

MTE MATRIX Harmonic Filters Series D

TR technical reference

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Selection Guide Lines

The Series D Matrix Filter® uses patented Harmonics Mitigating Reactor (HMR) technology to limit full load current distortion to less than 5% THID.

Filters for variable torque AC drives rated 7.5 Hp and above should be selected for a filter output current rating greater than or equal to the motor current rating. If the motor current rating is not available, use the NEC motor current rating.

Filters for variable torque AC drives rated 2 – 5 Hp should be selected for a filter output current rating greater than or equal to 105% of the motor current rating. If the motor current rating is not available, select on the basis of 105% of the NEC motor current rating.

Filters for variable torque AC drives rated less than 1.5 Hp should be selected for an output current rating greater than or equal to 110% of the motor current rating or 110% OF the NEC motor current rating.

For constant torque, AC and DC drive applications operating from six pulse rectifier front ends selected a filter current rating according to application engineering note “Matrix Filter® Operation in Constant Torque Applications with Six Pulse Rectifiers” or consult MTE engineering. For phase controlled DC drive applications, select filter current rating per application note “Matrix Filter with Phase Controlled DC Driver.”

The capacitor contactor option is recommended for generator applications where the KVA rating of the generator is less than 1.20 times the KVA rating of the Matrix filter. Calculate the KVA rating of the Matrix Filter based on the input voltage rating and the output current rating.

Where a single filter is used to feed multiple drives, the output current rating of the filter should be selected to equal the total current rating of the individual drives when calculated according to the instructions above.

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Selection

380 – 415 Volts, 50Hz,

OPEN PANEL & GENERAL PURPOSE NEMA 2 and 3R

Filter Max Load Amps	Motor HP	NEC Motor Amps	Filter Style		
			OPEN PANEL	GEN'L PURPOSE NEMA 2	GEN'L PURPOSE NEMA 3R
			Cat. No.	Cat. No.	Cat. No.
6	2	4.3	MDP0006C	MDG0006C	MDW0006C
8	3	6.1	MDP0008C	MDG0008C	MDW0008C
11	5	9.7	MDP0011C	MDG0011C	MDW0011C
14	7.5	14	MDP0014C	MDG0014C	MDW0014C
21	10	18	MDP0021C	MDG0021C	MDW0021C
27	15	27	MDP0027C	MDG0027C	MDW0027C
34	20	34	MDP0034C	MDG0034C	MDW0034C
44	25	44	MDP0044C	MDG0044C	MDW0044C
52	30	51	MDP0052C	MDG0052C	MDW0052C
66	40	66	MDP0066C	MDG0066C	MDW0066C
83	50	83	MDP0083C	MDG0083C	MDW0083C
103	60	103	MDP0103C	MDG0103C	MDW0103C
128	75	128	MDP0128C	MDG0128C	MDW0128C
165	100	165	MDP0165C	MDG0165C	MDW0165C
208	125	208	MDP0208C	MDG0208C	MDW0208C
240	150	240	MDP0240C	MDG0240C	MDW0240C
320	200	320	MDP0320C	MDG0320C	MDW0320C
403	250	403	MDP0403C	MDG0403C	MDW0403C
482	300	482	MDP0482C	MDG0482C	MDW0482C
636	400	636	MDP0636C	MDG0636C	MDW0636C
786	500	786	MDP0786C	MDG0786C	MDW0786C

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Selection

380 - 415 Volts, 50Hz

Contactor Options

Option -002
Capacitor Contactor

This option provides a contactor to disconnect the filter capacitor bank when the drive is not running. The contactor is supplied with NO/NC auxiliary contacts. The contactor coil and auxiliary contacts are wired to a customer terminal block See page PB1200-43 for contactor coil switching characteristics. Please note that a 240 volt 50 Hz power source is required for this option.

This option is provided pre-wired complete for enclosed filters and as loose parts for open panel filters. The enclosed version of this option, except for ratings 320 – 480 amps, includes a larger cabinet to accommodate the contactor and parts associated with this option. The enclosure for this option is shown below.

To incorporate this option for a selected filter current rating use the part numbers shown below .

Filter current rating	Open Style PN	NEMA 2 PN	NEMA3R PN	Enclosure for option
6	MDP0006C002	MDG0006C002	MDW0006C002	CAB-17C
8	MDP0008C002	MDG0008C002	MDW0008C002	CAB-17C
11	MDP0011C002	MDG0011C002	MDW0011C002	CAB-17C
14	MDP0014C002	MDG0014C002	MDW0014C002	CAB-17C
21	MDP0021C002	MDG0021C002	MDW0021C002	CAB-17C
27	MDP0027C002	MDG0027C002	MDW0027C002	CAB-17C
34	MDP0034C002	MDG0034C002	MDW0034C002	CAB-17C
44	MDP0044C002	MDG0044C002	MDW0044C002	CAB-17C
52	MDP0052C002	MDG0052C002	MDW0052C002	CAB-26C
66	MDP0066C002	MDG0066C002	MDW0066C002	CAB-26C
83	MDP0083C002	MDG0083C002	MDW0083C002	CAB-26C
103	MDP0103C002	MDG0103C002	MDW0103C002	CAB-26C
128	MDP0128C002	MDG0128C002	MDW0128C002	CAB-26D
165	MDP0165C002	MDG0165C002	MDW0165C002	CAB-26D
208	MDP0208C002	MDG0208C002	MDW0208C002	CAB-26D
240	MDP0240C002	MDG0240C002	MDW0240C002	CAB-26D
320	MDP0320C002	MDG0320C002	MDW0320C002	CAB-26D
403	MDP0403C002	MDG0403C002	MDW0403C002	CAB-26D
482	MDP0482C002	MDG0482C002	MDW0482C002	CAB-26D
636	MDP0636C002	MDG0636C002	MDW0636C002	CAB-42D
786	MDP0786C002	MDG0786C002	MDW0786C002	CAB-42D

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Selection

380 - 415 Volts, 50Hz

Contactor Options

Option -009

Capacitor Contactor with adjustable pick up and drop out

This option provides a contactor to disconnect the filter capacitor bank based on the motor load current. Two current operated switches provide independent adjustment of the pick up and drop current levels. The switches are preset at the factory for pick up at 35% and drop out at 20% of the filter output current rating. The switches are each field adjustable over a 0 – 100% current range.

This option is only available for enclosed filters and except for ratings 320 – 480 amps, includes a larger cabinet to accommodate the contactor and parts associated with this option. The enclosure for this option is shown below.

To incorporate this option for a selected filter current rating use the part numbers shown below.. .

Filter current rating	NEMA 2 PN	NEMA 3R PN	Enclosure for option
6	MDG0006C009	MDW0006C009	CAB-17C
8	MDG0008C009	MDW0008C009	CAB-17C
11	MDG0011C009	MDW0011C009	CAB-17C
14	MDG0014C009	MDW0014C009	CAB-17C
21	MDG0021C009	MDW0021C009	CAB-17C
27	MDG0027C009	MDW0027C009	CAB-17C
34	MDG0034C009	MDW0034C009	CAB-17C
44	MDG0044C009	MDW0044C009	CAB-17C
52	MDG0052C009	MDW0052C009	CAB-26C
66	MDG0066C009	MDW0066C009	CAB-26C
83	MDG0083C009	MDW0083C009	CAB-26C
103	MDG0103C009	MDW0103C009	CAB-26C
128	MDG0128C009	MDW0128C009	CAB-26D
165	MDG0165C009	MDW0165C009	CAB-26D
208	MDG0208C009	MDW0208C009	CAB-26D
240	MDG0240C009	MDW0240C009	CAB-26D
320	MDG0320C009	MDW0320C009	CAB-26D
403	MDG0403C009	MDW0403C009	CAB-26D
482	MDG0482C009	MDW0482C009	CAB-26D
636	MDG0636C009	MDW0636C009	CAB-42D
786	MDG0786C009	MDW0786C009	CAB-42D

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Selection

380 - 415 Volts, 50Hz Enclosure Options

Option -100

NEMA 3R enclosure with high endurance white paint

These galvanized enclosures are supplied with continuous welds on the top cover and weather shields. Exterior hardware is supplied with gaskets. Because limited quantities are stocked, confirm delivery with inside sales.

To incorporate this option for a selected filter current rating use the part numbers shown below..

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006C100	103	MDW0103C100
8	MDW0008C100	128	MDW0128C100
11	MDW0011C100	165	MDW0165C100
14	MDW0014C100	208	MDW0208C100
21	MDW0021C100	240	MDW0240C100
27	MDW0027C100	320	MDW0320C100
34	MDW0034C100	403	MDW0403C100
44	MDW0044C100	482	MDW0482C100
52	MDW0052C100	636	MDW0636C100
66	MDW0066C100	786	MDW0786C100
83	MDW0083C100		

Option - 200

NEMA 3R STAINLESS steel enclosure with high endurance white paint

These enclosures are constructed from 316L stainless alloy using stainless steel hardware. Gaskets are applied to weather proof exterior components. The exterior surfaces of the enclosure are finished in high endurance white polyester powder coat. The base and sub-panels are unfinished. Because limited quantities are stocked, confirm delivery with inside sales.

To incorporate this option for a selected filter current rating use the part numbers shown below..

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006C200	103	MDW0103C200
8	MDW0008C200	128	MDW0128C200
11	MDW0011C200	165	MDW0165C200
14	MDW0014C200	208	MDW0208C200
21	MDW0021C200	240	MDW0240C200
27	MDW0027C200	320	MDW0320C200
34	MDW0034C200	403	MDW0403C200
44	MDW0044C200	482	MDW0482C200
52	MDW0052C200	636	MDW0636C200
66	MDW0066C200	786	MDW0786C200
83	MDW0083C200		

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Selection 380 - 415 Volts, 50Hz, Enclosure Options

Option -300

Standard Grey NEMA 3R enclosure with optional rodent / serpent screen

Option 300 provides intake exhaust air screens with (¼ X ¼) mesh openings.

To incorporate this option for a selected filter current rating use the part numbers shown below..

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006C300	103	MDW0103C300
8	MDW0008C300	128	MDW0128C300
11	MDW0011C300	165	MDW0165C300
14	MDW0014C300	208	MDW0208C300
21	MDW0021C300	240	MDW0240C300
27	MDW0027C300	320	MDW0320C300
34	MDW0034C300	403	MDW0403C300
44	MDW0044C300	482	MDW0482C300
52	MDW0052C300	636	MDW0636C300
66	MDW0066C300	786	MDW0786C300
83	MDW0083C300		

Option -400

NEMA 3R enclosure with high endurance white paint plus rodent / serpent screens

This option incorporates air intake screens with ¼ X ¼ mesh openings to the white painted NEMA 3R enclosure of option 100. Because limited quantities are stocked, confirm delivery with inside sales.

To incorporate this option for a selected filter current rating use the part numbers shown below.

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006C400	103	MDW0103C400
8	MDW0008C400	128	MDW0128C400
11	MDW0011C400	165	MDW0165C400
14	MDW0014C400	208	MDW0208C400
21	MDW0021C400	240	MDW0240C400
27	MDW0027C400	320	MDW0320C400
34	MDW0034C400	403	MDW0403C400
44	MDW0044C400	482	MDW0482C400
52	MDW0052C400	636	MDW0636C400
66	MDW0066C400	786	MDW0786C400
83	MDW0083C400		

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380 - 415 Volts, 50Hz

Enclosure Options

Option -500

NEMA 3R STAINLESS steel enclosure with high endurance white paint plus rodent / serpent screens

This option incorporates air intake screens with ¼ X ¼ mesh openings to the white painted NEMA 3R enclosure of option 200. Because limited quantities are stocked, confirm delivery with inside sales.

To incorporate this option for a selected filter current rating use the part numbers shown below.

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006C500	103	MDW0103C500
8	MDW0008C500	128	MDW0128C500
11	MDW0011C500	165	MDW0165C500
14	MDW0014C500	208	MDW0208C500
21	MDW0021C500	240	MDW0240C500
27	MDW0027C500	320	MDW0320C500
34	MDW0034C500	403	MDW0403C500
44	MDW0044C500	482	MDW0482C500
52	MDW0052C500	636	MDW0636C500
66	MDW0066C500	786	MDW0786C500
83	MDW0083C500		

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Selection

480 Volts, 60Hz

OPEN PANEL & GENERAL PURPOSE NEMA 2

Filter Max Load Amps	Motor HP	NEC Motor Amps	Filter Style		
			OPEN PANEL	GEN'L PURPOSE NEMA 2	GEN'L PURPOSE NEMA 3R
			Cat. No.	Cat. No.	Cat. No.
6	3	4.8	MDP0006D	MDG0006D	MDW0006D
8	5	7.6	MDP0008D	MDG0008D	MDW0008D
11	7.5	11	MDP0011D	MDG0011D	MDW0011D
14	10	14	MDP0014D	MDG0014D	MDW0014D
21	15	21	MDP0021D	MDG0021D	MDW0021D
27	20	27	MDP0027D	MDG0027D	MDW0027D
34	25	34	MDP0034D	MDG0034D	MDW0034D
44	30	40	MDP0044D	MDG0044D	MDW0044D
52	40	52	MDP0052D	MDG0052D	MDW0052D
66	50	65	MDP0066D	MDG0066D	MDW0066D
83	60	77	MDP0083D	MDG0083D	MDW0083D
103	75	96	MDP0103D	MDG0103D	MDW0103D
128	100	124	MDP0128D	MDG0128D	MDW0128D
165	125	156	MDP0165D	MDG0165D	MDW0165D
208	150	180	MDP0208D	MDG0208D	MDW0208D
240	200	240	MDP0240D	MDG0240D	MDW0240D
320	250	302	MDP0320D	MDG0320D	MDW0320D
403	300	361	MDP0403D	MDG0403D	MDW0403D
482	400	477	MDP0482D	MDG0482D	MDW0482D
636	500	590	MDP0636D	MDG0636D	MDW0636D
786	600	708	MDP0786D	MDG0786D	MDW0786D

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Selection 480 Volts, 60Hz, Contactor Options

Option -002
Capacitor Contactor

This option provides a contactor to disconnect the filter capacitor bank when the drive is not running. The contactor is supplied with NO/NC auxiliary contacts. The contactor coil and auxiliary contacts are wired to a customer terminal block See page PB1200-43 for contactor coil switching characteristics. Please note that a 120 volt 60 Hz power source is required for this option.

This option is provided pre-wired complete for enclosed filters and as loose parts for open panel filters. The enclosed version of this option, except for ratings 320 – 480 amps, includes a larger cabinet to accommodate the contactor and parts associated with this option. The enclosure for this option is shown below.

To incorporate this option for a selected filter current rating use the part numbers shown below. .

Filter current rating	Open Style PN	NEMA 2 PN	NEMA 3R PN	Enclosure for option
6	MDP0006D002	MDG0006D002	MDW0006D002	CAB-17C
8	MDP0008D002	MDG0008D002	MDW0008D002	CAB-17C
11	MDP0011D002	MDG0011D002	MDW0011D002	CAB-17C
14	MDP0014D002	MDG0014D002	MDW0014D002	CAB-17C
21	MDP0021D002	MDG0021D002	MDW0021D002	CAB-17C
27	MDP0027D002	MDG0027D002	MDW0027D002	CAB-17C
34	MDP0034D002	MDG0034D002	MDW0034D002	CAB-17C
44	MDP0044D002	MDG0044D002	MDW0044D002	CAB-17C
52	MDP0052D002	MDG0052D002	MDW0052D002	CAB-26C
66	MDP0066D002	MDG0066D002	MDW0066D002	CAB-26C
83	MDP0083D002	MDG0083D002	MDW0083D002	CAB-26C
103	MDP0103D002	MDG0103D002	MDW0103D002	CAB-26C
128	MDP0128D002	MDG0128D002	MDW0128D002	CAB-26D
165	MDP0165D002	MDG0165D002	MDW0165D002	CAB-26D
208	MDP0208D002	MDG0208D002	MDW0208D002	CAB-26D
240	MDP0240D002	MDG0240D002	MDW0240D002	CAB-26D
320	MDP0320D002	MDG0320D002	MDW0320D002	CAB-26D
403	MDP0403D002	MDG0403D002	MDW0403D002	CAB-26D
482	MDP0482D002	MDG0482D002	MDW0482D002	CAB-26D
636	MDP0636D002	MDG0636D002	MDW0636D002	CAB-42D
786	MDP0786D002	MDG0786D002	MDW0786D002	CAB-42D

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Selection 480 Volts, 60Hz, Contactor Options

Option -009

Capacitor Contactor with adjustable pick up and drop out

This option provides a contactor to disconnect the filter capacitor bank based on the motor load current. Two current operated switches provide independent adjustment of the pick up and drop current levels. The switches are preset at the factory for pick up at 35% and drop out at 20% of the filter output current rating. The switches are each field adjustable over a 0 – 100% current range. This option includes a 120 VAC control transformer.

This option is only available for enclosed filters and except for ratings 320 – 480 amps, includes a larger cabinet to accommodate the contactor and parts associated with this option. The enclosure for this option is shown below.

To incorporate this option for a selected filter current rating use the part numbers shown below.

Filter current rating	NEMA 2 PN	NEMA 3R PN	Enclosure for option
6	MDG0006D009	MDW0006D009	CAB-17C
8	MDG0008D009	MDW0008D009	CAB-17C
11	MDG0011D009	MDW0011D009	CAB-17C
14	MDG0014D009	MDW0014D009	CAB-17C
21	MDG0021D009	MDW0021D009	CAB-17C
27	MDG0027D009	MDW0027D009	CAB-17C
34	MDG0034D009	MDW0034D009	CAB-17C
44	MDG0044D009	MDW0044D009	CAB-17C
52	MDG0052D009	MDW0052D009	CAB-26C
66	MDG0066D009	MDW0066D009	CAB-26C
83	MDG0083D009	MDW0083D009	CAB-26C
103	MDG0103D009	MDW0103D009	CAB-26C
128	MDG0128D009	MDW0128D009	CAB-26D
165	MDG0165D009	MDW0165D009	CAB-26D
208	MDG0208D009	MDW0208D009	CAB-26D
240	MDG0240D009	MDW0240D009	CAB-26D
320	MDG0320D009	MDW0320D009	CAB-26D
403	MDG0403D009	MDW0403D009	CAB-26D
482	MDG0482D009	MDW0482D009	CAB-26D
636	MDG0636D009	MDW0636D009	CAB-42D
786	MDG0786D009	MDW0786D009	CAB-42D

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Selection 480 Volts, 60Hz

Contactor Options

Option -012

Capacitor contactor with control transformer

This option provides a 120 VAC control transformer to power the capacitor contactor. The contractor is provided with NO/NC auxiliary contacts. For filter ratings 165 amps and above a pilot relay is also provided to limit inrush current below 0.60 amps. Connections are wired to a customer terminal block.

This option is only available for enclosed filters and except for ratings 320 – 480 amps, includes a larger cabinet to accommodate the contactor and parts associated with this option. The enclosure for this option is shown below.

To incorporate this option for a selected filter current rating use the part numbers shown below.

Filter current rating	Drive HP	NEMA 2 PN	NEMA3R PN	Enclosure for option
6	3	MDG0006D012	MDW0006D012	CAB-17C
8	5	MDG0008D012	MDW0008D012	CAB-17C
11	7.5	MDG0011D012	MDW0011D012	CAB-17C
14	10	MDG0014D012	MDW0014D012	CAB-17C
21	15	MDG0021D012	MDW0021D012	CAB-17C
27	20	MDG0027D012	MDW0027D012	CAB-17C
34	25	MDG0034D012	MDW0034D012	CAB-17C
44	30	MDG0044D012	MDW0044D012	CAB-17C
52	40	MDG0052D012	MDW0052D012	CAB-26C
66	50	MDG0066D012	MDW0066D012	CAB-26C
83	60	MDG0083D012	MDW0083D012	CAB-26C
103	75	MDG0103D012	MDW0103D012	CAB-26C
128	100	MDG0128D012	MDW0128D012	CAB-26D
165	125	MDG0165D012	MDW0165D012	CAB-26D
208	150	MDG0208D012	MDW0208D012	CAB-26D
240	200	MDG0240D012	MDW0240D012	CAB-26D
320	250	MDG0320D012	MDW0320D012	CAB-26D
403	300	MDG0403D012	MDW0403D012	CAB-26D
482	400	MDG0482D012	MDW0482D012	CAB-26D
636	500	MDG0636D012	MDW0636D012	CAB-42D
786	600	MDG0786D012	MDW0786D012	CAB-42D

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Selection

480 Volts, 60Hz,

Contactor Options

Option -010

Filter Bypass

The filter bypass option is designed to provide filter bypass for drives that have an integrated bypass option as typically found in HVAC applications. Filter bypass is initiated by a contact closure when the motor is switched to operate directly from the AC line instead of the drive. This option is available for the filter current ratings listed below. See page PB1200-43 for contactor coil switching characteristics. A 120VAC control power source is required.

This option is only available for enclosed filters and except for rating 320 amps, includes a larger cabinet to accommodate the contactor and parts associated with this option. The enclosure for this option is shown below.

To incorporate this option for a selected filter current rating use the part numbers shown below .

Filter current rating	Drive HP	NEMA 2 PN	NEMA3R PN	Enclosure for option
6	3	MDG0006D010	MDW0006D010	CAB-17C
8	5	MDG0008D010	MDW0008D010	CAB-17C
11	7.5	MDG0011D010	MDW0011D010	CAB-17C
14	10	MDG0014D010	MDW0014D010	CAB-17C
21	15	MDG0021D010	MDW0021D010	CAB-17C
27	20	MDG0027D010	MDW0027D010	CAB-17C
34	25	MDG0034D010	MDW0034D010	CAB-17C
44	30	MDG0044D010	MDW0044D010	CAB-17C
52	40	MDG0052D010	MDW0052D010	CAB-26C
66	50	MDG0066D010	MDW0066D010	CAB-26C
83	60	MDG0083D010	MDW0083D010	CAB-26C
103	75	MDG0103D010	MDW0103D010	CAB-26C
128	100	MDG0128D010	MDW0128D010	CAB-26D
165	125	MDG0165D010	MDW0165D010	CAB-26D
208	150	MDG0208D010	MDW0208D010	CAB-26D
240	200	MDG0240D010	MDW0240D010	CAB-26D
320	250	MDG0320D010	MDW0320D010	CAB-26D

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Selection

480 Volts, 60Hz, Variable Torque Loads

Contactors Options

Option -011

Filter Bypass with transformer

The filter bypass option is designed to provide filter bypass for drives that have an integrated bypass option as typically found in HVAC applications. Filter bypass is initiated by a contact closure when the motor is switched to operate directly from the AC line instead of the drive. A control transformer provides 120 VAC power for contactor operation. This option is available for the filter current ratings listed below. See page PB1200-43 for contactor coil switching characteristics.

This option is only available for enclosed filters and except for rating 320 amps, includes a larger cabinet to accommodate the contactor and parts associated with this option. The enclosure for this option is shown below.

To incorporate this option for a selected filter current rating use the part numbers shown below .

Filter current rating	Drive HP	NEMA 2 PN	NEMA3R PN	Enclosure for option
6	3	MDG0006D011	MDW0006D011	CAB-17C
8	5	MDG0008D011	MDW0008D011	CAB-17C
11	7.5	MDG0011D011	MDW0011D011	CAB-17C
14	10	MDG0014D011	MDW0014D011	CAB-17C
21	15	MDG0021D011	MDW0021D011	CAB-17C
27	20	MDG0027D011	MDW0027D011	CAB-17C
34	25	MDG0034D011	MDW0034D011	CAB-17C
44	30	MDG0044D011	MDW0044D011	CAB-17C
52	40	MDG0052D011	MDW0052D011	CAB-26C
66	50	MDG0066D011	MDW0066D011	CAB-26C
83	60	MDG0083D011	MDW0083D011	CAB-26C
103	75	MDG0103D011	MDW0103D011	CAB-26C
128	100	MDG0128D011	MDW0128D011	CAB-26D
165	125	MDG0165D011	MDW0165D011	CAB-26D
208	150	MDG0208D011	MDW0208D011	CAB-26D
240	200	MDG0240D011	MDW0240D011	CAB-26D
320	250	MDG0320D011	MDW0320D011	CAB-26D

MTE MATRIX Harmonic Filters Series D

TR technical reference

Selection

480 Volts, 60Hz, Variable Torque Loads

Contactor Options

Option -013

Filter bypass and capacitor contactor with control transformer

This option provides a 120 VAC control transformer to power the capacitor and bypass contactors. Contactors are provided with NO/NC auxiliary contacts. For filter ratings 44 amps and above pilot relays are also provided to limit inrush currents below 0.60 amps. A jumper selection provides single contact switching for normal bypass control with capacitor removal. Connections are wired to a customer terminal block.

This option is only available for enclosed filters and except for ratings 320 – 480 amps, includes a larger cabinet to accommodate the contactor and parts associated with this option. The enclosure for this option is shown below.

To incorporate this option for a selected filter current rating use the part numbers shown below.

Filter current rating	Drive HP	NEMA 2 PN	NEMA3R PN	Enclosure for option
6	3	MDG0006D013	MDW0006D013	CAB-17C
8	5	MDG0008D013	MDW0008D013	CAB-17C
11	7.5	MDG0011D013	MDW0011D013	CAB-17C
14	10	MDG0014D013	MDW0014D013	CAB-17C
21	15	MDG0021D013	MDW0021D013	CAB-17C
27	20	MDG0027D013	MDW0027D013	CAB-17C
34	25	MDG0034D013	MDW0034D013	CAB-17C
44	30	MDG0044D013	MDW0044D013	CAB-17C
52	40	MDG0052D013	MDW0052D013	CAB-26C
66	50	MDG0066D013	MDW0066D013	CAB-26C
83	60	MDG0083D013	MDW0083D013	CAB-26C
103	75	MDG0103D013	MDW0103D013	CAB-26C
128	100	MDG0128D013	MDW0128D013	CAB-26D
165	125	MDG0165D013	MDW0165D013	CAB-26D
208	150	MDG0208D013	MDW0208D013	CAB-26D
240	200	MDG0240D013	MDW0240D013	CAB-26D
320	250	MDG0320D013	MDW0320D013	CAB-26D
403	300	MDG0403D013	MDW0403D013	CAB-26D
482	400	MDG0482D013	MDW0482D013	CAB-26D
636	500	MDG0636D013	MDW0636D013	CAB-42D
786	600	MDG0786D013	MDW0786D013	CAB-42D

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Selection 480 Volts, 60Hz, Variable Torque Loads

Enclosure Options

Option -100

NEMA 3R enclosure with high endurance white paint

These galvanized enclosures are supplied with continuous welds on the top cover and weather shields. Exterior hardware is supplied with gaskets. Because limited quantities are stocked, confirm delivery with inside sales.

To incorporate this option for a selected filter current rating use the part numbers shown below..

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006D100	103	MDW0103D100
8	MDW0008D100	128	MDW0128D100
11	MDW0011D100	165	MDW0165D100
14	MDW0014D100	208	MDW0208D100
21	MDW0021D100	240	MDW0240D100
27	MDW0027D100	320	MDW0320D100
34	MDW0034D100	403	MDW0403D100
44	MDW0044D100	482	MDW0482D100
52	MDW0052D100	636	MDW0636D100
66	MDW0066D100	786	MDW0786D100
83	MDW0083D100		

Option - 200

NEMA 3R STAINLESS steel enclosure with high endurance white paint

These enclosures are constructed from 316L stainless alloy using stainless steel hardware. Gaskets are applied to weather proof exterior components. The exterior surfaces of the enclosure are finished in high endurance white polyester powder coat. The base and sub-panels are unfinished. Because limited quantities are stocked, confirm delivery with inside sales.

To incorporate this option for a selected filter current rating use the part numbers shown below..

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006D200	103	MDW0103D200
8	MDW0008D200	128	MDW0128D200
11	MDW0011D200	165	MDW0165D200
14	MDW0014D200	208	MDW0208D200
21	MDW0021D200	240	MDW0240D200
27	MDW0027D200	320	MDW0320D200
34	MDW0034D200	403	MDW0403D200
44	MDW0044D200	482	MDW0482D200
52	MDW0052D200	636	MDW0636D200
66	MDW0066D200	786	MDW0786D200
83	MDW0083D200		

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Selection 480 Volts, 60Hz, Variable Torque Loads

Enclosure Options

Option -300

Standard Grey enclosure with optional rodent / serpent screen

Option 300 provides intake exhaust air screens with (¼ X ¼) mesh openings.

To incorporate this option for a selected filter current rating use the part numbers shown below.

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006D300	103	MDW0103D300
8	MDW0008D300	128	MDW0128D300
11	MDW0011D300	165	MDW0165D300
14	MDW0014D300	208	MDW0208D300
21	MDW0021D300	240	MDW0240D300
27	MDW0027D300	320	MDW0320D300
34	MDW0034D300	403	MDW0403D300
44	MDW0044D300	482	MDW0482D300
52	MDW0052D300	636	MDW0636D300
66	MDW0066D300	786	MDW0786D300
83	MDW0083D300		

Option -400

NEMA 3R enclosure with high endurance white paint plus rodent / serpent screens

This option incorporates air intake screens with ¼ X ¼ mesh openings to the white painted NEMA 3R enclosure of option 100. Because limited quantities are stocked, confirm delivery with inside sales.

To incorporate this option for a selected filter current rating use the part numbers shown below.

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006D400	103	MDW0103D400
8	MDW0008D400	128	MDW0128D400
11	MDW0011D400	165	MDW0165D400
14	MDW0014D400	208	MDW0208D400
21	MDW0021D400	240	MDW0240D400
27	MDW0027D400	320	MDW0320D400
34	MDW0034D400	403	MDW0403D400
44	MDW0044D400	482	MDW0482D400
52	MDW0052D400	636	MDW0636D400
66	MDW0066D400	786	MDW0786D400
83	MDW0083D400		

MTE MATRIX Harmonic Filters Series D

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Selection

480 Volts, 60Hz, Variable Torque Loads

Enclosure Options

Option -500

NEMA 3R STAINLESS steel enclosure with high endurance white paint plus rodent / serpent screens

This option incorporates air intake screens with ¼ X ¼ mesh openings to the white painted NEMA 3R enclosure of option 200. Because limited quantities are stocked, confirm delivery with inside sales.

To incorporate this option for a selected filter current rating use the part numbers shown below.

Filter Current Rating Amps	NEMA 3R Part Number	Filter Current Rating Amps	NEMA 3R Part Number
6	MDW0006D500	103	MDW0103D500
8	MDW0008D500	128	MDW0128D500
11	MDW0011D500	165	MDW0165D500
14	MDW0014D500	208	MDW0208D500
21	MDW0021D500	240	MDW0240D500
27	MDW0027D500	320	MDW0320D500
34	MDW0034D500	403	MDW0403D500
44	MDW0044D500	482	MDW0482D500
52	MDW0052D500	636	MDW0636D500
66	MDW0066D500	786	MDW0786D500
83	MDW0083D500		

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Selection

Non Standard Voltages and Frequency

For price and availability of nonstandard voltages and frequencies submit the following application information to engineering.

Line Voltage: _____ Volts

Line Frequency: _____ Hz

Motor Type: AC _____ DC _____

Load: Variable Torque _____ Constant Torque _____

Motor Nameplate Current Rating: _____ Amps

Motor Nameplate Voltage Rating: _____ Volts

THID Requirement: _____ %

Mechanical Configuration

Open Panel _____

General Purpose NEMA 1 _____

General Purpose NEMA 3R _____

Build to Order: Provide Specification

Contactor coil voltage & frequency for option 002, 009, 010, 011 _____ Volts ____ Hz

MTE MATRIX Harmonic Filters Series D

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Product Specification

Refer to User Manual for Detailed Specification

Service Conditions

Load: 6 pulse variable torque rectifier only based on standard selection tables. For constant torque application select filter rating base on appropriate application data sheet.

Input voltage: Nominal voltage VAC +/- 10%, 3 Phase

Frequency: Nominal Frequency \pm .75 Hz

Input voltage line unbalance: 1% maximum

Maximum source impedance: 6.00%

Minimum source impedance: 1.5%

Service Factor: 1.00

Ambient Temperature (Operating)

Enclosed Filters: -40 to +40 degrees C

Open Panel Filters: -40 to +50 degrees C

Storage Temperature: -40 to +90 degrees C

Altitude: 0 to 3300 Feet above sea level without derating

Relative Humidity: 0 to 95% non-condensing

Agency Approvals

UL and cUL listed to UL508 and CSA-C22.2 No 14-95
File E180243 (3 – 1000 HP, 120VAC through 600 VAC
50Hz, 50/60Hz, 60 Hz Three Phase

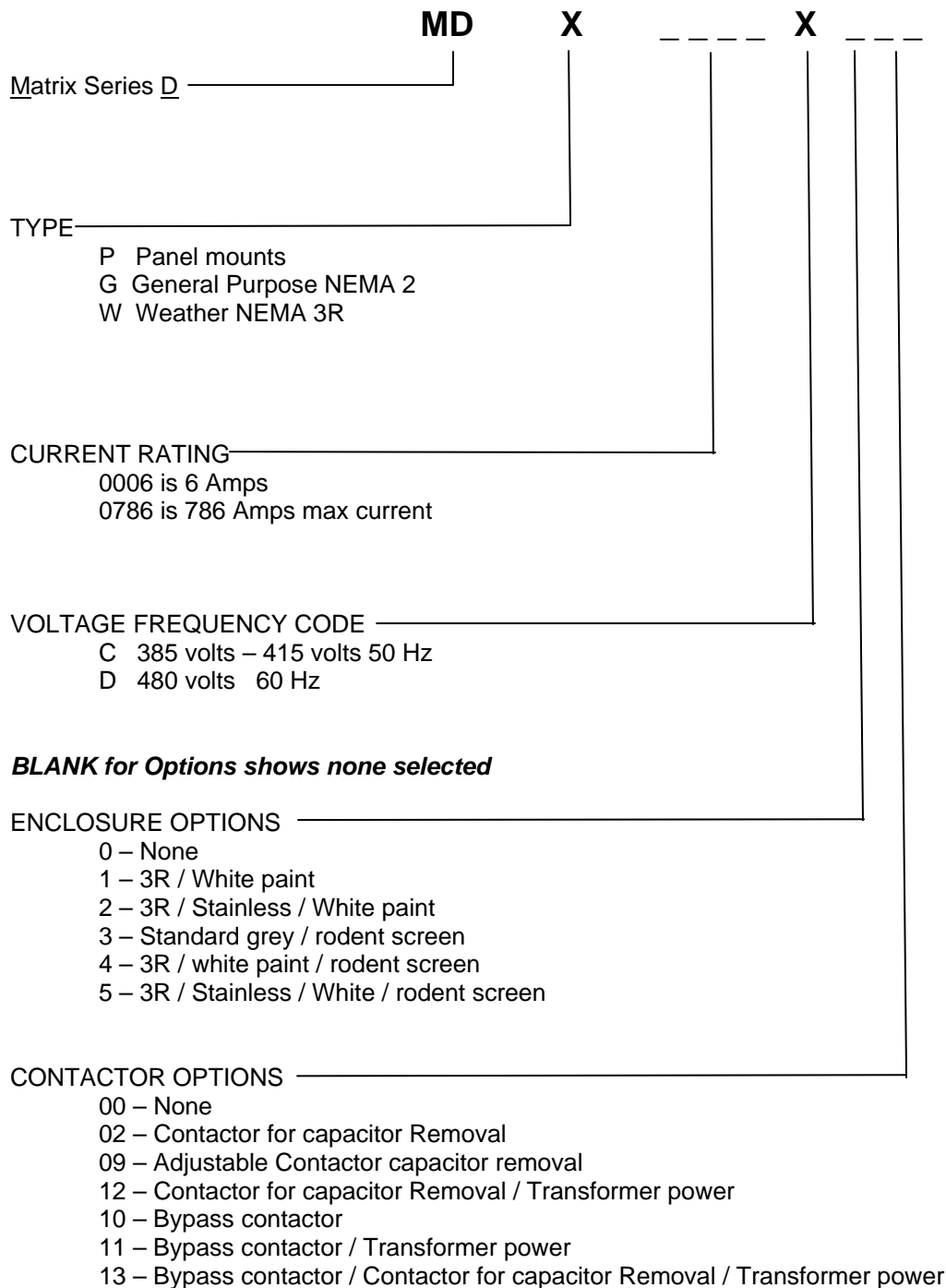
Performance

Total Harmonic Current Distortion: 5% MAX at FULL LOAD

MTE MATRIX Harmonic Filters Series D

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Part Number Code



MTE MATRIX Harmonic Filters Series D

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Open Style Component Dimensions

380 - 415 Volts, 50Hz

Amps rating	Catalog Part Number	Weight Lbs	HMR Size Inches	HMR Ref. Figure	Capacitor assembly size Inches	Capacitor Ref. Figure
6	MDP0006C	22	11.3"H x 6"W x 6.2"D	Figure 1	4.8"H x 4.8"W x 7.3"D	Figure 6
8	MDP0008C	24	11.3"H x 6"W x 6.3"D	Figure 1	4.8"H x 4.8"W x 8.2"D	Figure 6
11	MDP0011C	29	12.4"H x 7.2"W x 5.7"D	Figure 1	5.6"H x 5.6"W x 7.3"D	Figure 6
14	MDP0014C	35	12.4"H x 7.3"W x 6.3"D	Figure 1	5.6"H x 5.6"W x 7.3"D	Figure 6
21	MDP0021C	46	15.8"H x 9"W x 6.5"D	Figure 2	5.6"H x 5.6"W x 6.3"D	Figure 6
27	MDP0027C	61	15.8"H x 9"W x 7"D	Figure 2	5.6"H x 5.6"W x 7.3"D	Figure 6
34	MDP0034C	72	15.8"H x 9"W x 7.5"D	Figure 2	5.6"H x 5.6"W x 7.3"D	Figure 6
44	MDP0044C	84	15.8"H x 9"W x 8"D	Figure 2	5.6"H x 5.6"W x 7.3"D	Figure 6
52	MDP0052C	125	16.5"H x 12.3"W x 9.6"D	Figure 3	5.6"H x 5.6"W x 8.2"D	Figure 6
66	MDP0066C	150	16.5"H x 12.3"W x 10.7"D	Figure 3	5.6"H x 5.6"W x 8.2"D	Figure 6
83	MDP0083C	176	16.5"H x 12.3"W x 11.3"D	Figure 3	8"H x 7.3"W x 12"D	Figure 7
103	MDP0103C	180	16.5"H x 12.3"W x 11"D	Figure 4	8"H x 8.1"W x 12"D	Figure 7
128	MDP0128C	213	23"H x 15.3"W x 11.3"D	Figure 4	8"H x 9.1"W x 12"D	Figure 7
165	MDP0165C	278	23"H x 15.3"W x 11.5"D	Figure 4	12"H x 8.1"W x 12"D	Figure 8
208	MDP0208C	289	23"H x 15.3"W x 12"D	Figure 4	12"H x 9.1"W x 12"D	Figure 8
240	MDP0240C	298	23"H x 15.3"W x 12.4"D	Figure 4	15"H x 8.1"W x 12"D	Figure 9
320	MDP0320C	460	35.5"H x 18"W x 20.2"D	Figure 5	15"H x 8.1"W x 12"D	Figure 9
					5.6"H x 5.6"W x 9.3"D	Figure 6
403	MDP0403C	504	35.5"H x 18"W x 22.5"D	Figure 5	15"H x 8.1"W x 12"D	Figure 9
					8"H x 9.1"W x 12"D	Figure 7
482	MDP0482C	598	35.5"H x 18"W x 23"D	Figure 5	15"H x 9.1"W x 12"D	Figure 9
					12"H x 9.1"W x 12"D	Figure 8
636	MDP0636C	866	35.5"H x 24"W x 23.5"D	Figure 5	15"H x 9.1"W x 12"D	Figure 9
					15"H x 9.1"W x 12"D	Figure 9
					5.6"H x 5.6"W x 8.2"D	Figure 6
786	MDP0786C	1087	35.5"H x 24"W x 24"D	Figure 5	15"H x 9.1"W x 12"D	Figure 9
					15"H x 9.1"W x 12"D	Figure 9
					12"H x 9.1"W x 12"D	Figure 8

See following assembly pages for drawing details.

MTE MATRIX Harmonic Filters Series D

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Open Style Component Dimensions

480 Volts, 60Hz

Amps rating	Catalog Part Number	Weight Lbs	HMR Size Inches	HMR Ref. Figure	Capacitor assemblies size Inches	Capacitor Ref. Figure
6	MDP0006D	22	11.3"H x 6"W x 6.2"D	Figure 1	4.8"H x 4.8"W x 7.3"D	Figure 6
8	MDP0008D	24	11.3"H x 6"W x 6.3"D	Figure 1	4.8"H x 4.8"W x 7.3"D	Figure 6
11	MDP0011D	29	12.4"H x 7.2"W x 5.7"D	Figure 1	4.8"H x 4.8"W x 8.2"D	Figure 6
14	MDP0014D	35	12.4"H x 7.3"W x 6.3"D	Figure 1	4.8"H x 4.8"W x 8.2"D	Figure 6
21	MDP0021D	46	15.8"H x 9"W x 6.5"D	Figure 2	5.6"H x 5.6"W x 7.3"D	Figure 6
27	MDP0027D	61	15.8"H x 9"W x 7"D	Figure 2	5.6"H x 5.6"W x 8.2"D	Figure 6
34	MDP0034D	72	15.8"H x 9"W x 7.5"D	Figure 2	5.6"H x 5.6"W x 8.7"D	Figure 6
44	MDP0044D	84	15.8"H x 9"W x 8"D	Figure 2	5.6"H x 5.6"W x 7.3"D	Figure 6
52	MDP0052D	125	16.5"H x 12.3"W x 9.6"D	Figure 3	5.6"H x 5.6"W x 7.3"D	Figure 6
66	MDP0066D	154	16.5"H x 12.3"W x 10.7"D	Figure 3	8"H x 7.3"W x 12"D	Figure 7
83	MDP0083D	176	16.5"H x 12.3"W x 11.3"D	Figure 3	8"H x 7.3"W x 12"D	Figure 7
103	MDP0103D	180	16.5"H x 12.3"W x 11"D	Figure 4	8"H x 7.3"W x 12"D	Figure 7
128	MDP0128D	217	23"H x 15.3"W x 11.3"D	Figure 4	12"H x 7.3"W x 12"D	Figure 8
165	MDP0165D	273	23"H x 15.3"W x 11.5"D	Figure 4	12"H x 7.3"W x 12"D	Figure 8
208	MDP0208D	292	23"H x 15.3"W x 12"D	Figure 4	15"H x 7.3"W x 12"D	Figure 9
240	MDP0240D	298	23"H x 15.3"W x 12.4"D	Figure 4	15"H x 7.3"W x 12"D	Figure 9
320	MDP0320D	464	35.5"H x 18"W x 20.2"D	Figure 5	15"H x 7.3"W x 12"D	Figure 9
					8"H x 7.3"W x 12"D	Figure 7
403	MDP0403D	508	35.5"H x 18"W x 22.5"D	Figure 5	12"H x 7.3"W x 12"D	Figure 9
					15"H x 7.3"W x 12"D	Figure 8
482	MDP0482D	602	35.5"H x 18"W x 23"D	Figure 5	15"H x 7.3"W x 12"D	Figure 9
					15"H x 7.3"W x 12"D	Figure 9
636	MDP0636D	873	35.5"H x 24"W x 23.5"D	Figure 5	12"H x 8.1"W x 12"D	Figure 8
					15"H x 7.3"W x 12"D	Figure 9
					15"H x 7.3"W x 12"D	Figure 9
786	MDP0786D	1082	35.5"H x 24"W x 24"D	Figure 5	15"H x 7.3"W x 12"D	Figure 9
					15"H x 7.3"W x 12"D	Figure 9
					15"H x 7.3"W x 12"D	Figure 9
					5.6"H x 5.6"W x 7.3"D	Figure 6

See following assembly pages for drawing details.

MTE MATRIX Harmonic Filters Series D

TR technical reference

HMR ASSEMBLIES

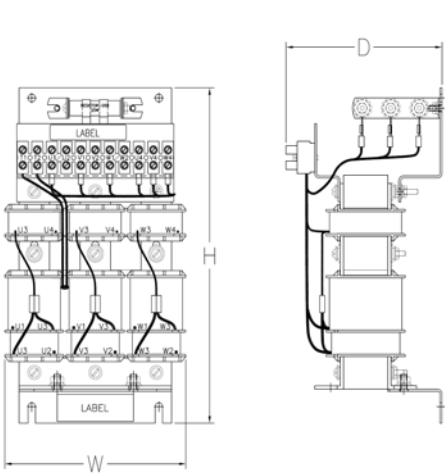


Figure 1
6 to 14 Amp

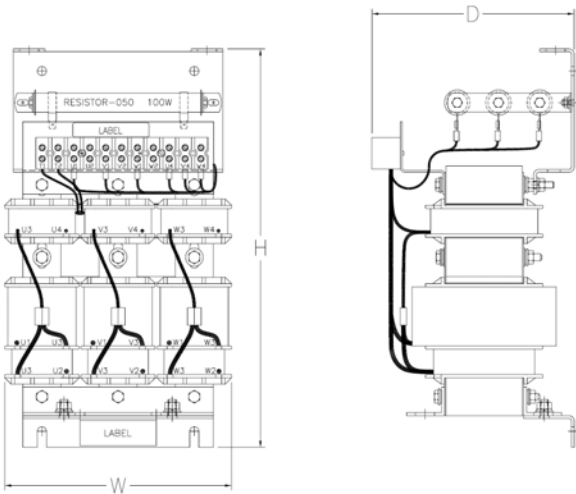


Figure 2
21 to 44 Amp

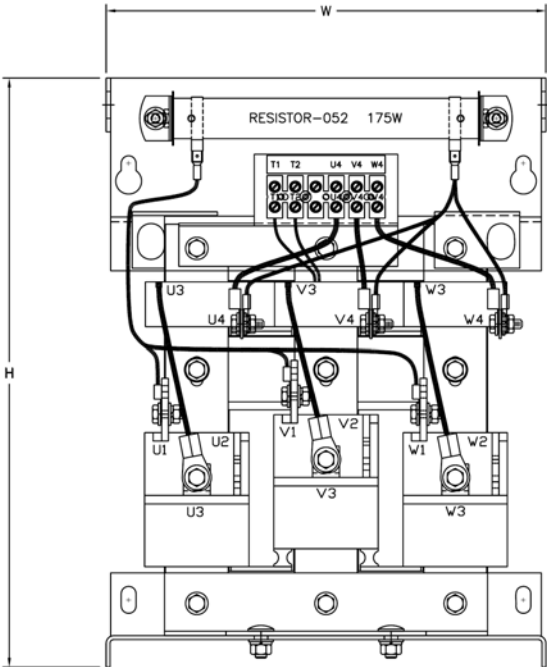
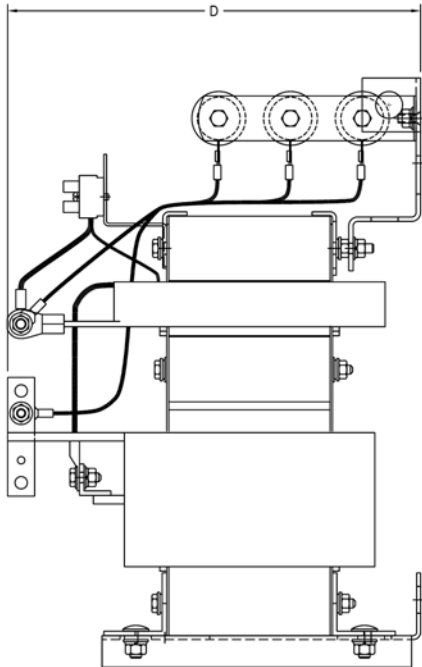


Figure 3
52 to 83 Amp



MTE MATRIX Harmonic Filters Series D

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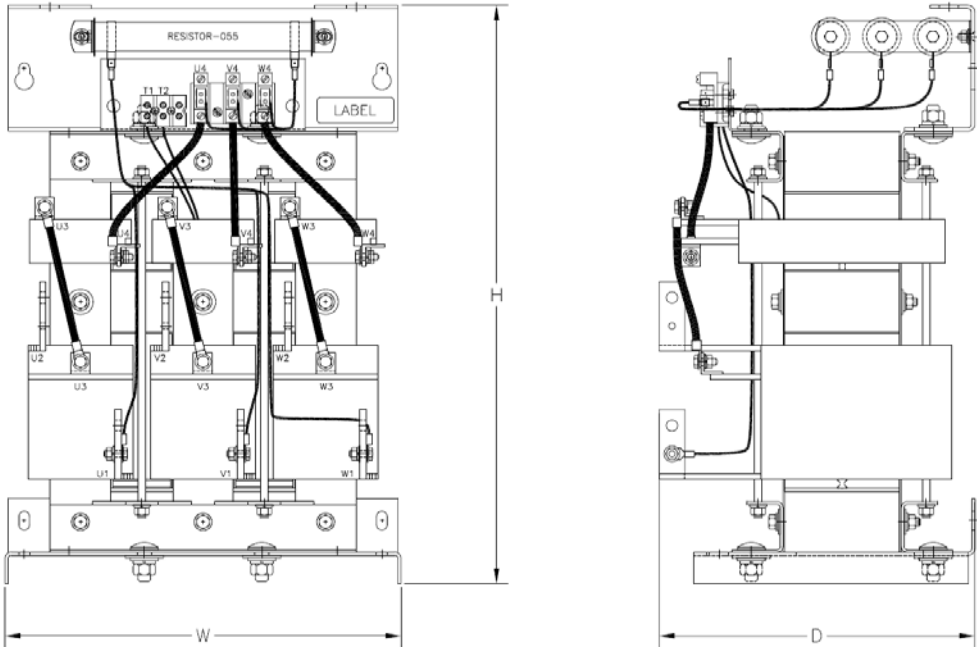


Figure 4
103 to 240 Amp

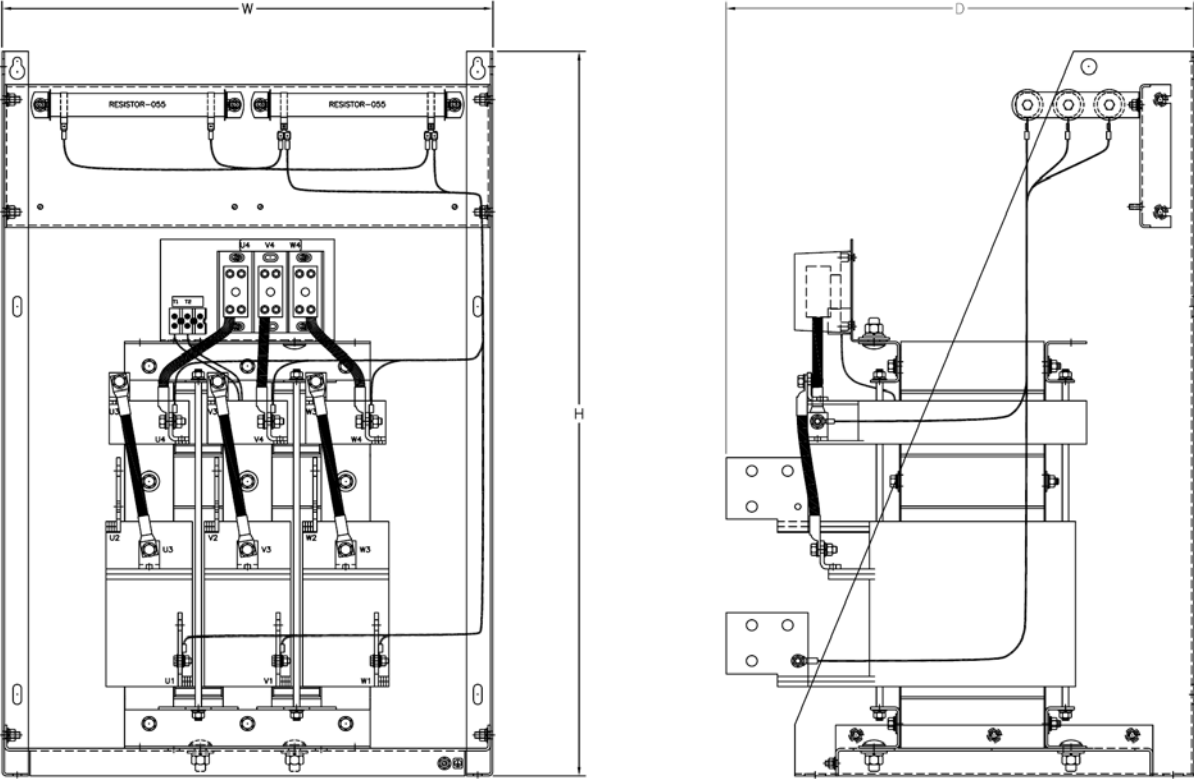


Figure 5
320 to 786 Amp

MTE MATRIX Harmonic Filters Series D

TR technical reference

CAPACITOR ASSEMBLIES

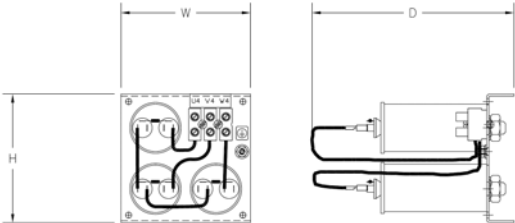


Figure 6
3 Cap panel Shown

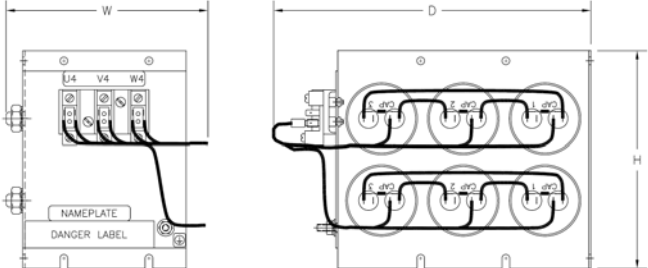


Figure 7
6 Cap panel Shown

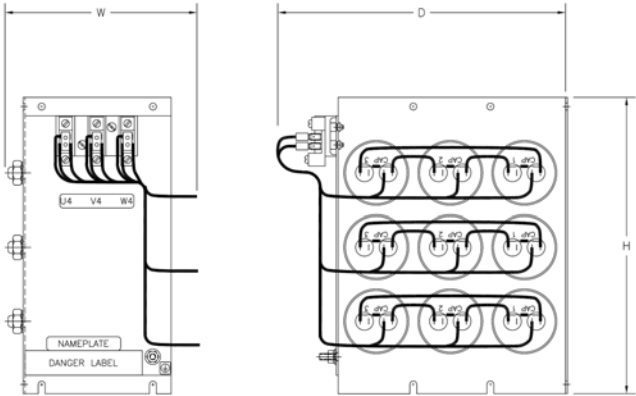


Figure 8
9 Cap panel Shown

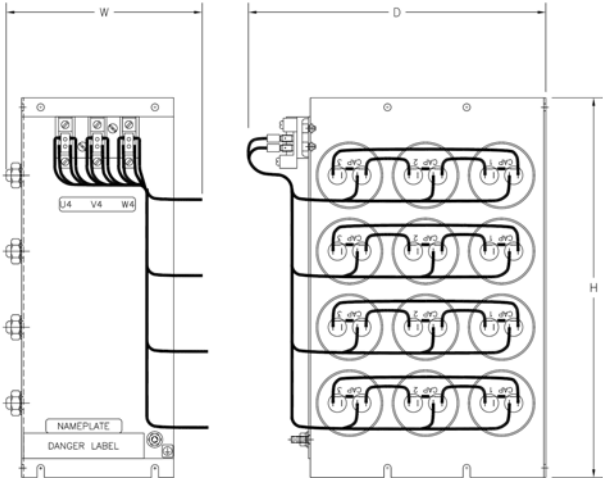


Figure 9
12 Cap panel Shown

MTE MATRIX Harmonic Filters Series D

TR technical reference

Enclosed Unit Data

380 - 415 Volts 50 Hz

Filter Amps	NEMA 1	Enclosure	Weight	NEMA 3R	Enclosure	Weight	Figure
6	MDG0006C	CAB-12C2	76	MDW0006C	CAB-12C3	86	Figure 10
8	MDG0008C	CAB-12C2	79	MDW0008C	CAB-12C3	89	Figure 10
11	MDG0011C	CAB-12C2	83	MDW0011C	CAB-12C3	93	Figure 10
14	MDG0014C	CAB-12C2	89	MDW0014C	CAB-12C3	99	Figure 10
21	MDG0021C	CAB-12C2	100	MDW0021C	CAB-12C3	110	Figure 10
27	MDG0027C	CAB-12C2	115	MDW0027C	CAB-12C3	125	Figure 10
34	MDG0034C	CAB-12C2	126	MDW0034C	CAB-12C3	136	Figure 10
44	MDG0044C	CAB-12C2	138	MDW0044C	CAB-12C3	148	Figure 10
52	MDG0052C	CAB-17C2	190	MDW0052C	CAB-17C3	199	Figure 11
66	MDG0066C	CAB-17C2	215	MDW0066C	CAB-17C3	224	Figure 11
83	MDG0083C	CAB-17C2	241	MDW0083C	CAB-17C3	250	Figure 11
103	MDG0103C	CAB-17C2	244	MDW0103C	CAB-17C3	253	Figure 11
128	MDG0128C	CAB-26C2	382	MDW0128C	CAB-26C3	403	Figure 12
165	MDG0165C	CAB-26C2	446	MDW0165C	CAB-26C3	467	Figure 12
208	MDG0208C	CAB-26C2	457	MDW0208C	CAB-26C3	478	Figure 12
240	MDG0240C	CAB-26C2	467	MDW0240C	CAB-26C3	488	Figure 12
320	MDG0320C	CAB-26D2	659	MDW0320C	CAB-26D3	790	Figure 13
403	MDG0403C	CAB-26D2	703	MDW0403C	CAB-26D3	834	Figure 13
482	MDG0482C	CAB-26D2	796	MDW0482C	CAB-26D3	928	Figure 13
636	MDG0636C	CAB-30D2	1198	MDW0636C	CAB-30D3	1240	Figure 14
786	MDG0786C	CAB-30D2	1420	MDW0786C	CAB-30D3	1462	Figure 14

Note: Weight is shown in US pounds

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Enclosed Unit Data

480 Volts 60 Hz

Filter Amps	NEMA 1	Enclosure	Weight	NEMA 3R	Enclosure	Weight	Figure
6	MDG0006D	CAB-12C2	76	MDW0006D	CAB-12C3	86	Figure 10
8	MDG0008D	CAB-12C2	79	MDW0008D	CAB-12C3	89	Figure 10
11	MDG0011D	CAB-12C2	83	MDW0011D	CAB-12C3	93	Figure 10
14	MDG0014D	CAB-12C2	89	MDW0014D	CAB-12C3	99	Figure 10
21	MDG0021D	CAB-12C2	100	MDW0021D	CAB-12C3	110	Figure 10
27	MDG0027D	CAB-12C2	115	MDW0027D	CAB-12C3	125	Figure 10
34	MDG0034D	CAB-12C2	126	MDW0034D	CAB-12C3	136	Figure 10
44	MDG0044D	CAB-12C2	138	MDW0044D	CAB-12C3	148	Figure 10
52	MDG0052D	CAB-17C2	190	MDW0052D	CAB-17C3	199	Figure 11
66	MDG0066D	CAB-17C2	219	MDW0066D	CAB-17C3	228	Figure 11
83	MDG0083D	CAB-17C2	241	MDW0083D	CAB-17C3	250	Figure 11
103	MDG0103D	CAB-17C2	244	MDW0103D	CAB-17C3	253	Figure 11
128	MDG0128D	CAB-26C2	385	MDW0128D	CAB-26C3	406	Figure 12
165	MDG0165D	CAB-26C2	441	MDW0165D	CAB-26C3	462	Figure 12
208	MDG0208D	CAB-26C2	461	MDW0208D	CAB-26C3	482	Figure 12
240	MDG0240D	CAB-26C2	467	MDW0240D	CAB-26C3	488	Figure 12
320	MDG0320D	CAB-26D2	663	MDW0320D	CAB-26D3	794	Figure 13
403	MDG0403D	CAB-26D2	706	MDW0403D	CAB-26D3	838	Figure 13
482	MDG0482D	CAB-26D2	800	MDW0482D	CAB-26D3	931	Figure 13
636	MDG0636D	CAB-30D2	1205	MDW0636D	CAB-30D3	1247	Figure 14
786	MDG0786D	CAB-30D2	1416	MDW0786D	CAB-30D3	1458	Figure 14

Note: Weight is shown in US pounds

MTE MATRIX Harmonic Filters Series D

TR technical reference

Enclosure Dimensions

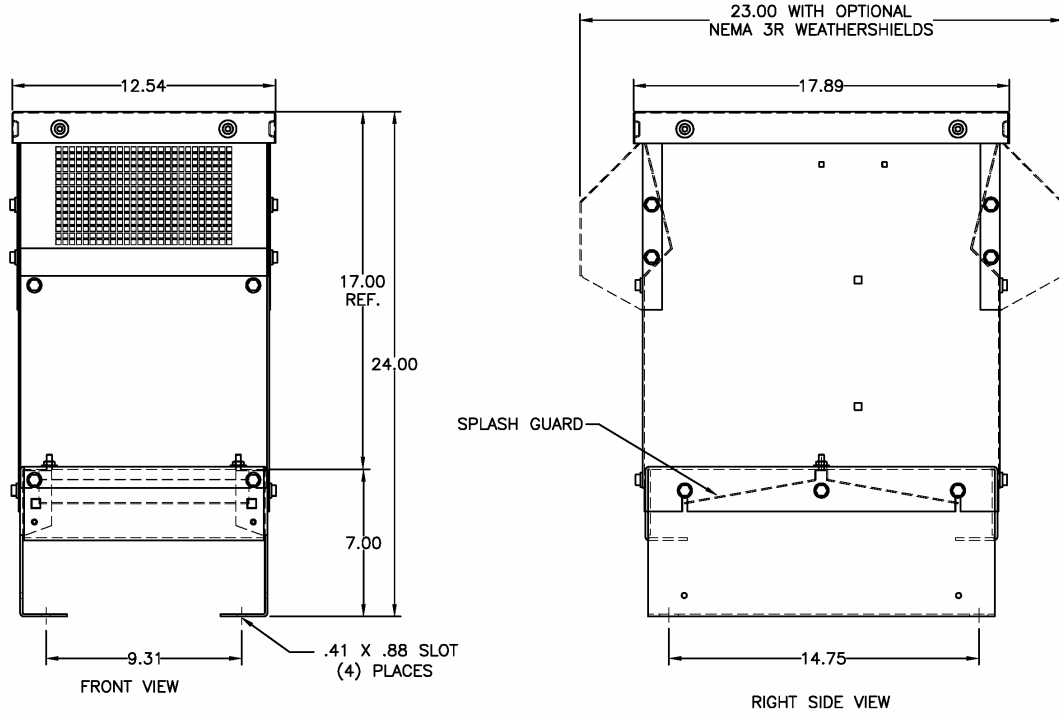


Figure 10 Cab - 12C

MTE MATRIX Harmonic Filters Series D

TR technical reference

Enclosure Dimensions

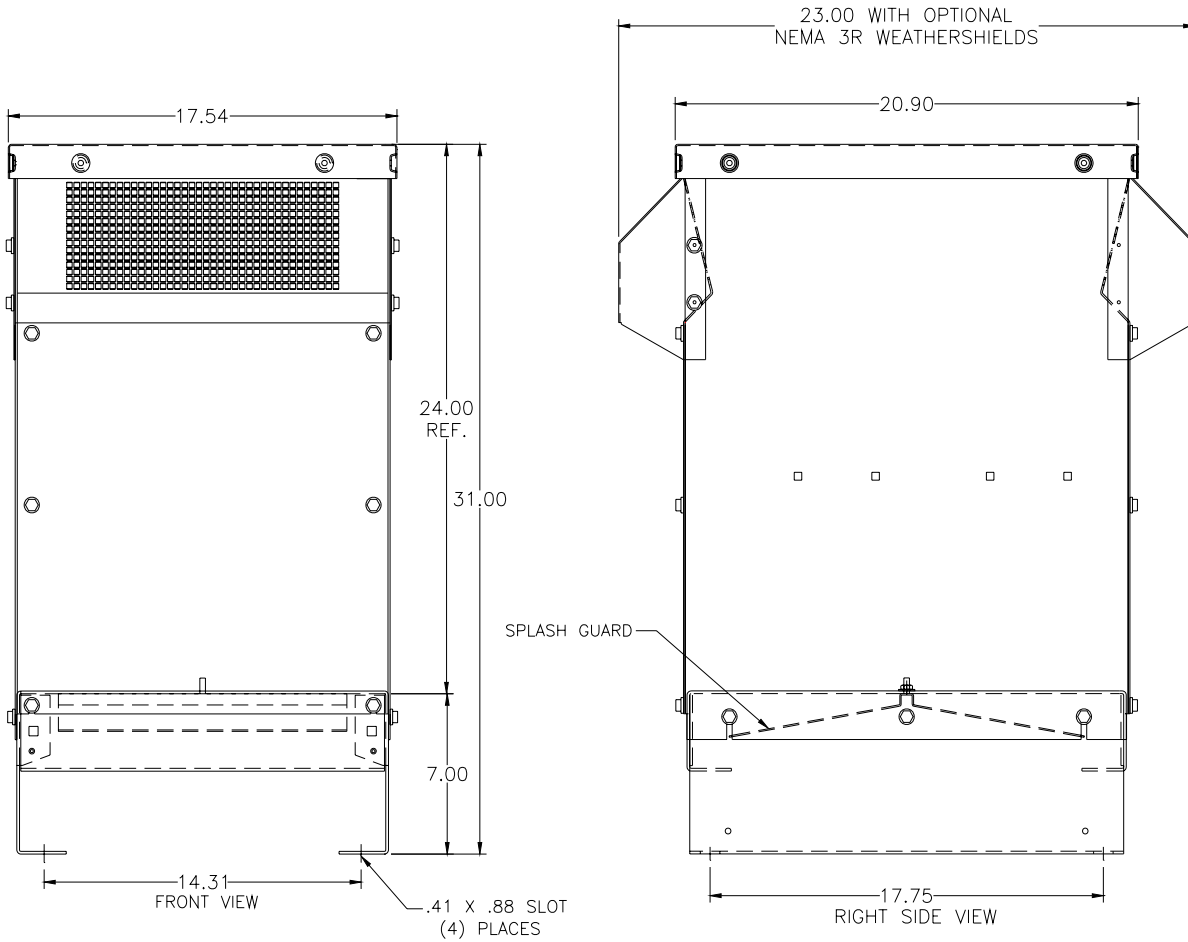


Figure 11 Cab - 17C

MTE MATRIX Harmonic Filters Series D

TR technical reference

Enclosure Dimensions

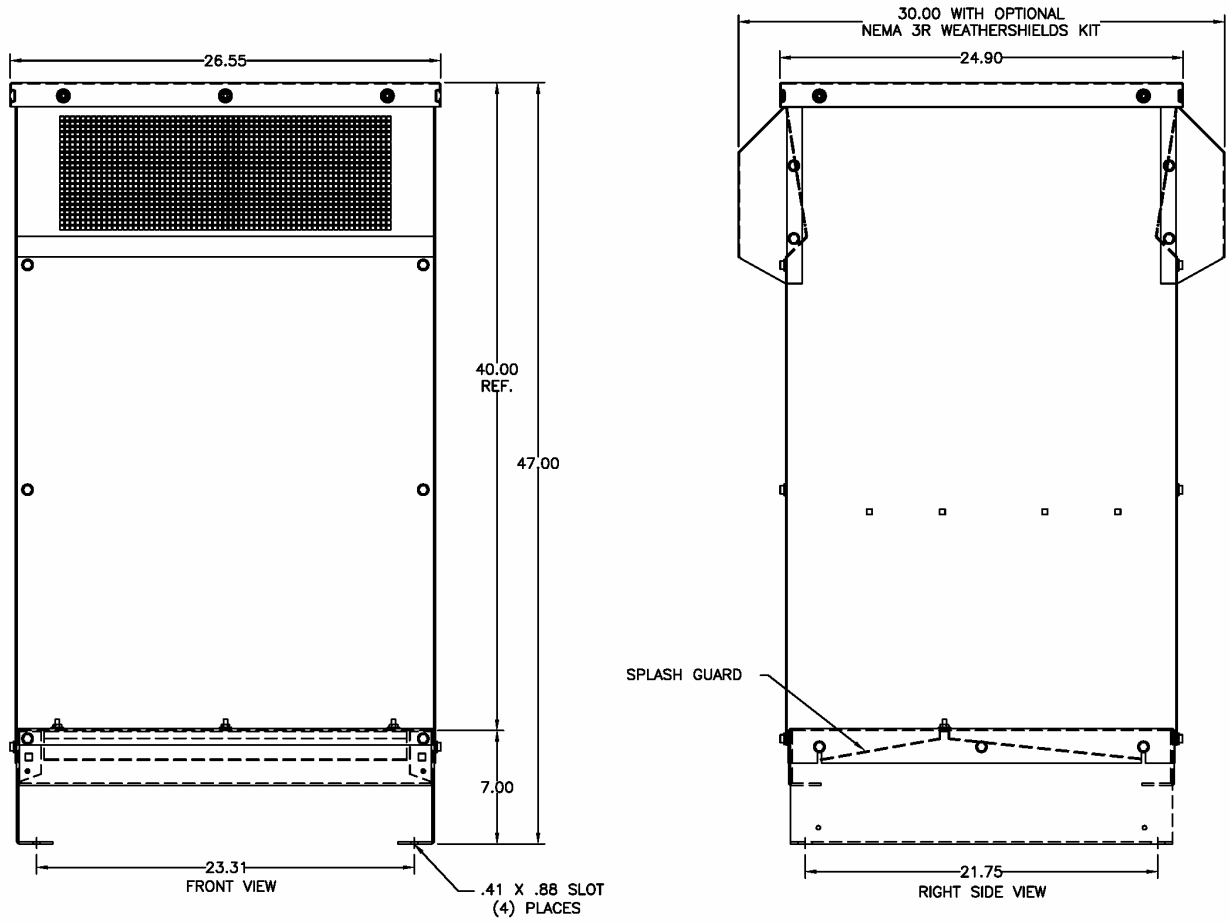


Figure 12 Cab - 26C

MTE MATRIX Harmonic Filters Series D

TR technical reference

Enclosure Dimensions

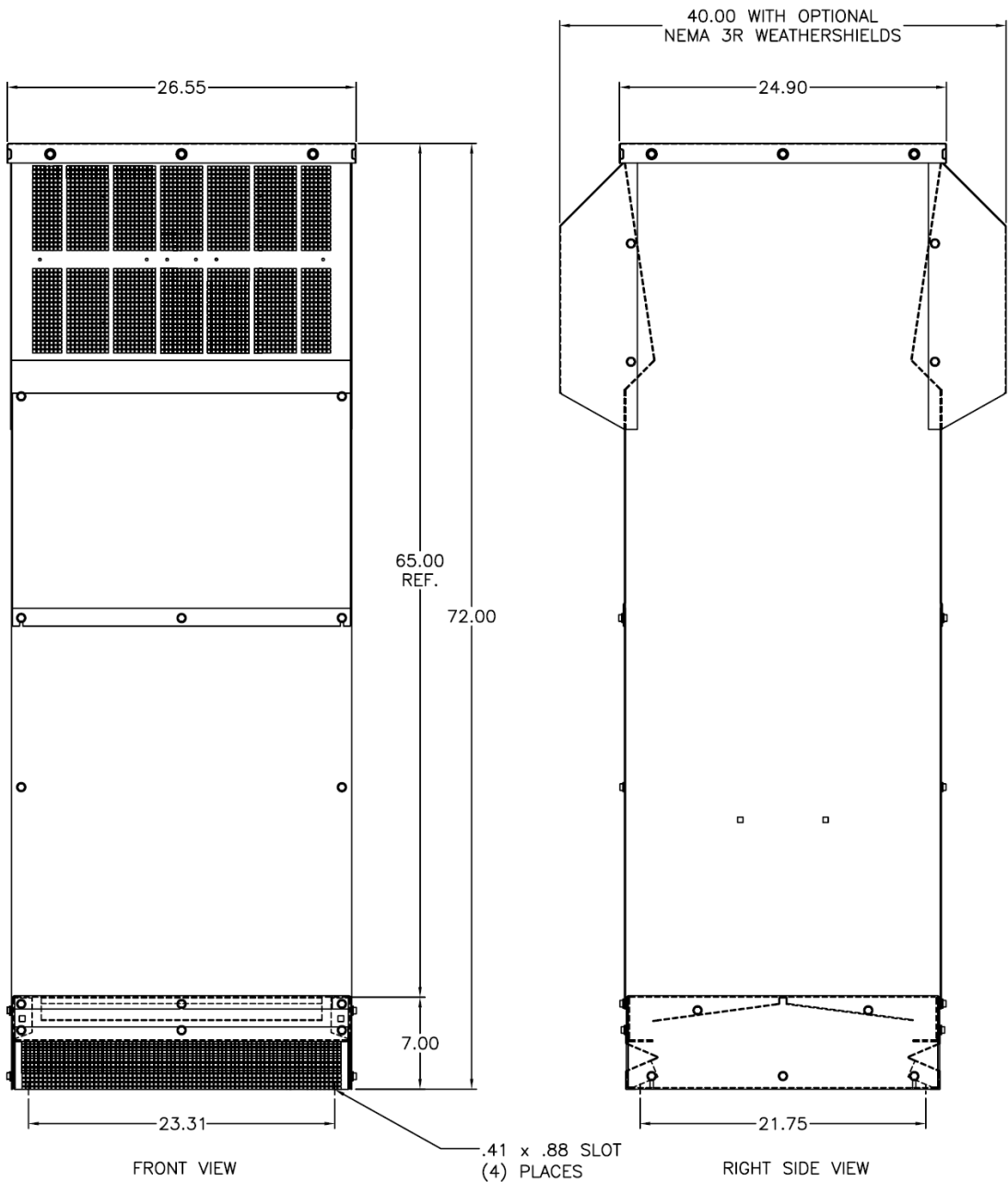


Figure 13 Cab - 26D

MTE MATRIX Harmonic Filters Series D

TR technical reference

Enclosure Dimensions

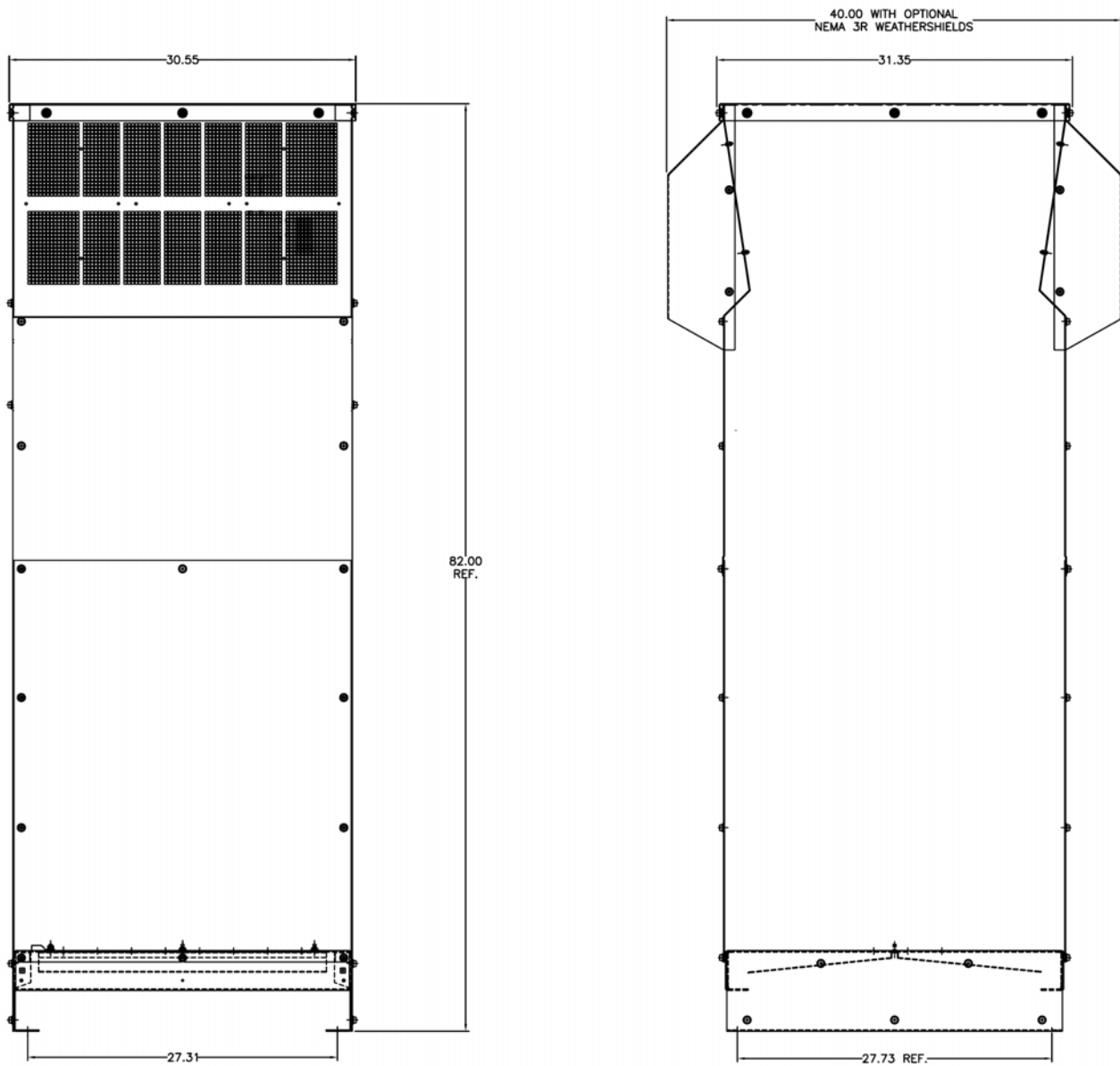


Figure 14 Cab - 30D

MTE MATRIX Harmonic Filters Series D

TR technical reference

Enclosure Dimensions

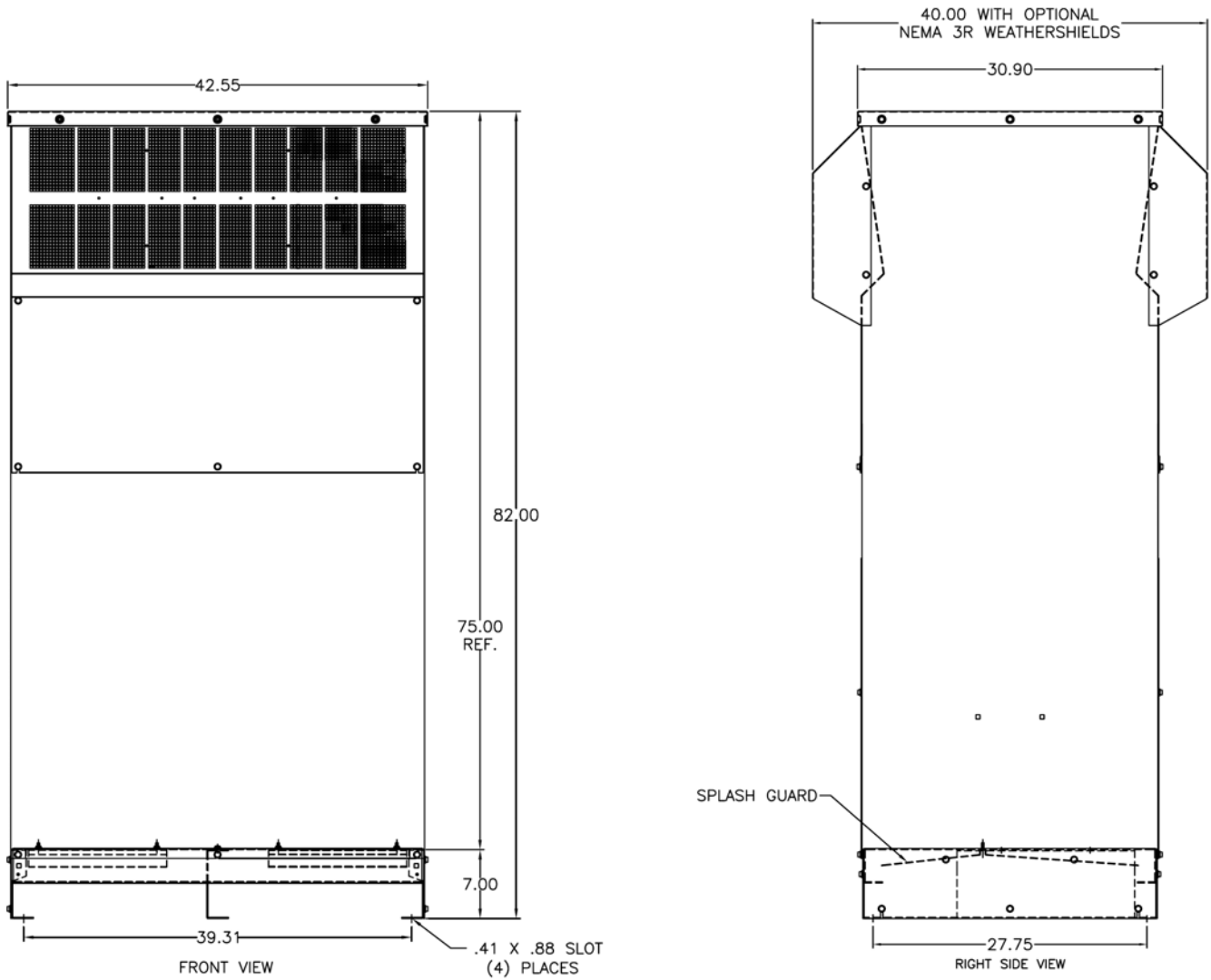


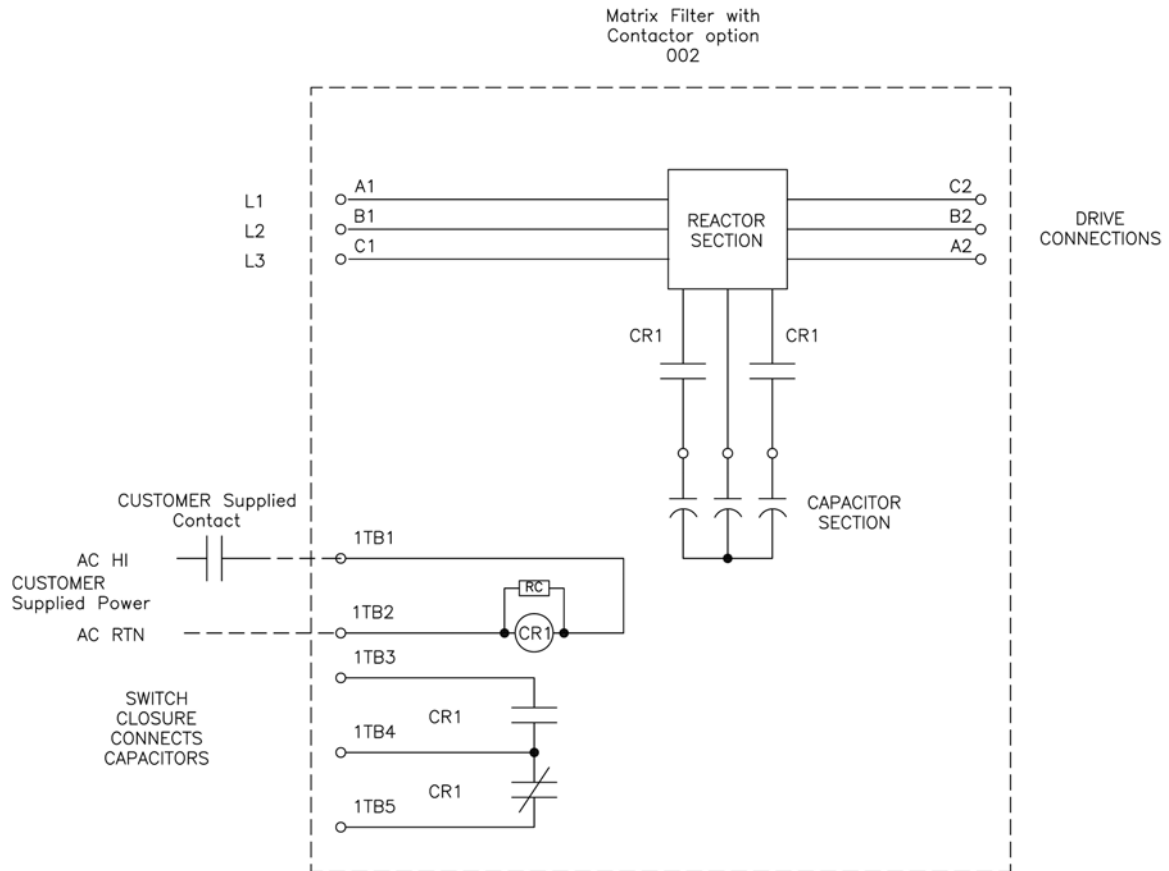
Figure 15 Cab – 42D

MTE MATRIX Harmonic Filters Series D

TR technical reference

Contactor Circuit Drawings

Option -002
Capacitor Contactor



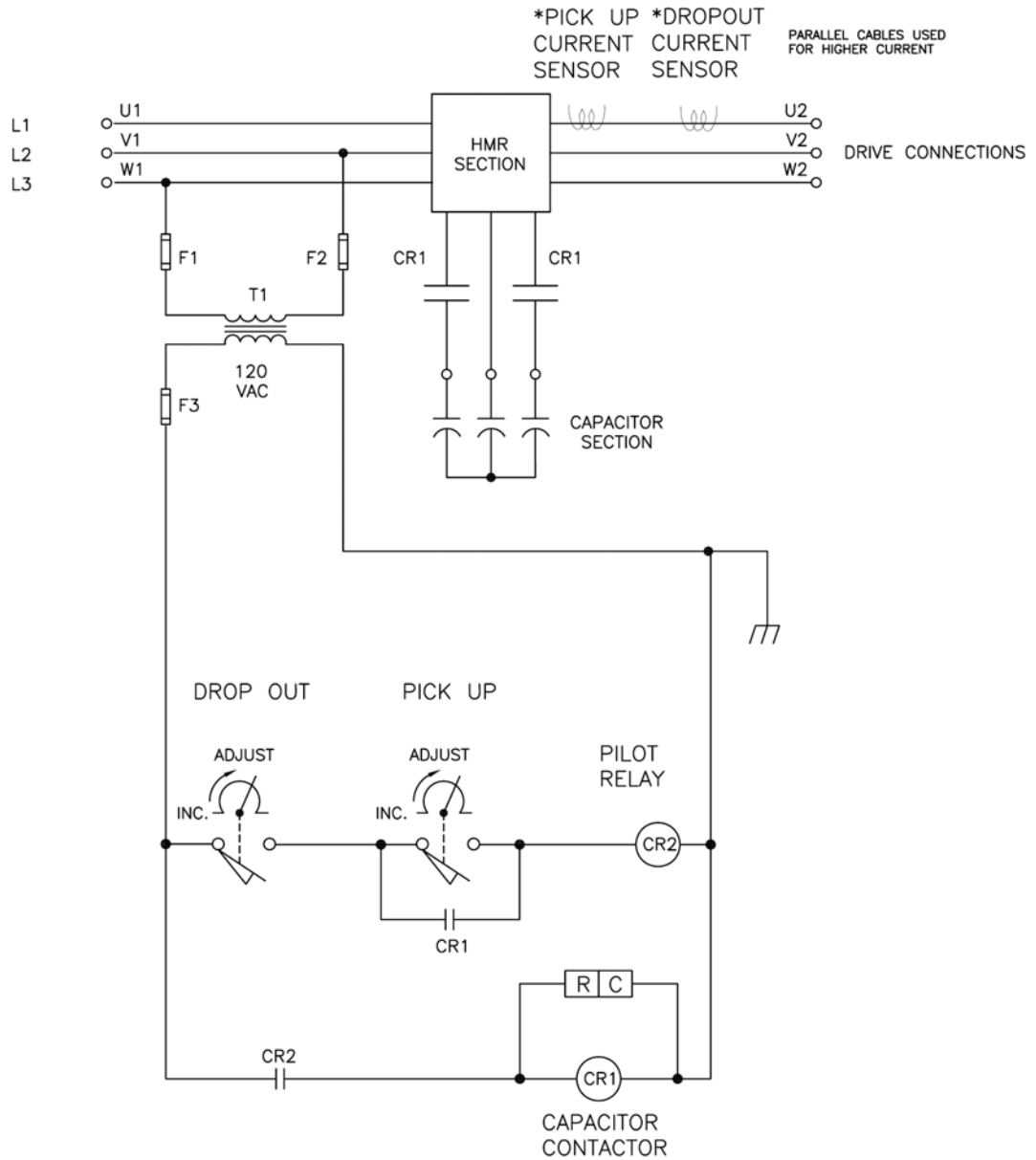
The above contactor option diagram is provided to help understand the circuit function and does not reflect actual circuit wiring.

MTE MATRIX Harmonic Filters Series D

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Option -009

Capacitor Contactor with adjustable pick up and drop out



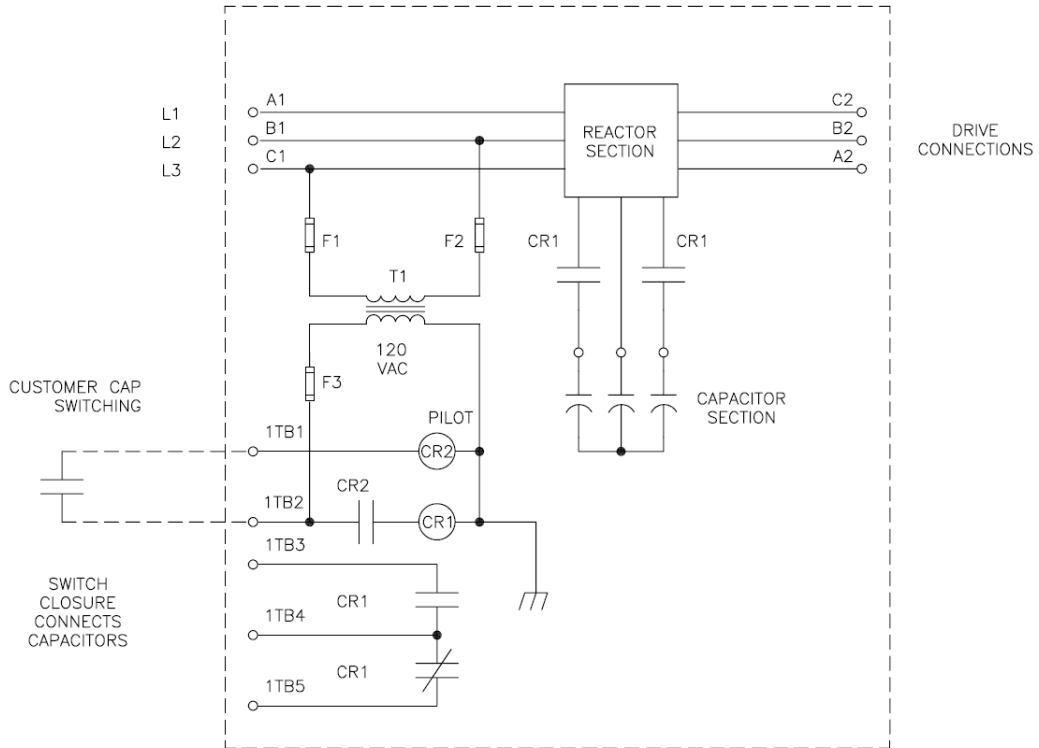
The above contactor option diagram is provided to help understand the circuit function and does not reflect actual circuit wiring.

MTE MATRIX Harmonic Filters Series D

TR technical reference

Option -012

Capacitor contactor with control transformer



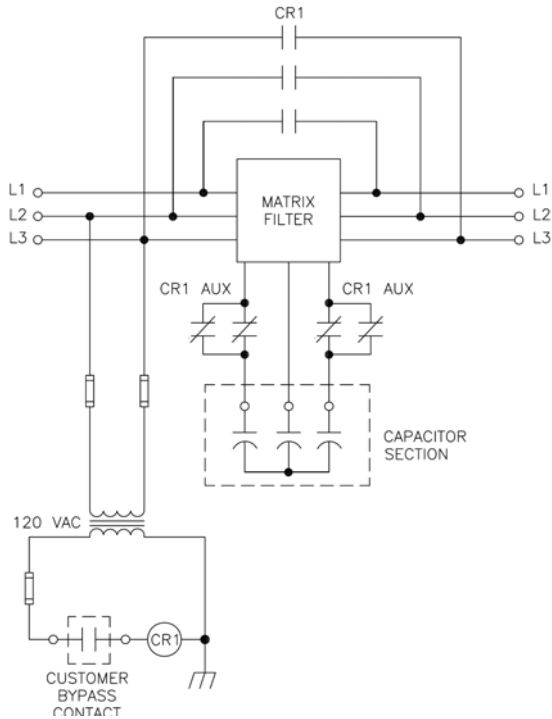
The above contactor option diagram is provided to help understand the circuit function and does not reflect actual circuit wiring.

MTE MATRIX Harmonic Filters Series D

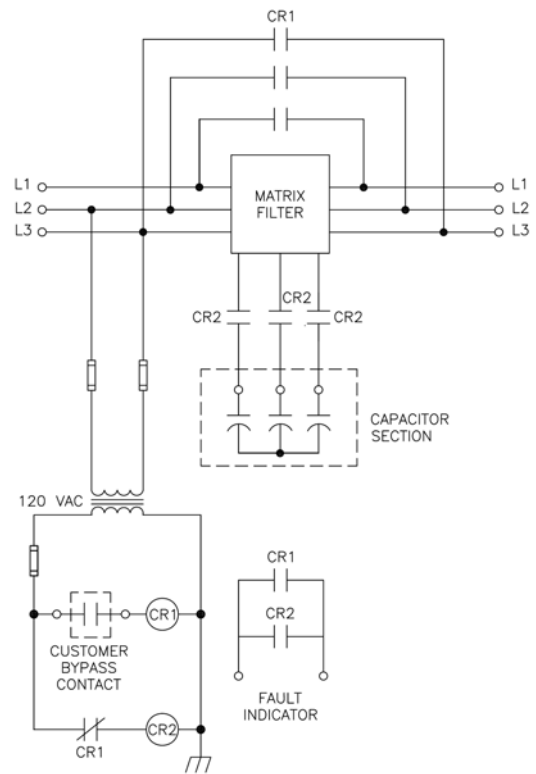
TR technical reference

Option -011

Filter Bypass with transformer



Filters rated 44 Amps and below



Filters rated 55 Amps and above

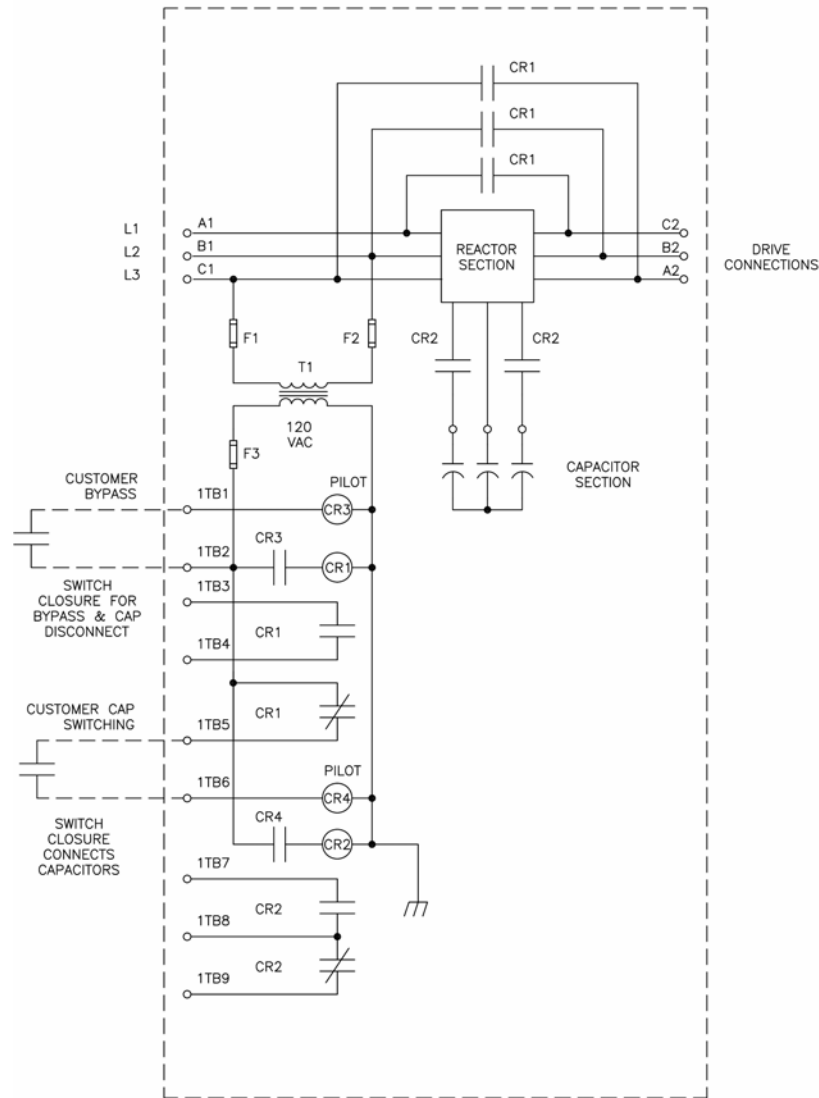
The above contactor option diagram is provided to help understand the circuit function and does not reflect actual circuit wiring.

MTE MATRIX Harmonic Filters Series D

TR technical reference

Option -013

Filter bypass and capacitor contactor with control transformer



The above contactor option diagram is provided to help understand the circuit function and does not reflect actual circuit wiring.

MTE MATRIX Harmonic Filters Series D

TR technical reference

Contactor coil switching currents

Options 002, 010 & 011

The following table indicates the 120 VAC 60 Hz current required to switch and hold the various size contactors used in Matrix filter capacitor switching and bypass options. This data will help select the proper switch rating to remotely control the contactor.

Contactor Currents for 120 VAC 60 Hz coils.

Matrix filter current Rating AMPS	Capacitor Contactor Option 002 AMPS (Maximum)		Filter Bypass Options 010 & 011 AMPS (Maximum)	
	INRUSH	SEALED	INRUSH	SEALED
6	0.54	0.10	0.54	0.10
8	0.54	0.10	0.54	0.10
11	0.54	0.10	0.54	0.10
14	0.54	0.10	0.54	0.10
21	0.54	0.10	0.54	0.10
27	0.54	0.10	0.54	0.10
34	0.54	0.10	0.54	0.10
44	0.54	0.10	1.7	0.30
52	0.54	0.10	1.7	0.30
66	0.54	0.10	2.44	0.60
83	0.54	0.10	3.79	0.40
103	0.54	0.10	3.79	0.40
128	0.54	0.10	4.95	1.00
165	1.70	0.30	10.6	1.3
208	1.80	0.30	11.95	1.4
240	3.25	0.40	11.95	1.4
320	8.70	1.00	11.95	1.4
403	8.70	1.00	-	-
482	8.70	1.00	-	-
636	8.70	1.00	-	-
786	8.70	1.00	-	-

MTE MATRIX Harmonic Filters Series D

TR technical reference

ISO 7.2.3	Matrix Harmonic Filters Series B	TR-1704
Responsibility:	Corporate	
Approved by:	Karl Hink	
File Location:	J:\Public\Controlled Documents\Sales\PRICE BOOK	
Revision	Date	Revision History (recorded by date on document)
---	10/05/06	New document written by Wayne Walcott