overload will result in increased proportional voltage drop
Rise Time	Less than 0.1 uS
Peak Voltage	150% of DC bus voltage up to 1,000 feet
Common Mode Reduction	50%+ peak current reduction typical

Final product specifications subject to change at any time.

Common Mode Reduction:

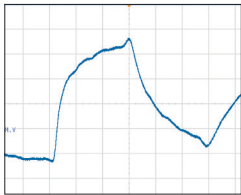


Without dV Sentry®

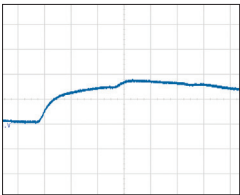


With dV Sentry®

Peak Rise Protection:

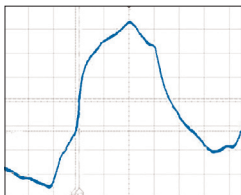


Without dV Sentry®

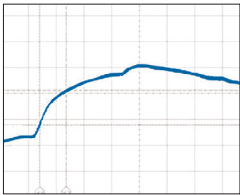


With dV Sentry®

Rise Time Reduction:



Without dV Sentry®



With dV Sentry®

How to properly size your filter

- **Determine input voltage and frequency requirements**
- **Reference motor nameplate to determine motor HP or kW and Full Load Amps**
- **Verify motor meets inverter duty standards per NEMA MG1 Section 31**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter's maximum current rating (amps)
- **Specify enclosure style**
Open (No enclosure)
NEMA 1/2 (General Purpose Enclosure)
NEMA 3R (Outdoor Enclosure)
- **Determine derating requirements**
Reference Performance Specifications table on previous page as well as derating tables listed below:
Table 1: Drive Output Frequency
Table 2: Altitude Derating Curve
- **Note: Filters can be paralleled for higher current ratings. Contact MTE Application Engineering for more information. appengrg@mtecorp.com**

Derating Curves:

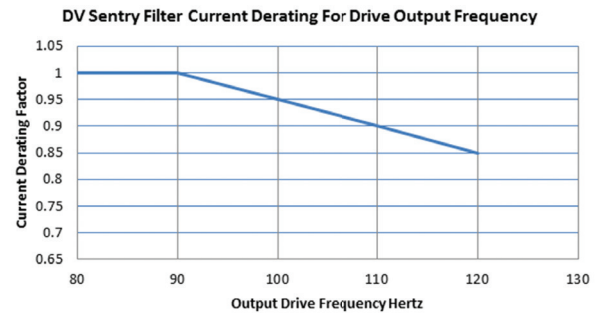


Table 1: Drive Output Frequency

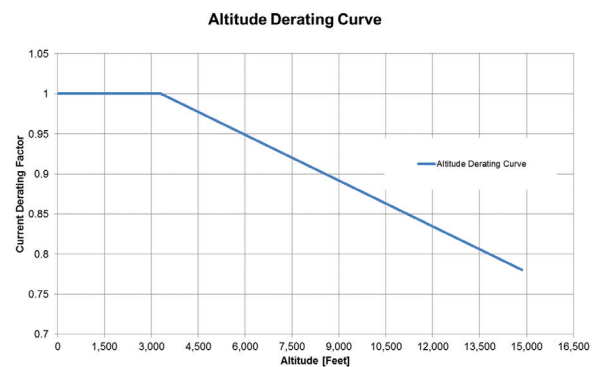
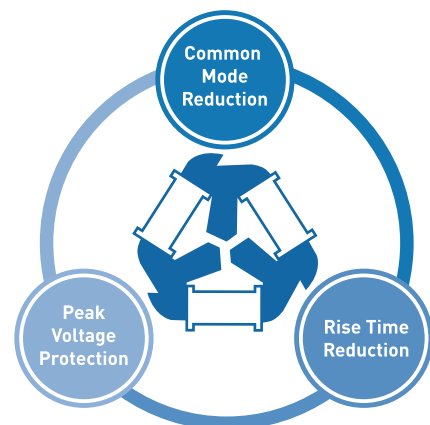
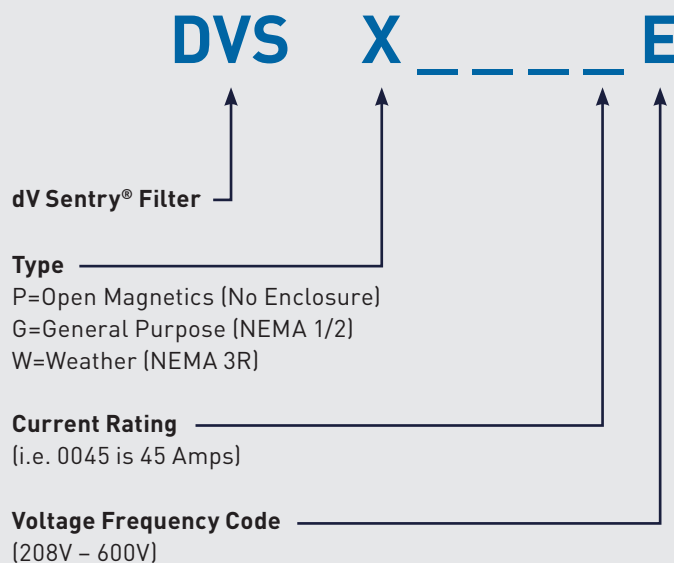


Table 2: Altitude Derating Curve

Understanding the dV Sentry® Part Number:



dV Sentry® SELECTION TABLES

208 – 600V 50/60Hz																
Motor (Ref Only)					Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Resistor Panel Dimensions (H x W x D)		Ref Fig
208V HP	240V HP	380V kW	480V HP	550- 600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters	
0.5	0.75	0.5- 1.1	0.5- 1.5	0.5-2	3	DVSP0003E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0003E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0003E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
0.75	1	1.5	2	3	4	DVSP0004E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0004E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0004E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
1.5	2	2.2-3	3	5	7	DVSP0007E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0007E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0007E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
2	3	4	5	7.5	9	DVSP0009E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0009E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0009E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
3	4	5.5	7.5	10	12	DVSP0012E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0012E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0012E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
5	5.5	7.5	10	15	17	DVSP0017E	OPEN	9.1 x 6.7 x 7.5	231 x 170 x 191	8	4	2	96	Preinstalled on reactor panel		
						DVSG0017E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	19	9	6		Preinstalled in cabinet		
						DVSW0017E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	30	14	8				
5.5	7.5	11	15	20	22	DVSP0022E	OPEN	9.1 x 6.7 x 8.2	231 x 170 x 208	11	5	2	91	Preinstalled on reactor panel		
						DVSG0022E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	22	10	6		Preinstalled in cabinet		
						DVSW0022E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	32	15	8				
7.5	10	-	20	25	27	DVSP0027E	OPEN	9.1 x 6.7 x 8.2	231 x 170 x 208	11	5	2	92	Preinstalled on reactor panel		
						DVSG0027E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	22	10	6		Preinstalled in cabinet		
						DVSW0027E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	32	15	8				
10	12.5	15	25	30	35	DVSP0035E	OPEN	12.0 x 9.0 x 8.0	305 x 229 x 203	15	7	3	91	Preinstalled on reactor panel		
						DVSG0035E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	25	11	6		Preinstalled in cabinet		
						DVSW0035E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	35	16	8				
12.5	15	18.5- 22	30	40	45	DVSP0045E	OPEN	12.0 x 9.0 x 8.0	305 x 229 x 203	16	7	3	88	Preinstalled on reactor panel		
						DVSG0045E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	25	11	6		Preinstalled in cabinet		
						DVSW0045E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	35	16	8				
15	20	-	40	50	55	DVSP0055E	OPEN	12.0 x 9.0 x 8.2	305 x 229 x 208	22	10	3	137	Preinstalled on reactor panel		
						DVSG0055E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	32	15	6		Preinstalled in cabinet		
						DVSW0055E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	75	34	9				
20	25	30	50	60	65	DVSP0065E	OPEN	12.0 x 9.0 x 11.1	305 x 229 x 282	31	14	3	166	Preinstalled on reactor panel		
						DVSG0065E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	41	19	6		Preinstalled in cabinet		
						DVSW0065E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	84	38	9				

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

208 – 600V 50/60Hz

Motor (Ref Only)					Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Resistor Panel Dimensions (H x W x D)			Ref Fig
208V HP	240V HP	380V kW	480V HP	550- 600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
25	30	37	60	75	80	DVSP0080E	OPEN	12.0 x 9.0 x 11.1	305 x 229 x 282	32	15	3	158	Preinstalled on reactor panel			
						DVSG0080E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	42	19	6		Preinstalled in cabinet			
						DVSW0080E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	85	39	9					
30	40	45- 55	75	100	110	DVSP0110E	OPEN	12.0 x 9.0 x 11.1	305 x 229 x 282	36	16	3	175	Preinstalled on reactor panel			
						DVSG0110E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	43	20	6		Preinstalled in cabinet			
						DVSW0110E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	89	40	9					
40	50	-	100	125	130	DVSP0130E	OPEN	13.5 x 13.6 x 7.9	343 x 345 x 201	56	25	4	273	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0130E	NEMA 1/2	24.0 x 17.1 x 18.5	610 x 434 x 470	97	44	7		Preinstalled in cabinet			
						DVSW0130E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	139	63	10					
50	60	75- 90	125	150	160	DVSP0160E	OPEN	13.5 x 13.6 x 9.1	343 x 345 x 231	72	33	4	289	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0160E	NEMA 1/2	24.0 x 17.1 x 18.5	610 x 434 x 470	113	51	7		Preinstalled in cabinet			
						DVSW0160E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	155	70	10					
60	75	110	150	200	200	DVSP0200E	OPEN	13.5 x 13.6 x 9.1	343 x 345 x 231	76	34	4	325	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0200E	NEMA 1/2	24.0 x 17.1 x 18.5	610 x 434 x 470	116	53	7		Preinstalled in cabinet			
						DVSW0200E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	157	71	10					
75	100	132	200	250	250	DVSP0250E	OPEN	15.0 x 15.1 x 10.3	381 x 384 x 262	90	41	5	423	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0250E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	165	75	10		Preinstalled in cabinet			
						DVSW0250E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	173	78	10					
100	125	160	250	300	305	DVSP0305E	OPEN	15.2 x 15.1 x 10.4	386 x 384 x 264	94	43	5	481	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0305E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	170	77	10		Preinstalled in cabinet			
						DVSW0305E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	177	80	10					
125	150	185- 200	300	350	365	DVSP0365E	OPEN	15.1 x 15.1 x 11.8	384 x 384 x 300	125	57	5	564	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0365E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	200	91	10		Preinstalled in cabinet			
						DVSW0365E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	208	94	10					
150	175	-	350	450	415	DVSP0415E	OPEN	15.1 x 15.1 x 11.8	384 x 384 x 300	125	57	5	795	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0415E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	200	91	10		Preinstalled in cabinet			
						DVSW0415E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	208	94	10					
175	225	250	400- 450	500- 550	515	DVSP0515E	OPEN	14.9 x 15.1 x 13.3	378 x 384 x 338	158	72	5	798	18.4 x 5.0 x 7.0	467 x 127 x 178	1B	
						DVSG0515E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	326	148	10		Preinstalled in cabinet			
						DVSW0515E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	339	154	10					
200	250	315	500	600	600	DVSP0600E	OPEN	15.1 x 15.1 x 13.4	384 x 384 x 340	165	75	5	822	18.4 x 5.0 x 7.0	467 x 127 x 178	1B	
						DVSG0600E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	332	151	10		Preinstalled in cabinet			
						DVSW0600E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	345	156	10					

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

RESISTOR PANEL

FIGURE 1A

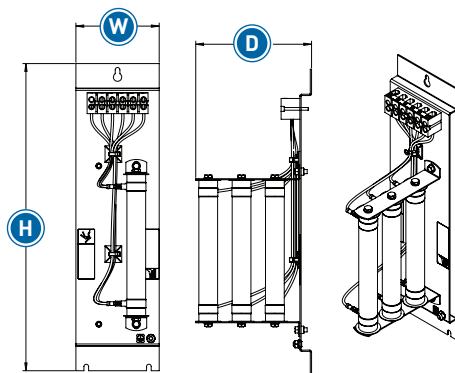
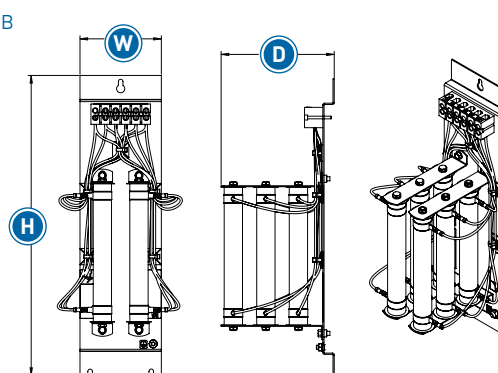


FIGURE 1B



OPEN MAGNETICS

FIGURE 2

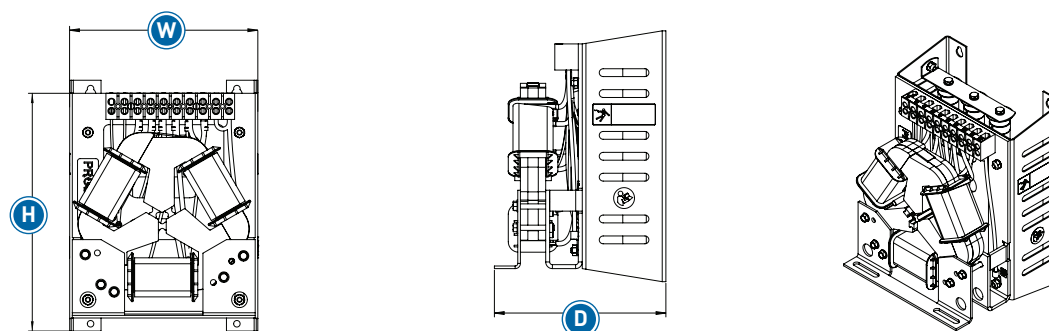


FIGURE 3

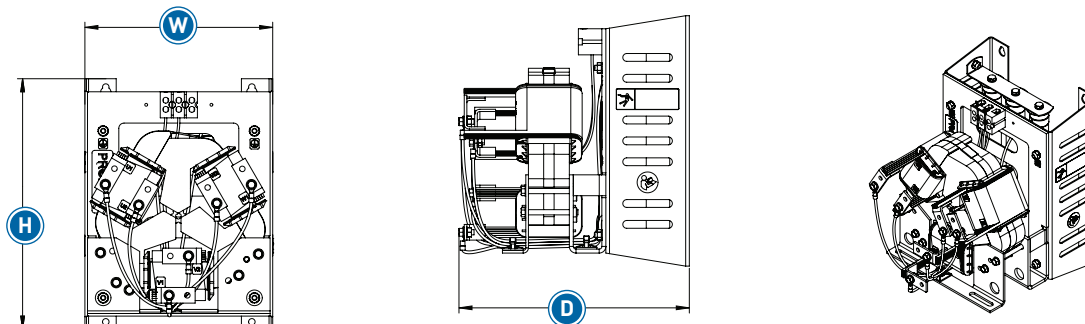


FIGURE 4

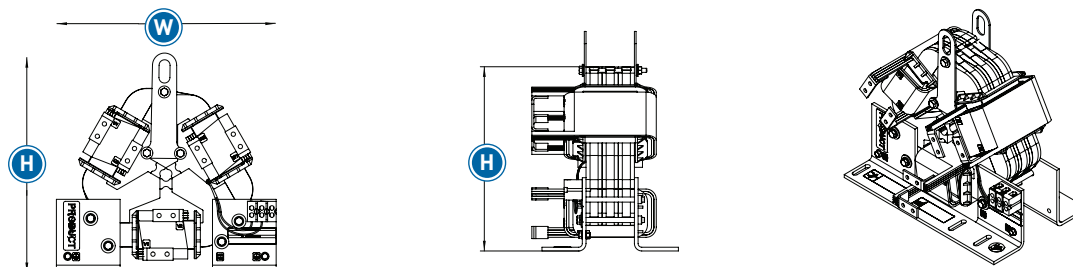
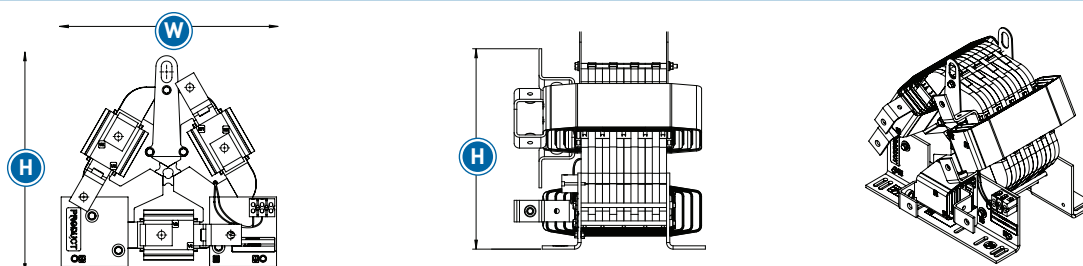


FIGURE 5



ENCLOSURES

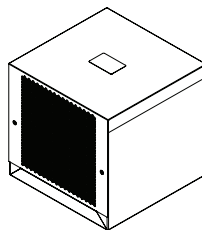
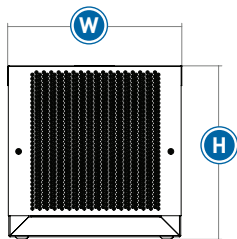


FIGURE 6

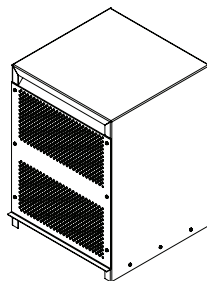
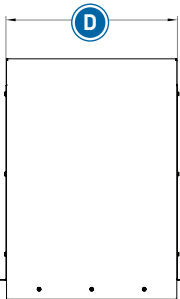
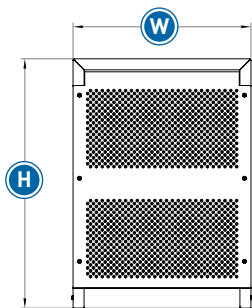


FIGURE 7

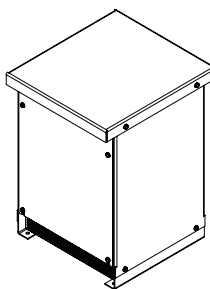
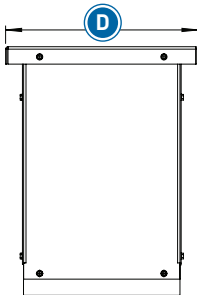
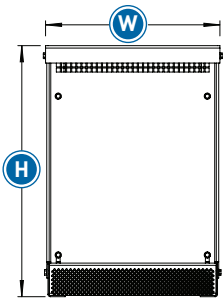


FIGURE 8

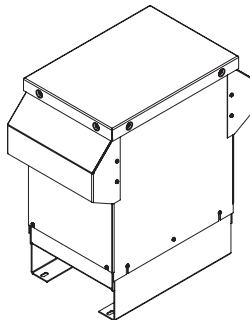
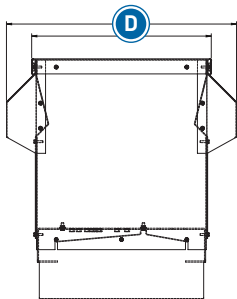
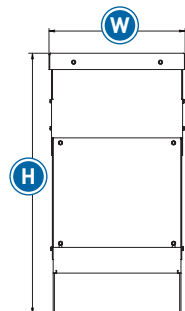


FIGURE 9

NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

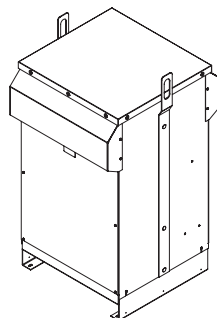
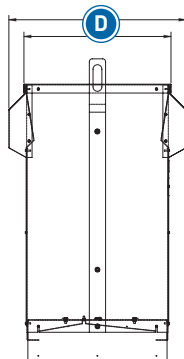
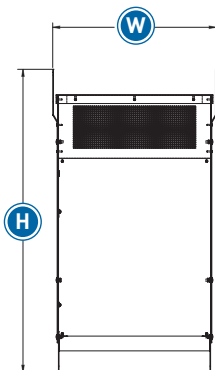


FIGURE 10

NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

Motor Protection Filters

dV E-Series

Next level power quality you've come to expect from the power quality experts

dV Sentry®

Next generation dV/dt Filters for motor protection

SineWave Guardian®

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

High Frequency SineWave Guardian®

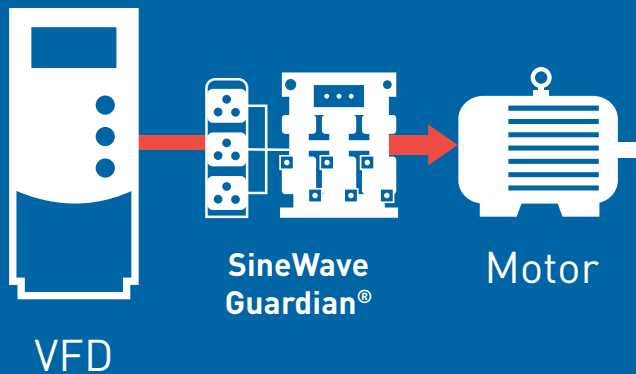
The optimized motor protection solution for high frequency motors

SineWave Nexus®

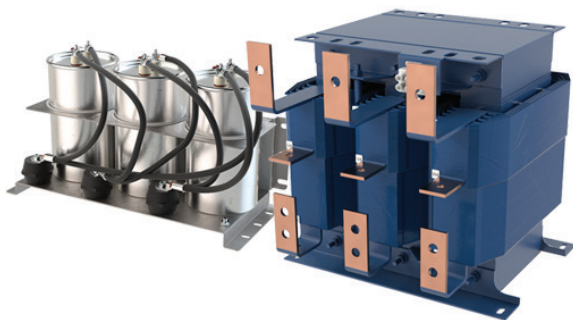
An integrated solution for both differential and common mode filtering

microNexus™

Powerful protection in a small, compact size



SineWave Guardian®



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

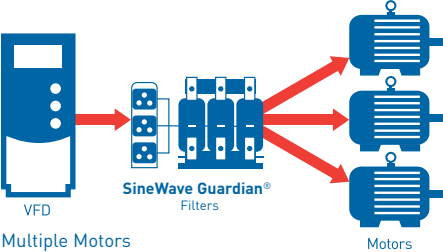
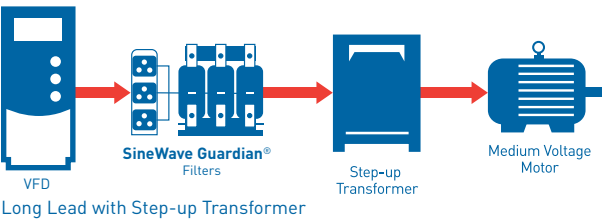
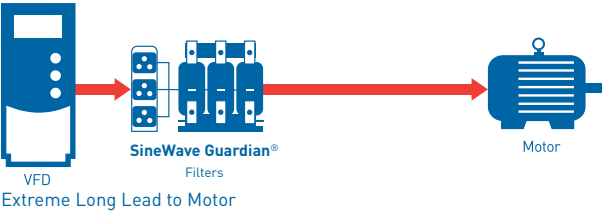
Quality motor protection for miles - literally.

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®.

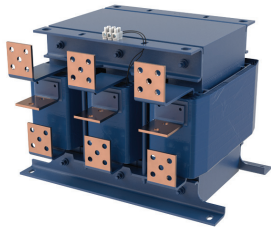
SineWave Guardian® Filters transform the output of Variable Frequency Drives (VFDs) to a near perfect sinusoidal waveform for the best level of motor protection. MTE's unique, patented design offers higher performance with smaller size and better efficiency than traditional LC Filters.

Application Configurations:



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

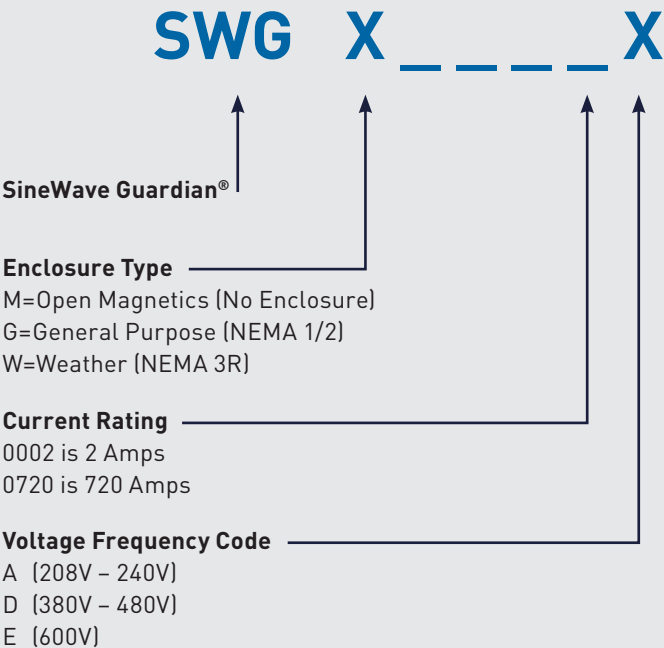
SineWave
Guardian®



How to properly size your filter

- Determine voltage and frequency requirements
- Reference motor nameplate to determine motor HP or kW and Full Load Amps
- Verify motor meets inverter duty standards per NEMA MG1 Section 31
- Select filter based on Motor Full Load Amps
 - Do not exceed filter's maximum current rating (amps)
- Specify enclosure style
 - Open (No enclosure)
 - NEMA 1/2 (General Purpose Enclosure)
 - NEMA 3R (Outdoor Enclosure)
- Determine derating requirements
 - Reference Performance Specifications table

Understanding the SineWave Guardian® Part Number:



208V – 240V 75Hz

Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
208V HP	240V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
2	3	9	SWGM0009A	OPEN	6.6 x 8.0 x 4.8	168 x 203 x 122	11	5	7	63	7.5 x 3.0	191 x 76	1	1
			SWGG0009A	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	28	13	3		Preinstalled in cabinet			
			SWGW0009A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	69	31	5		Preinstalled in cabinet			
3	4	12	SWGM0012A	OPEN	6.7 x 8.0 x 5.1	170 x 203 x 130	14	6	7	75	7.5 x 3.0	191 x 76	1	1
			SWGG0012A	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	30	14	3		Preinstalled in cabinet			
			SWGW0012A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	69	31	5		Preinstalled in cabinet			
5	5.5	17	SWGM0017A	OPEN	6.7 x 8.0 x 5.1	170 x 203 x 130	14	6	7	101	7.5 x 3.9	191 x 99	1	1
			SWGG0017A	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	30	14	3		Preinstalled in cabinet			
			SWGW0017A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	69	31	5		Preinstalled in cabinet			
5.5	7.5	22	SWGM0022A	OPEN	6.6 x 8.0 x 5.4	168 x 203 x 137	15	7	7	112	8.3 x 3.0	211 x 76	1	1
			SWGG0022A	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	32	15	3		Preinstalled in cabinet			
			SWGW0022A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	71	32	5		Preinstalled in cabinet			
7.5	10	30	SWGM0030A	OPEN	7.5 x 9.0 x 4.8	191 x 229 x 122	18	8	7	100	8.3 x 3.0	211 x 76	1	1
			SWGG0030A	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	34	15	3		Preinstalled in cabinet			
			SWGW0030A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	73	33	5		Preinstalled in cabinet			
10 – 12.5	15	45	SWGM0045A	OPEN	8.7 x 10.5 x 6.7	221 x 267 x 170	28	13	7	138	8.3 x 4.6	211 x 117	1	1
			SWGG0045A	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	78	35	4		Preinstalled in cabinet			
			SWGW0045A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	85	39	5		Preinstalled in cabinet			
15	20	55	SWGM0055A	OPEN	9.0 x 10.5 x 7.4	229 x 267 x 188	32	15	8	162	8.3 x 4.6	211 x 117	1	1
			SWGG0055A	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	80	36	4		Preinstalled in cabinet			
			SWGW0055A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	87	40	5		Preinstalled in cabinet			
20	25	70	SWGM0070A	OPEN	9.0 x 10.5 x 7.9	229 x 267 x 201	34	15	8	192	8.3 x 3.0	211 x 76	1	1
			SWGG0070A	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	82	37	4		Preinstalled in cabinet			
			SWGW0070A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	90	41	5		Preinstalled in cabinet			
25	30	85	SWGM0085A	OPEN	8.7 x 10.5 x 7.2	221 x 267 x 183	38	17	8	201	8.3 x 3.0	211 x 76	1	1
			SWGG0085A	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	86	39	4		Preinstalled in cabinet			
			SWGW0085A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	93	42	5		Preinstalled in cabinet			
30	40	110	SWGM0110A	OPEN	8.7 x 10.5 x 8.9	221 x 267 x 226	53	24	8	226	8.3 x 4.0	211 x 102	1	1
			SWGG0110A	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	101	46	4		Preinstalled in cabinet			
			SWGW0110A	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	109	49	5		Preinstalled in cabinet			
40	50	135	SWGM0135A	OPEN	11.0 x 12.0 x 9.3	279 x 305 x 236	72	33	9	299	8.3 x 3.0	211 x 76	1	1
			SWGG0135A	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	148	67	6		Preinstalled in cabinet			
			SWGW0135A	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	159	72	7		Preinstalled in cabinet			
50	60	160	SWGM0160A	OPEN	10.6 x 12.0 x 9.7	269 x 305 x 246	74	34	9	303	8.3 x 4.6	211 x 117	1	1
			SWGG0160A	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	150	68	6		Preinstalled in cabinet			
			SWGW0160A	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	161	73	7		Preinstalled in cabinet			
60	75	200	SWGM0200A	OPEN	10.9 x 12.0 x 11.4	277 x 305 x 290	120	54	9	387	8.3 x 4.0	211 x 102	1	1
			SWGG0200A	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	199	90	6		Preinstalled in cabinet			
			SWGW0200A	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	209	95	7		Preinstalled in cabinet			
75	100	250	SWGM0250A	OPEN	10.5 x 12.0 x 11.2	267 x 305 x 284	110	50	9	374	8.3 x 3.0	211 x 76	1	1
			SWGG0250A	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	189	86	6		8.3 x 4.6	211 x 117	1	
			SWGW0250A	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	199	90	7		Preinstalled in cabinet			
100	125	320	SWGM0320A	OPEN	14.2 x 15.3 x 11.8	361 x 389 x 300	153	69	10	637	7.4 x 16.4 x 7.6	188 x 417 x 193	1	2
			SWGG0320A	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	321	146	6		Preinstalled in cabinet			
			SWGW0320A	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	334	151	7		Preinstalled in cabinet			

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

SineWave Guardian® SELECTION TABLES

380V – 480V 75Hz														
Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
380V kW	480V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
0.55	0.75	2	SWGMM0002D	OPEN	4.9 x 4.4 x 2.6	124 x 112 x 66	5	2	7	25	7.5 x 3.0	191 x 76	1	1
			SWGGM0002D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	19	9	3		Preinstalled in cabinet			
			SWGWM0002D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	62	28	5					
0.75	1.5	3	SWGMM0003D	OPEN	4.9 x 4.4 x 3.3	124 x 112 x 84	7	3	7	45	7.5 x 3.0	191 x 76	1	1
			SWGGM0003D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	21	10	3		Preinstalled in cabinet			
			SWGWM0003D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	64	29	5					
2.2	3	5	SWGMM0005D	OPEN	6.6 x 8.0 x 4.8	168 x 203 x 122	11	5	7	75	7.5 x 3.0	191 x 76	1	1
			SWGGM0005D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	25	11	3		Preinstalled in cabinet			
			SWGWM0005D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	68	31	5					
3	4	7	SWGMM0007D	OPEN	6.7 x 8.0 x 5.1	170 x 203 x 130	13	6	7	91	7.5 x 3.0	191 x 76	1	1
			SWGGM0007D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	27	12	3		Preinstalled in cabinet			
			SWGWM0007D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	61	28	5					
4	5.5	9	SWGMM0009D	OPEN	6.7 x 8.0 x 5.1	170 x 203 x 130	14	6	7	97	7.5 x 3.0	191 x 76	1	1
			SWGGM0009D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	28	13	3		Preinstalled in cabinet			
			SWGWM0009D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	54	24	5					
5.5	7.5	12	SWGMM0012D	OPEN	6.7 x 8.0 x 5.4	170 x 203 x 137	15	7	7	127	7.5 x 3.0	191 x 76	1	1
			SWGGM0012D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	29	13	3		Preinstalled in cabinet			
			SWGWM0012D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	70	32	5					
7.5	10	17	SWGMM0017D	OPEN	7.5 x 9.0 x 4.8	191 x 229 x 122	20	9	7	130	7.5 x 3.0	191 x 76	1	1
			SWGGM0017D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	34	15	3		Preinstalled in cabinet			
			SWGWM0017D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	76	34	5					
11	15	22	SWGMM0022D	OPEN	8.7 x 10.5 x 6.7	221 x 267 x 170	32	15	7	135	7.5 x 3.0	191 x 76	1	1
			SWGGM0022D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	79	36	4		Preinstalled in cabinet			
			SWGWM0022D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	87	39	5					
-	20	27	SWGMM0027D	OPEN	8.7 x 10.5 x 6.7	221 x 267 x 170	35	16	8	140	7.5 x 3.0	191 x 76	1	1
			SWGGM0027D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	82	37	4		Preinstalled in cabinet			
			SWGWM0027D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	90	41	5					
18.5	25	35	SWGMM0035D	OPEN	8.9 x 10.5 x 6.7	226 x 267 x 170	39	18	8	210	7.5 x 3.9	191 x 99	1	1
			SWGGM0035D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	87	39	4		Preinstalled in cabinet			
			SWGWM0035D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	94	43	5					
22	30	45	SWGMM0045D	OPEN	8.8 x 10.5 x 7.2	224 x 267 x 183	40	18	8	225	7.5 x 3.9	191 x 99	1	1
			SWGGM0045D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	90	41	4		Preinstalled in cabinet			
			SWGWM0045D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	98	44	5					
-	40	55	SWGMM0055D	OPEN	8.8 x 10.5 x 6.7	224 x 267 x 170	54	24	9	301	8.0 x 3.9	203 x 99	1	1
			SWGGM0055D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	101	46	4		Preinstalled in cabinet			
			SWGWM0055D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	109	49	5					
30	50	65	SWGMM0065D	OPEN	10.7 x 12.0 x 8.6	272 x 305 x 218	59	27	9	310	8.0 x 3.9	203 x 99	1	1
			SWGGM0065D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	136	62	6		Preinstalled in cabinet			
			SWGWM0065D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	143	65	6					
37	60	80	SWGMM0080D	OPEN	10.8 x 12.0 x 9.0	274 x 305 x 229	75	34	9	387	8.3 x 4.6	211 x 117	1	1
			SWGGM0080D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	150	68	6		Preinstalled in cabinet			
			SWGWM0080D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	157	71	6					
55	75	110	SWGMM0110D	OPEN	10.7 x 12.0 x 10.5	272 x 305 x 267	105	48	9	395	8.3 x 4.6	211 x 117	1	1
			SWGGM0110D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	180	82	6		Preinstalled in cabinet			
			SWGWM0110D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	187	85	6					

Note: Weights and dimensions are for reference only. Please visit mtcorp.com for detailed information.

380V – 480V 75Hz

Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
380V kW	480V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
-	100	130	SWGMM0130D	OPEN	10.7 x 12.0 x 11.5	272 x 305 x 292	108	49	10	420	8.3 x 4.6	211 x 117	1	1
			SWGGM0130D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	182	83	6		Preinstalled in cabinet			
			SWGWM0130D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	189	86			Preinstalled in cabinet			
75	125	160	SWGMM0160D	OPEN	14.5 x 15.3 x 11.3	368 x 389 x 287	160	73	10	595	6.7 x 16.4 x 7.6	170 x 417 x 193	1	2
			SWGGM0160D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	327	148	6		Preinstalled in cabinet			
			SWGWM0160D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	340	154			Preinstalled in cabinet			
110	150	200	SWGMM0200D	OPEN	14.5 x 15.3 x 14.8	368 x 389 x 376	166	75	10	650	6.7 x 16.4 x 7.6	170 x 417 x 193	1	2
			SWGGM0200D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	336	152	6		Preinstalled in cabinet			
			SWGWM0200D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	349	158			Preinstalled in cabinet			
132	200	250	SWGMM0250D	OPEN	14.5 x 15.3 x 13.8	368 x 389 x 351	220	100	10	775	6.9 x 16.3 x 7.6	175 x 414 x 193	1	2
			SWGGM0250D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	381	173	6		Preinstalled in cabinet			
			SWGWM0250D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	395	179			Preinstalled in cabinet			
160	250	305	SWGMM0305D	OPEN	14.6 x 15.3 x 14.8	371 x 389 x 376	260	118	11	945	7.4 x 16.4 x 7.6	188 x 417 x 193	1	2
			SWGGM0305D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	430	195	6		Preinstalled in cabinet			
			SWGWM0305D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	443	201			Preinstalled in cabinet			
200	300	365	SWGMM0365D	OPEN	14.6 x 15.3 x 15.2	371 x 389 x 386	310	141	11	1,050	8.3 x 16.4 x 7.6	211 x 417 x 193	1	2
			SWGGM0365D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	480	218	6		Preinstalled in cabinet			
			SWGWM0365D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	493	224			Preinstalled in cabinet			
220	350	415	SWGMM0415D	OPEN	14.6 x 15.3 x 15.2	371 x 389 x 386	326	148	11	1,137	8.3 x 16.4 x 7.6	211 x 417 x 193	1	2
			SWGGM0415D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	496	225	6		Preinstalled in cabinet			
			SWGWM0415D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	509	231			Preinstalled in cabinet			
280	450	515	SWGMM0515D	OPEN	15.0 x 15.3 x 16.2	381 x 389 x 411	355	161	12	1,235	9.9 x 16.4 x 7.6	251 x 417 x 193	1	2
			SWGGM0515D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	764	347	6		Preinstalled in cabinet			
			SWGWM0515D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	800	363			Preinstalled in cabinet			
335	500	600	SWGMM0600D	OPEN	18.3 x 24.0 x 14.6	465 x 610 x 371	483	219	12	2,225	9.9 x 16.4 x 7.6	251 x 417 x 193	1	2
			SWGGM0600D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	896	406	6		Preinstalled in cabinet			
			SWGWM0600D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	932	423			Preinstalled in cabinet			
375	600	720	SWGMM0720D	OPEN	18.2 x 24.0 x 17.5	462 x 610 x 445	711	323	12	2,300	8.3 x 16.4 x 7.6	211 x 417 x 193	1	2
			SWGGM0720D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,127	511	6		9.9 x 16.4 x 7.6	251 x 417 x 193	1	
			SWGWM0720D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,164	528			Preinstalled in cabinet			
450	700	850	SWGMM0850D	OPEN	18.2 x 24.0 x 19.0	462 x 610 x 483	835	379	12	2,556	7.7 x 16.4 x 7.6	196 x 417 x 193	1	2
			SWGGM0850D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,470	667	6		9.9 x 16.4 x 7.6	251 x 417 x 193	2	
			SWGWM0850D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,511	685			Preinstalled in cabinet			
560	850	1000	SWGMM1000D	OPEN	18.1 x 24.0 x 20.6	460 x 610 x 523	942	427	12	2,850	7.4 x 16.4 x 7.6	188 x 417 x 193	1	2
			SWGGM1000D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,580	717	6		9.9 x 16.4 x 7.6	251 x 417 x 193	2	
			SWGWM1000D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,621	735			Preinstalled in cabinet			
675	1000	1200	SWGMM1200D	OPEN	25.7 x 24.0 x 20.3	653 x 610 x 516	1,272	577	13	3,000	9.9 x 16.4 x 7.6	251 x 416.6 x 193	3	2
			SWGGM1200D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,921	871	6		Preinstalled in cabinet			
			SWGWM1200D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,962	890			Preinstalled in cabinet			
800	1200	1500	SWGMM1500D	OPEN	25.9 x 24.0 x 20.0	658 x 610 x 508	1,296	588	13	3,210	9.9 x 16.4 x 7.6	251 x 417 x 193	3	2
			SWGGM1500D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,945	882	6		Preinstalled in cabinet			
			SWGWM1500D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,986	901			Preinstalled in cabinet			

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

SineWave Guardian® SELECTION TABLES

600V 75Hz															
Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig	
600V kW	600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters			
0.75	1	2	SWGMM0002E	OPEN	4.9 x 4.4 x 3.0	124 x 112 x 76	8	4	7	30	7.9 x 3.0	201 x 76	1	1	
			SWGGM0002E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	22	10	3		Preinstalled in cabinet				
			SWGWM0002E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	65	29	5						
1.5	2	3	SWGMM0003E	OPEN	6.7 x 8.0 x 4.8	170 x 203 x 122	11	5	7	51	7.9 x 3.0	201 x 76	1	1	
			SWGGM0003E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	25	11	3		Preinstalled in cabinet				
			SWGWM0003E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	68	31	5						
3	3	5	SWGMM0005E	OPEN	6.6 x 8.0 x 5.1	168 x 203 x 130	14	6	7	77	7.9 x 3.0	201 x 76	1	1	
			SWGGM0005E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	28	13	3		Preinstalled in cabinet				
			SWGWM0005E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	69	31	5						
3.7	5	7	SWGMM0007E	OPEN	6.7 x 8.0 x 5.4	170 x 203 x 137	15	7	7	97	7.9 x 3.0	201 x 76	1	1	
			SWGGM0007E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	29	13	3		Preinstalled in cabinet				
			SWGWM0007E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	70	32	5						
5.5	7.5	9	SWGMM0009E	OPEN	6.7 x 8.0 x 4.3	170 x 203 x 109	17	8	7	124	7.9 x 3.0	201 x 76	1	1	
			SWGGM0009E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	32	15	3		Preinstalled in cabinet				
			SWGWM0009E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	72	33	5						
7.5	10	12	SWGMM0012E	OPEN	7.5 x 9.0 x 4.8	191 x 229 x 122	20	9	7	126	7.9 x 3.0	201 x 76	1	1	
			SWGGM0012E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	35	16	3		Preinstalled in cabinet				
			SWGWM0012E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	75	34	5						
11	15	17	SWGMM0017E	OPEN	7.5 x 9.0 x 5.3	191 x 229 x 135	26	12	7	133	7.9 x 3.0	201 x 76	1	1	
			SWGGM0017E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	40	18	3		Preinstalled in cabinet				
			SWGWM0017E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	81	37	5						
15	20	22	SWGMM0022E	OPEN	8.7 x 10.5 x 6.7	221 x 267 x 170	34	15	7	146	7.9 x 3.0	201 x 76	1	1	
			SWGGM0022E	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	82	37	4		Preinstalled in cabinet				
			SWGWM0022E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	89	40	5						
18.5	25	27	SWGMM0027E	OPEN	8.7 x 10.5 x 7.7	221 x 267 x 196	40	18	8	156	7.9 x 3.0	201 x 76	1	1	
			SWGGM0027E	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	88	40	4		Preinstalled in cabinet				
			SWGWM0027E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	95	43	5						
22	30	35	SWGMM0035E	OPEN	8.7 x 10.5 x 7.7	221 x 267 x 196	40	18	8	210	7.9 x 3.0	201 x 76	1	1	
			SWGGM0035E	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	88	40	4		Preinstalled in cabinet				
			SWGWM0035E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	95	43	5						
30	40	45	SWGMM0045E	OPEN	8.7 x 10.5 x 8.7	221 x 267 x 221	53	24	8	251	7.9 x 3.0	201 x 76	1	1	
			SWGGM0045E	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	101	46	4		Preinstalled in cabinet				
			SWGWM0045E	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	109	49	5						
37	50	55	SWGMM0055E	OPEN	10.7 x 12.0 x 9.4	272 x 305 x 239	63	29	9	293	7.9 x 3.0	201 x 76	1	1	
			SWGGM0055E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	138	63	6		Preinstalled in cabinet				
			SWGWM0055E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	149	68							
45	60	65	SWGMM0065E	OPEN	10.7 x 12.0 x 9.7	272 x 305 x 246	78	35	9	302	7.9 x 3.0	201 x 76	1	1	
			SWGGM0065E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	152	69	6		Preinstalled in cabinet				
			SWGWM0065E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	163	74							
55	75	80	SWGMM0080E	OPEN	10.7 x 12.0 x 10.1	272 x 305 x 257	92	42	9	359	7.9 x 3.0	201 x 76	1	1	
			SWGGM0080E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	166	75	6		Preinstalled in cabinet				
			SWGWM0080E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	177	80							
75	100	110	SWGMM0110E	OPEN	10.7 x 12.0 x 10.5	272 x 305 x 267	106	48	9	449	7.9 x 3.0	201 x 76	1	1	
			SWGGM0110E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	181	82	6		Preinstalled in cabinet				
			SWGWM0110E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	191	87							
90	125	130	SWGMM0130E	OPEN	14.4 x 15.3 x 11.2	366 x 389 x 284	161	73	9	647	7.9 x 3.0	201 x 76	1	1	
			SWGGM0130E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	332	151	6		Preinstalled in cabinet				
			SWGWM0130E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	345	156							

600V 75Hz														
Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
600V kW	600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
110	150	160	SWGMM0160E	OPEN	12.5 x 15.3 x 14.2	318 x 389 x 361	195	88	10	660	7.9 x 3.0	201 x 76	1	1
			SWGGM0160E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	367	166	6		Preinstalled in cabinet			
			SWGWM0160E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	379	172						
150	200	200	SWGMM0200E	OPEN	14.6 x 15.3 x 14.7	371 x 389 x 373	245	111	10	765	9.9 x 16.4 x 7.6	251 x 417 x 193	1	2
			SWGGM0200E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	414	188	6		Preinstalled in cabinet			
			SWGWM0200E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	427	194						
185	250	250	SWGMM0250E	OPEN	14.6 x 15.3 x 15.7	371 x 389 x 399	282	128	10	939	12.7 x 16.4 x 7.6	323 x 417 x 193	1	2
			SWGGM0250E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	699	317	6		Preinstalled in cabinet			
			SWGWM0250E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	744	337						
220	300	305	SWGMM0305E	OPEN	15.1 x 15.3 x 15.6	384 x 389 x 396	333	151	11	1,194	12.7 x 16.4 x 7.6	323 x 417 x 193	1	2
			SWGGM0305E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	758	344	6		8.9 x 16.4 x 7.6	226 x 417 x 193	1	2
			SWGWM0305E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	803	364			Preinstalled in cabinet			
250	350	365	SWGMM0365E	OPEN	15.1 x 15.3 x 15.6	384 x 389 x 396	327	148	11	1,359	12.7 x 16.4 x 7.6	323 x 417 x 193	1	2
			SWGGM0365E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	752	341	6		8.9 x 16.4 x 7.6	226 x 417 x 193	1	2
			SWGWM0365E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	797	362			Preinstalled in cabinet			
335	450	415	SWGMM0415E	OPEN	14.8 x 15.3 x 16.6	376 x 389 x 422	360	163	11	1,599	12.7 x 16.4 x 7.6	323 x 417 x 193	1	2
			SWGGM0415E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	785	356	6		8.9 x 16.4 x 7.6	226 x 417 x 193	1	2
			SWGWM0415E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	830	376			Preinstalled in cabinet			
375	500	515	SWGMM0515E	OPEN	18.2 x 24.0 x 14.5	462 x 610 x 368	507	230	12	1,670	12.7 x 16.4 x 7.6	323 x 417 x 193	1	2
			SWGGM0515E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	917	416	6		9.9 x 16.4 x 7.6	251 x 417 x 193	1	2
			SWGWM0515E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	962	436			Preinstalled in cabinet			
450	600	600	SWGMM0600E	OPEN	17.9 x 24.0 x 17.4	455 x 610 x 442	726	329	12	1,734	12.7 x 16.4 x 7.6	323 x 417 x 193	2	2
			SWGGM0600E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,142	518	6		8.9 x 16.4 x 7.6	226 x 417 x 193	1	2
			SWGWM0600E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,187	538			Preinstalled in cabinet			
525	700	720	SWGMM0720E	OPEN	18.1 x 24.0 x 18.9	460 x 610 x 480	854	387	12	2,250	12.7 x 16.4 x 7.6	323 x 417 x 193	2	2
			SWGGM0720E	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,470	667	9.9 x 16.4 x 7.6		251 x 417 x 193	1		
			SWGWM0720E	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,510	685	6		7.9 x 3.0	201 x 76	1	1
675	900	865	SWGMM0865E	OPEN	18.3 x 24.0 x 19.1	465 x 610 x 485	895	406	12	2,860	12.7 x 16.4 x 7.6	323 x 417 x 193	2	2
			SWGGM0865E	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,512	686	9.9 x 16.4 x 7.6		251 x 417 x 193	2		
			SWGWM0865E	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,553	704	6		Preinstalled in cabinet			
750	1000	1000	SWGMM1000E	OPEN	18.1 x 24.0 x 20.0	460 x 610 x 508	877	398	12	3,250	12.7 x 16.4 x 7.6	323 x 417 x 193	2	2
			SWGGM1000E	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,495	678	9.9 x 16.4 x 7.6		251 x 417 x 193	2		
			SWGWM1000E	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,536	697	6		Preinstalled in cabinet			
935	1250	1200	SWGMM1200E	OPEN	25.9 x 24.0 x 20.2	658 x 610 x 513	1,341	608	12	3,546	12.7 x 16.4 x 7.6	323 x 417 x 193	4	2
			SWGGM1200E	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,977	897	7.9 x 3.0		201 x 76	1	1	
			SWGWM1200E	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	2,018	915	6		Preinstalled in cabinet			
1100	1500	1500	SWGMM1500E	OPEN	33.2 x 36.0 x 29.3	843 x 914 x 744	1,897	860	-	3,762	12.7 x 16.4 x 7.6	323 x 417 x 193	5	2
											7.9 x 3.0	201 x 76	1	1

3-PHASE CAPACITOR

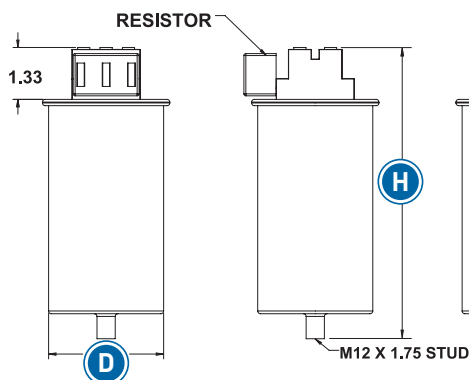
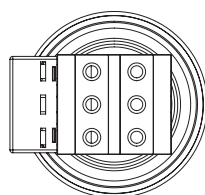


FIGURE 1

CAPACITOR PANEL

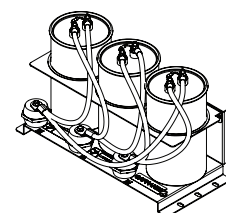
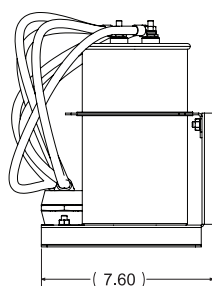
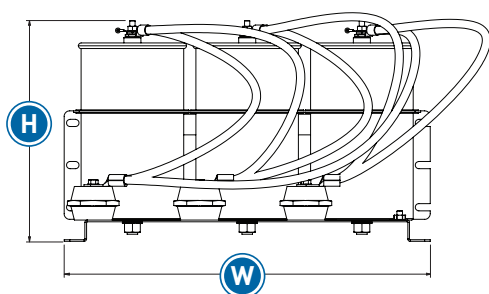


FIGURE 2

ENCLOSURES

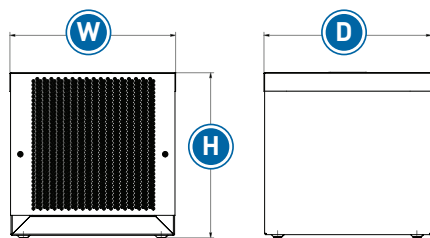


FIGURE 3

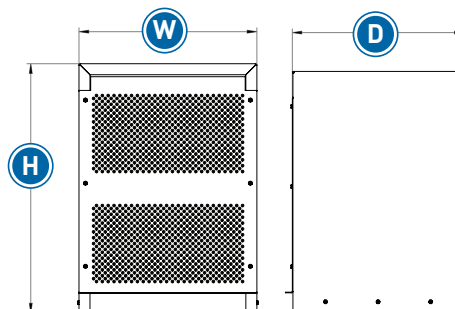
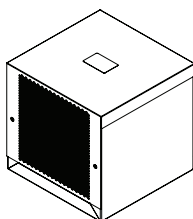


FIGURE 4

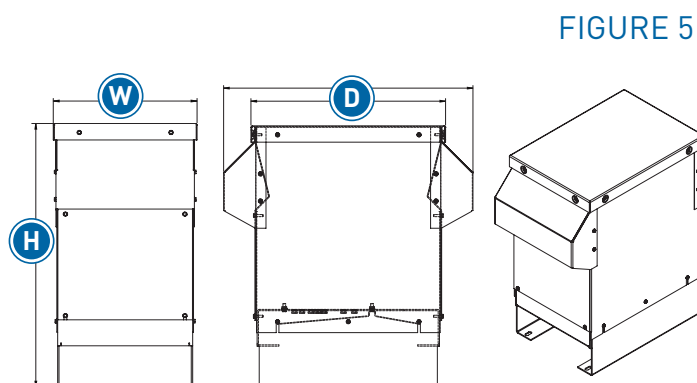
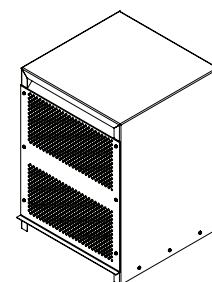


FIGURE 5

(NOTE: HOODS ONLY ON NEMA 3R ENCLOSURES)

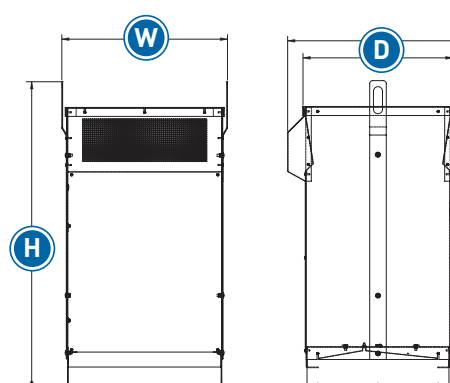


FIGURE 6

(NOTE: HOODS ONLY ON NEMA 3R ENCLOSURES)

OPEN MAGNETICS

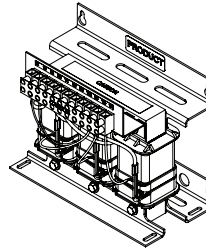
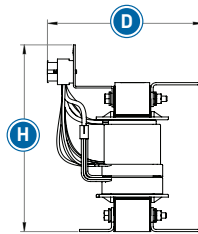
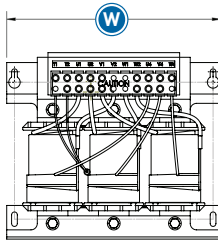


FIGURE 7

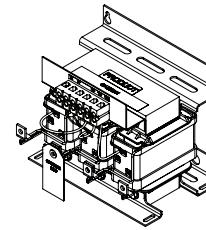
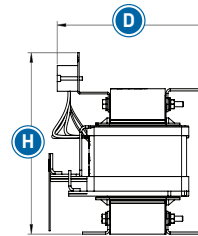
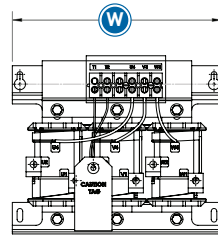


FIGURE 8

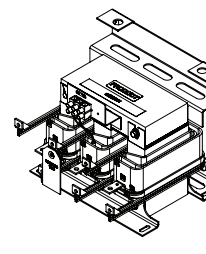
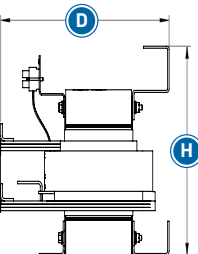
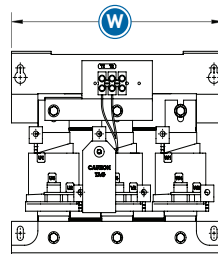


FIGURE 9

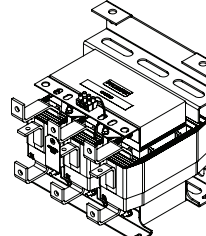
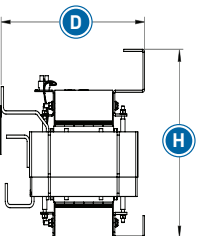
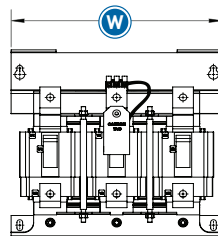


FIGURE 10

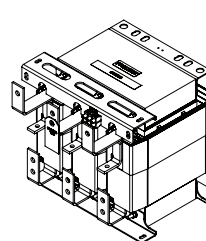
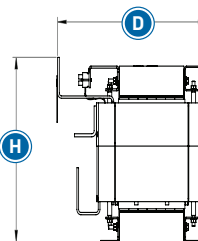
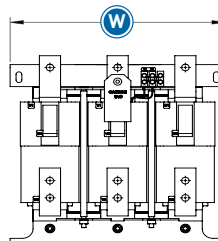


FIGURE 11

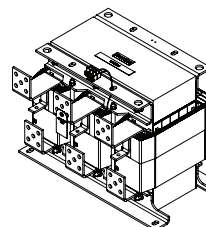
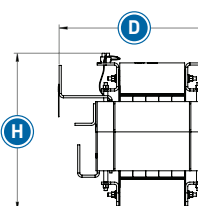
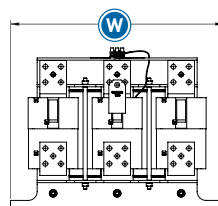


FIGURE 12

Motor Protection Filters

dV E-Series

Next level power quality you've come to expect from the power quality experts

dV Sentry®

Next generation dV/dt Filters for motor protection

SineWave Guardian®

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

High Frequency SineWave Guardian®

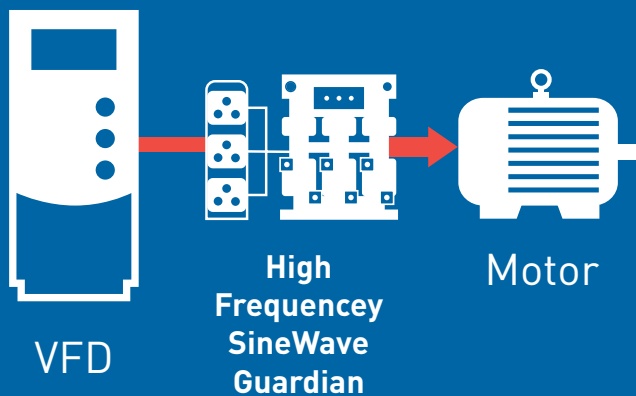
The optimized motor protection solution for high frequency motors

SineWave Nexus®

An integrated solution for both differential and common mode filtering

microNexus™

Powerful protection in a small, compact size





High Frequency SineWave Guardian®



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

If you're not leading, you're following. Innovation is here.

At MTE, we have found a way to make our best-in-class motor protection solution, the SineWave Guardian Filter, even better. Featuring the same unequaled performance, the market leading High Frequency SineWave Guardian uses innovative technology to optimize protection for high frequency motors. Our new filter features reduced voltage drop and virtually eliminates voltage distortion (THVD) generated by Variable Frequency Drives (VFDs). This results in reduced losses, protection against overheating motors, and ultimately providing less downtime. It can protect motors in some of the harshest conditions, with unmatched reliability and durability. The High Frequency SineWave Guardian Filter is the optimized motor protection solution for high frequency motors, exclusively by MTE.

Specially designed for high frequency motors to reduce voltage distortion, improve efficiency, and extend motor life.

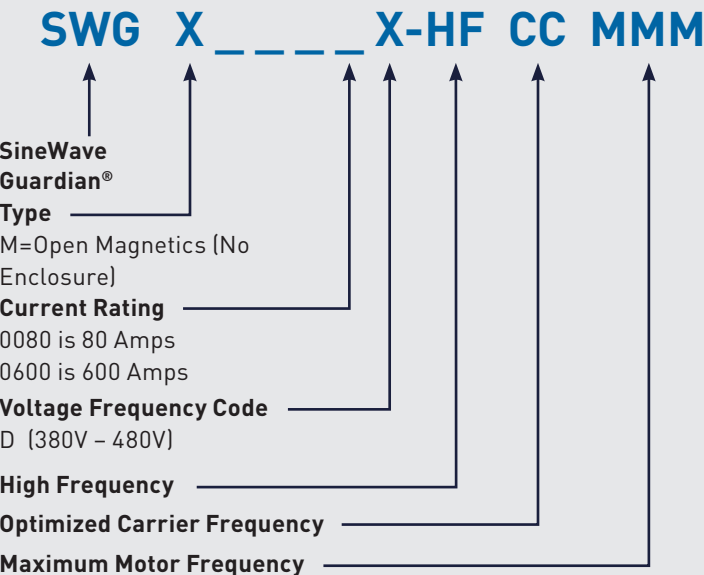
High Frequency SineWave Guardian® Filters transform the output of Variable Frequency Drives (VFDs) to a near perfect sinusoidal waveform for the best level of protection for high frequency motors. MTE's unique, patent-pending design comes in a smaller size than traditional LC Filters, and offers higher performance and better efficiency.

- Increase motor life
- Reduce motor audible noise
- Reduce radiated emissions

How to properly size your filter

- Determine voltage and frequency requirements
- Reference motor nameplate to determine motor HP or kW and Full Load Amps
- Verify motor meets inverter duty standards per NEMA MG1 Section 31
- Select filter based on Motor Full Load Amps
 - Do not exceed filter's maximum current rating (amps)
- Determine derating requirements
 - Reference Performance Specifications table

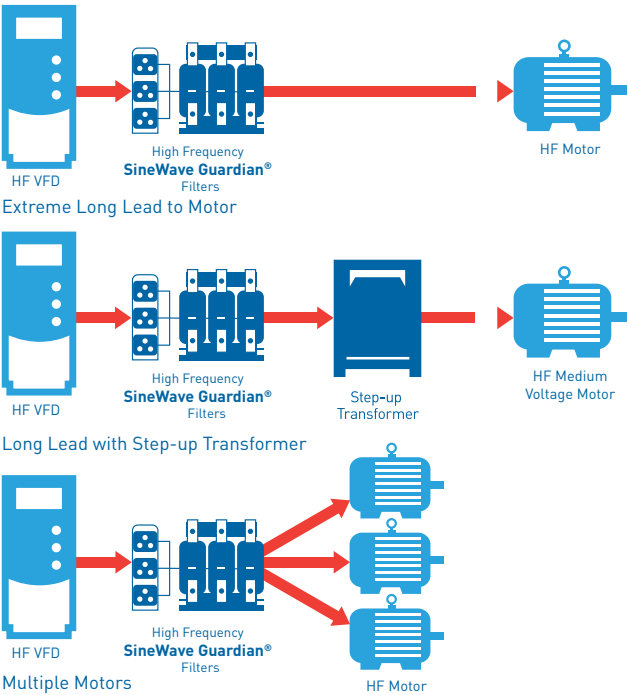
Understanding the High Frequency SineWave Guardian® Part Number:



High Frequency SineWave Guardian®



Application Configurations:



Performance Specifications	
Service Load Condition	Conventional 3 phase motors operating in volts per hertz mode, standard step-up transformer or design for use of filter in sensor less vector mode
Input Voltage	380V – 480V +/- 10%
Harmonic Voltage Distortion	5% maximum @ 5kHz; 8% maximum @ 6-8 kHz
Inverter Switching Frequency*	4.8kHz to 8kHz
Inverter Operating Frequency*	6Hz to 300Hz
Maximum Ambient Temperature	-40°C to +60°C modular filter; -40°C to +90°C storage
Insertion Loss (Voltage)	6% maximum @ 150Hz; 12% maximum @ 300Hz
Efficiency	>99%
Altitude Without Derating	3,300 feet above sea level
Maximum Motor Lead Length	15,000 feet
Relative Humidity	0% to 95% non-condensing
Current Rating	100% RMS continuous; 150% for 1 minute intermittent

* Additional ratings available upon request.
Final product specifications subject to change at any time.

380 – 480V 300Hz														
Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
380V kW	480V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
37	60	80	SWGM0080D-HF05300	OPEN	10.5 x 12.0 x 9.1	267 x 305 x 231	62	28	1	360	5.8 x 16.3 x 7.6	147 x 414 x 193	1	4
55	75	110	SWGM0110D-HF05300	OPEN	10.1 x 12.0 x 10.1	257 x 305 x 257	78	35	1	451	5.8 x 16.3 x 7.6	147 x 414 x 193	1	4
-	100	130	SWGM0130D-HF05300	OPEN	10.2 x 12.0 x 11.5	259 x 305 x 292	92	42	1	504	5.8 x 16.3 x 7.6	147 x 414 x 193	1	4
75	125	160	SWGM0160D-HF05300	OPEN	10.0 x 12.0 x 11.6	254 x 305 x 295	96	44	1	563	5.8 x 16.3 x 7.6	147 x 414 x 193	1	4
110	150	200	SWGM0200D-HF05300	OPEN	12.1 x 15.3 x 11.2	307 x 389 x 284	136	62	2	718	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
132	200	250	SWGM0250D-HF05300	OPEN	12.3 x 15.3 x 11.3	312 x 389 x 287	143	65	2	911	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
160	250	305	SWGM0305D-HF05300	OPEN	12.4 x 15.3 x 12.6	315 x 389 x 320	174	79	2	958	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
220	350	415	SWGM0415D-HF05300	OPEN	12.3 x 15.3 x 14.3	312 x 389 x 363	244	111	2	1,144	6.7 x 16.3 x 7.6	170 x 414 x 193	2	4
280	450	515	SWGM0515D-HF05300	OPEN	14.2 x 15.3 x 13.1	361 x 389 x 333	258	117	3	1,250	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
											6.7 x 16.3 x 7.6	170 x 414 x 193	2	4
335	500	600	SWGM0600D-HF05300	OPEN	14.3 x 15.3 x 14.3	363 x 389 x 363	306	139	3	1,321	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
											6.7 x 16.3 x 7.6	170 x 414 x 193	2	4

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

FIGURE 1

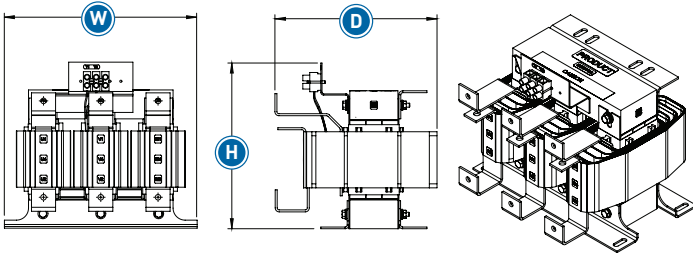


FIGURE 2

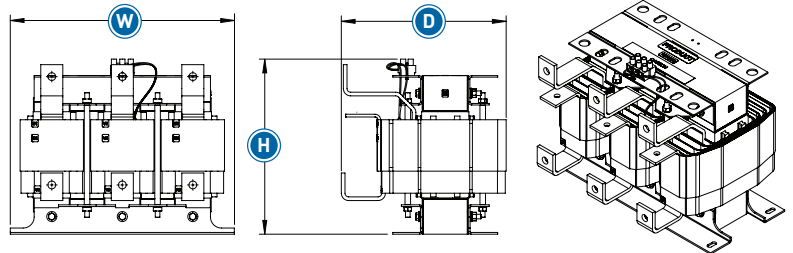


FIGURE 3

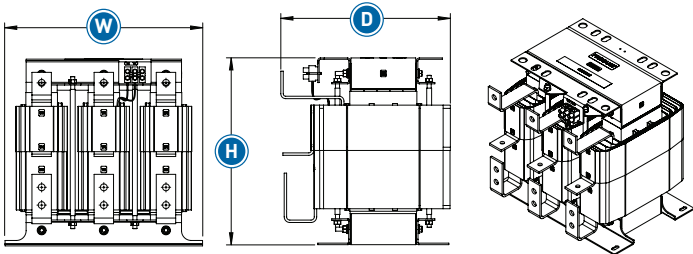
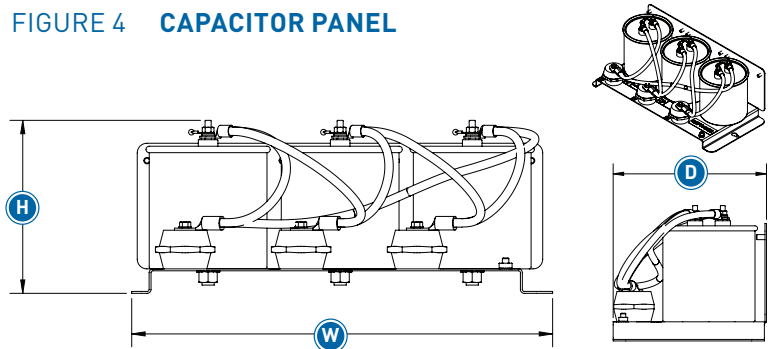


FIGURE 4 CAPACITOR PANEL



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

Motor Protection Filters

dV E-Series

Next level power quality you've come to expect from the power quality experts

dV Sentry®

Next generation dV/dt Filters for motor protection

SineWave Guardian®

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

High Frequency SineWave Guardian®

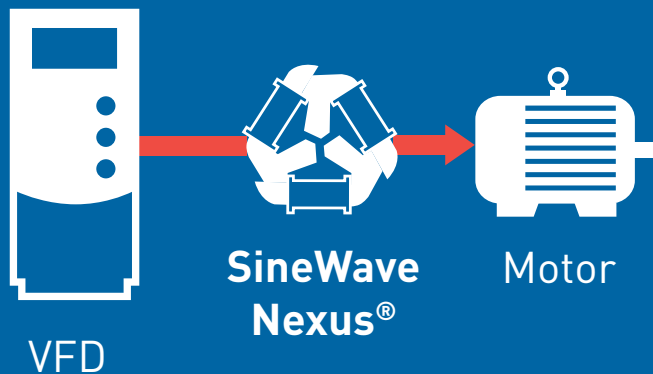
The optimized motor protection solution for high frequency motors

SineWave Nexus®

An integrated solution for both differential and common mode filtering

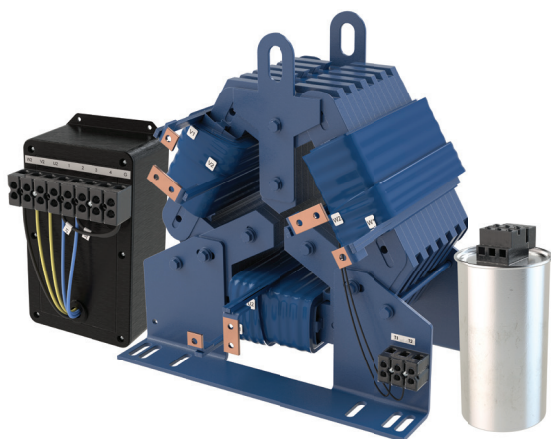
microNexus™

Powerful protection in a small, compact size





SineWave Nexus®



- **Increases motor life**
- **Eliminates motor failures due to bearing currents**
- **Reduces motor noise and heating**
- **Small package solution**
- **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.

MTE
POWER QUALITY. SOLVED.
A STEEL PARTNERS COMPANY

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

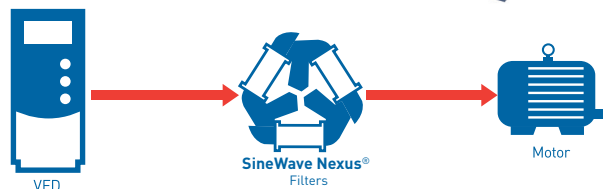
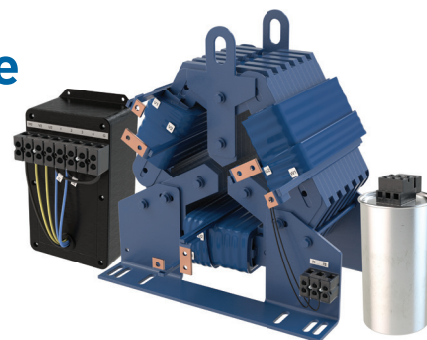
Differential and common mode power quality issues have adverse affects on motors. SineWave Nexus® filters provide complete motor protection - for any application - at any cable length.

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.

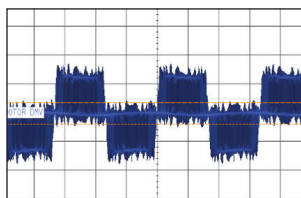
Save time and money associated with sourcing and installing multiple solutions as the all-in-one design combines the performance of a sinewave filter and isolation transformer into one compact solution. The SineWave Nexus also eliminates the need for costly VFD cables.

SineWave Nexus®

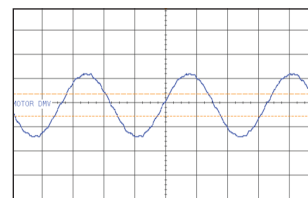


SineWave Nexus Performance:

Total Harmonic Voltage Distortion

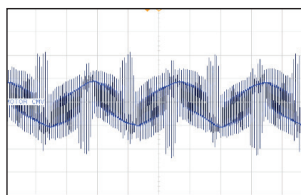


Without SineWave Nexus

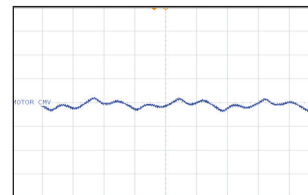


With SineWave Nexus

Common Mode Voltage

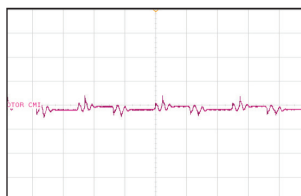


Without SineWave Nexus

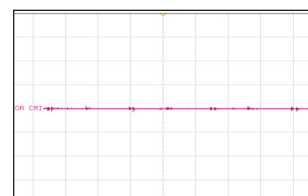


With SineWave Nexus

Common Mode Current



Without SineWave Nexus



With SineWave Nexus

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

Final product specifications subject to change at anytime.



How to properly size your filter

- Determine voltage and frequency requirements
- Reference motor nameplate to determine motor HP or kW and Full Load Amps
- Verify motor meets inverter duty standards per NEMA MG1 Section 31

- Select filter based on Motor Full Load Amps

Do not exceed filter's maximum current rating (amps)

- Specify enclosure style

Open (No enclosure)

NEMA 1/2 (General Purpose Enclosure)

NEMA 3R (Outdoor Enclosure)

- Determine derating requirements

Reference Performance Specifications table on previous page as well as derating tables listed below:

Table 1: Drive Output Frequency Derating

Table 2: Altitude Derating Curve

Derating Curves:

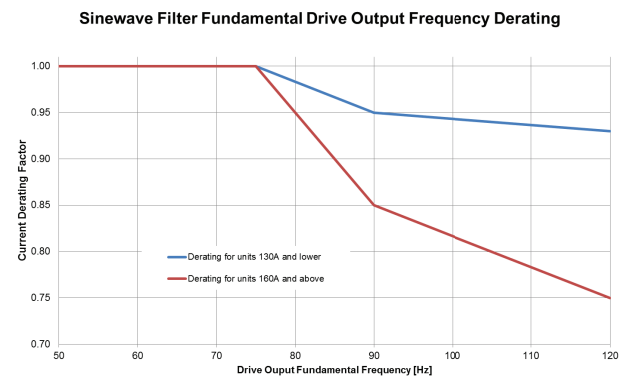


Table 1: Drive Output Frequency Derating

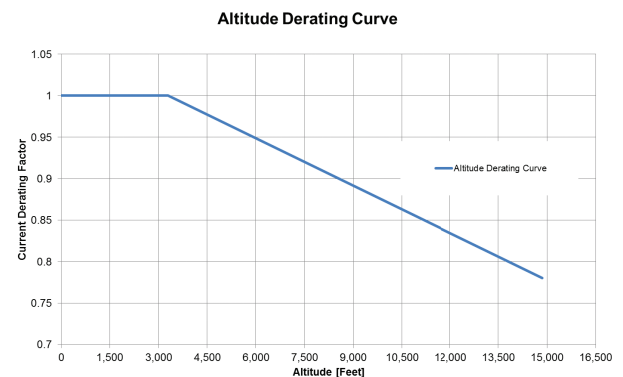


Table 2: Altitude Derating Curve

Understanding the SineWave Nexus®

Part Number:

SWN X _ _ _ X

SineWave Nexus®

Enclosure Type

M=Open Magnetics (No Enclosure)

G=General Purpose (NEMA 1/2)

W=Weather (NEMA 3R)

Current Rating

0005 is 5 Amps

0130 is 130 Amps

Voltage Frequency Code

D (380V – 480V)

E (600V)

SineWave Nexus® SELECTION TABLES

380V - 480V 60Hz														
Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor Dimensions (H x W)		Qty Req'd	Ref Fig
380V kW	480V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
0.55	0.75	2	SWNM0002D	OPEN	8.2 x 6.9 x 4.2	208 x 175 x 107	12	5	8	30	7.5 x 3.0	191 x 76	1	1
			SWNG0002D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	29	13	5		Preinstalled in cabinet			
			SWNW0002D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 854	71	32	6					
0.75	1.5	3	SWNM0003D	OPEN	8.2 x 6.9 x 4.5	208 x 175 x 114	14	6	8	36	7.5 x 3.0	191 x 76	1	1
			SWNG0003D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	31	14	5		Preinstalled in cabinet			
			SWNW0003D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 854	73	33	6					
2.2	3	5	SWNM0005D	OPEN	8.2 x 6.9 x 4.8	208 x 175 x 122	19	9	8	55	7.5 x 3.0	191 x 76	1	1
			SWNG0005D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	71	32	6		Preinstalled in cabinet			
			SWNW0005D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 854	78	35						
5.5	7.5	12	SWNM0012D	OPEN	10.2 x 8.8 x 5.8	259 x 224 x 147	32	15	8	102	7.5 x 3.0	191 x 76	1	1
			SWNG0012D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	83	38	6		Preinstalled in cabinet			
			SWNW0012D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 854	91	41						
7.5	10	17	SWNM0017D	OPEN	13.1 x 11.0 x 6.6	333 x 279 x 168	51	23	9	148	7.5 x 3.0	191 x 76	1	1
			SWNG0017D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	102	46	6		Preinstalled in cabinet			
			SWNW0017D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 854	110	50						
11	15	22	SWNM0022D	OPEN	13.1 x 11.0 x 7.1	333 x 279 x 180	61	28	9	180	7.5 x 3.0	191 x 76	1	1
			SWNG0022D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	112	51	6		Preinstalled in cabinet			
			SWNW0022D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 854	120	54						
-	20	27	SWNM0027D	OPEN	13.1 x 11.0 x 7.1	333 x 279 x 180	62	28	9	207	7.5 x 3.0	191 x 76	1	1
			SWNG0027D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	113	51	6		Preinstalled in cabinet			
			SWNW0027D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 854	121	55						
22	30	45	SWNM0045D	OPEN	13.2 x 11.0 x 7.6	335 x 279 x 193	67	30	9	296	7.5 x 3.9	191 x 99	1	1
			SWNG0045D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	118	54	6		Preinstalled in cabinet			
			SWNW0045D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 854	126	57						
30	50	65	SWNM0065D	OPEN	15.6 x 15.0 x 9.0	396 x 381 x 229	94	43	10	457	8.3 x 4.6	211 x 117	1	1
			SWNG0065D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	174	79	6		Preinstalled in cabinet			
			SWNW0065D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	185	84						
55	75	110	SWNM0110D	OPEN	15.6 x 15.0 x 10.7	396 x 381 x 272	141	64	10	559	8.3 x 4.6	211 x 117	1	1
			SWNG0110D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	221	100	6		Preinstalled in cabinet			
			SWNW0110D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	232	105						
-	100	130	SWNM0130D	OPEN	15.7 x 15.0 x 12.2	399 x 381 x 310	176	80	10	729	8.3 x 3.9	211 x 99	2	1
			SWNG0130D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	225	102	6		Preinstalled in cabinet			
			SWNW0130D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	266	121						
75	125	160	SWNM0160D	OPEN	15.9 x 15.0 x 15.9	404 x 381 x 404	210	95	11	760	8.3 x 3.9	211 x 99	1	1
			SWNG0160D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	385	175	7		8.4 x 4.6	211 x 117	1	
			SWNW0160D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	398	181						
110	150	200*	SWNM0200D	OPEN	22.1 x 18.6 x 19.6	561 x 472 x 498	313	142	12	737	16.4 x 7.6 x 6.7	417 x 193 x 170	1	2
			SWNW0200D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	741	336	7		Preinstalled in cabinet			
132	200	250*	SWNM0250D	OPEN	22.1 x 18.5 x 19.9	561 x 470 x 505	336	152	12	937	16.4 x 7.6 x 6.7	417 x 193 x 188	1	2
			SWNW0250D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	767	348	7		Preinstalled in cabinet			
160	250	305*	SWNM0305D	OPEN	22.1 x 18.7 x 20.9	561 x 475 x 531	412	187	12	949	16.4 x 7.6 x 7.9	417 x 193 x 201	1	2
			SWNW0305D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	834	378	7		Preinstalled in cabinet			
200	350	415*	SWNM0415D	OPEN	22.1 x 18.8 x 22.0	561 x 478 x 559	471	214	12	1144	16.4 x 7.6 x 7.9	417 x 193 x 201	1	2
			SWNW0415D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	896	406	7		Preinstalled in cabinet			

* – To order models with filter amps ratings of 200 – 415 in a NEMA 1/2 cabinet, please contact MTE.

Common Mode Assembly – SineWave Nexus “Open” configurations ship with a Common Mode Assembly box in addition to the filter and capacitor. “Enclosed” configurations ship with the Common Mode Assembly preinstalled in the cabinet. Use the “Common Mode Assembly” table on Page 39 for dimensional info.

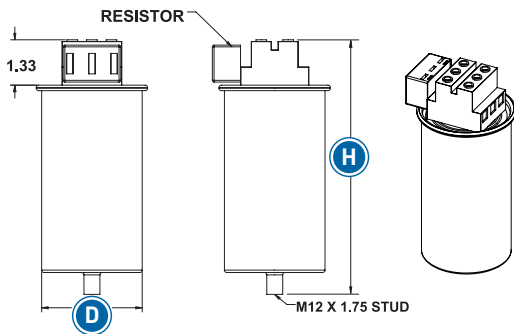
600V 60Hz														
Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor Dimensions (H x W)		Qty Req'd	Ref Fig
600V kW	600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
3	3	5	SWNM0005E	OPEN	10.2 x 8.8 x 5.3	259 x 224 x 135	28	13	8	76	8.3 x 3.0	211 x 76	1	1
			SWNG0005E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	80	36	6		Preinstalled in cabinet			
			SWNW0005E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	87	39						
7.5	10	12	SWNM0012E	OPEN	10.2 x 8.8 x 5.8	259 x 224 x 147	34	15	8	157	8.3 x 3.0	211 x 76	1	1
			SWNG0012E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	85	39	6		Preinstalled in cabinet			
			SWNW0012E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	93	42						
11	15	17	SWNM0017E	OPEN	13.2 x 11.0 x 7.1	335 x 279 x 180	65	29	9	213	8.3 x 3.0	211 x 76	1	1
			SWNG0017E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	116	53	6		Preinstalled in cabinet			
			SWNW0017E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	124	56						
15	20	22	SWNM0022E	OPEN	13.2 x 11.0 x 7.1	335 x 279 x 180	66	30	9	243	8.3 x 3.0	211 x 76	1	1
			SWNG0022E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	117	53	6		Preinstalled in cabinet			
			SWNW0022E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	125	57						
18.5	25	27	SWNM0027E	OPEN	13.2 x 11.0 x 7.6	335 x 279 x 193	76	34	9	268	8.3 x 3.0	211 x 76	1	1
			SWNG0027E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	127	58	6		Preinstalled in cabinet			
			SWNW0027E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	135	61						
30	40	45	SWNM0045E	OPEN	15.7 x 15.0 x 9.1	399 x 381 x 231	99	45	10	458	8.3 x 3.0	211 x 76	1	1
			SWNG0045E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	178	81	6		Preinstalled in cabinet			
			SWNW0045E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	189	86						
45	60	65	SWNM0065E	OPEN	15.7 x 15.0 x 9.7	399 x 381 x 246	114	52	10	467	8.3 x 4.0	211 x 102	1	1
			SWNG0065E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	194	88	6		Preinstalled in cabinet			
			SWNW0065E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	205	93						
75	100	110	SWNM0110E	OPEN	15.7 x 15.0 x 12.3	399 x 381 x 312	178	81	10	910	8.3 x 4.6	211 x 117	1	1
			SWNG0110E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	353	160	7		Preinstalled in cabinet			
			SWNW0110E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	366	166						
90	125	130	SWNM0130E	OPEN	15.8 x 15.0 x 12.1	401 x 381 x 307	177	80	10	930	8.3 x 4.6	211 x 117	1	1
			SWNG0130E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	351	159	7		Preinstalled in cabinet			
			SWNW0130E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	364	165						

Common Mode Assembly – SineWave Nexus “Open” configurations ship with a Common Mode Assembly box in addition to the filter and capacitor. “Enclosed” configurations ship with the Common Mode Assembly preinstalled in the cabinet. Use the “Common Mode Assembly” table below for dimensional info.

Common Mode Assembly					
Voltage Rating	MTE Part Number	Common Mode Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
		Inches	Millimeters		
480V	SWNM0002D - SWNM0003D	3.0 x 5.8 x 3.3	76 x 147 x 84	1	3
	SWNM0005D - SWNM0160D	4.3 x 9.4 x 5.1	109 x 239 x 130	1	2
600V	SWNM0005E - SWNM0160E	4.3 x 9.4 x 5.1	109 x 239 x 130	1	2

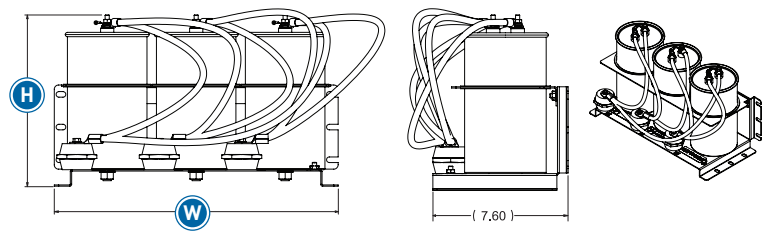
3-PHASE CAPACITOR

FIGURE 1



CAPACITOR PANEL

FIGURE 2



COMMON MODE BOX

FIGURE 3

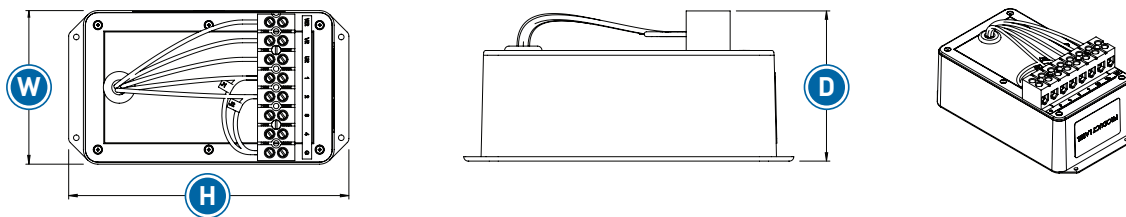
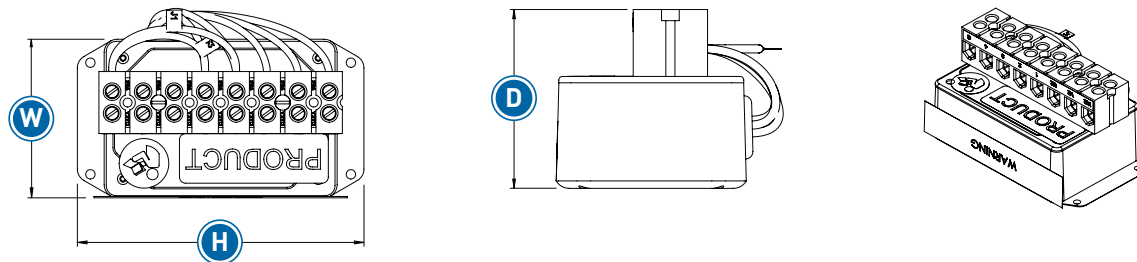
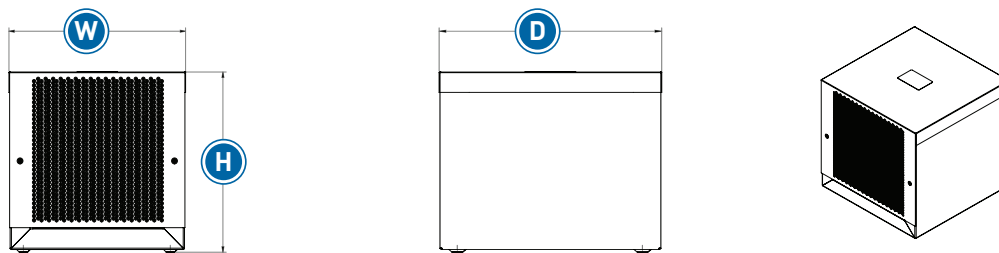


FIGURE 4



ENCLOSURES

FIGURE 5



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

ENCLOSURES

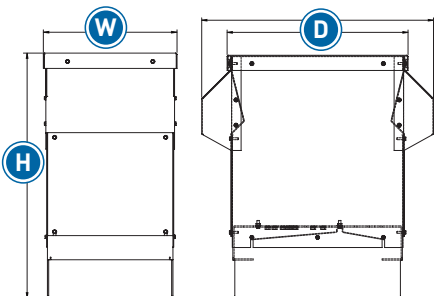


FIGURE 6

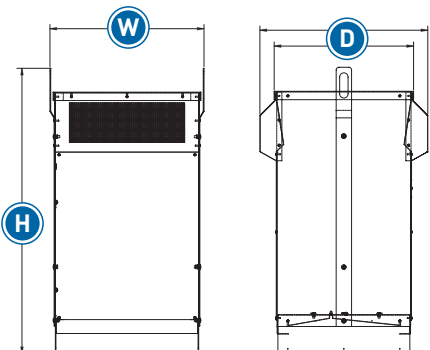
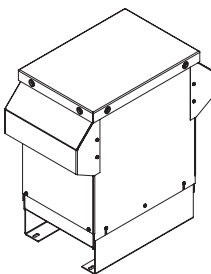
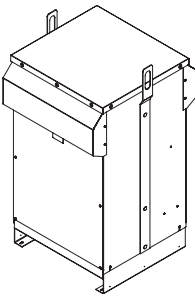


FIGURE 7



(NOTE: HOODS ONLY ON NEMA 3R ENCLOSURES)

(NOTE: HOODS ONLY ON NEMA 3R ENCLOSURES)

OPEN MAGNETICS

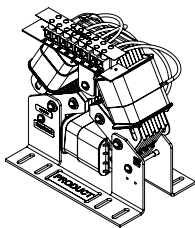
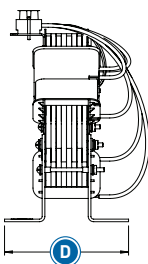
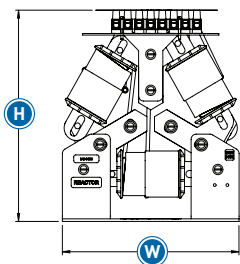


FIGURE 8

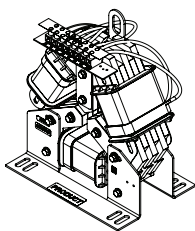
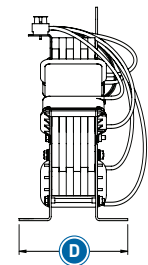
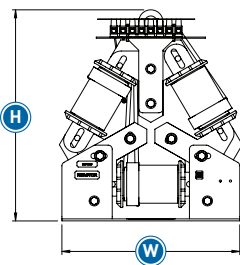


FIGURE 9

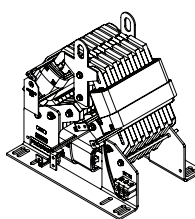
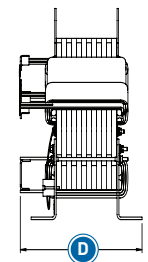
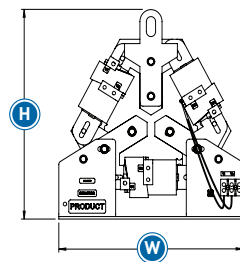


FIGURE 10

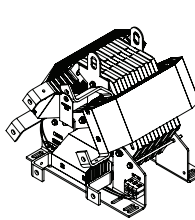
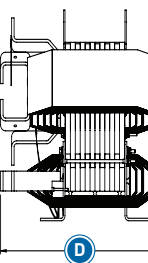
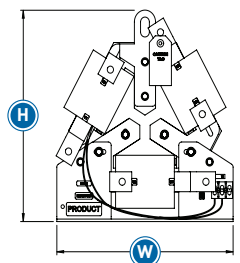


FIGURE 11

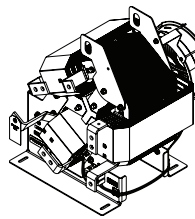
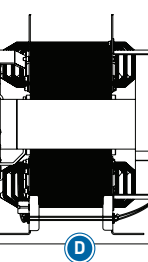
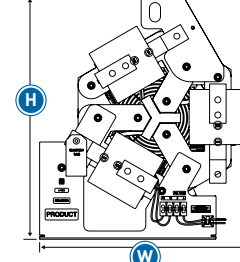


FIGURE 12

Motor Protection Filters

dV E-Series

Next level power quality you've come to expect from the power quality experts

dV Sentry®

Next generation dV/dt Filters for motor protection

SineWave Guardian®

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

High Frequency SineWave Guardian®

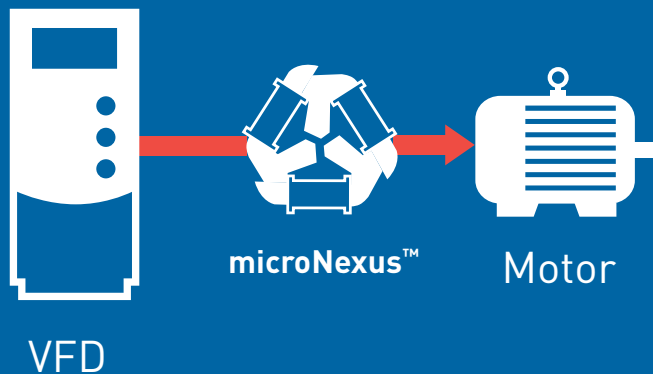
The optimized motor protection solution for high frequency motors

SineWave Nexus®

An integrated solution for both differential and common mode filtering

microNexus™

Powerful protection in a small, compact size





microNexus™



Complete motor protection in a micro-sized package.

- Compact, space-saving form eliminates additional cable trays, wiring, and panel space within VFD cabinets
- Provisions for mounting VFD to front of filter
- Increases motor life by eliminating failures caused by bearing currents
- Reduces motor noise and heating
- Reduces cable heating
- Allows for multiple cables in the same conduit
- Five-year product warranty
- Five-year motor bearing warranty



MTE's microNexus filter takes the proven performance of our award-winning SineWave Nexus and shrinks it down into a **space-saving solution** that integrates into any micro drive application. The microNexus not only eliminates voltage spikes generated by Variable Frequency Drives (VFDs), and reflective waves that cause motor windings and cables to fail, but it also virtually **eliminates common mode voltage** which causes motor bearing failures, cable degradation, and VFD faults. By filtering out damaging common mode voltage, motor bearings are never subject to harmful voltages that cause damaging pitting, frosting, or fluting of bearings, all which lead to motor failure.

microNexus eliminates the need for common mode chokes and inductive absorbers that only temporarily extend motor life. Additionally, there's **no need for shaft grounding rings** which require ongoing maintenance and replacement. With our microNexus, you have a compact electrical solution for big electrical problems.



The optimal solution for compact motor protection.

Applications



Distribution Centers

To efficiently and accurately handle packages, distribution centers use micro drives on a variety of equipment and systems.

Equipment Examples – Belt/steel hinged conveyors, incline/decline conveyors, belt over roller conveyors, condensers, pumps.



Airports

Transporting baggage and people rapidly and safely throughout an airport requires the use of micro drives on many different systems.

Equipment Examples – Baggage conveyors, baggage carousels, people movers, water/wastewater pumps, lighting systems.



Food & Beverage

Food and beverage facilities rely on micro drives within their manufacturing systems to process, handle, transfer and package products for rapid delivery to the marketplace.

Equipment Examples – Conveyors, form/fill/seal systems, tray depositors, filling/capping carousels, packaging, labeling.

Industry Solutions

- **Faster delivery**
- **Less maintenance and downtime**
- **More time for planned maintenance**
- **Fewer damaged shipments**
- **E-commerce growth**
- **Lower maintenance costs**
- **Less food and beverage spoilage**
- **Improved scanning accuracy**
- **Better personnel safety**
- **Better robot safety**

Performance Specifications

Input Voltage	380V - 480V +/- 10%
Current Range	2A - 22A (≤ 1 HP - 15 HP)
Harmonic Voltage Distortion	5% maximum
Inverter Switching Frequency	4kHz
Inverter Operating Frequency	6Hz to 75Hz; >75Hz to 120Hz with derating
Insertion Loss (Voltage)	10% maximum @ 60Hz
Efficiency	>98%
Common Mode Attenuation	-20dB (>90% PWM common mode RMS voltage reduction)
Maximum Sound Level	75dB @ 1 meter
Maximum Ambient Temperature	-40C to +40C / -40C to +90C storage
Altitude Without Derating	3,300 feet above sea level
Maximum Motor Lead Length	15,000 feet
Relative Humidity	0% to 95% non-condensing
Current Rating	100% RMS continuous; 150% for 1 minute intermittent

Final product specifications subject to change at anytime.

How to properly size your filter

- **Determine voltage and frequency requirements**
- **Reference motor nameplate to determine motor HP or kW and Full Load Amps**
- **Verify motor meets inverter duty standards per NEMA MG1 Section 31**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter's maximum current rating (amps)
- **Specify enclosure style**
IP20 Enclosure (Indoor Use Only)
- **Determine derating requirements**
Reference Performance Specifications table on previous page as well as derating tables listed below:

Table 1: Drive Output Frequency Derating

Table 2: Altitude Derating Curve

Derating Curves:

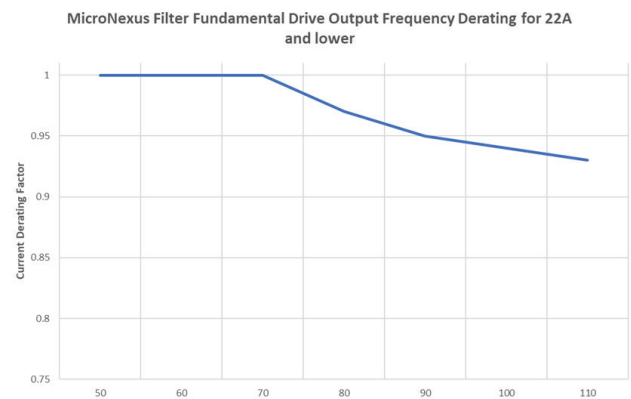


Table 1: Drive Output Frequency Derating

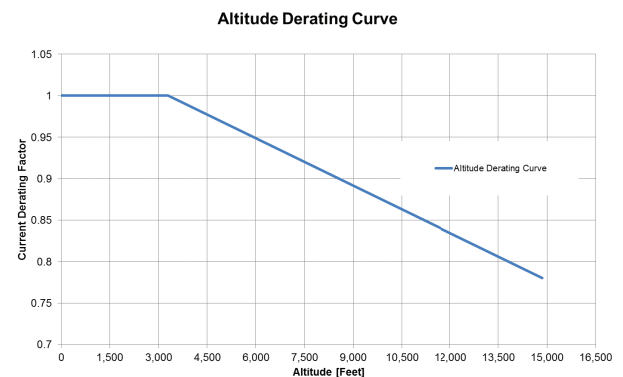


Table 2: Altitude Derating Curve

Understanding the microNexus™

Part Number:

SNU X _ _ _ X

microNexus™ Filter

Enclosure Type

G=General Purpose (IP 20)

Current Rating

0005 is 5 Amps

0130 is 130 Amps

Voltage Frequency Code

D (380V – 480V)

380 – 480V 60Hz										
Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss
380V kW	480V HP				Inches	Millimeters	Lbs	Kgs		
0.55	0.75	2	SNUG0002D	IP20	12.8 x 3.3 x 7.1	325.1 x 83.8 x 180.3	10	5	1	33
0.75	1.5	3	SNUG0003D	IP20	12.8 x 3.3 x 7.1	325.1 x 83.8 x 180.3	11	5	1	41
2.2	3	5	SNUG0005D	IP20	12.8 x 3.3 x 7.1	325.1 x 83.8 x 180.3	11	5	1	55
3	4	7	SNUG0007D	IP20	12.8 x 3.3 x 7.1	325.1 x 83.8 x 180.3	12	6	1	75
4	5.5	9	SNUG0009D	IP20	14.3 x 5.7 x 9.1	363.2 x 144.8 x 231.1	21	10	2	80
5.5	7.5	12	SNUG0012D	IP20	14.3 x 5.7 x 9.1	363.2 x 144.8 x 231.1	23	11	2	84
7.5	10	17	SNUG0017D	IP20	14.3 x 5.7 x 9.1	363.2 x 144.8 x 231.1	23	11	2	108
11	15	22	SNUG0022D	IP20	14.3 x 5.7 x 9.1	363.2 x 144.8 x 231.1	24	11	2	126

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

FIGURE 1

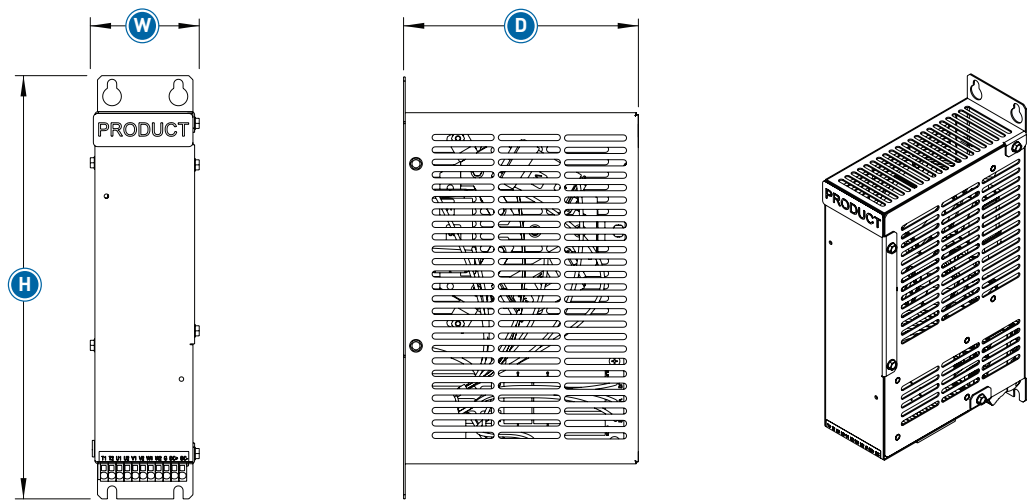
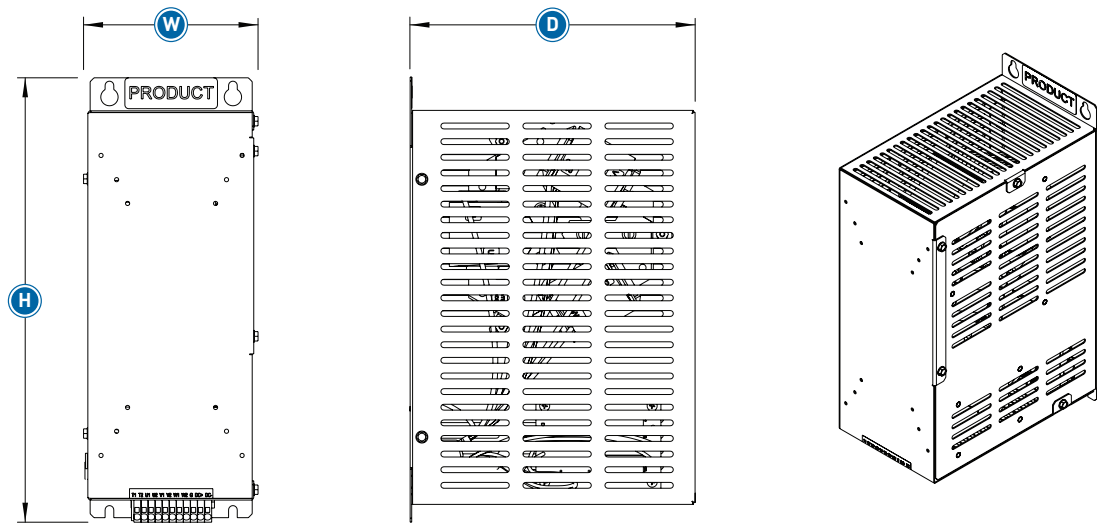


FIGURE 2



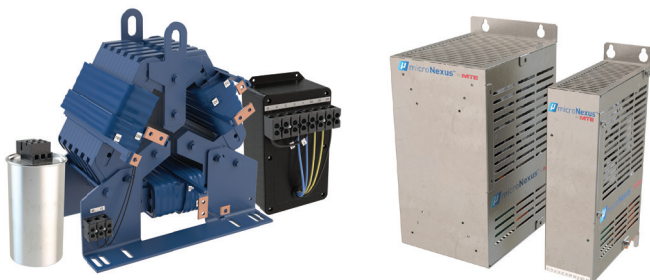
Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

NEXUS WARRANTY

**Protect Your Motor Bearings from Harmful Electrical Fluting Damage -
GUARANTEED**

Product Overview

The SineWave Nexus® and microNexus™ filters are the optimal solution for reducing common mode and differential mode voltages and currents. These filters provide complete motor protection - for any application - at any cable length.



Nexus Product Benefits

- Only comprehensive motor protection solution on the market
- Eliminates common mode and differential mode noise
- Pricy “VFD” cable and insulated bearings not required
- Extends the life of non-inverter and inverter duty motors
- Combines the protection of an isolation transformer and sinewave filter in one compact solution
- Ideal solution for critical applications and hazardous (Class 1&2) locations

Warranty Overview

MTE Corporation warranties AC induction motor bearings against failure from electrical fluting damage when MTE's SineWave Nexus or microNexus filters have been installed with a new motor. If damage does occur, MTE will pay the current Vaughen's National Average Price for “Furnish/Install 2 Standard Ball Bearings” and will also replace the SineWave Nexus or microNexus filter.



Warranty Requirements

- The SineWave Nexus or microNexus filters must be connected in common mode assembly DC bus configuration to assure low impedance filter connection back to the drive.
- New bearings or a new unused motor must be installed at the time of initial application of the SineWave Nexus or microNexus filter for the warranty to be valid.
- There must be an approved registration within one (1) month of system commissioning. The warranty begins after registration approval and lasts for 5 years.



For full warranty details and a registration form, scan the QR code or visit: www.mtecorp.com

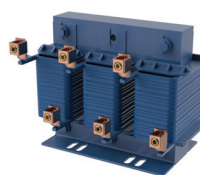
Our Products

REACTOR PRODUCTS



RL Reactors

The RL family of line and load reactors is unequalled in absorbing power line disturbances to reduce nuisance tripping, reduce harmonic distortion, and minimize long lead effects.



RLW Reactors

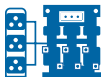
The RLW family of line and load reactors provides an engineered solution to protect electrical systems against harmful and annoying power distortions.



DC Link Chokes

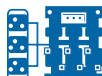
Designed to be added to a VFD's internal bridge and bus, DC Link Chokes help reduce AC input line current harmonic distortion while absorbing DC bus voltage spikes.

HARMONIC MITIGATION FILTERS



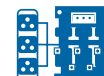
Matrix® AP

The Matrix® AP is the most advanced passive filter on the market to meet IEEE-519. Its patented Adaptive Passive Technology adapts to varying loads to virtually eliminate harmonics.



Matrix® ONE

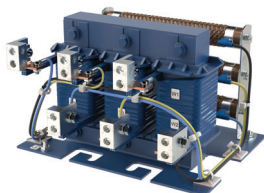
Matrix® ONE single phase filters are optimized to work in remote and rural areas where three phase power is not available.



Matrix® E-Series

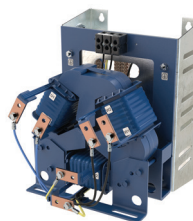
The Matrix® E-Series harmonic filter meets the international harmonic distortion requirement of 10%-15% while also supporting the compliance of IEEE-519.

MOTOR PROTECTION FILTERS



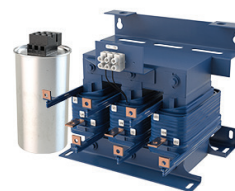
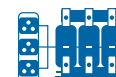
dV E-Series

The dV E-Series is lighter, more efficient, and runs cooler than other dV/dt solutions making it the optimal solution for leads less than 1,000 ft.



dV Sentry®

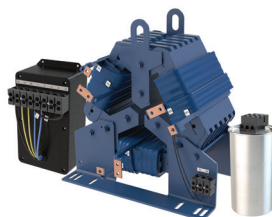
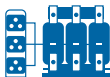
The dV Sentry® and its patented Triple Defense Core is proven to reduce common mode, protect against peak voltage, and reduce rise time – all-in-one unit.



SineWave Guardian®

This best-in-class filter cleans up the PWM waveforms generated by VFDs. It virtually eliminates high frequency content and voltage peaks to reduce motor downtime.

***Also available for High Frequency and Permanent Magnet Motors**



SineWave Nexus®

SineWave Nexus® filters eliminates common mode voltage which causes motor bearing failures such as pitting, frosting, or fluting damage - up to 15,000 feet.



microNexus™

The microNexus takes the unparalleled performance of our SineWave Nexus and shrinks it down into a space-saving solution that integrates into any micro drive application.

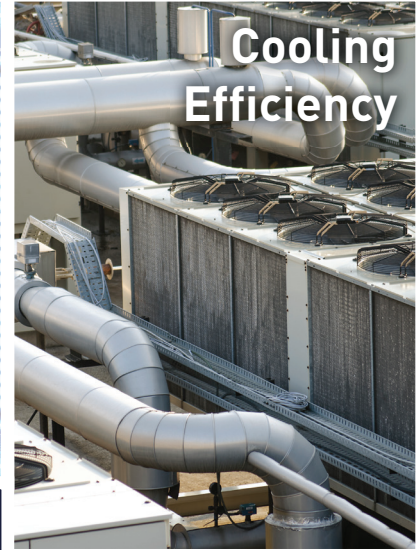
Energy Resilience



Cloud Uptime



Cooling Efficiency



Expedited Delivery

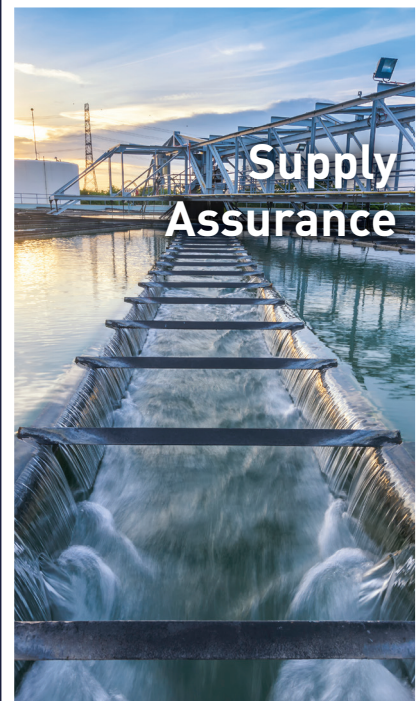


Trusted by leading industries.

At MTE, we leverage our know-how to provide not just any solution, but the perfect solution customized to fit even the most demanding industries. As the power quality partner of choice for hundreds of leading companies, we protect your most valuable assets by combining our knowledge, expertise, and support to increase uptime and improve your bottom line.

Whatever the power quality problem, **MTE is the trusted solution.**

Supply Assurance



Food Safety



Production Uptime



Motor Protection Filters

Product Catalog



MTE Corporation
(800) 455-4683 • (262) 253-8200
Scan QRC for home page.

MTE-CAT-MP-E 1023



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A STEEL PARTNERS COMPANY