

# Type RF EMI/RFI

## Product Selector



- **Meet EMC Directives (Class A) and FCC limits for conducted noise emissions**
- **Reduce common mode and differential mode noise emissions**
- **Protect sensitive loads from EMI/RFI**
- **Use on input side of a VFD or inverter**

## The quiet solution to noise issues.

Our Type RF Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) filters are designed to help your system meet Electromagnetic Compatibility (EMC) requirements. They provide sufficient attenuation of the conducted EMI and RFI associated with Variable Frequency Drives (VFDs) and inverter applications. Typically used with AC and DC Motor drives, Uninterruptible Power Supplies, and Active Harmonic Filters, the Type RF EMI/RFI filters provide an economical solution to facility interference problems caused by RF emissions.

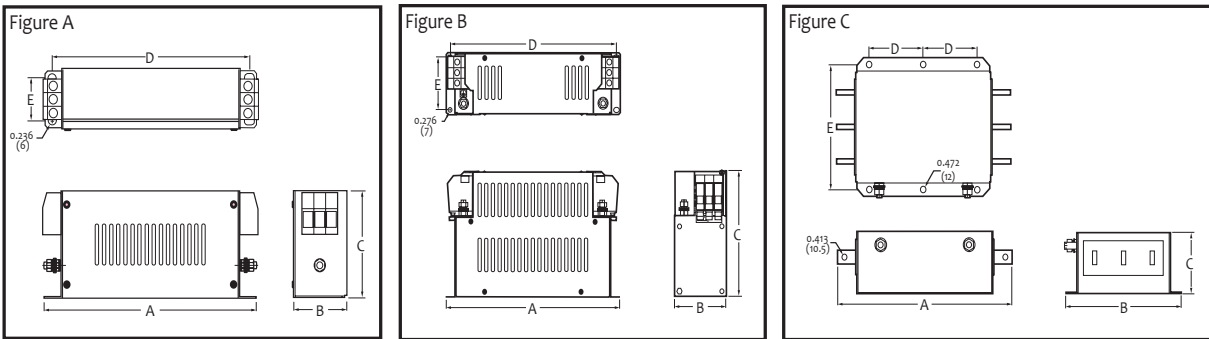
Say goodbye to voltage distortion and electrical noise caused by RF emissions with the Type RF EMI/RFI filter from MTE.

# Solve electrical noise problems and protect your sensitive loads with Type RF EMI/RFI Filters.

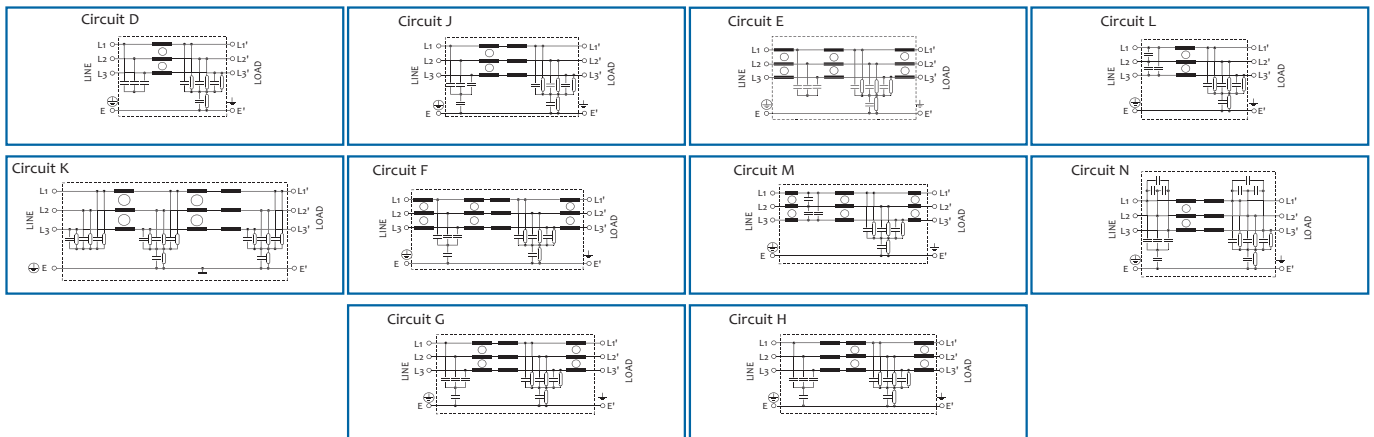
MTE Part Number	Ref Fig	Circuit Fig	Rated Amps	SCCR Rating	A (in)	A (mm)	B (in)	B (mm)	C (in)	C (mm)	D (in)	D (mm)	E (in)	E (mm)	Weight (lbs)	Mass (kg)	Diss. Watts	Max Wired Size AWG (mm <sup>2</sup> )	Leakage Current (mA)
<b>480V 50/60Hz</b>																			
RF3-0006-4	A	D	6	5	7.0	179	1.8	45	3.1	79	6.57	167	1.26	32	1.4	0.65	3.5	11 (4)	3.3
RF3-0010-4	A	D	10	5	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	5	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	5	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	5	10.7	272	2.9	73	6.4	162	10.16	258	2.36	60	4.2	1.9	16	7 (10)	17.6
RF3-0050-4	B	F	50	10	12.3	312	3.7	94	7.5	190	11.73	298	3.11	79	8.2	3.3	16	1 (35)	22.8
RF3-0070-4	B	F	70	10	12.3	312	3.7	94	7.5	190	11.73	298	3.11	79	8.6	3.9	19	1 (35)	21.4
RF3-0090-4	B	G	90	10	12.3	312	3.7	94	7.5	190	11.73	298	3.11	79	9.0	4.1	18	1 (35)	30.6
RF3-0130-4	B	H	130	18	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	18	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	30	15.2	386	10.2	260	4.6	116	4.72	120	9.25	235	24.3	11	40	N/A	7.2
<b>600V 50/60Hz</b>																			
RF3-0006-6	A	L	6	5	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	5	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	5	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	5	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	5	10.7	272	2.9	73	6.4	162	10.16	258	2.36	60	4.4	2.0	16	7 (10)	26.4
RF3-0050-6	B	F	50	10	12.3	312	3.7	94	7.5	190	11.73	298	3.11	79	8.2	3.3	16	1 (35)	39.7
RF3-0070-6	B	F	70	10	12.3	312	3.7	94	7.5	190	11.73	298	3.11	79	8.8	4.0	19	1 (35)	39.7
RF3-0090-6	B	G	90	10	12.3	312	3.7	94	7.5	190	11.73	298	3.11	79	8.8	4.0	19	1 (35)	39.7
RF3-0130-6	B	N	130	18	13.1	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	18	13.1	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	30	15.2	386	10.2	260	4.6	116	4.72	120	9.25	235	24.3	11	40	N/A	19.2

Note: Weights and dimensions are for reference only. Please visit [mtecorp.com](http://mtecorp.com) for detailed information.

## REF FIGURES



## CIRCUIT FIGURES



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit [mtecorp.com](http://mtecorp.com) for detailed information.

HP	kW	Installation WITHOUT an Input Line Reactor					
		208V	240V	380V	400V/415V	480V	600V
1	0.75	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
1.5	1.12	RF3-0010-4	RF3-0010-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
2	1.5	RF3-0018-4	RF3-0010-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
3	2.2	RF3-0018-4	RF3-0018-4	RF3-0010-4	RF3-0010-4	RF3-0010-4	RF3-0006-6
5	3.7	RF3-0025-4	RF3-0025-4	RF3-0018-4	RF3-0018-4	RF3-0010-4	RF3-0010-6
7.5	5.5	RF3-0033-4	RF3-0033-4	RF3-0018-4	RF3-0018-4	RF3-0018-4	RF3-0018-6
10	7.5	RF3-0050-4	RF3-0050-4	RF3-0025-4	RF3-0025-4	RF3-0025-4	RF3-0018-6
15	11.25	RF3-0070-4	RF3-0070-4	RF3-0050-4	RF3-0033-4	RF3-0033-4	RF3-0025-6
20	15	RF3-0090-4	RF3-0090-4	RF3-0050-4	RF3-0050-4	RF3-0050-4	RF3-0033-6
25	18.5	RF3-0130-4	RF3-0130-4	RF3-0070-4	RF3-0050-4	RF3-0050-4	RF3-0050-6
30	22.5	RF3-0130-4	RF3-0130-4	RF3-0070-4	RF3-0070-4	RF3-0070-4	RF3-0050-6
40	30	RF3-0330-4	RF3-0150-4	RF3-0090-4	RF3-0090-4	RF3-0090-4	RF3-0070-6
50	37.5	RF3-0330-4	RF3-0330-4	RF3-0130-4	RF3-0130-4	RF3-0090-4	RF3-0070-6
60	45	RF3-0330-4	RF3-0330-4	RF3-0130-4	RF3-0130-4	RF3-0130-4	RF3-0090-6
75	56.3	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0150-4	RF3-0150-4	RF3-0130-6
100	75	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0130-6
125	93.8	--	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-6
150	112.5	--	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-6
200	150	--	--	--	--	RF3-0330-4	RF3-0330-6
250	187.5	--	--	--	--	--	--
300	225	--	--	--	--	--	--

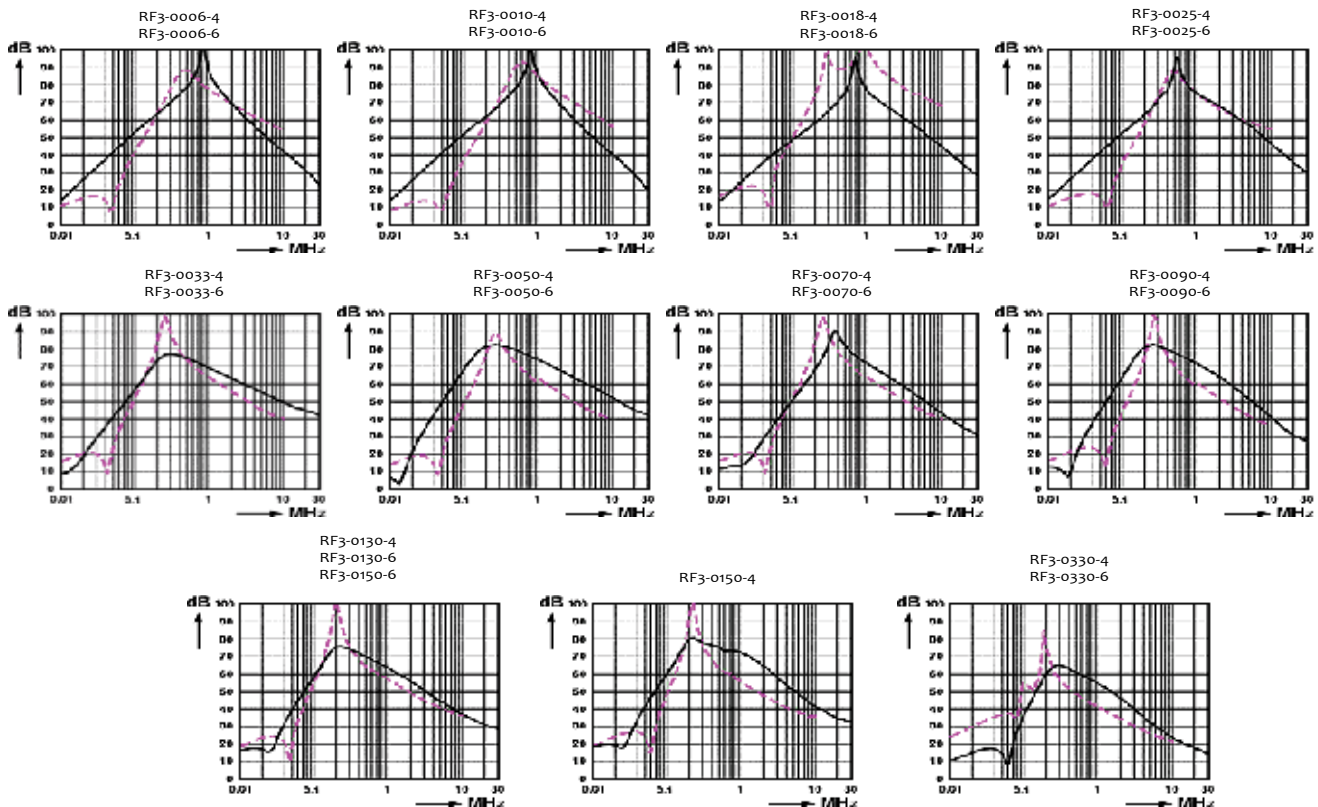
HP	kW	Installation WITH an Input Line Reactor (≥ 3% Impedance)					
		208V	240V	380V	400V/415V	480V	600V
1	0.75	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
1.5	1.12	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
2	1.5	RF3-0010-4	RF3-0010-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
3	2.2	RF3-0018-4	RF3-0010-4	RF3-0010-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
5	3.7	RF3-0018-4	RF3-0018-4	RF3-0010-4	RF3-0010-4	RF3-0010-4	RF3-0006-6
7.5	5.5	RF3-0025-4	RF3-0025-4	RF3-0018-4	RF3-0018-4	RF3-0018-4	RF3-0010-6
10	7.5	RF3-0033-4	RF3-0033-4	RF3-0018-4	RF3-0018-4	RF3-0018-4	RF3-0018-6
15	11.25	RF3-0050-4	RF3-0050-4	RF3-0025-4	RF3-0025-4	RF3-0025-4	RF3-0018-6
20	15	RF3-0070-4	RF3-0070-4	RF3-0033-4	RF3-0033-4	RF3-0033-4	RF3-0025-6
25	18.5	RF3-0090-4	RF3-0090-4	RF3-0050-4	RF3-0050-4	RF3-0050-4	RF3-0033-6
30	22.5	RF3-0130-4	RF3-0090-4	RF3-0070-4	RF3-0050-4	RF3-0050-4	RF3-0033-6
40	30	RF3-0130-4	RF3-0130-4	RF3-0070-4	RF3-0070-4	RF3-0070-4	RF3-0050-6
50	37.5	RF3-0150-4	RF3-0150-4	RF3-0090-4	RF3-0090-4	RF3-0070-4	RF3-0070-6
60	45	RF3-0330-4	RF3-0330-4	RF3-0130-4	RF3-0090-4	RF3-0090-4	RF3-0070-6
75	56.3	RF3-0330-4	RF3-0330-4	RF3-0130-4	RF3-0130-4	RF3-0130-4	RF3-0090-6
100	75	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0150-4	RF3-0130-4	RF3-0130-6
125	93.8	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0130-6
150	112.5	--	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0150-6
200	150	--	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-6
250	187.5	--	--	--	--	RF3-0330-4	RF3-0330-6
300	225	--	--	--	--	--	RF3-0330-6

Note: Higher ratings may be accomplished by connecting two or more filters in parallel. Please visit [mtecorp.com](http://mtecorp.com) for detailed information.

**Insertion Loss** - Insertion loss data illustrates the typical reduction of both common mode and differential mode noise (based on the standard test circuit). Common mode noise occurs between a phase or neutral conductor and ground, while differential mode noise occurs between phase conductors or between phase and neutral conductors.

## 6A to 330A Rated

Common Mode ———  
 Differential Mode - - - - -



## The power quality experts.

MTE Corporation was formed in 1982 by bringing together Milwaukee Transformer Co., Transformer Design Inc., and Milwaukee Electronics Corp. – companies that specialized in different fields of magnetics and transformer designs and were long established in their respective fields. MTE vaulted into a leadership role in power quality with its unique AC reactor design and passive filter expertise. We continued to grow as a global leader with innovative Harmonic Filters, Motor Protection Filters and Sinewave Filters.

With the addition of TEAL Electronics in 2016, MTE brings a continuum of power quality solutions unmatched in the industry. Building on TEAL's reputation of high-efficiency transformers and durable power conditioning and distribution units for demanding applications, MTE is building the best power quality company by capitalizing on the individual strength of each while bringing a new dimension in management, marketing, and quality.

Our team of professional design engineers has well over 100 years of collective experience in the industry and is complemented by as much experience in operations. Our engineers utilize state-of-the-art platforms and best-in-class simulation/modeling tools so that new designs meet your needs and the latest compliance standards while improving your bottom line.

**At MTE, we know power quality because power quality is all we do.**

## Steel Partners Holdings L.P.

MTE is an operating company within the Diversified Industrial Segment of Steel Partners Holdings L.P. (NYSE:SPLP). Steel Partners is a diversified holding company that engages in multiple businesses through consolidated subsidiaries, associated companies, and other interests. The Company owns and operates businesses, and has investments in companies, in various industries, including diversified industrial products, energy, defense, supply chain management and logistics, banking, and youth sports.



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