

## Type RF EMI/RFI Filters

### Single Phase and Three Phase RF Filters

MTE TYPE RF FILTERS are designed to help your system meet Electromagnetic Compatibility (EMC) requirements by providing sufficient attenuation of the conducted Radio Frequency Interference (RFI) and Electromagnetic Interference (EMI) associated with adjustable speed drive and inverter applications. In most cases, drive and inverter systems using MTE TYPE RF Filters will be able to meet the stringent requirements of the EMC Directives (Class A) and the FCC limits for conducted noise emissions.

**TYPE RF FILTERS SOLVE NOISE PROBLEMS** - The MTE TYPE RF Filters offer an economical solution to many facility interference problems caused by the RF emissions (typically 100kHz to 3Mz) of adjustable speed motor drives and inverters. MTE TYPE RF Filters can prevent drives and inverters from interfering with other sensitive electronic loads by reducing both common mode and differential mode noise emissions.

**PROTECT SENSITIVE LOADS FROM EMI/RFI** - Micro-processor based equipment can be sensitive to voltage distortion and electrical noise, even at low levels. TYPE RF Filters are intended for installation on equipment causing the electrical noise in order to protect other sensitive electronic loads, including:

- Laboratory measurement equipment
- Micro-processor based equipment
- Telecommunication equipment
- Computers
- Automated lighting controls
- Energy management systems
- Radio transmitters / receivers
- Television / CCTV
- Photo electric sensors



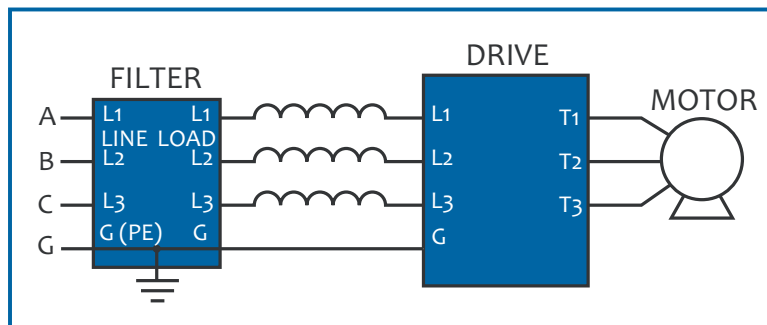
**PRODUCT SELECTION:** See [MTE TYPE RF EMI/RFI Filter Selection Brochure](#) or visit the MTE website at [www.mtecorp.com](http://www.mtecorp.com) and select the handy >> [EMI/RFI CLICK find](#) << for complete product selection, including pricing.

**TYPE RF FILTER CONNECTION** - MTE TYPE RF Filters are intended for use at the input (line side) of an adjustable speed drive or inverter. They are **NOT** designed to be used on the output (load side) of an inverter or drive. Connect the incoming power conductors to the “Line” side terminals of the RF filter. To reduce inverter or drive output (load side) EMI problems, use the [MTE Series A Sine Wave Filter](#).

**PRODUCT OPTIONS:** The MTE TYPE RF Filters are available for single phase applications (TYPE RF2, 240VAC rated) or three phase applications (TYPE RF3, either 480VAC rated or 600VAC rated), 50/60Hz line frequency, from 6A to 330A standard ratings.

#### Typical uses include:

- AC Motor Drives
- DC Motor Drives
- Uninterruptible Power Supplies
- Active Harmonic Filters
- Battery Chargers
- Electronic Welders



## DRIVING POWER QUALITY

MTE Corporation - Menomonee Falls, WI - 1-800-455-4MTE - [www.mtecorp.com](http://www.mtecorp.com)

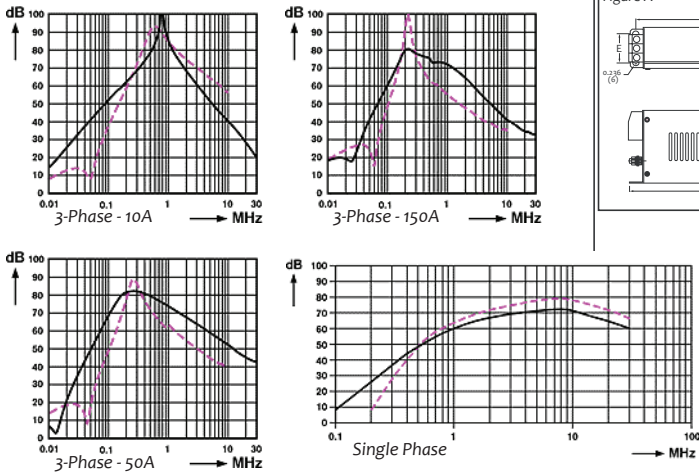
# Product Specifications - TYPE RF EMI-RFI Filters

Refer to the MTE website, [www.mtecorp.com](http://www.mtecorp.com), for Detailed Specifications & Pricing

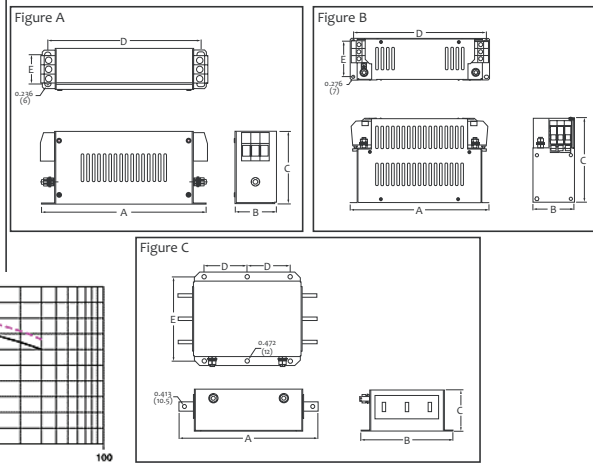
Part No.	Figure	Circuit	Rated Amps	A(in.)	A(mm)	B(in.)	B(mm)	C(in.)	C(mm)	D(in.)	D(mm)	E(in.)	E(mm)	Weight (lb.)	Mass (kg)	Diss. Watts	Max Wire Size AWG (mm <sup>2</sup> )	Leakage Current (mA)
<b>480 Volts THREE PHASE (50/60 Hz)</b>																		
RF3-0006-4	A	D	6	7.0	179	1.8	45	3.1	79	6.57	167	1.26	32	1.4	0.65	3.5	11 (4)	3.3
RF3-0010-4	A	D	10	7.0	179	1.8	45	3.1	79	6.57	167	1.26	32	1.5	0.7	4.2	11 (4)	3.1
RF3-0018-4	A	D	18	9.0	229	2.2	55	4.5	114	8.54	217	1.65	42	2.4	1.1	11	7 (10)	3.3
RF3-0025-4	A	E	25	9.0	229	2.2	55	4.5	114	8.54	217	1.65	42	2.9	1.3	11	7 (10)	6.3
RF3-0033-4	B	F	33	10.7	272	2.9	74	6.3	161	10.16	258	2.36	60	6.0	2.7	16	7 (10)	8.1
RF3-0050-4	B	F	50	12.3	312	3.7	93	7.5	190	11.73	298	3.11	79	8.2	3.7	16	1 (35)	10.5
RF3-0070-4	B	F	70	12.3	312	3.7	93	7.5	190	11.73	298	3.11	79	9.3	4.2	19	1 (35)	9.8
RF3-0090-4	B	G	90	12.6	319	5.0	126	8.8	224	11.73	298	3.11	79	13.5	6.1	18	1 (35)	19.7
RF3-0130-4	B	H	130	12.6	319	5.0	126	8.8	224	11.73	298	4.41	112	13.5	6.1	25	000 (70)	21.7
RF3-0150-4	B	J	150	13.1	334	5.0	126	8.8	224	11.73	298	4.41	112	19.6	8.9	28	0000 (95)	27.6
RF3-0330-4	C	K	330	15.2	386	10.2	260	4.6	116	4.72	120	9.25	235	24.3	11	40	N/A	7.2
<b>600 Volts THREE PHASE (50/60 Hz)</b>																		
RF3-0006-6	A	L	6	7.2	183	1.8	45	3.1	79	6.57	167	1.26	32	1.4	0.65	3.5	9 (6)	2.9
RF3-0010-6	A	L	10	7.2	183	1.8	45	3.1	79	6.57	167	1.26	32	1.5	0.7	4.2	9 (6)	2.9
RF3-0018-6	A	L	18	9.2	233	2.2	55	4.5	114	8.54	217	1.65	42	2.4	1.1	11	9 (6)	9.6
RF3-0025-6	A	M	25	9.2	233	2.2	55	4.5	114	8.54	217	1.65	42	2.9	1.3	11	9 (6)	9.6
RF3-0033-6	B	F	33	10.7	272	2.9	74	6.3	161	10.16	258	2.36	60	6.0	2.7	16	7 (10)	12.6
RF3-0050-6	B	F	50	12.3	312	3.7	93	7.5	190	11.73	298	3.11	79	8.2	3.7	16	1 (35)	13.2
RF3-0070-6	B	F	70	12.3	312	3.7	93	7.5	190	11.73	298	3.11	79	9.3	4.2	19	1 (35)	19.2
RF3-0090-6	B	G	90	12.3	312	3.7	93	7.5	190	11.73	298	3.11	79	9.3	4.2	19	1 (35)	27.5
RF3-0130-6	B	N	130	13.11	334	5.0	126	8.8	224	11.73	298	4.41	112	19.3	8.9	28	000 (70)	27.5
RF3-0150-6	B	N	150	15.0	334	5.0	126	8.8	224	11.73	298	4.41	112	19.6	8.9	28	0000 (95)	27.5
RF3-0330-6	C	K	330	15.2	386	10.2	260	4.6	116	4.72	120	9.25	235	24.3	11	40	N/A	19.2
<b>240 Volts SINGLE PHASE (50/60 Hz)</b>																		
RF2-0010-2	P	U	10	3.7	93	2.1	53	1.6	40	2.95	75	N/A	N/A	0.5	0.23	2.8	N/A	2 x 0.21
RF2-0016-2	P	U	16	3.7	93	2.1	53	1.6	40	2.95	75	N/A	N/A	0.6	0.26	9	N/A	2 x 0.21
RF2-0020-2	R	U	20	4.9	125	4.1	105	1.6	40	2.01	51	3.74	95	1.3	0.59	12	N/A	2 x 0.21

Data subject to change without notice.

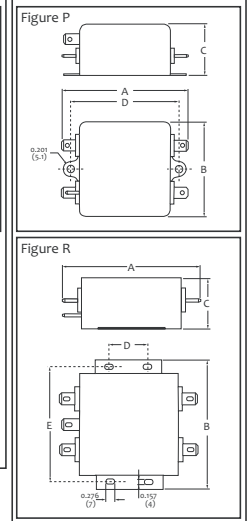
Insertion Loss Examples



Three Phase RF Filters



Single Phase RF Filters



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**DRIVING POWER QUALITY**