# The ideal dV/dt solution for essential motor protection.

A proven filter that eliminates reflective wave, provides peak voltage protection, and rise time reduction for any application out to 1,000 ft of cable.

#### **Triple Protection**

- 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

#### **dV E-Series Benefits:**

- Prevents damage to motor windings
- Protects against premature motor insulation failure
- Extends the life of the cable





#### **dV E-Series Features:**

#### Low Watts (Heat) Loss

- Protects surrounding equipment
- Ideal for harsh environments
- Less cooling needed
- Operates temperature up to 60° C

#### Size-Optimized Design

- Small footprint allows integrators to easily design into their applications
  - Standard kit offering allows for further integration
- Lightweight makes it simple to move and install
- Enhanced resistor protection on all panel mounted filters up to 110A

#### **Easy Installation**

- Easy and convenient terminations make installation faster and effortless
- Mounting hole positions allow for easy replacement of existing dV/dt filters

#### Quiet

- Runs less than 65dB
- As quiet as a normal conversation

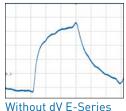
#### **Includes a Three-Year Warranty**

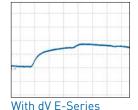




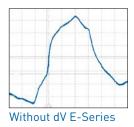
### **dV E-Series Product Guide**

#### **Peak Rise Protection:**





Rise Time Reduction:





The dV E-Series Product Line:

Voltages: 208V to 600V, 50/60Hz

Currents: 3A to 750A

Configurations: Kit, Open Panel, NEMA 1/2 and

NEMA 3R

- Kit design for all ratings. Resistor assembly and reactor provided separately.
- Panel design for all ratings. Resistors located under steel for enhanced protection up to 110A.
- Back Panel Mountable with four easily accessible mounting holes.
- Optimized design provides a compact, lightweight, and low watts loss solution.

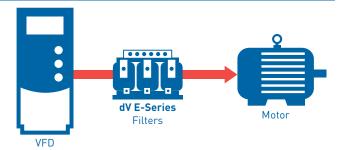
## DV E-SERIES PERFORMANCE GUARANTEE

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 lenght does not exceed 1,000 ft.
- Carrier frequency is 4 kHz.

#### MTE Motor Protection Portfolio

Solution	Cable Length (feet)	Total Harmonic Voltage Distortion (THVD)	Common Mode Attenuation
dV E-Series	1,000′	- Peak Voltage: <150% of DC bus voltage - Rise Time: >0.1µS	None
dV Sentry®	1,000'	- Peak Voltage: <150% of DC bus voltage - Rise Time: >0.1µS	>50% peak current reduction
SineWave Guardian®	15,000°	5% @ 2kHz	None
SineWave Nexus®	15,000′	5% @ 4kHz	>90%



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