

# Harmonic Filters Matrix<sup>®</sup> AP

Adaptive Passive Technology for  
superior harmonic mitigation  
at varying loads



- **Adapts to varying power loads**
- **Best performance in the industry**
- **Extends the service life of electrical equipment**
- **Generator compatible**
- **Performance guarantee**

## The key to success: adapt.

Simply put, our Matrix<sup>®</sup> AP is the most advanced passive filter on the market today. Most traditional filters work fine at 100% power load, but severely underperform at lower loads. Matrix AP is different, because we know almost no one runs at full load all the time. Its patented Adaptive Passive Technology virtually eliminates harmonic distortion by adapting to varying power loads. It delivers better THID performance, increases energy efficiency, and allows you to meet IEEE-519 requirements.

Its unique design generates less heat, and is easy to install and maintain. Plus it is generator compatible. With Matrix AP Harmonic Filters, power quality, energy efficiency and reduced downtime are easy to achieve.

# Improve power quality and reduce downtime with our patented Adaptive Passive Technology.



The best-in-class Matrix® AP Harmonic Filters can be specified for use on the input of your VFD or other 6-pulse rectifier power supply to enable your system to meet the IEEE-519 requirements for harmonic distortion, regardless of power load.

**Features our patented Adaptive Passive Technology** for superior harmonic mitigation and better THID performance over a wider load range.

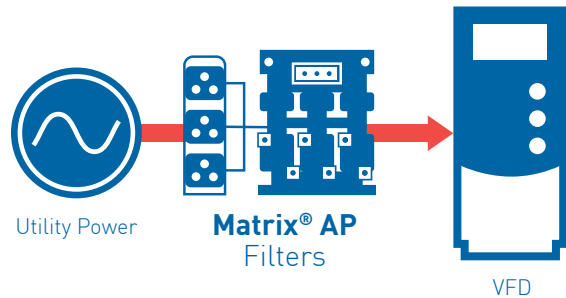
**MTE performance guarantee** provides peace of mind that the Matrix AP will meet or exceed performance expectations - every time.

**Extends service life of electrical equipment**, especially transformers and motors, due to the virtual elimination of CEMF and the skin effect.

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

**Industry leading THREE year warranty** because the best products deserve the best warranty.

## Matrix® AP

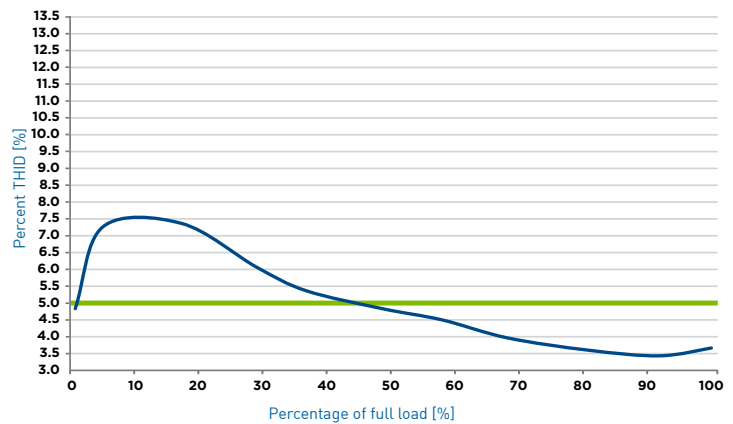


Performance Specifications	
Service Load Condition	<b>Load: 6-pulse rectifier only</b>
Input Voltage	208 - 240V +/- 10%; 60 Hz; 3-phase 380 - 415V +/- 10%; 50 Hz; 3-phase 480V +/- 10%; 60 Hz; 3-phase 600V +/- 10%; 60 Hz; 3-phase 690V +/- 10%; 50 Hz; 3-phase
Current Range	208 - 240V: 6A - 403A (3 HP - 150 HP) 380 - 415V: 6A - 1200A (1.1 KW - 600 KW) 480V: 6A - 2300A (3 HP - 1850 HP) 600V: 6A - 786A (5 HP - 800 HP) 690V: 52A - 636A (37 KW - 450 KW)
Maximum THID	<b>8% @ 30% load; 5% @ full load</b>
Maximum Ambient Temperature	-40C to +50C open panel filter -40C to +40C - 45C enclosed filter -40C to +90C storage
Insertion Loss @ Full Load	<b>&lt;4%</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>
Current Rating	<b>150% for 1 minute duration</b>

Final product specifications subject to change at anytime.



### MTE vs. Competition THID [%]



Matrix AP Harmonic Filters can help ensure that your system meets the IEEE-519 requirements for harmonic current.



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