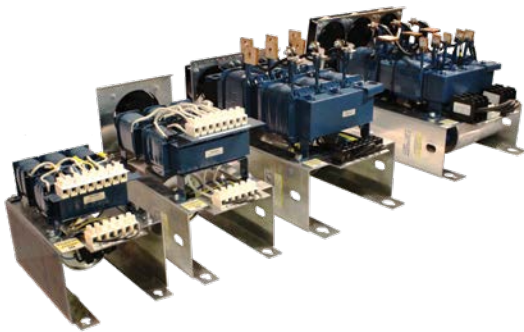


Harmonic Filters **Matrix® APAX**

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
Current Range	6A - 320A (1.5 KW - 150 KW)
Maximum THID*	8% @ full load 12% @ 40% load
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
Fan Life Expectancy	80,000 hours @ 40C

Product specifications subject to change at anytime.
 * On systems with a DC link choke or reactor.
 † Also available in 380V;60Hz. Contact MTE for details.
 ‡ Insertion loss for the 380V;60Hz version can measure up to 6-7%.

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

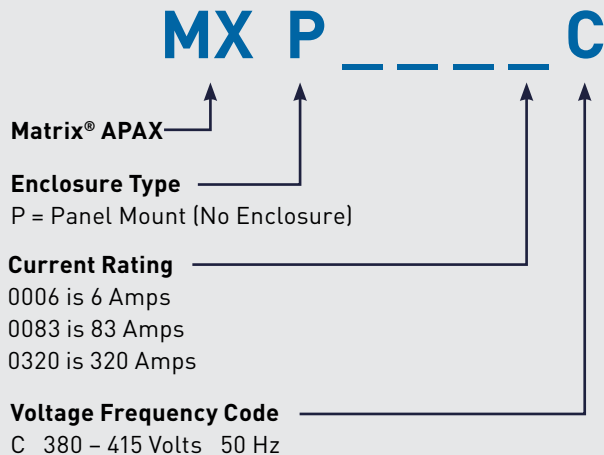
Contactor Wiring Option: Opens capacitors under light load conditions

- 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

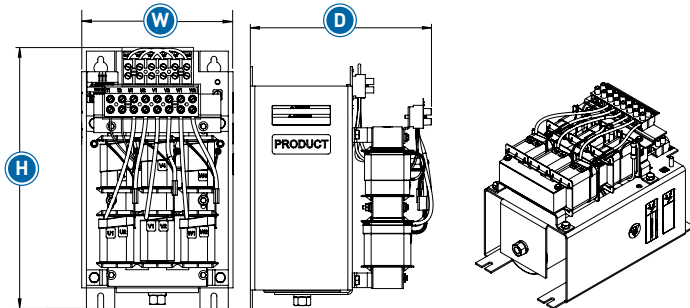


FIGURE 2

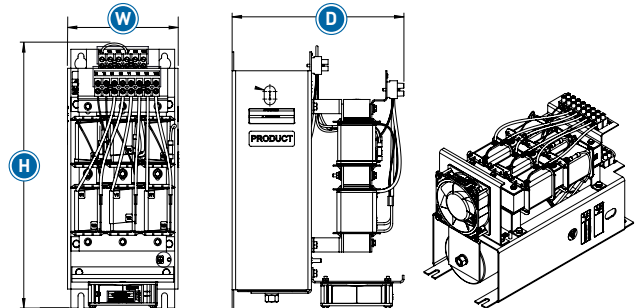


FIGURE 3

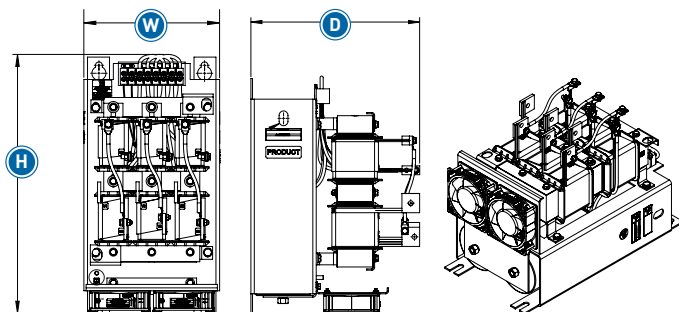
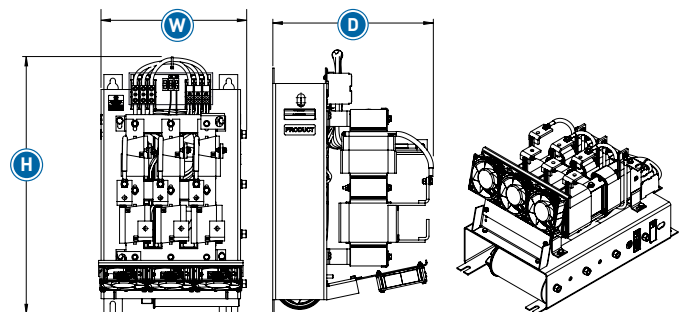


FIGURE 4



Note: Figure illustrations are for reference only. Actual hardware may differ.