

Harmonic Filters **Matrix[®] E-Series**

Quality, convenient solutions for
reducing harmonic distortion



- **Meets essential harmonic distortion requirements**
- **Flexible, compact design**
- **Easy to integrate and install**
- **Extends the service life of electrical equipment**

Performance you can count on - at an affordable cost.

The patented Matrix[®] E-series is the latest in a long line of highly effective harmonic filters from MTE. The E-series delivers the performance you've come to expect out of a Matrix filter without being over engineered. It is an affordable solution to managing unwanted harmonic distortions - such as nuisance tripping of circuit breakers, inaccurate measurements on sensors, overheating of components, and system downtime - generated by Variable Frequency Drives (VFDs).

The Matrix E-Series features a flexible design that is compact and robust, making it easy to integrate and install in nearly any application. Power quality, energy efficiency, and reduced downtime are easy to achieve with the new Matrix E-Series from MTE.

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

Patented design with reliable components provides harmonic mitigation and reduced THID (Total Harmonic Distortion) where you need it most.

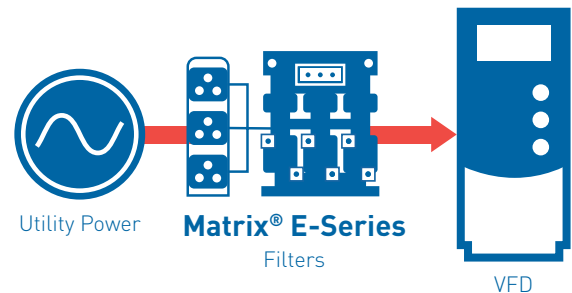
Affordable solution that is easy to install and maintain.

Improves system efficiency and reliability to lower total cost.

Helps extend service life of electrical equipment and transformers.

Alleviates system downtime by preventing blown fuses and tripped circuit breakers.

Matrix® E-Series

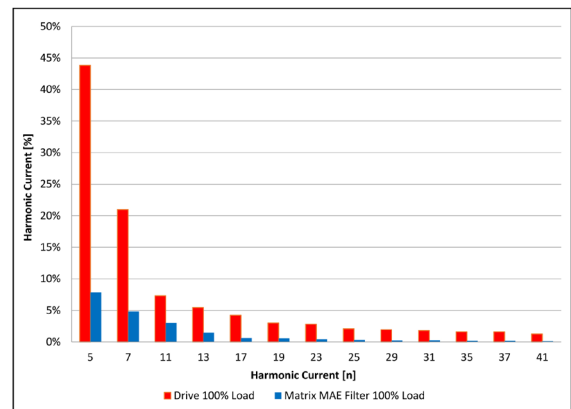


Performance Specifications

Service Load Condition	Load: 6-pulse rectifier only
Input Voltage	380V - 415V +/- 10%; 50 + 0.75Hz; 3-phase 480V +/- 10%; 60 + 0.75Hz; 3-phase
Current Range	6A - 320A (1.1 KW - 150 KW; 3HP - 250HP)
Maximum THID With DC Link Choke or Reactor Without DC Link Choke or Reactor	8% @ full load; 12% @ 40% load 12% @ full load; 17% @ 40% load
System Power Conditions at Rated Power	THVD: <2% Line Voltage Unbalance: <1%
Source Impedance	Maximum: 6% Minimum: 1.5%
Maximum Output Voltage at No Load (RMS Peak)	+5%
Minimum Output Voltage at Full Load (RMS Peak)	-5%
Service Factor	1.00
Maximum Ambient Temperature	-40C to +50C open panel filters -40C to +90C storage
Insertion Loss @ Full Load	<5%
Efficiency	>98%
Altitude Without Derating	3,300 feet above sea level
Relative Humidity	0% to 95% non-condensing
Current Rating	150% for 1 minute duration

Product specifications subject to change at anytime.

Matrix® E-Series Harmonic Spectrum Chart



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