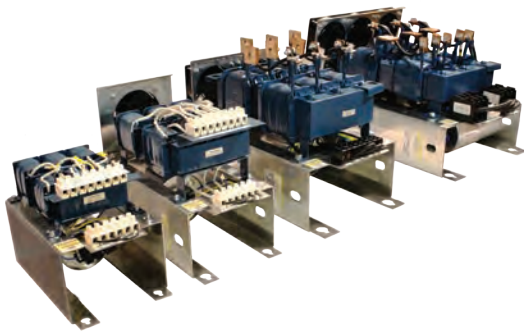


Harmonic Filters **Matrix® APAX**

Product Selector



- **Compact passive harmonic filter**
- **Meets 10%–15% harmonic distortion requirements**
- **Over temperature switch included**
- **Easy to integrate and install**
- **Designed in the USA**

Power quality just got easier to achieve.

The patented Matrix® APAX is the convenient solution for meeting specific harmonic distortion requirements. Designed in the USA and built to meet MTE's proven standards for quality, the Matrix® APAX helps reduce harmonic distortions caused by Variable Frequency Drives (VFDs).

It features a one-panel design with fewer connections and optional contactor positions. This makes it easier to integrate and easier to install. With Matrix® APAX Harmonic Filters, power quality, energy efficiency and reduced downtime are easy to afford.

The convenient, easy-to-install solution for harmonic filtering.

The Matrix® APAX Harmonic Filter can be specified for use on the input of your VFD or other 6-pulse rectifier power supply to meet the 10%–15% requirement for harmonic distortion.

Improves system efficiency and reliability

Helps extend service

Alleviates system downtime

| Performance Specifications | |
|-----------------------------|--|
| Service Load Condition | Load: 6-pulse rectifier only |
| Input Voltage | 380V – 415V +/- 10%; 50 + 0.75Hz; 3-phase |
| Maximum THID | With DC link: 12% @ 40% load; 8% @ full load Without DC link: 17% @ 40% load; 12% @ full load |
| Maximum Ambient Temperature | -40°C to +50°C open panel filters -40°C to +90°C 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 |
| Fan Life Expectancy | 80,000 hours @ 40C |

Final product specifications subject to change at any time.

How to properly size your filter

- **Determine voltage and frequency required**
- **Reference motor nameplate to determine motor HP or kW and Full Load Amps**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter’s maximum current rating (amps)
- **Determine derating requirements**
Reference Performance Specifications table on previous page

Matrix® APAX Options

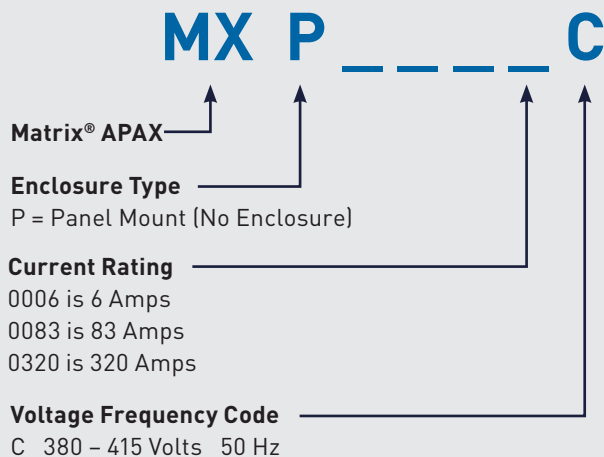
Contactor Wiring Option: Opens capacitors under light load conditions

- User configurable wiring block (See image below)
- Allows for user to disconnect option to meet their application
- Shipped with factory installed jumpers that must be removed for installation of contactor option



Matrix® APAX Harmonic Filter comes standard with field installable contactor options.

Understanding the Matrix® APAX Part Number:



| 385 - 415V 50Hz | | | | | | | | | | | |
|---------------------|--------------------------|--------------------|-------------------|----------------------------------|-----------------|------------------|-----|------------|---------------|---|-------------|
| 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) | |
| | | | | Inches | Millimeters | Lbs | Kgs | | | Inches | Millimeters |
| 1.1 - 2.2 | 6 | MXP0006C | OPEN | 12.6 x 7.4 x 8.9 | 320 x 188 x 226 | 20 | 9 | 1 | 65 | Preinstalled on reactor panel | |
| - | 8 | MXP0008C | OPEN | 12.6 x 7.4 x 8.9 | 320 x 188 x 226 | 24 | 11 | 1 | 74 | Preinstalled on reactor panel | |
| 3.7 | 11 | MXP0011C | OPEN | 12.6 x 7.4 x 9.1 | 320 x 188 x 231 | 30 | 14 | 1 | 94 | Preinstalled on reactor panel | |
| 5.5 | 14 | MXP0014C | OPEN | 12.6 x 7.4 x 9.3 | 320 x 188 x 236 | 33 | 15 | 1 | 106 | Preinstalled on reactor panel | |
| 7.5 | 21 | MXP0021C | OPEN | 17.4 x 7.6 x 11.4 | 442 x 193 x 290 | 39 | 18 | 2 | 192 | Preinstalled on reactor panel | |
| 11 | 27 | MXP0027C | OPEN | 17.4 x 7.6 x 11.4 | 442 x 193 x 290 | 43 | 20 | 2 | 212 | Preinstalled on reactor panel | |
| 15 | 34 | MXP0034C | OPEN | 17.4 x 7.6 x 11.4 | 442 x 193 x 290 | 47 | 21 | 2 | 205 | Preinstalled on reactor panel | |
| 18.5 - 22 | 44 | MXP0044C | OPEN | 17.4 x 7.6 x 11.4 | 442 x 193 x 290 | 53 | 24 | 2 | 270 | Preinstalled on reactor panel | |
| - | 52 | MXP0052C | OPEN | 20.0 x 10.6 x 12.5 | 508 x 269 x 318 | 73 | 33 | 3 | 278 | Preinstalled on reactor panel | |
| 30 | 66 | MXP0066C | OPEN | 20.0 x 10.6 x 12.2 | 508 x 269 x 310 | 78 | 35 | 3 | 359 | Preinstalled on reactor panel | |
| 37 - 45 | 83 | MXP0083C | OPEN | 20.0 x 10.6 x 13.1 | 508 x 269 x 333 | 92 | 42 | 3 | 378 | Preinstalled on reactor panel | |
| 55 | 103 | MXP0103C | OPEN | 20.0 x 10.6 x 13.8 | 508 x 269 x 351 | 104 | 47 | 3 | 397 | Preinstalled on reactor panel | |
| - | 128 | MXP0128C | OPEN | 20.2 x 10.6 x 14.3 | 513 x 269 x 363 | 115 | 52 | 3 | 480 | Preinstalled on reactor panel | |
| 75 - 90 | 165 | MXP0165C | OPEN | 25.5 x 14.8 x 14.3 | 648 x 376 x 363 | 145 | 66 | 4 | 668 | Preinstalled on reactor panel | |
| 110 | 208 | MXP0208C | OPEN | 25.6 x 14.8 x 14.6 | 650 x 376 x 371 | 163 | 74 | 4 | 732 | Preinstalled on reactor panel | |
| - | 240 | MXP0240C | OPEN | 25.6 x 14.8 x 15.7 | 650 x 376 x 399 | 193 | 88 | 4 | 768 | Preinstalled on reactor panel | |
| 150 | 320 | MXP0320C | OPEN | 25.8 x 14.8 x 15.6 | 655 x 376 x 396 | 209 | 95 | 4 | 929 | Preinstalled on reactor panel | |

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

OPEN MAGNETICS

FIGURE 1

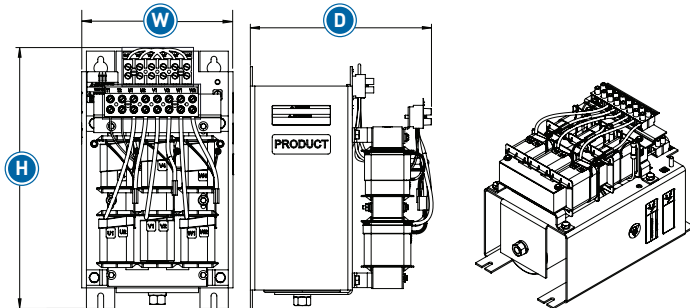


FIGURE 2

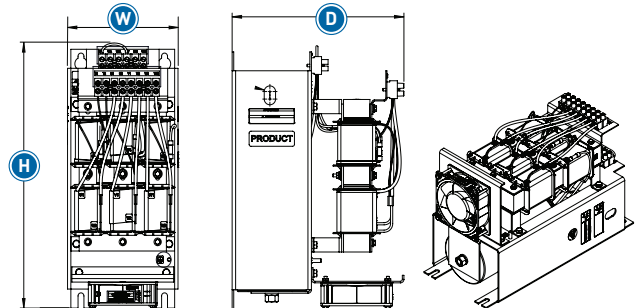


FIGURE 3

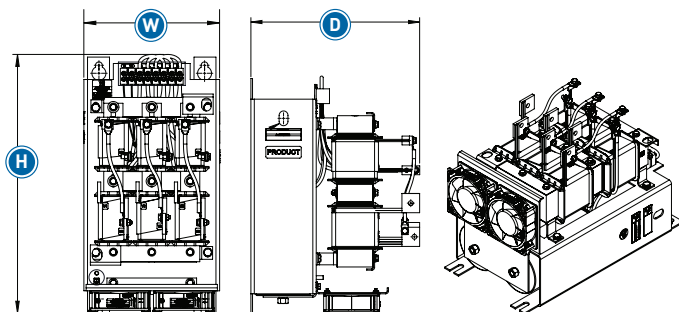
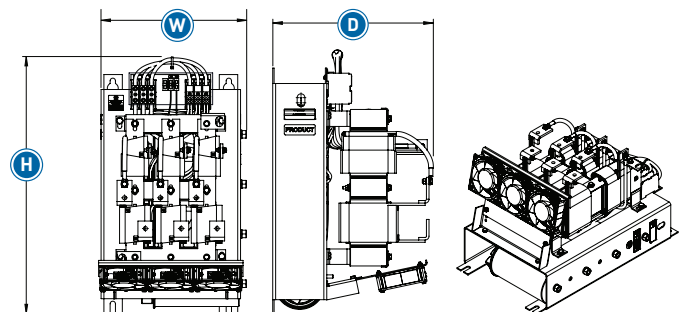


FIGURE 4



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