



## Economical, Versatile Power Quality Solutions For Variable Speed Drives & Inverters

## DC LINK CHOKES

1000 Volts DC  
Filters 360 Hz Ripple Current

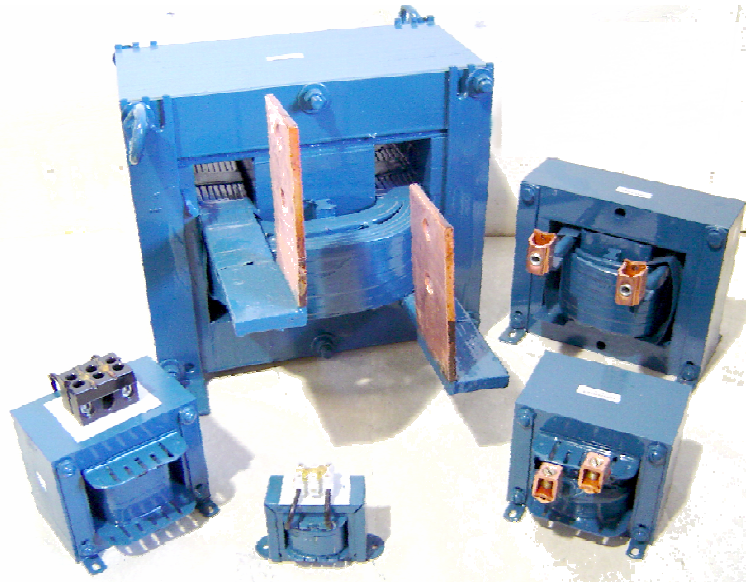
Add MTE DC Link Chokes to drives' internal DC bus to:

- Reduce AC input line harmonics
- Help meet IEEE-519 limits
- Absorb voltage/current spikes
- Reduce AC ripple on DC bus
- Reduce dv/dt and di/dt rates
- Solve nuisance over-voltage tripping
- Reduce DC Bus transient over-voltage

When added between the input rectifier and bus capacitor the link choke will improve the DC bus waveform and the AC input waveform. In this location the DC reactor will reduce the amount of AC ripple on the DC bus, reduce the AC input line harmonics and offer protection against nuisance tripping due to voltage spikes such as those caused by capacitor switching. However, a DC link choke will not protect the input rectifiers.

DC Link Chokes offer the advantage of maximizing the circuit inductance for power quality reasons, but without causing an AC input line voltage drop. DC link chokes can be used individually, typically on the positive DC bus, or in pairs with one each on both the positive and negative bus. When two DC reactors are used on the bus, the inductance is additive. You will need twice as much inductance on the DC bus as used on the AC input (per phase) to accomplish the same performance experienced with AC input reactors. For best performance combine the use of both an AC input reactor and a DC link choke.

MTE Corporation DC Link Chokes are an economical means of filtering and controlling the DC bus voltage and current in a variable speed drive/inverter. They help reduce AC input line current harmonic distortion while absorbing DC bus voltage spikes. Link Chokes add protection and filtering but should not be considered a direct alternative to AC input or output reactors. While DC Link Chokes increase the internal filtering and have the ability to absorb spikes, because of their circuit location they do not protect the input bridge rectifier. They do not offer protection for the inverter output circuit due to their location on the DC bus.



### Use DC Link Chokes In Applications Such as:

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

Application Engineering Assistance:

**1-800-455-4MTE or  
262-253-8200**

**[www.mtecorp.com](http://www.mtecorp.com)**

**Email: [apengrg@mtecorp.com](mailto:apengrg@mtecorp.com)**

# Selection Tables

DC Amps	Inductance mH	Cat No.
1	35.00	1RB001
1	60.00	1RB002
1	80.00	1RB003
2	10.00	2RB001
2	15.00	2RB002
2	20.00	2RB003
2	50.00	DCA000204
4	5.00	4RB001
4	12.00	DCA000402
4	15.00	DCA000403
4	25.00	DCA000404
9	2.00	9RB001
9	3.22	DCA000902
9	7.50	DCA000903
9	11.50	DCA000904
12	1.00	DCA001201
12	2.10	DCA001202
12	4.00	DCA001203
12	6.00	DCA001204
18	0.65	DCA001801
18	1.375	DCA001802
18	2.75	DCA001803
18	3.75	DCA001804
18	6.00	DCA001805
25	0.45	25RB001
25	1.00	25RB002
25	1.275	DCA002504
25	1.75	DCA002503
25	4.00	DCA002505
32	0.85	DCA003201
32	1.62	DCA003202
32	2.68	DCA003203

DC Amps	Inductance mH	Cat No.
40	0.50	DCA004001
40	0.75	DCA004002
40	1.00	DCA004003
40	2.50	DCA004004
50	0.625	DCA005001
50	0.97	50RB002
50	1.35	DCA005003
50	2.00	DCA005004
62	0.32	DCA006201
62	0.61	DCA006202
62	0.67	62RB003
62	1.20	62RB004
62	1.50	62RB005
80	0.31	80RB001
80	0.40	DCA008002
80	0.50	80RB003
80	0.75	80RB004
80	1.25	DCA008005
92	0.20	DCA009201
92	0.60	DCA009202
92	1.00	DCA009203
110	0.25	110RB001
110	0.30	DCA011002
110	0.45	DCA011003
125	0.11	125RB001
125	0.22	DCA012502
125	0.50	125RB003
125	0.85	125RB004
150	0.15	150RB001
150	0.22	DCA015002
150	0.32	150RB003
150	0.65	DCA015004

DC Amps	Inductance mH	Cat No.
200	0.12	200RB001
200	0.21	DCA020002
200	0.40	200RB003
200	0.50	200RB004
240	0.09	240RB001
240	0.25	240RB002
240	0.35	240RB003
300	0.08	300RB001
300	0.135	300RB002
300	0.32	300RB003
450	0.550	450RB001
450	0.11	450RB002
450	0.14	450RB003
450	0.25	450RB004
500	0.043	500RB001
500	0.09	500RB002
500	0.14	500RB003
500	0.19	500RB004
600	0.04	600RB001
600	0.11	600RB002
600	18.00	600RB003
700	0.044	700RB001
700	0.06	700RB002
700	0.15	700RB003
850	0.036	850RB001
850	0.065	850RB002
850	0.11	850RB003
1000	0.02	1000RB001
1000	0.042	1000RB002
1000	0.10	1000RB003

## SPECIAL FEATURES:

- Solid Copper Box lug type terminals on most sizes
- Specially constructed and epoxy impregnated for low noise
- Customized ratings also available—contact factory for custom mounting, inductance, current or ripple requirements

## SPECIFICATIONS:

- UL-508 Component recognized (File #E180243)
- 100 Volts DC maximum
- For ripple frequency of 300 Hz or 360 Hz
- Suitable for 40 C ambient temperature
- Class B Insulation System (130C)
- Suitable for ripple current of 10% peak-to-peak
- Touch safe terminals in many ratings

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