

# Single Phase Matrix<sup>®</sup> ONE

Optimized harmonic filters with  
proven harmonic mitigation



- **Extends the service life of electrical equipment**
- **Reduces system downtime**
- **Easy to install and maintain**
- **Increases energy efficiency**
- **Three-year warranty**

## Power quality you can count on.

The Single Phase Matrix<sup>®</sup> ONE Filter provides reliable harmonic protection in environments where utility power may not be optimal. MTE has built the Single Phase Matrix ONE Filter with time-tested components to work in rural, remote areas where three phase power is often not available. Its patented technology reduces harmonic distortion allowing your equipment to run with increased energy efficiency and better overall THID performance.

The Matrix ONE is designed to generate less heat and reduce system downtime. Easy to install and maintain, the Single Phase Matrix ONE produces the protection you need to extend the service life of your equipment.

# Improve power quality and reduce downtime with our optimized single phase harmonic filters.



The Single Phase Matrix<sup>®</sup> ONE Filter is proven to produce harmonic mitigation for your VFD or other single phase power applications.

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

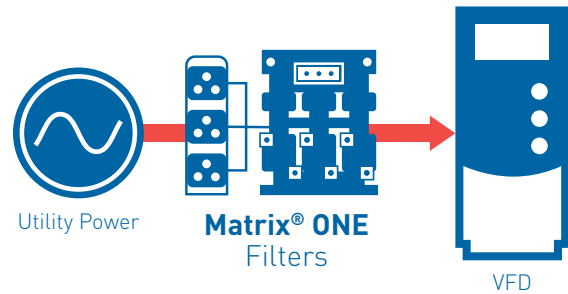
**Low cost solution** that is easy to install and maintain.

**Performance** that is able to withstand harsh and remote conditions.

**Extends service life of equipment** by reducing heat, and improving system efficiency.

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

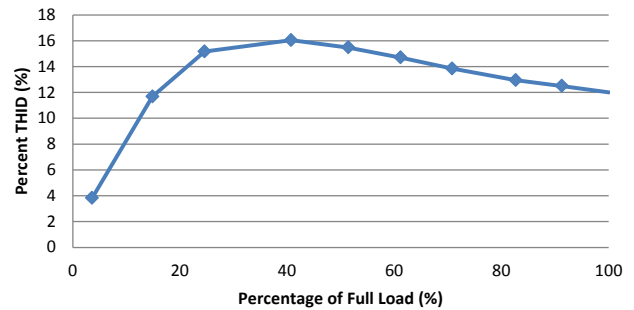
## Matrix<sup>®</sup> ONE



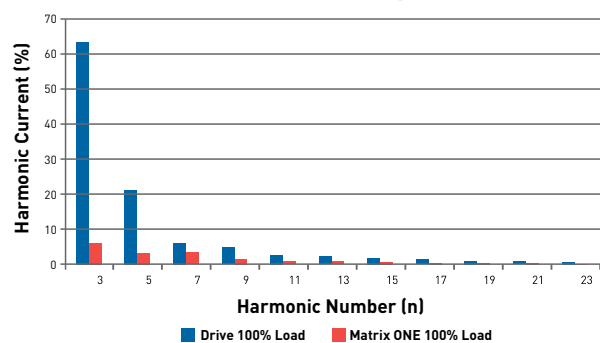
Performance Specifications	
Service Load Condition	<b>Load: typically a 4-pulse rectifier</b>
Input Voltage	<b>240V +/- 10%; 60 + 0.75Hz; 1-phase 480V +/- 10%; 60 + 0.75Hz; 1-phase</b>
Current Range	<b>240V: 17A - 620A (3<sub>HP</sub> - 150<sub>HP</sub>) 480V: 8A - 310A (3<sub>HP</sub> - 150<sub>HP</sub>)</b>
Maximum THID	<b>12% @ Full Load</b>
Maximum Ambient Temperature	<b>-40C to +50C open panel filters; -40C to +40C enclosed filters; -40C to +90C storage</b>
Insertion Load	<b>+10% no load; -10% full load</b>
Efficiency	<b>97% - 99%</b>
Altitude Without Derating	<b>3,300 feet above sea level</b>
Relative Humidity	<b>0% to 95% non-condensing</b>
Overload	<b>150% for 1 minute duration</b>

Final product specifications subject to change at anytime.

Matrix<sup>®</sup> ONE THID Performance (%)



Matrix<sup>®</sup> ONE Harmonic Spectrum Chart



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