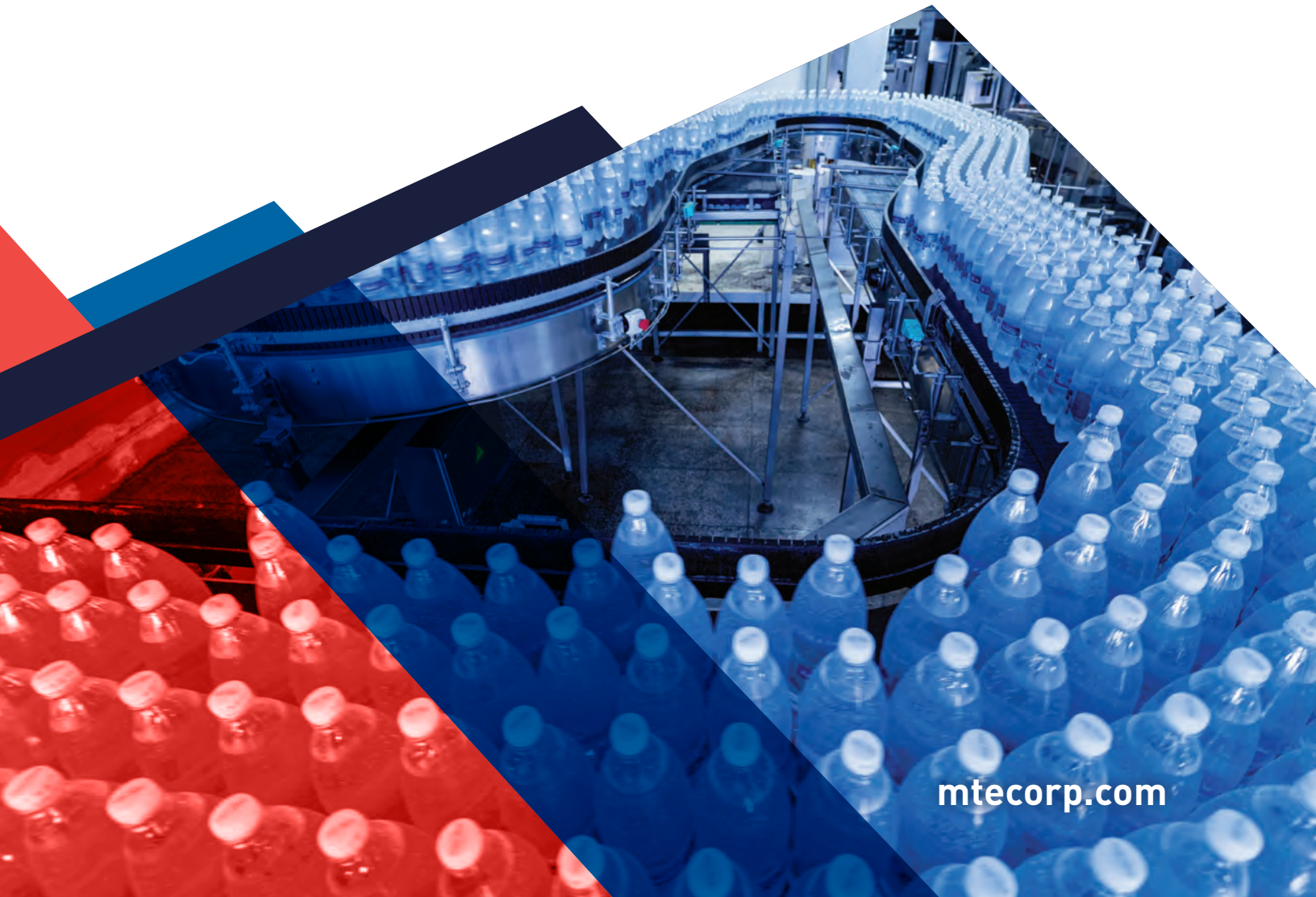




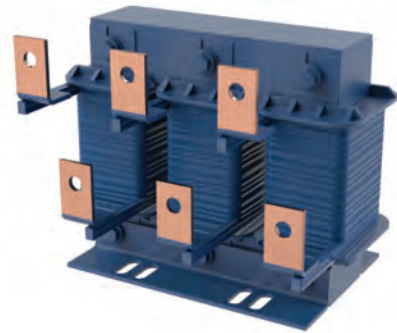
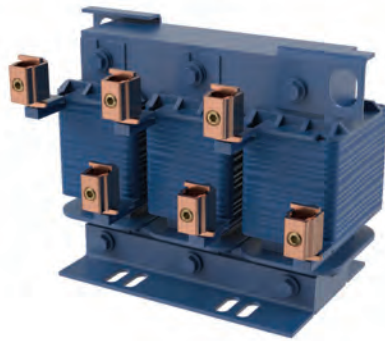
Reactors

Product Catalog



mtecorp.com

We set the benchmark for power quality.



MTE RL and RLW line/load reactors and DC link chokes are well-known for their outstanding performance and robustness. With their long-established history of proven reliability, these products are unmatched in their ability to absorb power line disturbances that can cause damage to sensitive equipment such as Variable Frequency Drives (VFDs), motors, and more.

By reducing nuisance tripping, minimizing long lead effects, and lowering harmonic distortion, MTE line/load reactors and DC link chokes can significantly enhance productivity, making them the best-in-class choice for customers.

Improve power quality. Enhance productivity. Increase your bottom line.



Contents

Reactors

Why Use a Reactor?

Learn the benefits of using a reactor

2

RL Reactor

Best-in-class power quality units for absorbing power line disturbances

4

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

12

DC Link Chokes

The cost-effective, versatile solution to solving power quality problems

20

WHY Use A Reactor?

MTE's versatile family of reactors offer many benefits on both the line or load side of a VFD. With their impressive capability to reduce harmonic levels by almost 50%, these reactors serve as a reliable and cost-effective safeguard against power line disturbances, surge currents, and voltage distortions—an invaluable insurance policy for uninterrupted power quality and enhanced operational stability.





Benefit 1: Equipment Protection

MTE line/load reactors offer equipment protection by limiting inrush currents, preventing damage from start-up or load changes, and reducing voltage transients, extending equipment life and minimizing downtime risk.



Benefit 2: Harmonic Mitigation

MTE line/load reactors effectively reduce harmonic distortion in electrical systems, maintaining a cleaner power supply and protecting sensitive equipment.



Benefit 3: Voltage Stabilization

MTE line/load reactors provide impedance to the system, smoothing out voltage spikes and sags, ensuring a stable voltage supply, and enhancing equipment reliability.



Benefit 4: Power Loss Reduction

MTE line/load reactors minimize power losses by improving power factor and reducing reactive power flow, resulting in energy savings and potential cost reduction.

RLW or RL - Which reactor should I use?

	RLW	RL
Concerned About Size	✓	
Concerned About Weight	✓	
Concerned About Watts Loss		✓
Application FLA rating >750A		✓
Reactor required on both line and load side	✓	✓
Reactor Needs To Be Robust (Handle Overload)		✓
Need To Be Price Competitive	✓	

Reactors

RL Reactors

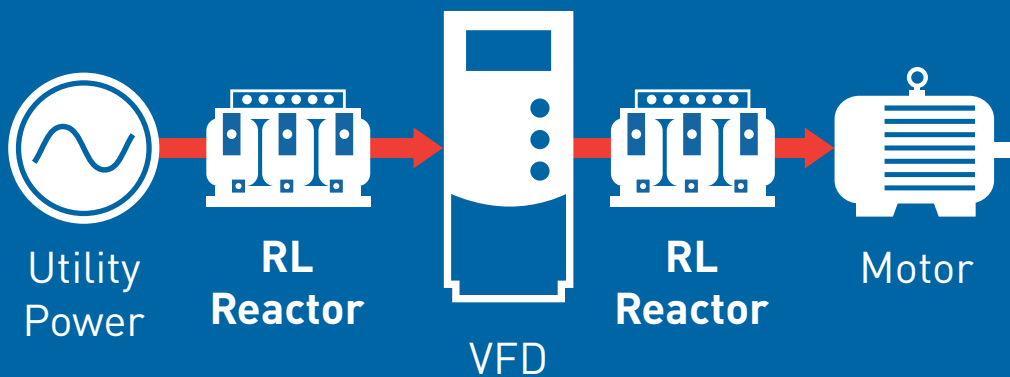
Best-in-class power quality units for absorbing power line disturbances

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

DC Link Chokes

The cost-effective, versatile solution to solving power quality problems



RL Reactors



- **Best-in-class line/load reactors**
- **Most robust, highest continuous service factor**
- **Low watts loss**
- **Performance and durability that is unmatched by the competition**

Peace of mind included.

Our RL Line/Load Reactors are best-in-class power quality units with a long history of proven performance. Rugged and robust, they are unequaled in absorbing power line disturbances that can damage or shut down variable frequency drives (VFDs) and other sensitive equipment. They work on both the line side and load side to give you an easy solution that reduces nuisance tripping, reduces harmonic distortion and minimizes long lead effects.

Improved power quality, enhanced productivity and complete peace of mind are easy with RL Line/ Load Reactors.

Get best-in-class performance with our RL Line/Load Reactors.

Our RL Line/Load Reactors are a robust, best-in-class filtering solution for virtually any 4 or 6-pulse rectifier or power conversion unit. There is no need to derate these reactors. They are harmonic compensated and protected to assure optimum performance in the presence of harmonics, and can help you meet IEEE-519 requirements. There are units available for a full line of currents (1A to 1,500A) and a full line of impedance options (1.5%, 3% and 5%).

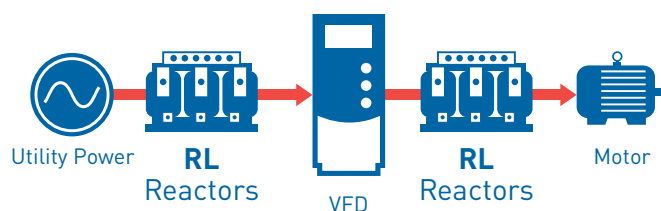
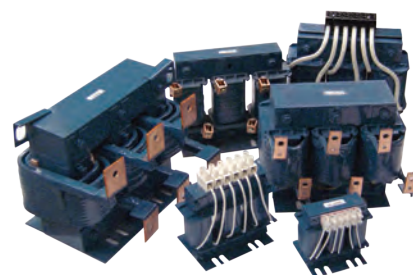
Robust design and construction for unequalled filtering of power line disturbances.

Highest continuous service factor virtually eliminates breakdowns in the field.

Reduces audible noise.

Multiple cabinet designs help meet NEMA 1/2 and 3R.

RL Reactors

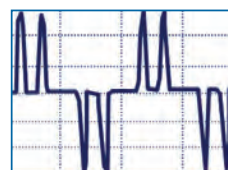


Performance Specifications

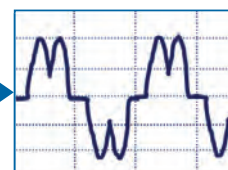
Impedance Levels	1.5%, 3% and 5%
Continuous Service Factor	Reactors rated 1 to 750 Amps – 150% of rating Reactors rated above 750 Amps – 125% of rating
Overload Rating	200% of rated for 30 minutes 300% of rated for 1 minute
Input Voltage Range	208V – 690V
Current Range	1A – 1,500A
Temperature Rise	135°C
Ambient Temperature	-40°C to 50°C
Altitude Maximum Without Derating	1,000 meters
Fundamental Frequency	50/60 Hz
Inductance Curve	100% at 100% Current 100% at 150% Current 50% at 350% Current

Final product specifications subject to change at any time.

MTE Input Reactor

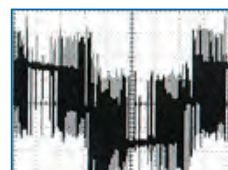


Waveform without reactor

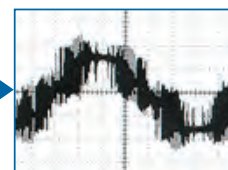


Waveform with reactor

MTE Output Reactor

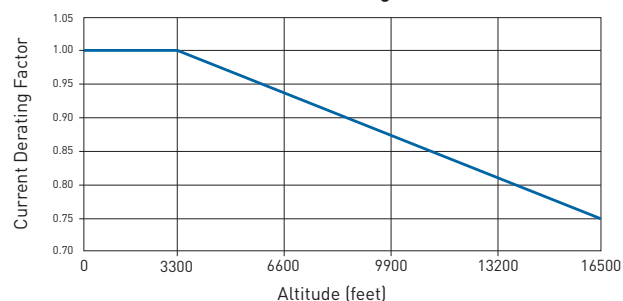


Waveform without reactor



Waveform with reactor

Altitude Derating Curve



ENCLOSURES

FIGURE 1

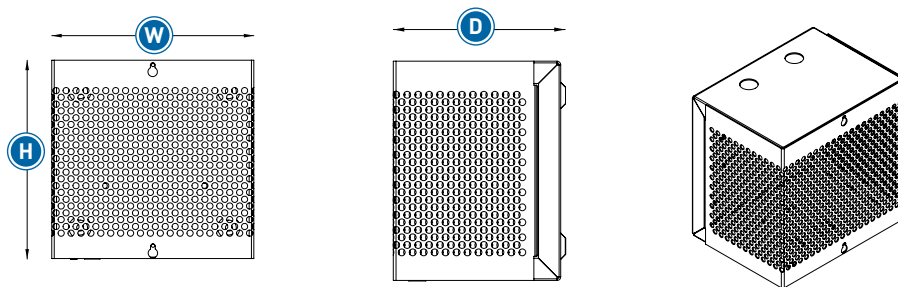
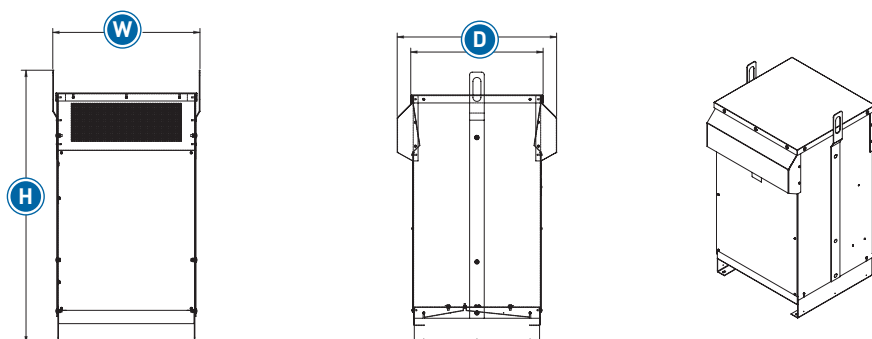
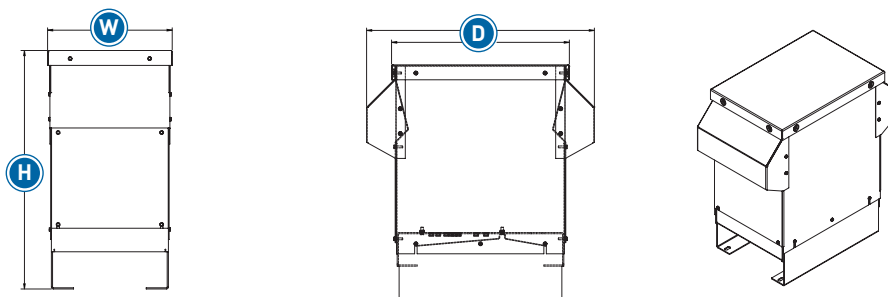


FIGURE 2



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 3



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 4

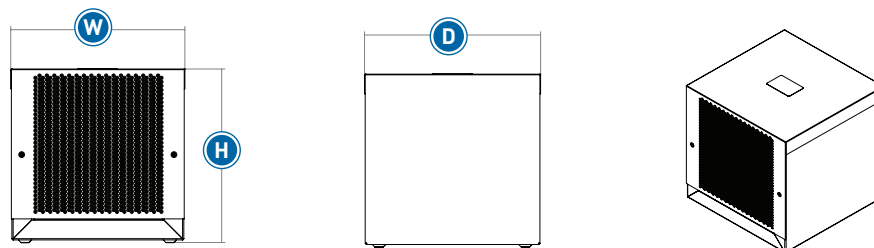
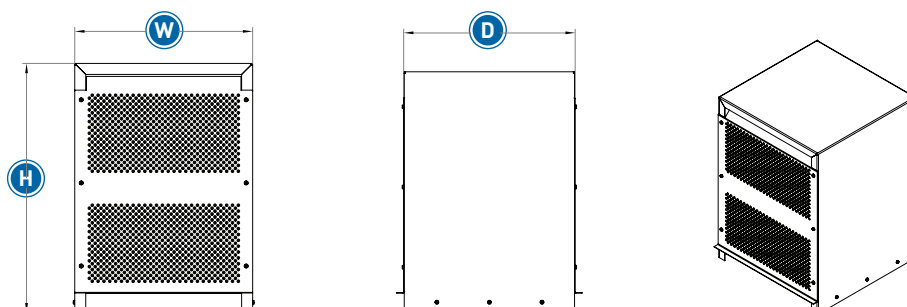


FIGURE 5



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

RL REACTOR SELECTION TABLES

Input Voltage & Hz	% Impedance	0.25 HP 0.18 kW	0.33 HP 0.25 kW	0.5 HP 0.37 kW	0.75 HP 0.55 kW	1.0 HP 0.75 kW	1.5 HP 1.1 kW	2.0 HP 1.5 kW	3.0 HP 2.2 kW	5.0 HP 3.7 kW	7.5 HP 5.5 kW	10.0 HP 7.5 kW	15.0 HP 11.0 kW	20.0 HP 15.0 kW	25.0 HP 18.5 kW	30.0 HP 22.0 kW
Three Phase Input or Output Applications Selected by Motor																
208V 60 Hz	3%	RL-00204	RL-00204	RL-00401	RL-00401	RL-00801	RL-00801	RL-00801	RL-01801	RL-02501	RL-03501	RL-05501	RL-05501	RL-08001	RL-10001	RL-10001
208V 60 Hz	5%	RL-00201	RL-00403	RL-00402	RL-00803	RL-00802	RL-00802	RL-01202	RL-01802	RL-02502	RL-03502	RL-05502	RL-04501	RL-05501	RL-08001	RL-13002
240V 60 Hz	3%	RL-00204	RL-00204	RL-00402	RL-00401	RL-00802	RL-00801	RL-00801	RL-01201	RL-01801	RL-02501	RL-03501	RL-04501	RL-05501	RL-08001	RL-10001
240V 60 Hz	5%	RL-00201	RL-00201	RL-00403	RL-00402	RL-00803	RL-00802	RL-00802	RL-01202	RL-02502	RL-03502	RL-03502	RL-05502	RL-08002	RL-10001	RL-08001
400V 50 Hz	3%	RL-00103	RL-00103	RL-00202	RL-00201	RL-00403	RL-00402	RL-00402	RL-00803	RL-00802	RL-01202	RL-01802	RL-02502	RL-03502	RL-04502	RL-04502
400V 50 Hz	5%	RL-00102	RL-00102	RL-00203	RL-00202	RL-00202	RL-00404	RL-00403	RL-00804	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-04503	RL-05503
480V 60 Hz	3%	RL-00103	RL-00103	RL-00104	RL-00201	RL-00201	RL-00402	RL-00402	RL-00803	RL-00802	RL-01202	RL-01802	RL-02502	RL-03502	RL-03502	RL-04502
480V 60 Hz	5%	RL-00102	RL-00102	RL-00103	RL-00202	RL-00202	RL-00404	RL-00403	RL-00804	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-03503	RL-05503
600V 60 Hz	3%	RL-00102	RL-00103	RL-00103	RL-00202	RL-00202	RL-00201	RL-00403	RL-00402	RL-00803	RL-01202	RL-01202	RL-01802	RL-02502	RL-02502	RL-03502
600V 60 Hz	5%	RL-00101	RL-00102	RL-00102	RL-00203	RL-00203	RL-00202	RL-00404	RL-00404	RL-00804	RL-01203	RL-01203	RL-01803	RL-02503	RL-02503	RL-03503
690V 50 Hz	2%	-	-	-	-	-	-	-	RL-00403	RL-00803	RL-00803	RL-01202	RL-01202	RL-01802	RL-02502	RL-02502
690V 50 Hz	3%	-	-	-	-	-	-	-	RL-00404	RL-00804	RL-00804	RL-01203	RL-01203	RL-01803	RL-02503	RL-02503
Single Phase Input Applications																
120V 60 Hz	5%	RL-01801	RL-01801	RL-01201	RL-01801	RL-01801	RL-02501	RL-03501	RL-05501	RL-10001	RL-16001	RL-20001B14	-	-	-	-
208V 60 Hz	5%	RL-00204	RL-00803	RL-00802	RL-01202	RL-00801	RL-01201	RL-01201	RL-01801	RL-03501	RL-04501	RL-05501	RL-08001	RL-10001	RL-13001	RL-16001
240V 60 Hz	5%	RL-00402	RL-00402	RL-00803	RL-00802	RL-01202	RL-01201	RL-01201	RL-01801	RL-02501	RL-04501	RL-04501	RL-08001	RL-10001	RL-13001	RL-16002
240V 50 Hz	5%	RL-00403	RL-00402	RL-00803	RL-00802	RL-00802	RL-01802	RL-01802	RL-02502	RL-03502	RL-03501	RL-05502	RL-10002	RL-13002	RL-13002	RL-16002
400V 50 Hz	5%	RL-00103	RL-00203	RL-00201	RL-00404	RL-00403	RL-00803	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-04502	RL-05502	RL-08002	RL-08002
480V 60 Hz	5%	RL-00203	RL-00202	RL-00202	RL-00404	RL-00403	RL-00803	RL-00803	RL-01203	RL-01803	RL-02503	RL-02502	RL-04502	RL-05503	RL-08003	RL-08002
600V 60 Hz	5%	RL-00102	RL-00103	RL-00202	RL-00202	RL-00404	RL-00403	RL-00804	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-04503	RL-05503	RL-05503

Note: The recommended reactor selections above are based on fundamental current ratings. Contact appengrg@mtecorp.com with any questions regarding the proper reactor selection.

Impedance Rating:

3% impedance reactors are typically sufficient to absorb power line spikes and motor current surges. They will prevent nuisance tripping of drives or circuit breakers in most applications.

5% impedance reactors are best for reducing harmonic currents and frequencies. Use them when you must reduce VFD drive generated harmonics, and to reduce motor operating temperature, or to reduce motor noise.

*The effective impedance of the reactor changes with actual RMS current. A 5% impedance reactor becomes 3% if its current is reduced to 60%.

40.0 HP 30.0 kW	50.0 HP 37.5 kW	60.0 HP 45.0 kW	75.0 HP 55.0 kW	100.0 HP 75.0 kW	125.0 HP 93.0 kW	150.0 HP 112.0 kW	200.0 HP 150.0 kW	250.0 HP 187.0 kW	300.0 HP 225.0 kW	350.0 HP 262.0 kW	400.0 HP 300.0 kW	500.0 HP 375.0 kW	600.0 HP 450.0 kW	700.0 HP 550.0 kW	800.0 HP 600.0 kW
Three Phase Input or Output Applications Selected by Motor															
RL-13001	RL-16001	RL-20001B14	RL-25001B14	RL-32001B14	RL-40001B14	RL-50001B14	RL-60001	RL-75001	RL-85001B14	RL-100001B14	RL-120001B14	RL-140001	-	-	-
RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	RL-60002	RL-75002	RL-85002B14	RL-100002B14	RL-120002B14	RL-140002	-	-	-	-
RL-13001	RL-16001	RL-20001B14	RL-25001B14	RL-32001B14	RL-40001B14	RL-50001B14	RL-60001	RL-75001	RL-85001B14	RL-100001B14	RL-120001B14	-	-	-	-
RL-13002	RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	RL-60002	RL-75002	RL-85002B14	RL-100002B14	RL-120002B14	-	-	-	-
RL-08002	RL-08002	RL-10002	RL-13002	RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	RL-60002	RL-75002	RL-85002B14	RL-90002B14	RL-10002B14	RL-12002B14
RL-08003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-40003B14	RL-50003	RL-60003	RL-75003	RL-85003B14	RL-90003B14	RL-10003B14	RL-12003B14	RL-14003B14
RL-05502	RL-08002	RL-10002	RL-13002	RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	RL-60002	RL-75002	RL-85002B14	RL-90002B14	RL-10002B14	RL-12002B14
RL-05503	RL-08003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-40003B14	RL-50003	RL-60003	RL-75003	RL-85003B14	RL-90003B14	RL-10003B14	RL-12003B14
RL-04502	RL-05502	RL-08002	RL-10002	RL-13002	RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	RL-60002	RL-75002	RL-85002B14	RL-90002B14	RL-10002B14
RL-04503	RL-05503	RL-08003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-40003B14	RL-50003	RL-60003	RL-75003	RL-85003B14	RL-90003B14	RL-10003B14
RL-03502	RL-04502	RL-05502	RL-08002	RL-10002	RL-13002	RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	RL-60002	RL-75002	RL-85002B14	RL-90002B14
RL-03503	RL-04503	RL-05503	RL-08003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-40003B14	RL-50003	RL-60003	RL-75003	RL-85003B14	RL-90003B14
Single Phase Input Applications															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RL-20001B14	RL-25001B14	RL-32001B14	RL-40001B14	RL-50001B14	-	-	-	-	-	-	-	-	-	-	-
RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	-	-	-	-	-	-	-	-	-	-	-
RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	-	-	-	-	-	-	-	-	-	-	-
RL-10002	RL-13003	RL-16003	RL-20003B14	RL-25003B14	-	-	-	-	-	-	-	-	-	-	-
RL-10002	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-40003B14	RL-50003	-	-	-	-	-	-	-	-
RL-08003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-40003B14	-	-	-	-	-	-	-	-

Note: The recommended reactor selections above are based on fundamental current ratings. Contact appengrg@mtecorp.com with any questions regarding the proper reactor selection.

RL REACTOR SELECTION TABLES

Open					
Open Part Number	Amps Rating	Inductance mh	Watts Loss	Open Weight (lbs)	Size (in) (H x W x D)
RL-00101	1	100	14.1	4	4.0 x 4.2 x 3.0
RL-00102	1	50	14.8	4	4.1 x 4.4 x 2.8
RL-00103	1	36	12.0	3	4.1 x 4.4 x 2.8
RL-00104	1	18	8.0	3	4.1 x 4.4 x 2.8
RL-00201	2	12	7.5	4	4.0 x 4.2 x 2.6
RL-00202	2	20	11.3	4	4.0 x 4.2 x 2.6
RL-00203	2	32	16	4	4.0 x 4.2 x 2.6
RL-00204	2	6	10.7	3	4.0 x 4.2 x 2.6
RL-00401	4	3	14.5	4	4.0 x 4.2 x 2.6
RL-00402	4	6.5	20	4	4.0 x 4.2 x 2.6
RL-00403	4	9	20	5	4.0 x 4.2 x 3.0
RL-00404	4	12	21	6	4.0 x 4.2 x 3.3
RL-00801	8	1.5	19.5	7	4.6 x 5.9 x 2.9
RL-00802	8	3	29	8	4.6 x 5.9 x 2.9
RL-00803	8	5	25.3	11	4.7 x 5.9 x 3.3
RL-00804	8	7.5	28	13	4.7 x 5.9 x 3.3
RL-01201	12	1.25	26	9	5.0 x 5.9 x 3.2
RL-01202	12	2.5	31	10	5.0 x 5.9 x 3.2
RL-01203	12	4.2	41	18	5.0 x 5.9 x 3.8
RL-01801	18	0.8	36	9	5.1 x 5.9 x 3.2
RL-01802	18	1.5	43	12	5.1 x 5.9 x 3.5
RL-01803	18	2.5	43	16	5.7 x 7.1 x 3.7
RL-02501	25	0.5	48	11	5.7 x 7.1 x 3.4
RL-02502	25	1.2	52	14	5.8 x 7.1 x 3.4
RL-02503	25	1.8	61	20	5.8 x 7.1 x 4.2
RL-03501	35	0.4	49	14	5.7 x 7.1 x 3.7
RL-03502	35	0.8	54	16	5.8 x 7.1 x 3.7
RL-03503	35	1.2	54	26	7.2 x 8.9 x 4.6
RL-04501	45	0.3	54	22	7.1 x 8.9 x 4.6
RL-04502	45	0.7	62	26	7.2 x 8.9 x 4.6
RL-04503	45	1.2	65	34	7.3 x 8.9 x 5.1
RL-05501	55	0.25	64	24	6.9 x 9.0 x 5.3
RL-05502	55	0.5	67	26	6.9 x 9.0 x 5.3
RL-05503	55	0.85	71	34	6.9 x 8.9 x 6.3
RL-08001	80	0.2	82	25	6.9 x 8.9 x 5.7
RL-08002	80	0.4	86	33	7.1 x 8.9 x 5.7
RL-08003	80	0.7	96	63	8.5 x 10.8 x 6.6
RL-10001	100	0.15	94	29	7.0 x 8.9 x 6.0
RL-10002	100	0.3	84	37	7.0 x 8.9 x 6.6
RL-10003	100	0.45	108	67	8.4 x 10.8 x 7.8
RL-13001	130	0.1	108	29	7.3 x 9.6 x 5.9
RL-13002	130	0.2	180	43	7.2 x 9.6 x 6.0
RL-13003	130	0.3	128	64	8.5 x 10.8 x 7.3

Open					
Open Part Number	Amps Rating	Inductance mh	Watts Loss	Open Weight (lbs)	Size (in) (H x W x D)
RL-16001	160	0.075	116	41	7.2 x 9.6 x 6.0
RL-16002	160	0.15	149	54	8.4 x 10.8 x 6.7
RL-16003	160	0.23	138	74	8.5 x 10.8 x 7.4
RL-20001B14	200	0.055	124	38	7.2 x 9.6 x 7.1
RL-20002B14	200	0.11	168	54	7.2 x 9.6 x 7.9
RL-20003B14	200	0.185	146	100	8.3 x 10.8 x 9.1
RL-25001B14	250	0.045	154	47	7.0 x 9.6 x 8.1
RL-25002B14	250	0.09	231	80	8.5 x 10.8 x 7.6
RL-25003B14	250	0.15	588	125	11.2 x 14.3 x 8.7
RL-32001B14	320	0.04	224	80	8.4 x 10.8 x 7.9
RL-32002B14	320	0.075	264	102	8.4 x 10.8 x 8.9
RL-32003B14	320	0.125	642	160	11.1 x 14.3 x 9.4
RL-40001B14	400	0.03	213	84	8.4 x 11.0 x 8.6
RL-40002B14	400	0.06	571	118	11.1 x 14.3 x 9.4
RL-40003B14	400	0.105	293	149	11.1 x 14.3 x 10.9
RL-50001B14	500	0.025	226	93	8.5 x 10.8 x 9.4
RL-50002	500	0.05	694	160	11.1 x 14.3 x 10.6
RL-50003	500	0.085	985	210	11.1 x 14.3 x 13.0
RL-60001	600	0.02	609	120	11.1 x 14.3 x 8.8
RL-60002	600	0.04	689	175	11.1 x 14.3 x 11.0
RL-60003	600	0.065	406	270	11.1 x 14.3 x 13.5
RL-75001	750	0.015	713	140	11.2 x 14.3 x 10.4
RL-75002	750	0.029	630	190	11.1 x 14.3 x 11.5
RL-75003	750	0.048	552	265	14.1 x 14.0 x 13.0
RL-85001B14	850	0.015	798	195	15.5 x 17.8 x 14.8
RL-85002B14	850	0.027	930	215	15.5 x 17.8 x 15.5
RL-85003B14	850	0.042	1133	315	15.8 x 17.8 x 17.5
RL-90001B14	900	0.013	655	195	14.4 x 16.2 x 13.8
RL-90002B14	900	0.025	1020	215	14.6 x 17.0 x 14.7
RL-90003B14	900	0.04	1365	315	15.8 x 17.8 x 17.1
RL-100001B14	1000	0.011	810	144	14.4 x 17.0 x 12.5
RL-100002B14	1000	0.022	1080	215	14.6 x 17.0 x 14.7
RL-100003B14	1000	0.038	1250	315	14.6 x 17.0 x 17.2
RL-120001B14	1200	0.009	870	195	14.7 x 17.0 x 13.8
RL-120002B14	1200	0.019	1270	275	14.9 x 17.0 x 16.2
RL-120003B14	1200	0.03	1530	390	14.7 x 17.0 x 17.7
RL-140001	1400	0.008	1235	500	16.6 x 21.0 x 15.2
RL-140002	1400	0.016	1523	525	16.6 x 21.0 x 17.1
RL-140003	1400	0.027	1680	850	16.8 x 21.0 x 22.0
RL-150001	1500	0.008	1432	635	17.1 x 24.0 x 13.7
RL-150002	1500	0.015	1100	460	16.8 x 18.0 x 15.5
RL-150003	1500	0.025	2621	760	16.6 x 21.0 x 19.9

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

NEMA 1/2				
Part Number	Weight (lbs)	Cabinet	Size (in) (H x W x D)	Ref Figure
RL-00111	9	CAB-8	8.0 x 8.2 x 6.3	1
RL-00112	9	CAB-8	8.0 x 8.2 x 6.3	1
RL-00113	8	CAB-8	8.0 x 8.2 x 6.3	1
RL-00114	8	CAB-8	8.0 x 8.2 x 6.3	1
RL-00211	9	CAB-8	8.0 x 8.2 x 6.3	1
RL-00212	9	CAB-8	8.0 x 8.2 x 6.3	1
RL-00213	9	CAB-8	8.0 x 8.2 x 6.3	1
RL-00214	8	CAB-8	8.0 x 8.2 x 6.3	1
RL-00411	9	CAB-8	8.0 x 8.2 x 6.3	1
RL-00412	9	CAB-8	8.0 x 8.2 x 6.3	1
RL-00413	10	CAB-8	8.0 x 8.2 x 6.3	1
RL-00414	11	CAB-8	8.0 x 8.2 x 6.3	1
RL-00811	12	CAB-8	8.0 x 8.2 x 6.3	1
RL-00812	13	CAB-8	8.0 x 8.2 x 6.3	1
RL-00813	16	CAB-8	8.0 x 8.2 x 6.3	1
RL-00814	18	CAB-8	8.0 x 8.2 x 6.3	1
RL-01211	14	CAB-8	8.0 x 8.2 x 6.3	1
RL-01212	15	CAB-8	8.0 x 8.2 x 6.3	1
RL-01213	23	CAB-8	8.0 x 8.2 x 6.3	1
RL-01811	14	CAB-8	8.0 x 8.2 x 6.3	1
RL-01812	17	CAB-8	8.0 x 8.2 x 6.3	1
RL-01813	30	CAB-13V	13.2 x 13.2 x 13.1	4
RL-02511	25	CAB-13V	13.2 x 13.2 x 13.1	4
RL-02512	28	CAB-13V	13.2 x 13.2 x 13.1	4
RL-02513	34	CAB-13V	13.2 x 13.2 x 13.1	4
RL-03511	28	CAB-13V	13.2 x 13.2 x 13.1	4
RL-03512	30	CAB-13V	13.2 x 13.2 x 13.1	4
RL-03513	40	CAB-13V	13.2 x 13.2 x 13.1	4
RL-04511	36	CAB-13V	13.2 x 13.2 x 13.1	4
RL-04512	40	CAB-13V	13.2 x 13.2 x 13.1	4
RL-04513	48	CAB-13V	13.2 x 13.2 x 13.1	4
RL-05511	38	CAB-13V	13.2 x 13.2 x 13.1	4
RL-05512	40	CAB-13V	13.2 x 13.2 x 13.1	4
RL-05513	48	CAB-13V	13.2 x 13.2 x 13.1	4
RL-08011	39	CAB-13V	13.2 x 13.2 x 13.1	4
RL-08012	47	CAB-13V	13.2 x 13.2 x 13.1	4
RL-08013	77	CAB-13V	13.2 x 13.2 x 13.1	4
RL-10011	43	CAB-13V	13.2 x 13.2 x 13.1	4
RL-10012	51	CAB-13V	13.2 x 13.2 x 13.1	4
RL-10013	81	CAB-13V	13.2 x 13.2 x 13.1	4
RL-13011	43	CAB-13V	13.2 x 13.2 x 13.1	4
RL-13012	57	CAB-13V	13.2 x 13.2 x 13.1	4
RL-13013	78	CAB-13V	13.2 x 13.2 x 13.1	4
RL-16011	55	CAB-13V	13.2 x 13.2 x 13.1	4
RL-16012	68	CAB-13V	13.2 x 13.2 x 13.1	4
RL-16013	88	CAB-13V	13.2 x 13.2 x 13.1	4
RL-20011B14	52	CAB-13V	13.2 x 13.2 x 13.1	4
RL-20012B14	68	CAB-13V	13.2 x 13.2 x 13.1	4
RL-20013B14	114	CAB-13V	13.2 x 13.2 x 13.1	4
RL-25011B14	61	CAB-13V	13.2 x 13.2 x 13.1	4
RL-25012B14	123	CAB-17V	24.0 x 17.1 x 18.5	5
RL-25013B14	168	CAB-17V	24.0 x 17.1 x 18.5	5
RL-32011B14	123	CAB-17V	24.0 x 17.1 x 18.5	5
RL-32012B14	145	CAB-17V	24.0 x 17.1 x 18.5	5
RL-32013B14	203	CAB-17V	24.0 x 17.1 x 18.5	5
RL-40011B14	127	CAB-17V	24.0 x 17.1 x 18.5	5
RL-40012B14	161	CAB-17V	24.0 x 17.1 x 18.5	5
RL-40013B14	192	CAB-17V	24.0 x 17.1 x 18.5	5
RL-50011B14	136	CAB-17V	24.0 x 17.1 x 18.5	5
RL-50012	297	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-50013	347	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-60011	257	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-60012	312	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-60013	407	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-75011	277	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-75012	327	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-75013	402	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-85011B14	332	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-85012B14	352	CAB-26C2	47.0 x 26.6 x 24.9	3
RL-85013B14	481	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-90011B14	361	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-90012B14	381	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-90013B14	481	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-100011B14	310	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-100012B14	381	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-100013B14	481	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-120011B14	361	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-120012B14	441	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-120013B14	556	CAB-26D2	72.0 x 26.6 x 24.9	3
RL-140011	815	CAB-42C2	72.0 x 42.6 x 30.9	3
RL-140012	840	CAB-42C2	72.0 x 42.6 x 30.9	3
RL-140013	1165	CAB-42C2	72.0 x 42.6 x 30.9	3
RL-150011	950	CAB-42C2	72.0 x 42.6 x 30.9	3
RL-150012	775	CAB-42C2	72.0 x 42.6 x 30.9	3
RL-150013	1075	CAB-42C2	72.0 x 42.6 x 30.9	3

NEMA 3R				
Part Number	Weight (lbs)	Cabinet	Size (in) (H x W x D)	Ref Figure
RL-00131	61	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00132	61	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00133	60	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00134	60	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00231	61	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00232	61	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00233	61	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00234	60	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00431	61	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00432	61	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00433	62	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00434	63	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00831	64	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00832	65	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00833	68	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-00834	70	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-01231	66	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-01232	67	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-01233	75	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-01831	66	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-01832	69	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-01833	73	CAB-12C3	24.0 x 12.5 x 17.9	2
RL-02531	99	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-02532	102	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-02533	108	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-03531	102	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-03532	104	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-03533	114	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-04531	110	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-04532	114	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-04533	122	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-05531	112	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-05532	114	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-05533	122	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-08031	113	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-08032	121	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-08033	151	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-10031	117	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-10032	125	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-10033	155	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-13031	117	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-13032	131	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-13033	152	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-16031	129	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-16032	142	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-16033	162	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-20031B14	126	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-20032B14	142	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-20033B14	188	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-25031B14	135	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-25032B14	168	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-25033B14	213	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-32031B14	168	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-32032B14	190	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-32033B14	248	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-40031B14	172	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-40032B14	206	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-40033B14	237	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-50031B14	181	CAB-17C3	31.0 x 17.6 x 26.0	2
RL-50032	319	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-50033	369	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-60031	279	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-60032	334	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-60033	429	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-75031	299	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-75032	349	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-75033	424	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-85031B14	354	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-85032B14	374	CAB-26C3	47.0 x 26.6 x 30.0	3
RL-85033B14	494	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-90031B14	374	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-90032B14	394	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-90033B14	494	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-100031B14	323	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-100032B14	394	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-100033B14	494	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-120031B14	374	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-120032B14	454	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-120033B14	569	CAB-26D3	72.0 x 26.6 x 34.0	3
RL-140031	859	CAB-42C3	72.0 x 42.6 x 40.0	3
RL-140032	884	CAB-42C3	72.0 x 42.6 x 40.0	3
RL-140033	1209	CAB-42C3	72.0 x 42.6 x 40.0	3
RL-150031	994	CAB-42C3	72.0 x 42.6 x 40.0	3
RL-150032	819	CAB-42C3	72.0 x 42.6 x 40.0	3
RL-150033	1119	CAB-42C3	72.0 x 42.6 x 40.0	3

Reactors

RL Reactors

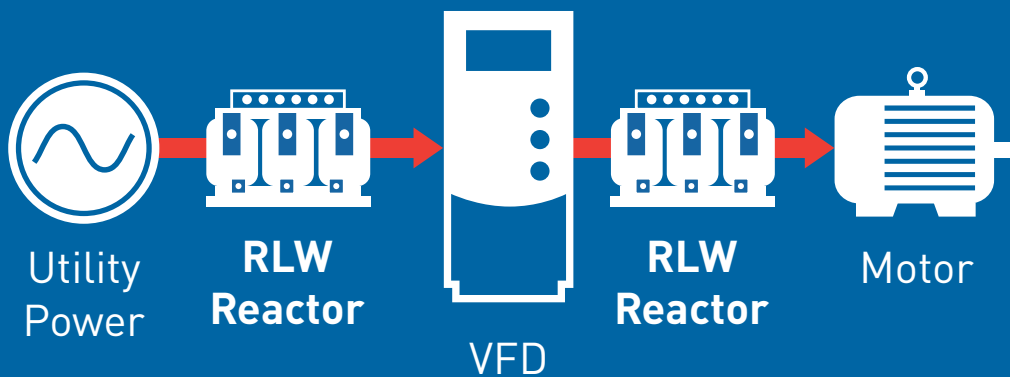
Best-in-class power quality units for absorbing power line disturbances

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

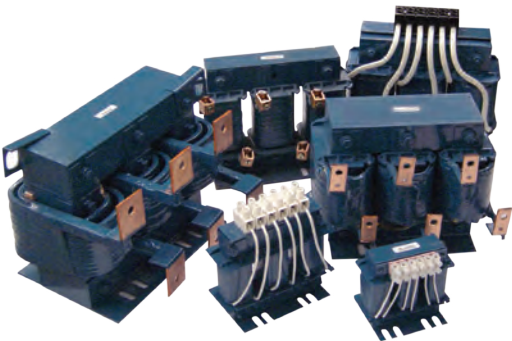
DC Link Chokes

The cost-effective, versatile solution to solving power quality problems





RLW Reactors



- **Proven performance in the field**
- **Reliable and economical**
- **Compact and light-weight**
- **Ideal for OEMs, integrators and panel builders**

Smaller. Lighter.

Our RLW Line/Load Reactors are a state-of-the-art solution for absorbing everyday power line disturbances that can damage or shut down variable frequency drives (VFDs) and other sensitive equipment. They work on both the line side and load side to give you an economical way to reduce nuisance tripping, reduce harmonic distortion and minimize long lead effects. Their epoxy impregnated design also reduces audible noise, and improves structural and moisture integrity.

Put an end to power spike issues and minimize downtime with our RLW Line/Load Reactors from MTE.

Stop nuisance tripping and harmonic distortion with our RLW Reactors.

Our RLW Reactors are the state-of-the-art filtering solution for virtually any 4 or 6-pulse rectifier or power conversion unit. There are units available for amperage ratings from 0.5A to 750A. Our 3% impedance option is 90% effective and our 5% option extends spike protection to 99%.

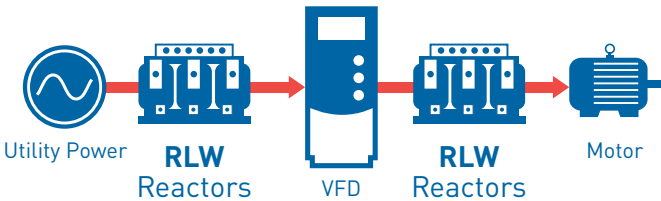
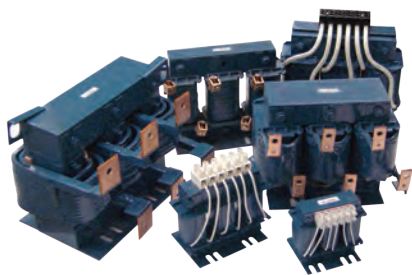
Smaller size and weight makes these units ideal for OEMs, integrators and panel builders.

Wider range of impedance values for accurate and cost-effective selection.

DIN Rail mounting options for easy panel installation.

UL/cUL listed and CE marked for all your installation requirements.

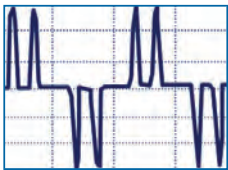
RLW Reactors



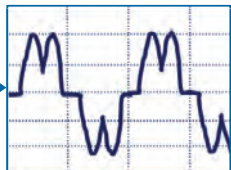
Performance Specifications	
Impedance Levels	1.5%, 3% and 5%
Continuous Service Factor	100%
Overload Rating - Line Side	150% of RMS rating for 1 minute 200% of RMS rating for 10 seconds
Input Voltage Range	208V – 690V
Current Range	0.5A – 750A
Temperature Rise	140°C
Ambient Temperature	-40°C to 50°C
Altitude Maximum Without Derating	1,000 meters
Fundamental Frequency	50/60 Hz
Inductance Curve	100% at 100% Current 80% at 150% Current 50% at 200% Current

Final product specifications subject to change at any time.

MTE Input Reactor

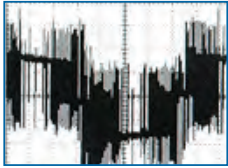


Waveform without reactor

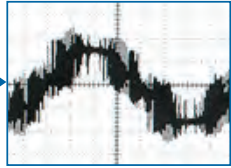


Waveform with reactor

MTE Output Reactor

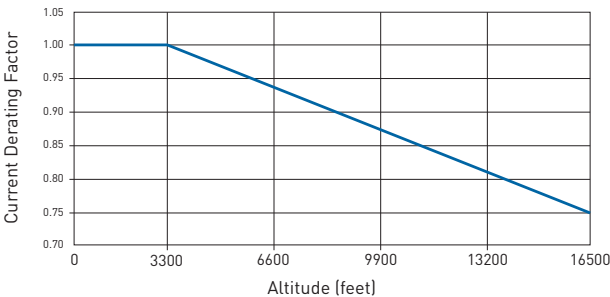


Waveform without reactor

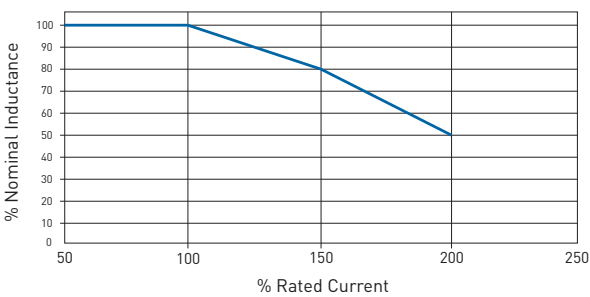


Waveform with reactor

Altitude Derating Curve



RLW Inductance Curve



ENCLOSURES

FIGURE 1

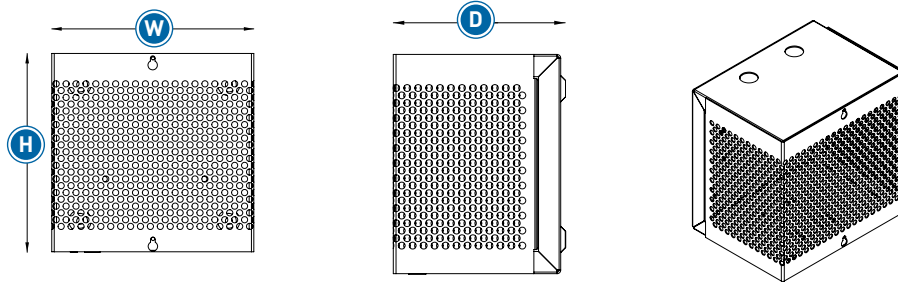
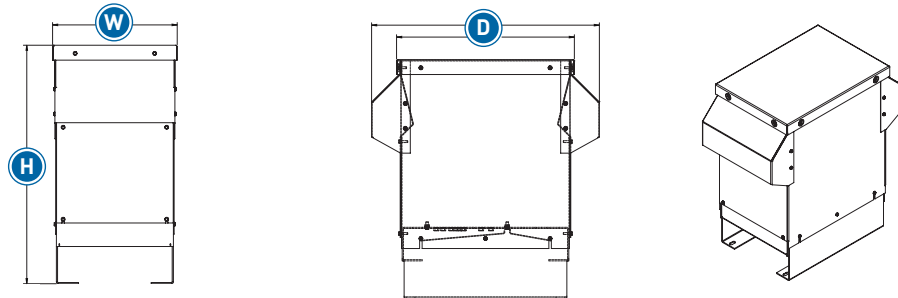


FIGURE 2



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 3

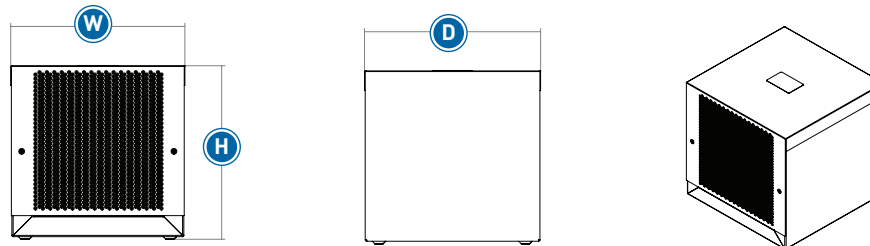
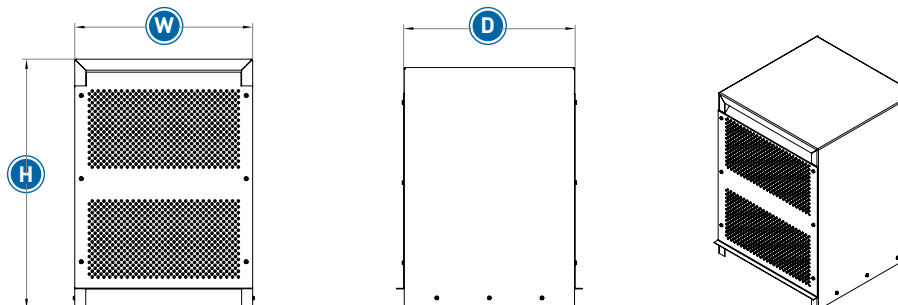


FIGURE 4



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

RLW REACTOR SELECTION TABLES

Phase	Input Voltage & Hz	% Impedance	0.25 HP 0.18 kW	0.33 HP 0.25 kW	0.5 HP 0.37 kW	0.75 HP 0.55 kW	1.0 HP 0.75 kW	1.5 HP 1.1 kW	2.0 HP 1.5 kW	3.0 HP 2.2 kW	5.0 HP 3.7 kW	7.5 HP 5.5 kW	10.0 HP 7.5 kW	15.0 HP 11.0 kW	20.0 HP 15.0 kW	25.0 HP 18.5 kW
Three Phase Input Applications Selected by Motor																
3 Phase	208V 60 Hz	3%	RLW-01P601	RLW-02P101	RLW-03P401	RLW-04P801	RLW-04P801	RLW-07P601	RLW-07P601	RLW-001101	RLW-002101	RLW-002801	RLW-003501	RLW-005501	RLW-006501	RLW-008301
3 Phase	208V 60 Hz	5%	RLW-01P603	RLW-02P103	RLW-03P403	RLW-04P803	RLW-07P603	RLW-07P603	RLW-001103	RLW-001403	RLW-002103	RLW-002803	RLW-004603	RLW-006503	RLW-008303	RLW-010403
3 Phase	240V 60 Hz	3%	RLW-01P601	RLW-02P101	RLW-03P401	RLW-03P401	RLW-04P801	RLW-07P601	RLW-07P601	RLW-001101	RLW-002101	RLW-002801	RLW-002801	RLW-004601	RLW-005501	RLW-008301
3 Phase	240V 60 Hz	5%	RLW-01P603	RLW-02P103	RLW-03P403	RLW-03P403	RLW-04P803	RLW-07P603	RLW-07P603	RLW-001103	RLW-002103	RLW-002803	RLW-003503	RLW-004603	RLW-006503	RLW-008303
3 Phase	400V 50 Hz	3%	RLW-0P7505	RLW-0P7503	RLW-01P605	RLW-02P103	RLW-03P405	RLW-03P403	RLW-04P803	RLW-07P605	RLW-001105	RLW-001405	RLW-002105	RLW-002805	RLW-003503	RLW-003503
3 Phase	400V 50 Hz	5%	RLW-0P7506	RLW-0P7505	RLW-01P606	RLW-02P106	RLW-03P406	RLW-03P405	RLW-04P806	RLW-07P606	RLW-001106	RLW-001406	RLW-002106	RLW-002806	RLW-003505	RLW-003505
3 Phase	480V 60 Hz	3%	RLW-0P7503	RLW-01P105	RLW-01P103	RLW-01P603	RLW-02P103	RLW-03P403	RLW-03P403	RLW-04P803	RLW-07P603	RLW-001103	RLW-001403	RLW-002103	RLW-002803	RLW-003503
3 Phase	480V 60 Hz	5%	RLW-0P7506	RLW-01P106	RLW-01P105	RLW-01P605	RLW-02P105	RLW-03P405	RLW-03P405	RLW-04P805	RLW-07P605	RLW-001105	RLW-001405	RLW-002105	RLW-002805	RLW-003505
3 Phase	600V 60 Hz	3%	RLW-00P505	RLW-0P7505	RLW-01P105	RLW-01P605	RLW-02P105	RLW-03P405	RLW-03P405	RLW-04P805	RLW-07P605	RLW-001105	RLW-001103	RLW-002105	RLW-002805	RLW-002803
3 Phase	600V 60 Hz	5%	RLW-00P506	RLW-0P7506	RLW-01P106	RLW-01P606	RLW-02P106	RLW-03P406	RLW-03P406	RLW-04P806	RLW-07P606	RLW-001106	RLW-001106	RLW-002106	RLW-002806	RLW-002806
3 Phase	690V 50 Hz	2%	-	-	-	-	-	-	-	RLW-03P403	RLW-04P803	RLW-07P603	RLW-001105	RLW-001403	RLW-002105	RLW-002103
3 Phase	690V 50 Hz	3%	-	-	-	-	-	-	-	RLW-03P406	RLW-04P805	RLW-07P606	RLW-001106	RLW-001405	RLW-002106	RLW-002105
Single Phase Input Applications																
1 Phase	400V 50 Hz	5%	RLW-01P105	RLW-01P606	RLW-02P105	RLW-03P405	RLW-04P805	RLW-07P606	RLW-07P605	RLW-001106	RLW-001405	RLW-002105	RLW-002805	RLW-004605	RLW-005505	RLW-006505
1 Phase	480V 60 Hz	5%	RLW-01P606	RLW-01P605	RLW-02P105	RLW-03P405	RLW-04P806	RLW-07P606	RLW-07P606	RLW-001106	RLW-001405	RLW-002105	RLW-002805	RLW-004605	RLW-005505	RLW-006505
1 Phase	600V 60 Hz	5%	RLW-01P106	RLW-01P105	RLW-01P605	RLW-03P406	RLW-03P406	RLW-04P806	RLW-04P805	RLW-07P606	RLW-001106	RLW-002106	RLW-002106	RLW-003505	RLW-004605	RLW-005505
Three Phase Output Selected by Motor																
3 Phase	480V 60 Hz	1.5%	RLW-01P101	RLW-01P101	RLW-01P601	RLW-02P101	RLW-03P403	RLW-04P803	RLW-04P801	RLW-07P601	RLW-001101	RLW-001401	RLW-002101	RLW-002801	RLW-003501	RLW-004601
3 Phase	600V 60 Hz	1.5%	RLW-0P7503	RLW-01P103	RLW-01P603	RLW-02P103	RLW-02P101	RLW-03P403	RLW-03P403	RLW-07P603	RLW-001103	RLW-001403	RLW-001403	RLW-002803	RLW-002803	RLW-003501
3 Phase	690V 50 Hz	1.5%	-	-	-	-	-	-	-	RLW-04P805	RLW-07P605	RLW-001105	RLW-001103	RLW-002105	RLW-002103	RLW-002803

Note: The recommended reactor selections above are based on fundamental current ratings. Contact appengrg@mtecorp.com with any questions regarding the proper reactor selection.

Impedance Rating:

1.5% impedance reactors are the recommended maximum impedance for load side reactor applications.

3% impedance reactors are typically sufficient to absorb power line spikes and motor current surges. They will prevent nuisance tripping of drives or circuit breakers in most applications.

5% impedance reactors are best for reducing harmonic currents and frequencies. Use them when you must reduce VFD drive generated harmonics, and to reduce motor operating temperature, or to reduce motor noise.

*The effective impedance of the reactor changes with actual RMS current. A 5% impedance reactor becomes 3% if its current is reduced to 60%.

30.0 HP 22.0 kW	40.0 HP 30.0 kW	50.0 HP 37.5 kW	60.0 HP 45.0 kW	75.0 HP 55.0 kW	100.0 HP 75.0 kW	125.0 HP 93.0 kW	150.0 HP 112.0 kW	200.0 HP 150.0 kW	250.0 HP 187.0 kW	300.0 HP 225.0 kW	350.0 HP 262.0 kW	400.0 HP 300.0 kW	500.0 HP 375.0 kW	600.0 HP 450.0 kW	700.0 HP 550.0 kW	800.0 HP 600.0 kW
Three Phase Input Applications Selected by Motor																
RLW-010401	RLW-013001	RLW-016001	RLW-020001	RLW-025001	RLW-032201	RLW-041401	RLW-051501	RLW-060001	RLW-075001	-	-	-	-	-	-	-
RLW-010403	RLW-013003	RLW-020003	RLW-020003	RLW-025003	RLW-032203	RLW-051503	RLW-041401	RLW-075003	RLW-075001	-	-	-	-	-	-	-
RLW-008301	RLW-010401	RLW-013001	RLW-016001	RLW-020001	RLW-025001	RLW-032201	RLW-041401	RLW-051501	RLW-060001	RLW-075001	-	-	-	-	-	-
RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-020003	RLW-032203	RLW-032203	RLW-041403	RLW-060003	RLW-075003	RLW-075003	-	-	-	-	-	-
RLW-004603	RLW-006503	RLW-008303	RLW-008303	RLW-010403	RLW-016003	RLW-020003	RLW-020003	RLW-032203	RLW-041403	RLW-041403	RLW-051503	RLW-051503	RLW-075003	-	-	-
RLW-004605	RLW-006505	RLW-008305	RLW-008305	RLW-010405	RLW-016005	RLW-020005	RLW-020005	RLW-032205	RLW-041405	RLW-041405	RLW-051505	RLW-060005	RLW-075005	-	-	-
RLW-004603	RLW-005503	RLW-006503	RLW-008303	RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-025003	RLW-032203	RLW-041403	RLW-051503	RLW-051503	RLW-075003	RLW-075003	-	-
RLW-004605	RLW-005505	RLW-006505	RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-041405	RLW-051505	RLW-051505	RLW-060005	RLW-075005	-	-
RLW-003503	RLW-004603	RLW-005503	RLW-006503	RLW-008303	RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-025003	RLW-032203	RLW-041403	RLW-041403	RLW-051503	RLW-060003	RLW-075003	-
RLW-003505	RLW-004605	RLW-005505	RLW-006505	RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-041405	RLW-041405	RLW-051505	RLW-060005	RLW-075005	-
RLW-002803	RLW-003503	RLW-004603	RLW-005503	RLW-006503	RLW-008303	RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-025003	RLW-032205	RLW-032203	RLW-041403	RLW-051503	RLW-051503	RLW-060003
RLW-002806	RLW-003505	RLW-004605	RLW-005505	RLW-006505	RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-032205	RLW-041405	RLW-051505	RLW-051505	RLW-060005
Single Phase Input Applications																
RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-041405	RLW-060005	RLW-060005	RLW-075005	-	-	-	-	-	-
RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-032205	RLW-051505	RLW-060005	RLW-075005	RLW-075005	-	-	-	-	-
RLW-006505	RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025007	RLW-025005	RLW-041405	RLW-051505	RLW-051505	RLW-060005	RLW-075005	-	-	-	-
Three Phase Output Selected by Motor																
RLW-005501	RLW-006501	RLW-008301	RLW-010401	RLW-013001	RLW-016001	RLW-020001	RLW-025001	RLW-032201	RLW-041401	RLW-051501	RLW-060001	RLW-060001	RLW-075001	-	-	-
RLW-004603	RLW-005501	RLW-006501	RLW-008303	RLW-010403	RLW-013003	RLW-016001	RLW-020003	RLW-025003	RLW-032201	RLW-041401	RLW-051503	RLW-051501	RLW-060001	RLW-075001	-	-
RLW-003503	RLW-004603	RLW-005503	RLW-006503	RLW-008303	RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-025003	RLW-032203	RLW-032203	RLW-041403	RLW-051503	RLW-060003	RLW-075003	RLW-075003

Note: The recommended reactor selections above are based on fundamental current ratings. Contact appengrg@mtecorp.com with any questions regarding the proper reactor selection.

RLW REACTOR SELECTION TABLES

Open					
Open Part Number	Amps Rating	Inductance mh	Watts Loss	Open Weight (lbs)	Size (in) (H x W x D)
RLW-00P501	0.5	22	2.3	2	3.7 x 4.5 x 1.5
RLW-00P503	0.5	46	3.6	2	3.7 x 4.5 x 1.5
RLW-00P505	0.5	74	4.8	2	3.7 x 4.5 x 1.5
RLW-00P506	0.5	92	5.4	2	3.7 x 4.5 x 1.5
RLW-0P7501	0.75	15	4.2	2	3.7 x 4.5 x 1.5
RLW-0P7503	0.75	31	6.6	2	3.7 x 4.5 x 1.5
RLW-0P7505	0.75	49	8.8	2	3.7 x 4.5 x 1.5
RLW-0P7506	0.75	61	10.1	2	3.7 x 4.5 x 1.5
RLW-01P101	1.1	10	4.8	2	3.7 x 4.5 x 1.5
RLW-01P103	1.1	21	7.8	2	3.7 x 4.5 x 1.5
RLW-01P105	1.1	33	10.1	2	3.7 x 4.5 x 1.5
RLW-01P106	1.1	42	11.9	2	3.7 x 4.5 x 1.5
RLW-01P601	1.6	6.9	6.9	2	3.7 x 4.5 x 1.5
RLW-01P603	1.6	14	10.9	2	3.7 x 4.5 x 1.5
RLW-01P605	1.6	23	15	2	3.7 x 4.5 x 1.5
RLW-01P606	1.6	29	17.7	2	3.7 x 4.5 x 1.5
RLW-02P101	2.1	5.3	9	2	3.7 x 4.5 x 1.5
RLW-02P103	2.1	11	14.3	2	3.7 x 4.5 x 1.5
RLW-02P105	2.1	18	19.6	2	3.7 x 4.5 x 1.5
RLW-02P106	2.1	22	22.3	2	3.7 x 4.5 x 1.5
RLW-03P401	3.4	3.2	12.3	2	3.7 x 4.5 x 1.5
RLW-03P403	3.4	6.8	19.6	2	3.7 x 4.5 x 1.5
RLW-03P405	3.4	11	26.5	3	4.0 x 4.2 x 2.6
RLW-03P406	3.4	14	31.5	3	4.0 x 4.2 x 2.6
RLW-04P801	4.8	2.3	13.8	2	3.7 x 4.5 x 1.5
RLW-04P803	4.8	4.8	23	2	3.7 x 4.5 x 1.5
RLW-04P805	4.8	7.7	37.5	3	4.0 x 4.2 x 2.6
RLW-04P806	4.8	10	40.1	4	4.0 x 4.2 x 3.0
RLW-07P601	7.6	1.5	19.2	2	3.7 x 4.5 x 1.5
RLW-07P603	7.6	3	37.2	3	4.0 x 4.2 x 2.6
RLW-07P605	7.6	4.8	47.8	4	4.0 x 4.2 x 3.0
RLW-07P606	7.6	6	53.8	4	4.0 x 4.2 x 3.0
RLW-001101	11	1	26.8	3	4.0 x 4.2 x 2.6
RLW-001103	11	2.1	40.9	4	4.0 x 4.2 x 3.0
RLW-001105	11	3.3	54.4	5	4.0 x 4.2 x 3.3
RLW-001106	11	4.3	59.1	7	4.7 x 5.9 x 2.9
RLW-001401	14	0.79	32.7	3	4.0 x 4.2 x 2.6
RLW-001403	14	1.6	48.2	4	4.0 x 4.2 x 3.0
RLW-001405	14	2.6	60.6	7	4.7 x 5.9 x 2.9
RLW-001406	14	3.3	66	9	5.7 x 5.9 x 3.3
RLW-002101	21	0.53	38.3	4	5.2 x 4.2 x 3.0
RLW-002103	21	1.1	57.4	7	6.0 x 5.9 x 2.9
RLW-002105	21	1.8	73.5	10	6.0 x 5.9 x 3.3
RLW-002106	21	2.2	78	13	6.8 x 7.1 x 3.5
RLW-002801	28	0.39	48.2	5	5.2 x 4.2 x 3.3
RLW-002803	28	0.82	66.8	10	6.0 x 5.9 x 3.3
RLW-002805	28	1.3	93.8	10	6.0 x 5.9 x 3.3
RLW-002806	28	1.6	110.6	14	6.8 x 7.1 x 3.5
RLW-003501	35	0.35	69	10	6.0 x 5.9 x 3.5
RLW-003503	35	0.71	103	13	5.8 x 7.1 x 3.7
RLW-003505	35	1.2	122	18	5.8 x 7.1 x 4.2
RLW-003507	35	2.12	204	28	8.3 x 8.9 x 5.7
RLW-004601	46	0.3	78	12	5.8 x 7.1 x 3.7
RLW-004603	46	0.55	100	17	5.7 x 7.1 x 4.2

Open					
Open Part Number	Amps Rating	Inductance mh	Watts Loss	Open Weight (lbs)	Size (in) (H x W x D)
RLW-004605	46	0.98	179	24	8.3 x 8.9 x 4.6
RLW-004607	46	1.6	192	33	8.4 x 8.9 x 4.9
RLW-005501	55	0.27	68	18	5.5 x 7.1 x 4.9
RLW-005503	55	0.48	110	20	5.6 x 7.1 x 5.6
RLW-005505	55	0.75	150	26	7.0 x 8.9 x 5.7
RLW-005507	55	1.33	283	35	7.0 x 9.0 x 6.8
RLW-006501	65	0.19	87	18	5.6 x 7.1 x 5.0
RLW-006503	65	0.36	105	22	5.7 x 7.1 x 6.0
RLW-006505	65	0.64	215	26	7.0 x 8.9 x 5.7
RLW-006507	65	1.1	191	44	7.0 x 8.9 x 7.0
RLW-008301	83	0.17	119	19	5.6 x 7.1 x 5.9
RLW-008303	83	0.29	155	26	7.0 x 8.9 x 5.8
RLW-008305	83	0.51	198	35	7.0 x 8.9 x 6.5
RLW-008307	83	0.91	240	54	7.0 x 8.9 x 7.5
RLW-010401	104	0.12	94	22	5.6 x 7.1 x 5.6
RLW-010403	104	0.23	200	28	7.1 x 8.9 x 6.2
RLW-010405	104	0.375	208	41	7.2 x 9.6 x 7.0
RLW-010407	104	0.67	256	57	7.2 x 9.6 x 7.5
RLW-013001	130	0.095	132	26	7.1 x 8.9 x 6.4
RLW-013003	130	0.18	153	37	7.0 x 9.6 x 6.9
RLW-013005	130	0.3	198	52	7.2 x 9.6 x 7.9
RLW-013007	130	0.56	480	80	8.5 x 10.8 x 8.1
RLW-016001	160	0.08	110	34	7.0 x 8.9 x 6.4
RLW-016003	160	0.155	195	40	7.3 x 9.6 x 7.1
RLW-016005	160	0.26	309	53	7.3 x 9.6 x 7.9
RLW-016007	160	0.47	561	91	8.6 x 10.8 x 9.9
RLW-020001	200	0.06	159	34	6.9 x 8.9 x 6.4
RLW-020003	200	0.115	224	49	7.2 x 9.6 x 7.9
RLW-020005	200	0.2	293	75	8.5 x 10.8 x 8.5
RLW-020007	200	0.34	509	91	8.5 x 10.8 x 9.5
RLW-025001	250	0.05	276	35	7.1 x 8.9 x 6.9
RLW-025003	250	0.095	284	55	7.2 x 9.6 x 7.9
RLW-025005	250	0.16	402	93	8.5 x 10.8 x 10.5
RLW-025007	250	0.27	465	121	8.4 x 10.8 x 10.6
RLW-032201	322	0.05	300	57	7.3 x 9.6 x 8.4
RLW-032203	322	0.07	383	76	8.4 x 10.8 x 8.7
RLW-032205	322	0.13	494	108	8.4 x 10.8 x 10.9
RLW-032207	322	0.225	780	172	11.2 x 14.3 x 10.5
RLW-041401	414	0.033	333	78	8.4 x 10.8 x 9.2
RLW-041403	414	0.066	531	98	8.5 x 10.8 x 10.4
RLW-041405	414	0.11	588	125	8.5 x 10.8 x 12.3
RLW-041407	414	0.185	1007	197	11.2 x 14.3 x 13.1
RLW-051501	515	0.025	314	81	8.4 x 10.8 x 8.8
RLW-051503	515	0.05	496	118	8.5 x 10.8 x 12.1
RLW-051505	515	0.08	695	193	11.1 x 14.3 x 12.7
RLW-051507	515	0.15	1096	248	11.2 x 14.3 x 13.2
RLW-060001	600	0.02	375	375	8.5 x 10.8 x 9.9
RLW-060003	600	0.04	747	144	11.2 x 14.3 x 11.8
RLW-060005	600	0.065	780	204	11.2 x 14.3 x 12.6
RLW-060007	600	0.12	1190	292	11.2 x 14.3 x 14.7
RLW-075001	750	0.017	468	105	8.6 x 10.8 x 11.0
RLW-075003	750	0.035	838	166	11.3 x 14.3 x 11.0
RLW-075005	750	0.055	858	245	11.1 x 14.3 x 13.8
RLW-075007	750	0.095	1426	348	11.2 x 14.3 x 17.2

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

NEMA 1/2				
Part Number	Weight (lbs)	Cabinet	Size (in) (H x W x D)	Ref Figure
RLW-00P511	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-00P513	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-00P515	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-00P516	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-0P7511	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-0P7513	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-0P7515	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-0P7516	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-01P111	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-01P113	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-01P115	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-01P116	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-01P611	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-01P613	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-01P615	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-01P616	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-02P111	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-02P113	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-02P115	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-02P116	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-03P411	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-03P413	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-03P415	8	CAB-8	8.0 x 8.2 x 6.3	1
RLW-03P416	8	CAB-8	8.0 x 8.2 x 6.3	1
RLW-04P811	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-04P813	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-04P815	8	CAB-8	8.0 x 8.2 x 6.3	1
RLW-04P816	9	CAB-8	8.0 x 8.2 x 6.3	1
RLW-07P611	7	CAB-8	8.0 x 8.2 x 6.3	1
RLW-07P613	8	CAB-8	8.0 x 8.2 x 6.3	1
RLW-07P615	9	CAB-8	8.0 x 8.2 x 6.3	1
RLW-07P616	10	CAB-8	8.0 x 8.2 x 6.3	1
RLW-001111	8	CAB-8	8.0 x 8.2 x 6.3	1
RLW-001113	9	CAB-8	8.0 x 8.2 x 6.3	1
RLW-001115	10	CAB-8	8.0 x 8.2 x 6.3	1
RLW-001116	12	CAB-8	8.0 x 8.2 x 6.3	1
RLW-001411	8	CAB-8	8.0 x 8.2 x 6.3	1
RLW-001413	9	CAB-8	8.0 x 8.2 x 6.3	1
RLW-001415	12	CAB-8	8.0 x 8.2 x 6.3	1
RLW-001416	23	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-002111	18	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-002113	21	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-002115	24	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-002116	27	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-002811	19	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-002813	24	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-002815	24	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-002816	28	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-003511	24	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-003513	27	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-003515	32	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-003517	42	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-004611	26	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-004613	31	CAB-13V	13.2 x 13.2 x 13.1	3

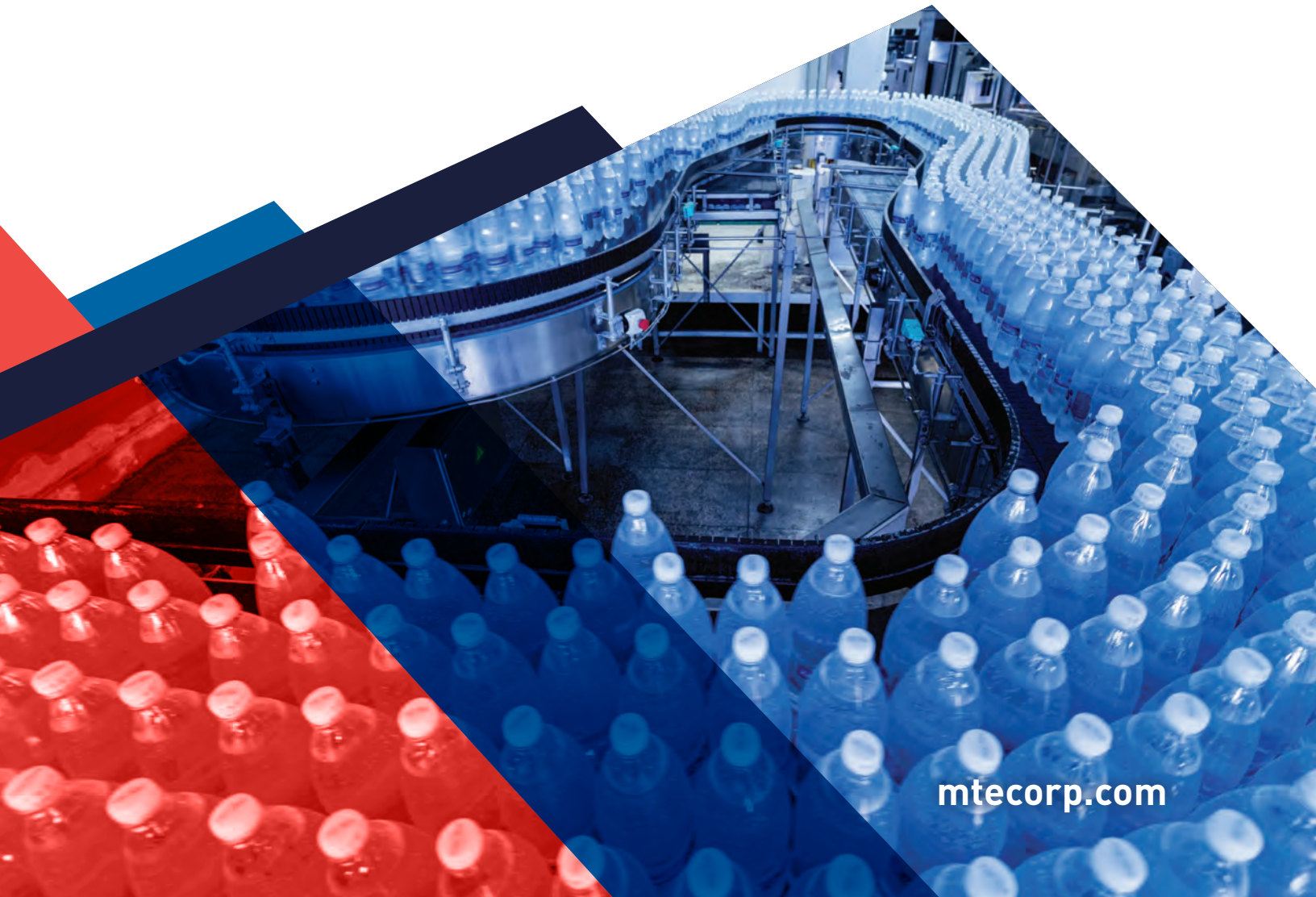
NEMA 1/2				
Part Number	Weight (lbs)	Cabinet	Size (in) (H x W x D)	Ref Figure
RLW-004615	38	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-004617	47	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-005511	32	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-005513	34	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-005515	40	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-005517	49	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-006511	32	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-006513	36	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-006515	40	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-006517	58	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-008311	33	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-008313	40	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-008315	49	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-008317	68	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-010411	36	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-010413	42	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-010415	55	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-010417	71	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-013011	40	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-013013	51	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-013015	66	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-013017	94	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-016011	48	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-016013	54	CAB-13V	13.2 x 13.2 x 13.1	3
RLW-016015	96	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-016017	134	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-020011	77	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-020013	92	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-020015	118	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-020017	134	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-025011	78	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-025013	98	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-025015	136	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-025017	164	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-032211	100	CAB-17V	24.0 x 17.1 x 18.5	4
RLW-032213	213	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-032215	245	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-032217	309	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-041411	215	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-041413	235	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-041415	262	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-041417	334	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-051511	218	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-051513	255	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-051515	330	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-051517	385	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-060011	223	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-060013	281	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-060015	341	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-060017	429	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-075011	242	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-075013	303	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-075015	382	CAB-26C2	47.0 x 26.6 x 24.9	2
RLW-075017	485	CAB-26C2	47.0 x 26.6 x 24.9	2

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

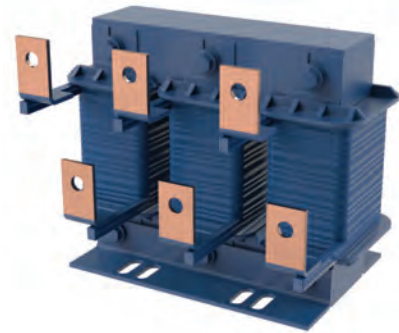
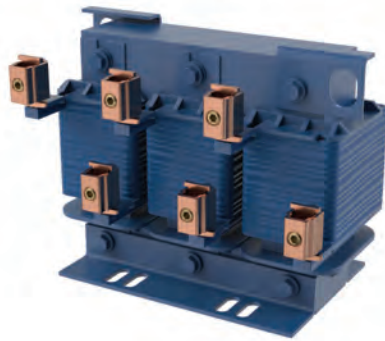


Reactors

Product Catalog



We set the benchmark for power quality.



MTE RL and RLW line/load reactors and DC link chokes are well-known for their outstanding performance and robustness. With their long-established history of proven reliability, these products are unmatched in their ability to absorb power line disturbances that can cause damage to sensitive equipment such as Variable Frequency Drives (VFDs), motors, and more.

By reducing nuisance tripping, minimizing long lead effects, and lowering harmonic distortion, MTE line/load reactors and DC link chokes can significantly enhance productivity, making them the best-in-class choice for customers.

Improve power quality. Enhance productivity. Increase your bottom line.



Contents

Reactors

Why Use a Reactor?

Learn the benefits of using a reactor

2

RL Reactor

Best-in-class power quality units for absorbing power line disturbances

4

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

12

DC Link Chokes

The cost-effective, versatile solution to solving power quality problems

20

WHY Use A Reactor?

MTE's versatile family of reactors offer many benefits on both the line or load side of a VFD. With their impressive capability to reduce harmonic levels by almost 50%, these reactors serve as a reliable and cost-effective safeguard against power line disturbances, surge currents, and voltage distortions—an invaluable insurance policy for uninterrupted power quality and enhanced operational stability.





Benefit 1: Equipment Protection

MTE line/load reactors offer equipment protection by limiting inrush currents, preventing damage from start-up or load changes, and reducing voltage transients, extending equipment life and minimizing downtime risk.



Benefit 2: Harmonic Mitigation

MTE line/load reactors effectively reduce harmonic distortion in electrical systems, maintaining a cleaner power supply and protecting sensitive equipment.



Benefit 3: Voltage Stabilization

MTE line/load reactors provide impedance to the system, smoothing out voltage spikes and sags, ensuring a stable voltage supply, and enhancing equipment reliability.



Benefit 4: Power Loss Reduction

MTE line/load reactors minimize power losses by improving power factor and reducing reactive power flow, resulting in energy savings and potential cost reduction.

RLW or RL - Which reactor should I use?

	RLW	RL
Concerned About Size	✓	
Concerned About Weight	✓	
Concerned About Watts Loss		✓
Application FLA rating >750A		✓
Reactor required on both line and load side	✓	✓
Reactor Needs To Be Robust (Handle Overload)		✓
Need To Be Price Competitive	✓	

Reactors

RL Reactors

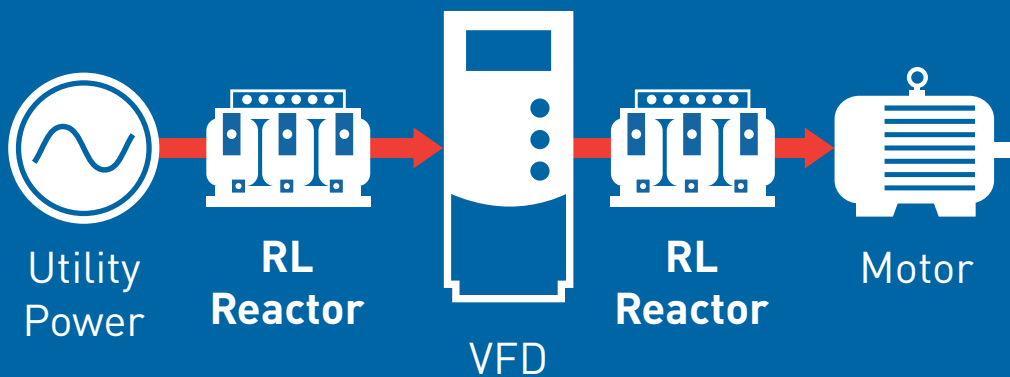
Best-in-class power quality units for absorbing power line disturbances

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

DC Link Chokes

The cost-effective, versatile solution to solving power quality problems



RL Reactors



- **Best-in-class line/load reactors**
- **Most robust, highest continuous service factor**
- **Low watts loss**
- **Performance and durability that is unmatched by the competition**

Peace of mind included.

Our RL Line/Load Reactors are best-in-class power quality units with a long history of proven performance. Rugged and robust, they are unequaled in absorbing power line disturbances that can damage or shut down variable frequency drives (VFDs) and other sensitive equipment. They work on both the line side and load side to give you an easy solution that reduces nuisance tripping, reduces harmonic distortion and minimizes long lead effects.

Improved power quality, enhanced productivity and complete peace of mind are easy with RL Line/ Load Reactors.

Get best-in-class performance with our RL Line/Load Reactors.

Our RL Line/Load Reactors are a robust, best-in-class filtering solution for virtually any 4 or 6-pulse rectifier or power conversion unit. There is no need to derate these reactors. They are harmonic compensated and protected to assure optimum performance in the presence of harmonics, and can help you meet IEEE-519 requirements. There are units available for a full line of currents (1A to 1,500A) and a full line of impedance options (1.5%, 3% and 5%).

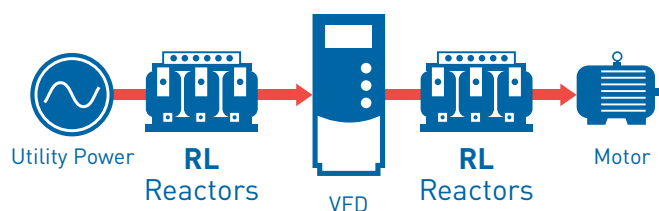
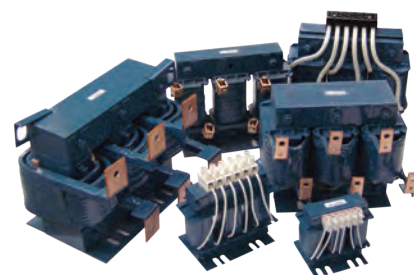
Robust design and construction for unequalled filtering of power line disturbances.

Highest continuous service factor virtually eliminates breakdowns in the field.

Reduces audible noise.

Multiple cabinet designs help meet NEMA 1/2 and 3R.

RL Reactors

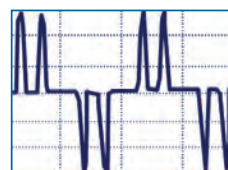


Performance Specifications

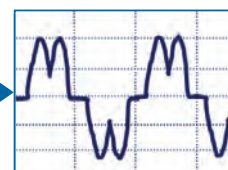
Impedance Levels	1.5%, 3% and 5%
Continuous Service Factor	Reactors rated 1 to 750 Amps – 150% of rating Reactors rated above 750 Amps – 125% of rating
Overload Rating	200% of rated for 30 minutes 300% of rated for 1 minute
Input Voltage Range	208V – 690V
Current Range	1A – 1,500A
Temperature Rise	135°C
Ambient Temperature	-40°C to 50°C
Altitude Maximum Without Derating	1,000 meters
Fundamental Frequency	50/60 Hz
Inductance Curve	100% at 100% Current 100% at 150% Current 50% at 350% Current

Final product specifications subject to change at any time.

MTE Input Reactor

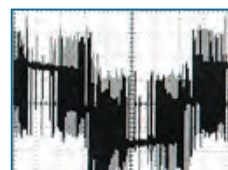


Waveform without reactor

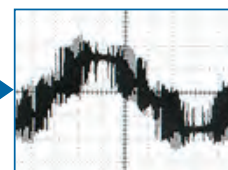


Waveform with reactor

MTE Output Reactor

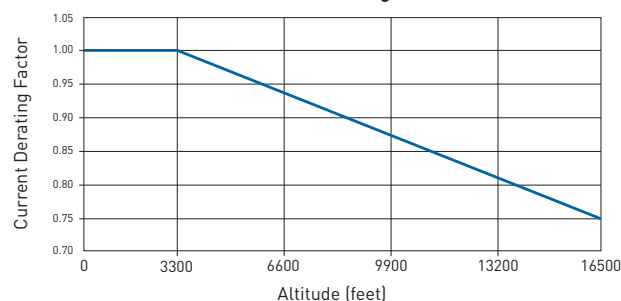


Waveform without reactor



Waveform with reactor

Altitude Derating Curve



ENCLOSURES

FIGURE 1

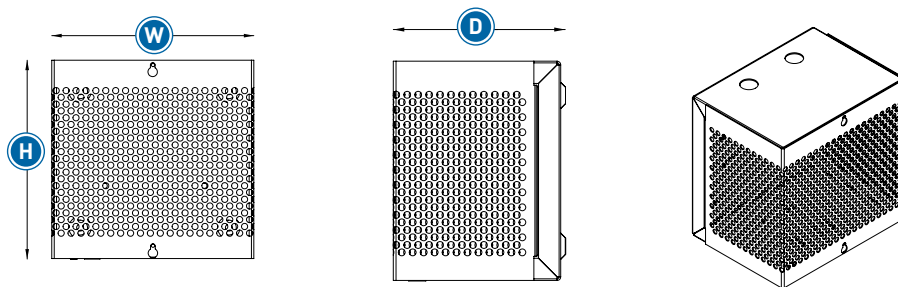
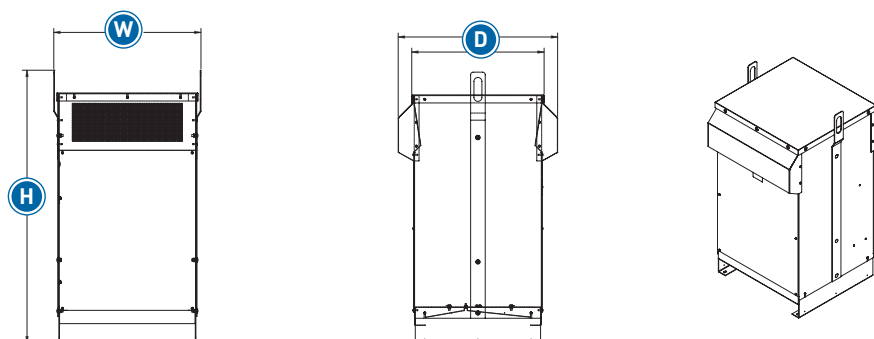
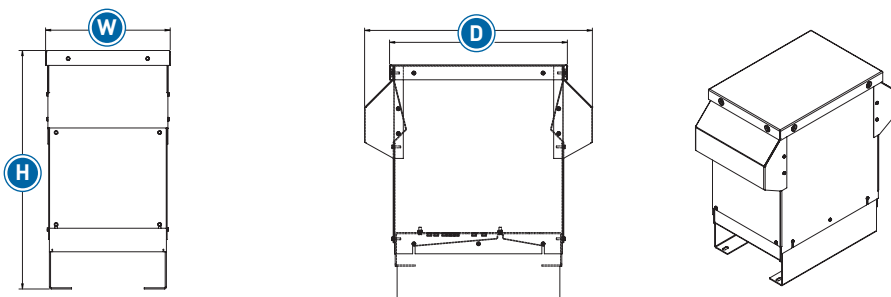


FIGURE 2



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 3



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 4

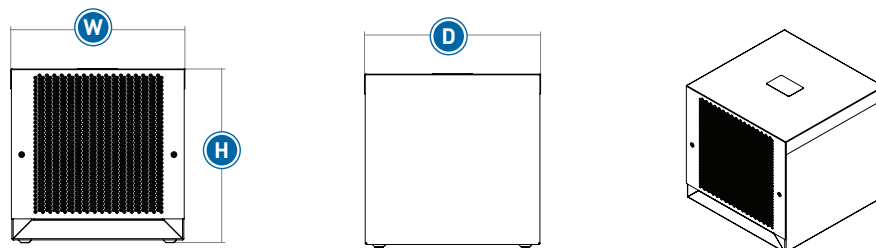
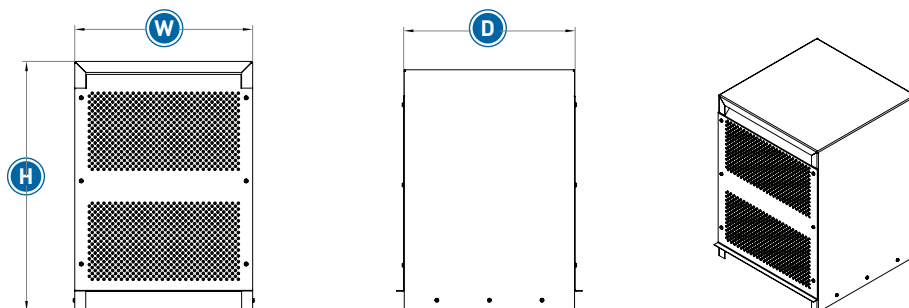


FIGURE 5



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

Reactors

RL Reactors

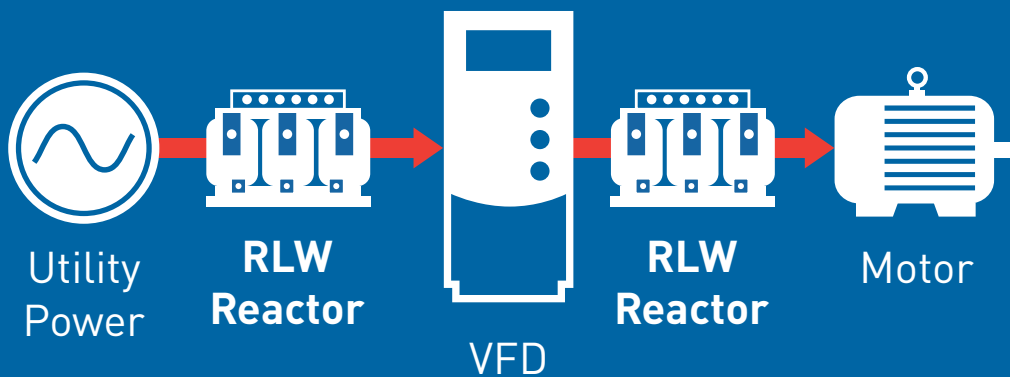
Best-in-class power quality units for absorbing power line disturbances

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

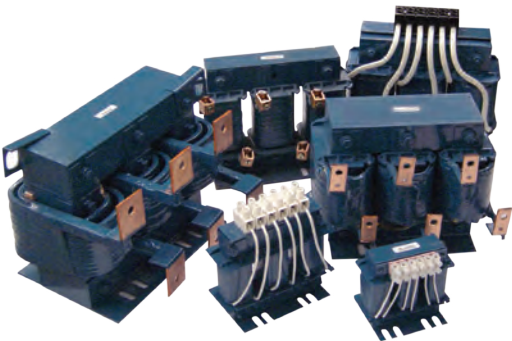
DC Link Chokes

The cost-effective, versatile solution to solving power quality problems





RLW Reactors



- **Proven performance in the field**
- **Reliable and economical**
- **Compact and light-weight**
- **Ideal for OEMs, integrators and panel builders**

Smaller. Lighter.

Our RLW Line/Load Reactors are a state-of-the-art solution for absorbing everyday power line disturbances that can damage or shut down variable frequency drives (VFDs) and other sensitive equipment. They work on both the line side and load side to give you an economical way to reduce nuisance tripping, reduce harmonic distortion and minimize long lead effects. Their epoxy impregnated design also reduces audible noise, and improves structural and moisture integrity.

Put an end to power spike issues and minimize downtime with our RLW Line/Load Reactors from MTE.

Stop nuisance tripping and harmonic distortion with our RLW Reactors.

Our RLW Reactors are the state-of-the art filtering solution for virtually any 4 or 6-pulse rectifier or power conversion unit. There are units available for amperage ratings from 0.5A to 750A. Our 3% impedance option is 90% effective and our 5% option extends spike protection to 99%.

Smaller size and weight makes these units ideal for OEMs, integrators and panel builders.

Wider range of impedance values for accurate and cost-effective selection.

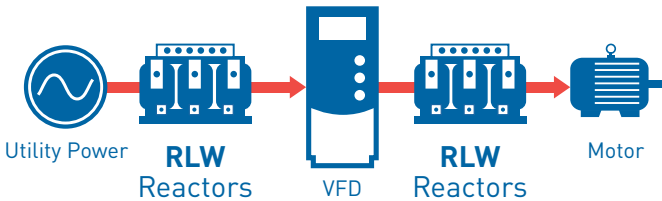
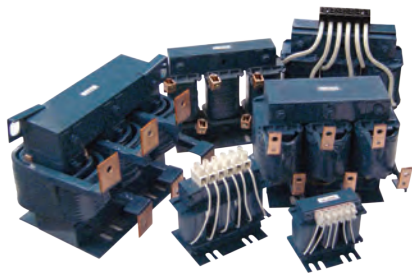
DIN Rail mounting options for easy panel installation.

UL/cUL listed and CE marked for all your installation requirements.

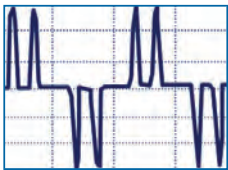
Performance Specifications	
Impedance Levels	1.5%, 3% and 5%
Continuous Service Factor	100%
Overload Rating - Line Side	150% of RMS rating for 1 minute 200% of RMS rating for 10 seconds
Input Voltage Range	208V – 690V
Current Range	0.5A – 750A
Temperature Rise	140°C
Ambient Temperature	-40°C to 50°C
Altitude Maximum Without Derating	1,000 meters
Fundamental Frequency	50/60 Hz
Inductance Curve	100% at 100% Current 80% at 150% Current 50% at 200% Current

Final product specifications subject to change at any time.

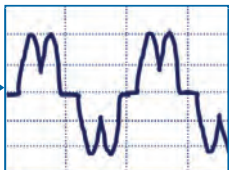
RLW Reactors



MTE Input Reactor

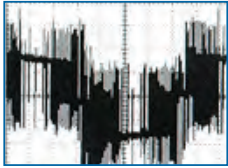


Waveform without reactor

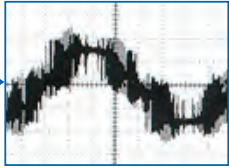


Waveform with reactor

MTE Output Reactor

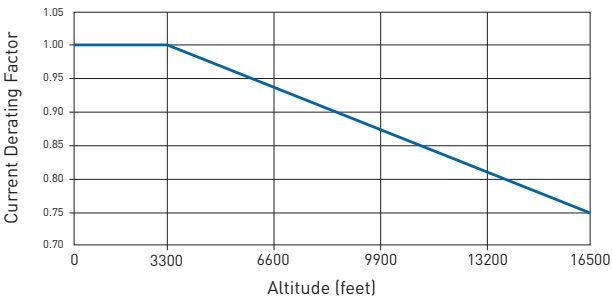


Waveform without reactor

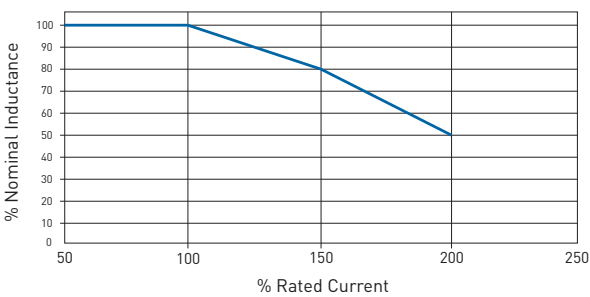


Waveform with reactor

Altitude Derating Curve



RLW Inductance Curve



ENCLOSURES

FIGURE 1

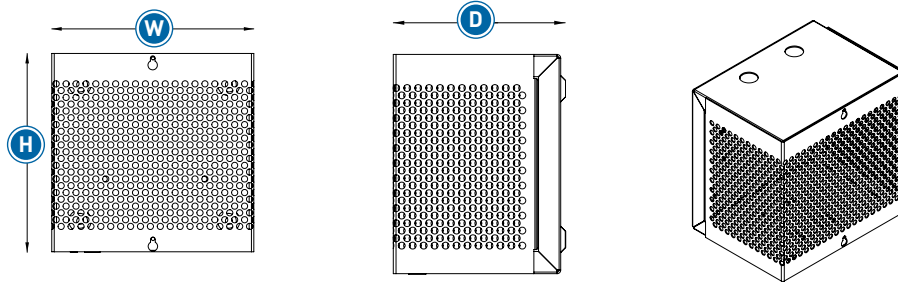
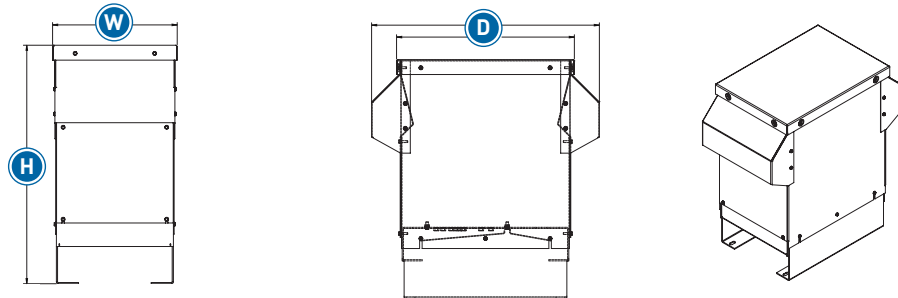


FIGURE 2



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 3

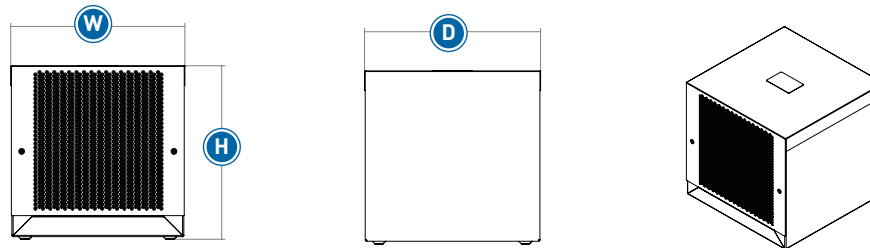
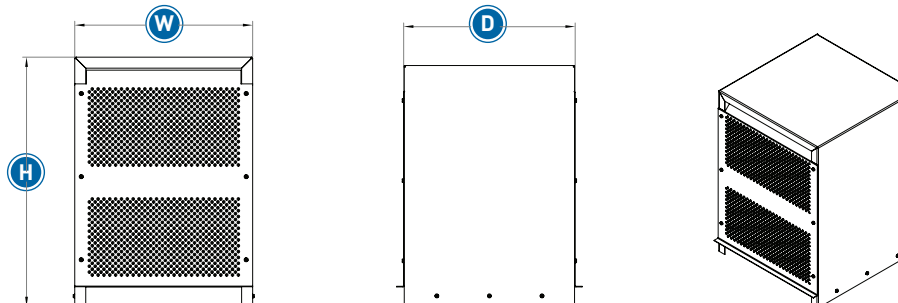


FIGURE 4



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

Reactors

RL Reactors

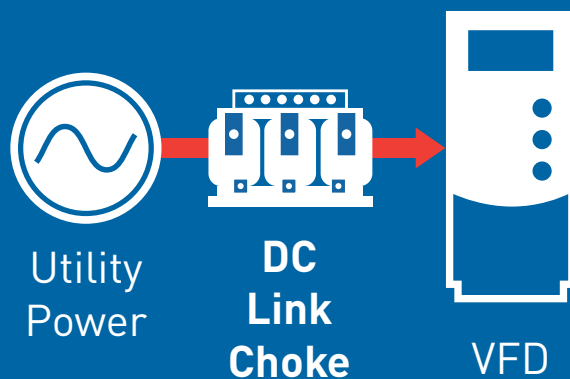
Best-in-class power quality units for absorbing power line disturbances

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

DC Link Chokes

The cost-effective, versatile solution to solving power quality problems



Reactors

RL Reactors

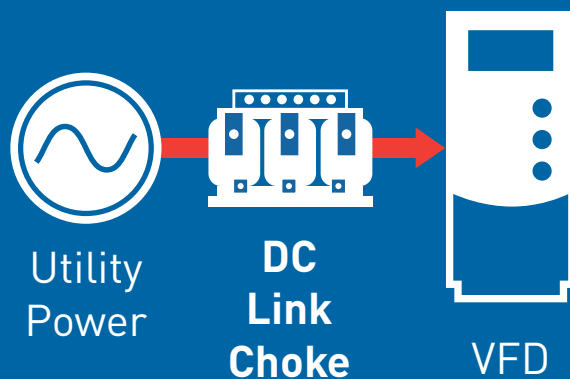
Best-in-class power quality units for absorbing power line disturbances

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

DC Link Chokes

The cost-effective, versatile solution to solving power quality problems





DC Link Chokes



- **Reduce AC input line harmonics**
- **Absorb voltage/current spikes**
- **Reduce AC ripple on DC bus**
- **Solve nuisance over-voltage tripping**
- **Reduce DC Bus transient over-voltage**

Economical. Versatile.

Our DC Link Chokes are an economical means of filtering the DC bus voltage in variable frequency drives (VFDs). Designed to be added to a VFD's internal bridge and bus, they help reduce AC input line current harmonic distortion while absorbing DC bus voltage spikes. They can be used individually, typically on the positive DC bus, or in pairs with one each on both the positive and negative bus.

Take advantage of maximizing the circuit inductance for power quality reasons without causing an AC input line voltage drop with DC Link Chokes from MTE.

An economical and versatile solution to solving power quality problems.

The ability of our DC Link Chokes to be used across multiple applications is just one reason these chokes stand above the rest. With factory capabilities to customize mounting, inductance, current or ripple requirements, our DC Link Chokes will meet all of your needs.

Solid copper box lug type available on most sizes.

Specially constructed and epoxy impregnated for low noise.

Series A link chokes are also available in NEMA 1-2 or NEMA 3R enclosures upon request.

DC Link Chokes



Performance Specifications	
Component Recognized	UL-508 (File #E180243)
Maximum Voltage	1000V DC
Ripple Frequency	300 Hz or 360 Hz
Ambient Temperature	40°C
Ripple Current	10% peak-to-peak
Insulation System	Class B (130C)

Final product specifications subject to change at any time.

Useful Applications

- AC PWM inverters/drives
- Variable frequency motor drives
- DC to AC inverters
- Electrical vehicle inverters

Understanding the DC Link Choke Series A Part Number:

DC A _ _ _ X X

DC Link Choke

Series A

Current Rating

0004 is 4 Amps

0050 is 50 Amps

0200 is 200 Amps

Mechanical Configurations

0 = Open Magnetics (No Enclosure)

1 = General Purpose (NEMA 1/2)

3 = Weather (NEMA 3R)

Reactor Relative Impedance No.

1, 2, 3, 4 (1 is lowest value)

Understanding the DC Link Choke Series RB Part Number:

_ _ _ RB 00 X

Current Rating

4 is 4 Amps

50 is 50 Amps

200 is 200 Amps

Series RB

Reactor Relative Impedance No.

1, 2, 3, 4 (1 is lowest value)

1000V 360Hz

DC Amps	Inductance mH	MTE Part Number	Ref Fig	DC Amps	Inductance mH	MTE Part Number	Ref Fig	DC Amps	Inductance mH	MTE Part Number	Ref Fig	DC Amps	Inductance mH	MTE Part Number	Ref Fig
1	35.00	1RB001	1	25	0.45	25RB001	1	80	0.75	80RB004	3	300	0.08	300RB001	3
1	60.00	1RB002	1	25	1.00	25RB002	2	80	1.25	DCA008005	3	300	0.135	300RB002	3
1	80.00	1RB003	1	25	1.275	DCA002504	2	92	0.20	DCA009201	3	300	0.32	300RB003	3
2	10.00	2RB001	1	25	1.75	DCA002503	2	92	0.60	DCA009202	3	450	0.055	450RB001	4
2	15.00	2RB002	1	25	4.00	DCA002505	2	92	1.00	DCA009203	3	450	0.11	450RB002	4
2	20.00	2RB003	1	32	0.85	DCA003201	2	110	0.25	110RB001	3	450	0.14	450RB003	4
2	50.00	DCA000204	1	32	1.62	DCA003202	2	110	0.30	DCA011002	3	450	0.25	450RB004	4
4	5.00	4RB001	1	32	2.68	DCA003203	2	110	0.45	DCA011003	3	500	0.043	500RB001	4
4	12.00	DCA000402	1	40	0.50	DCA004001	2	125	0.11	125RB001	3	500	0.09	500RB002	4
4	15.00	DCA000403	1	40	0.75	DCA004002	2	125	0.22	DCA012502	3	500	0.14	500RB003	4
4	25.00	DCA000404	2	40	1.00	DCA004003	2	125	0.50	125RB003	3	500	0.19	500RB004	4
9	2.00	9RB001	1	40	2.50	DCA004004	2	125	0.85	125RB004	3	600	0.04	600RB001	4
9	3.22	DCA000902	1	50	0.625	DCA005001	2	150	0.15	150RB001	3	600	0.11	600RB002	4
9	7.50	DCA000903	2	50	0.97	50RB002	2	150	0.22	DCA015002	3	600	0.18	600RB003	4
9	11.50	DCA000904	2	50	1.35	DCA005003	2	150	0.32	150RB003	3	700	0.044	700RB001	4
12	1.00	DCA001201	1	50	2.0	DCA005004	3	150	0.65	DCA015004	3	700	0.06	700RB002	4
12	2.10	DCA001202	2	62	0.35	DCA006201	3	200	0.12	200RB001	3	700	0.15	700RB003	4
12	4.00	DCA001203	2	62	0.61	DCA006202	3	200	0.21	DCA020002	3	850	0.036	850RB001	4
12	6.00	DCA001204	2	62	0.67	62RB003	3	200	0.40	200RB003	3	850	0.065	850RB002	4
18	0.65	DCA001801	1	62	1.20	62RB004	3	200	0.50	200RB004	3	850	0.11	850RB003	4
18	1.375	DCA001802	2	62	1.50	62RB005	3	240	0.09	240RB001	3	1000	0.02	1000RB001	4
18	2.75	DCA001803	2	80	0.31	80RB001	3	240	0.25	240RB002	3	1000	0.042	1000RB002	4
18	3.75	DCA001804	2	80	0.40	DCA008002	3	240	0.35	240RB003	3	1000	0.10	1000RB003	4
18	6.00	DCA001805	2	80	0.50	80RB003	3								

OPEN MAGNETICS

FIGURE 1

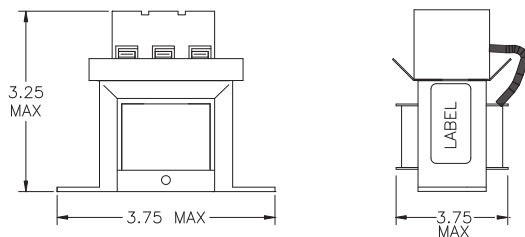


FIGURE 2

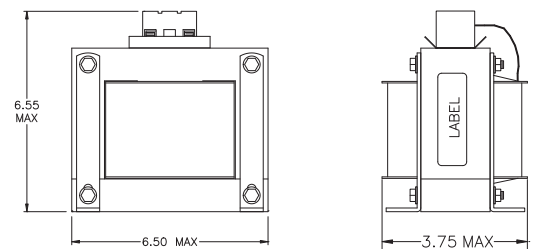


FIGURE 3

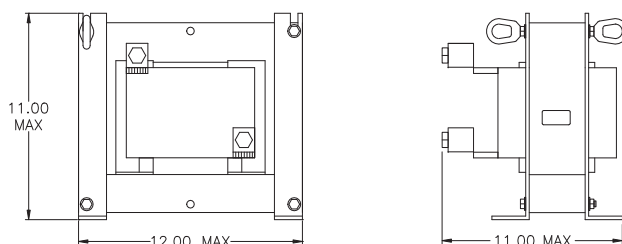
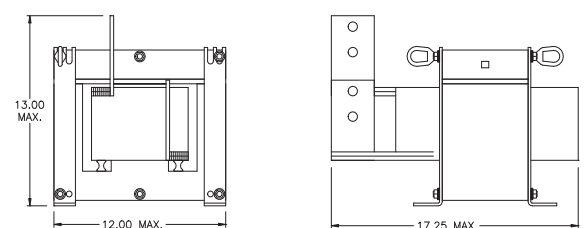


FIGURE 4



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.

Our Products

REACTOR PRODUCTS



RL Reactors

The RL family of line and load reactors is unequalled in absorbing power line disturbances to reduce nuisance tripping, reduce harmonic distortion, and minimize long lead effects.



RLW Reactors

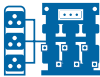
The RLW family of line and load reactors provides an engineered solution to protect electrical systems against harmful and annoying power distortions.



DC Link Chokes

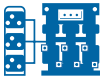
Designed to be added to a VFD's internal bridge and bus, DC Link Chokes help reduce AC input line current harmonic distortion while absorbing DC bus voltage spikes.

HARMONIC MITIGATION FILTERS



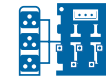
Matrix® AP

The Matrix® AP is the most advanced passive filter on the market to meet IEEE-519. Its patented Adaptive Passive Technology adapts to varying loads to virtually eliminate harmonics.



Matrix® ONE

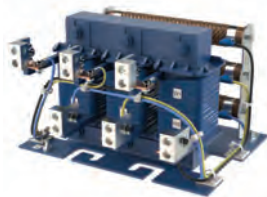
Matrix® ONE single phase filters are optimized to work in remote and rural areas where three phase power is not available.



Matrix® E-Series

The Matrix® E-Series harmonic filter meets the international harmonic distortion requirement of 10%-15% while also supporting the compliance of IEEE-519.

MOTOR PROTECTION FILTERS



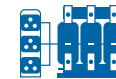
dV E-Series

The dV E-Series is lighter, more efficient, and runs cooler than other dV/dt solutions making it the optimal solution for leads less than 1,000 ft.



dV Sentry®

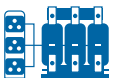
The dV Sentry® and its patented Triple Defense Core is proven to reduce common mode, protect against peak voltage, and reduce rise time – all-in-one unit.



SineWave Guardian®

This best-in-class filter cleans up the PWM waveforms generated by VFDs. It virtually eliminates high frequency content and voltage peaks to reduce motor downtime.

***Also available for High Frequency and Permanent Magnet Motors**



SineWave Nexus®

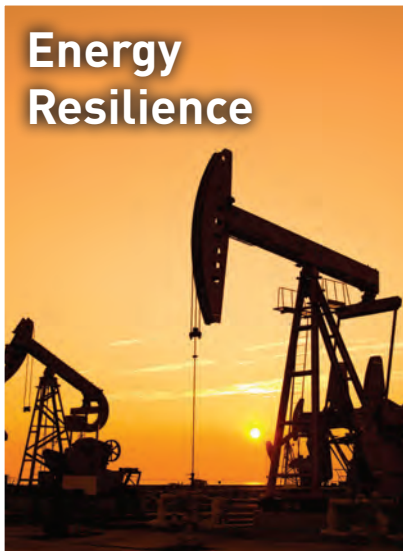
SineWave Nexus® filters eliminates common mode voltage which causes motor bearing failures such as pitting, frosting, or fluting damage - up to 15,000 feet.



microNexus™

The microNexus takes the unparalleled performance of our SineWave Nexus and shrinks it down into a space-saving solution that integrates into any micro drive application.

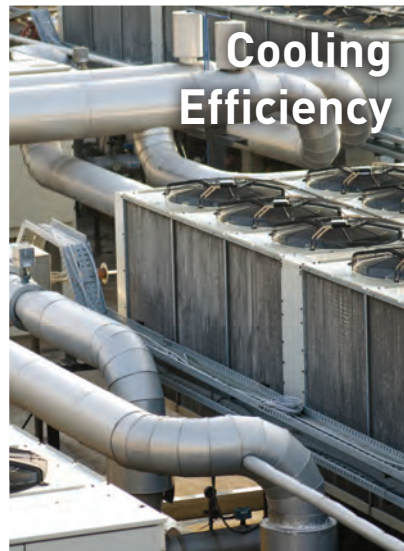
Energy Resilience



Cloud Uptime



Cooling Efficiency



Expedited Delivery



Trusted by leading industries.

At MTE, we leverage our know-how to provide not just any solution, but the perfect solution customized to fit even the most demanding industries. As the power quality partner of choice for hundreds of leading companies, we protect your most valuable assets by combining our knowledge, expertise, and support to increase uptime and improve your bottom line.

Whatever the power quality problem, **MTE is the trusted solution.**

Supply Assurance



Food Safety



Production Uptime



Reactors

Product Catalog



MTE Corporation
(800) 455-4683 • (262) 253-8200
Scan QRC for home page.

MTE-CAT-REA-E 0523



MTE
POWER QUALITY. SOLVED.
A STEEL PARTNERS COMPANY