

www.seestudioinc.com P: 619.606.5058

E: designgroup@seestudioinc.com

#### SPECIAL SEISMIC CERTIFICATION

## CERTIFICATE OF COMPLIANCE

MANUFACTURER: MTE Corporation

PRODUCT TYPE: Motor Control Filters

MODEL LINE: Matrix AP Filters

This is to certify that MTE Corporation has qualified for Special Seismic Certification in accordance with:

## 2015 INTERNATIONAL BUILDING CODE

Certification has been conducted in compliance with ICC Evaluation Service Document AC156 "Acceptance Criteria for Seismic Certification by Shake-Table Testing of Nonstructural Components" via tri-axial shake table testing at a laboratory accredited by the ANSI-ASQ National Accreditation Board/ANAB to ISO 17025 and under the review of the seismic qualification engineer, SEEStudio, Inc.

The following model designations, options, and accessories are included in this certification. Reference report number 12337-1301 as issued by Dynamic Certification Laboratories for a complete list of certified models, included accessories/options, and certified installation methods

## **EQUIPMENT MANUFACTURER**

Name: MTE Corporation

Address: 4350 Executive Dr, Suite 315, San Diego, CA 92121

Contact: Roderick Harvey Phone: 858.366.7500

Email: roderick.harvey@mtecorp.com

#### **TEST LABORATORY**

Name: Dynamic Certification Laboratories

Address: 1315 Greg St. Suite 109 Sparks, NV 89431

Contact: Joseph L. La Brie, S.E.

## CERTIFICATION ENGINEER

Name: SEEStudio, Inc.

Address: 1281 9<sup>th</sup> Ave. Suite 1101, San Diego, CA 92101

Contact: Dan Junker, SE Phone: 619.606.5058

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S E E T O M O R R O W B U I L T T O D A Y

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PRODUCT TYPE: Motor Control Filters

MODEL LINE: Matrix AP Filters

#### **CERTIFICATION PARAMETERS**

- The Special Seismic Certification program and this Certificate are based on successful completion of testing in accordance with ICC-ES A156 "Acceptance Criteria for Seismic Certification by Shake-Table Testing of Nonstructural Components, as permitted by ASCE7-10.
- 2. Pre-test functional compliance verification was performed by the test laboratory and confirmed that the equipment was operational prior to seismic simulation. After successful tri-axial shake table testing, post-test functional compliance verification was performed and confirmed that the equipment is capable of performing its intended functions after a seismic event.
- 3. Although a seismic qualified unit inherently contains some wind resisting capacity, that capacity is undetermined and is excluded from this certification. Snow/Ice loads have been neglected and thus limit the unit to be installed both indoors (covered by an independent protective structure) and out doors (exposed to accumulating snow/ice) for ground snow loads no greater than 30psf for all applications.
- 4. All components listed in this Certificate is assigned a component importance factor (Ip) equal to 1.5 for installations in essential facilities, for life safety applications, and/or of equipment containing hazardous contents
- 5. This certification is only valid for seismic parameters and equipment and anchorage / installation requirements referenced in the following tables, as considered by the manufacturer's specifications for seismic applications. Mounting details & drawings must be outlined and approved by the Engineer of Record (EOR) for the project and location and the Contractor shall insure that the specified requirements by the EOR are fulfilled. The equipment manufacturer or seismic qualification engineer listed in this certificate is not responsible for the design and performance of the anchorage system. Mounting requirement details such as anchor brand, type, embedment depth, edge spacing, anchor-to-anchor spacing, concrete strength, special inspection, wall design, and attachment to non-building structures must be outlined and approved by the Engineer of Record for the project or building. Structural walls, structural floors, and housekeeping pads must also be seismically designed and approved by the project or building Structural Engineer of Record to withstand the seismic anchor loads as defined on the installation drawings.
- 6. Mechanical, Electrical, and Plumbing connections to the equipment must be flexibly attached as to not transfer load through the connection. The structural integrity of any conduit, cable trays, piping, ductwork and/or flexible connections is the responsibility of others. This certification does not guarantee the equipment will remain compliant to UL or NEMA standards after a seismic event.
- 7. Refer to the Seismic Certification Label mounted to the equipment by the manufacturer for corresponding seismic certification parameters to this Certificate. For this certificate and certification to remain valid, this certificate must correspond to the "Seismic Certification Label" found affixed to the unit by the factory. The label ensures the manufacturer built the unit in conformance to the IBC seismic design criteria set forth by the
  - certification engineer, SEEStudio, Inc., and meets the seismic design levels claimed by this certificate.
- 8. Certified custom components must only contain certified sub-components as listed on the following pages. This certificate applies to units manufactured at N83 W13330 Leon Road, Menomonee Falls, WI.
- 9. This certification is valid for installations below grade, grade, and roof-level installations for site classes A-D, Risk Categories I-IV, and Seismic Design Categories A-F, subject to the following tabulated certification criteria.

I declare that this certificate is in general conformance with all applicable codes or ordinances and all documentation supporting this certification meets the requirements of special seismic certification.

Dan Junker, SE SEEStudio, Inc.

Issue Date: 05.09.18



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SPECIAL SEISMIC CERTIFICATION

## **CERTIFIED COMPONENTS**

TABLE 1

MANUFACTURER: MTE Corporation

PRODUCT TYPE: Motor Control Filters

MODEL LINE: Matrix AP Filters

#### **CONSTRUCTION SUMMARY:**

CERTIFICATION PARAMETERS:

Construction of components & sub-components shall be specific to the reference model number below. NEMA 1, 2, or 3R rated.

## **OPTIONS SUMMARY:**

This certification includes the product and factory supplied accessories and options. The product and included accessories and options must be a catalogue design and factory supplied. This certification excludes all non-factory supplied accessories, including but not limited to enclosures, isolation/restraint devices, remote control panels, mounting brackets, and other electrical/mechanical components. The model numbers listed below are certified by manufacturer to be specific to sub-components included at the time of physical testing of equipment. All units 480V, 60Hz.

**Building Code:** IBC 2015

**Component Importance Factor:**  $I_p = 1.5$ 

 $S_{DS} = 2.0g$  at z/h = 1.0

**MOUNTING SUMMARY:** 

Notes:

Rigid mounting from unit base to rigid structure. The product must be installed and attached to the building structure per the manufacturer supplied seismic installation instructions.

Bandal	Amperage (Amp)	Dimensions (in)			\4/a:=b+/lb\
Model		Length	Width	Height	Weight (lb)
MAPW0006DSEISMIC	6	23.0	12.5	24.0	80.0
MAPx0006D	6			24.0 – 31.0	80.0 – 240.0
MAPx0008Dxxx	8				
MAPx0011Dxxx	11	23.0 – 26.0 12.5 – 17.6	125 176		
MAPx0014Dxxx	14				
MAPx0021Dxxx	21				
MAPx0027Dxxx	27				
MAPx0034Dxxx	34		12.5 – 17.6		
MAPx0044Dxxx	44				
MAPx0052Dxxx	52				
MAPx0066Dxxx	66				
MAPx0083Dxxx	83				
MAPx0103Dxxx	103				
MAPW0103DSEISMIC	103	26.0	17.6	31.0	240.0

Digit 4: Type

G (General purpose NEMA 1 & 2)

W (Weather NEMA 3R)

Digit 10-12: Contactor Options

None

002 (Capacitor contactor)

009 (Capacitor contactor with adjustable pick up and drop out)

010 (Bypass contactor)

011 (Bypass contactor with control transformer)

012 (Capacitor contactor with control transformer)

013 (Capacitor contactor with control transformer; Bypass contactor)

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# **CERTIFIED SUB-COMPONENTS**

TABLE 2

MANUFACTURER: MTE Corporation

PRODUCT TYPE: Motor Control Filters

MODEL LINE: Matrix AP Filters

## CONSTRUCTION SUMMARY: CERTIFICATION PARAMETERS:

Construction of components & sub-components shall be specific to the reference model number below. NEMA 1, 2, or 3R rated.

## **OPTIONS SUMMARY:**

This certification includes the product and factory supplied accessories and options. The product and included accessories and options must be a catalogue design and factory supplied. This certification excludes all non-factory supplied accessories, including but not limited to enclosures, isolation/restraint devices, remote control panels, mounting brackets, and other electrical/mechanical components. The model numbers listed below are certified by manufacturer to be specific to sub-components included at the time of physical testing of equipment.

**Building Code:** IBC 2015

**Component Importance Factor:**  $I_p = 1.5$ 

 $S_{DS} = 2.0g$  at z/h = 1.0

MOUNTING SUMMARY: NOTES:

Mounted in unit. Certified mounting shall be identical to mounting of sub-component in UUT's.

Sub-Component	Manufacturer	Model Number	Description
Enclosure		CAB-12AP2	NEMA 1/2
	MTE	CAB-12AP3	NEMA 3R
	IVITE	CAB-17AP2	NEMA 1/2
		CAB-17AP3	NEMA 3R
		ML0006H344	6 Amp
		ML0008J029	8 Amp
		ML0011H189	11 Amp
		ML0014H149	14 Amp
		ML0021G974	21 Amp
Filtor	MTE	ML0027G759	27 Amp
Filter	IVITE	ML0034G615	34 Amp
		ML0044H049	44 Amp
		ML0052G393	52 Amp
		ML0066G312	66 Amp
		ML0083G250	83 Amp
		ML0103G198	103 Amp
	MTE	CAP-338TP	Capacitor for 6 Amp Filter
		CAP-339TP	Capacitor for 8 Amp Filter
		CAP-349TP	Capacitor for 11 Amp Filter
Capacitor		CAP-340TP	Capacitor for 14 Amp Filter
		CAP-341TP	Capacitor for 21 Amp Filter
		CAP-342TP	Capacitor for 27 Amp Filter
		CAP-343TP	Capacitor for 34 Amp Filter
		CAP-344TP	Capacitor for 44 Amp Filter
		CAP-345TP	Capacitor for 52 Amp Filter
		CAP-346TP	Capacitor for 66 Amp Filter
		CAP-347TP	Capacitor for 82 Amp Filter
		CAP-348TP	Capacitor for 103 Amp Filter

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TABLE 2

MANUFACTURER: MTE Corporation

PRODUCT TYPE: Motor Control Filters

MODEL LINE: Matrix AP Filters

CONSTRUCTION SUMMARY: CERTIFICATION PARAMETERS:

Construction of components & sub-components shall be specific to the reference model number below. NEMA 1, 2, or 3R rated.

## **OPTIONS SUMMARY:**

This certification includes the product and factory supplied accessories and options. The product and included accessories and options must be a catalogue design and factory supplied. This certification excludes all non-factory supplied accessories, including but not limited to enclosures, isolation/restraint devices, remote control panels, mounting brackets, and other electrical/mechanical components. The model numbers listed below are certified by manufacturer to be specific to sub-components included at the time of physical testing of equipment.

**Building Code: IBC 2015** 

**Component Importance Factor:**  $I_p = 1.5$ 

 $S_{DS} = 2.0g$  at z/h = 1.0

MOUNTING SUMMARY: NOTES:

Mounted in unit. Certified mounting shall be identical to mounting of sub-component in UUT's.

Sub-Component	Manufacturer	Model Number	Description
		C25DND215	15 Amp, 2-Pole
		C25DND315	15 Amp, 3-Pole
		C25DND315A	15 Amp, 3-Pole
		C25DND325A	25 Amp, 3-Pole
		C25DND225A	25 Amp, 2-Pole
		C25DND230A	30 Amp, 2-Pole
		C25DND330A	30 Amp, 3-Pole
		C25DNF240	40 Amp, 2-Pole
		C25DNF240A	40 Amp, 2-Pole
Contactor	Eaton	C25DNF340A	40 Amp, 3-Pole
		C25FNF250A	50 Amp, 2-Pole
		C25FNF350A	50 Amp, 3-Pole
		C25FNF260A	60 Amp, 2-Pole
		C25FNF360A	60 Amp, 3-Pole
		C25FNF275A	75 Amp, 2-Pole
		C25FNF375A	75 Amp, 3-Pole
		C25GNF290A	90 Amp, 2-Pole
		C25GNF390A	90 Amp, 3-Pole
		XTCE115G	115 Amp, 3-Pole
	Eaton	C0150E2AFB	150 VA
Transformer		C0150E4D	150 VA
		C0150E2A	150 VA
		C0200E2A	200 VA
		C0250E2A	250 VA
		C0350E2A	350 VA
		C0500E2A	500 VA

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# **CERTIFIED SUB-COMPONENTS**

TABLE 2

MANUFACTURER: MTE Corporation

PRODUCT TYPE: Motor Control Filters

MODEL LINE: Matrix AP Filters

## **CONSTRUCTION SUMMARY:**

CERTIFICATION PARAMETERS:

Construction of components & sub-components shall be specific to the reference model number below. NEMA 1, 2, or 3R rated.

**OPTIONS SUMMARY:** 

Building Code: IBC 2015

Component Importance Factor: I<sub>p</sub> = 1.5

S<sub>DS</sub> = 2.0g at z/h = 1.0

This certification includes the product and factory supplied accessories and options. The product and included accessories and options must be a catalogue design and factory supplied. This certification excludes all non-factory supplied accessories, including but not limited to enclosures, isolation/restraint devices, remote control panels, mounting brackets, and other electrical/mechanical components. The model numbers listed below are certified by manufacturer to be specific to sub-components included at the time of physical testing of equipment.

MOUNTING SUMMARY: NOTES:

Mounted in unit. Certified mounting shall be identical to mounting of sub-component in UUT's.

Sub-Component	Manufacturer	Model Number	Description
Relay	Omron	1YCY8	120 V
Current Switch	Automation Components	SWITCH-001	
Transient Suppressor	Pro Industrial Control	RCS1A-6	
	l		

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