

RLW Reactors

Enhanced Design Reactors for Line and Load

The MTE RLW REACTOR is MTE's newest reactor line that, like our RL Reactor product line, keeps equipment running longer by absorbing the power line disturbances. They are a state-of-the-art filtering solution for virtually any 4 or 6 pulse rectifier or power conversion unit.

Why Do I Need a Line/Load Reactor?

Are you experiencing nuisance tripping of your inverters, variable frequency drives (VFDs), variable speed controllers, and other sensitive equipment?

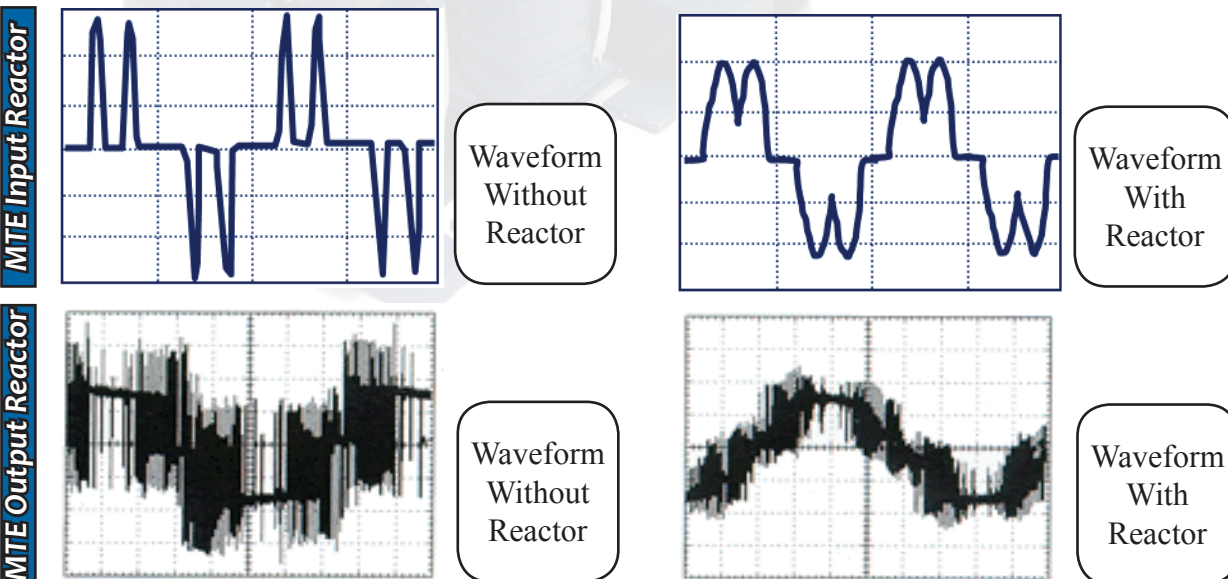
Voltage spikes on the AC power lines cause rapid elevation of the DC Bus voltage which may cause the inverter to "trip-off" and indicate an over-voltage protection condition. Use reactors to absorb these line spikes and offer protection to the rectifiers and DC Bus capacitors while minimizing nuisance tripping of the inverter. A 3% impedance reactor is 90% effective at protecting against transients or nuisance tripping of AC voltage source inverters, due to voltage spikes. The 5% RL reactor extends spike protection to 99%.

Are your motors not lasting as long as promised?

Properly sized RLW load reactors help to protect motors and cables from the high peak voltages and fast rise times (dv/dt) which can be experienced in IGBT inverter applications when the distance between the inverter and motor is up to 100 feet.

Perfect Reactor for OEM's, System Integrators, and Panel Builders!

Optimally designed for peak performance in a compact and lightweight design. Smaller size and weight than other standard reactors. Multiple mounting options available to accommodate your machine building needs. Reactor designed from a global perspective, allowing machines to be shipped globally. Lower horsepower selection for smaller motor protection needs.

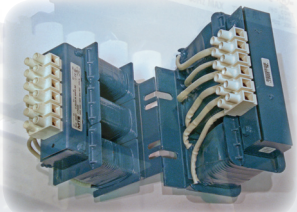


Driving Power Quality

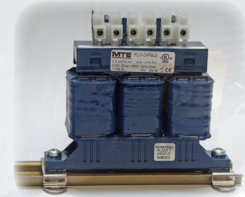
Product Specifications - MTE RLW Reactors

Refer to the RLW Reactor Technical Reference Manual for Detailed Specifications

- Reactors UL / cUL LISTED and CE marked for all your installation requirements
- Smaller size and weight than other standard reactors, ideal for OEM's, Integrators, and Panel Builders
- Wider range of standard impedance values for accurate and cost effective selection
- Expanded inductance values and low current offerings to support both NEC and IEC world-wide motor applications
- RoHS and REACH compliant for your environmental concerns
- Available in all the standard voltages from 208 to 690 VAC for your global needs
- Amperage ratings of 0.5 to 750 Amps
- Suitable for application to single phase drives to provide transient protection as well
- Crossover Tables available for other standard reactors
- Epoxy impregnation to minimize audible noise and enhances structural and moisture integrity
- DIN Rail mounting option
- Adapter plate allows for drop-in replacement of other reactors



MTE RLW reactor (on left) with optional adapter plate compared to MTE RL reactor (on right) with same ratings



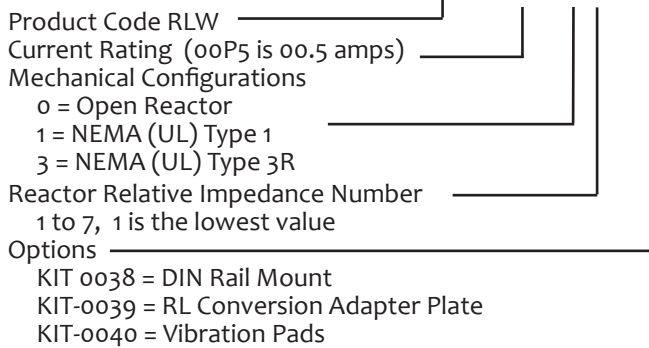
DIN Rail mounting option

Product Specifications

Impedance Basis Calculation:	% Z = (1/V) x 2πfL√3 x 100
Service Factor (continuous):	100%
Overload Rating - Line Side:	150% of RMS rating for 1 minute 200% of RMS rating for 10 seconds
System Voltage:	Up to 690 Volts
Switching Frequency:	Maximum - 20 kHz Minimum - 1 kHz
Insulation System:	200° C
Temperature Rise:	140° C (average)
Ambient Temperature:	Full Load: -40 to 50° C Open -40 to 90° C Storage
Altitude (Maximum):	1000 meters
Fundamental Frequency:	50/60 Hz - de-rate above 60 Hz
Inductance Tolerance:	+/- 10%
Inductance Curve (Typical):	100% at 100% current 80% at 150% current 50% at 200% current
Dielectric Strength:	4000 volts RMS (2200 volts peak repetitive)
Maximum Audible Level at Two (2) Meters:	Line applications: 65 dBA Load applications: 76 dBA
Approvals:	Up to 600V: CE, UL-508, Type RL cUL per CSA C22.2 690V: CE. Consult Factory for UL on 690V
Note: Short Circuit rating not required under Exception No.1 of UL508A SB4.2.1 effective 4/25/06	
DIN Rail Mount:	2 spring steel screw mounts for 35mm rail with 10-32 screws

Part Number Configuration

Part Number Breakdown: RLW - ___ X Y -

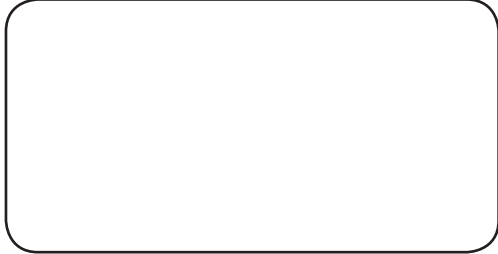


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