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| **DC Link Chokes** **Product Overview**  **1000 Volts DC Filters 300/360 Hz Ripple Current**  **Use DC Link Chokes in many applications such as:**   * AC PWM inverters/drives * DC to AC inverters * Variable frequency motor drives * Electric vehicle inverters |

**Economical, Versatile Power Quality Solutions For Variable Speed Drives & Inverters**  
Add MTE DC Link Chokes in series with the 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 overvoltage tripping
  + Reduce DC Bus Transient Overvoltage

**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 offer protection of 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.