



APPLYING LINE/LOAD REACTORS

INPUT TO INVERTER/DRIVE:

On the input of an electronic controller, line reactors protect sensitive electronic equipment from electrical noise created by the drive or inverter (notching, pulsed distortion, harmonics). They also protect the controller from surges or spikes on the incoming power lines, as well as reduce harmonic distortion. They help to meet the requirements of IEEE 519.

OUTPUT OF INVERTER/DRIVE:

The use of reactors between a controller and a motor (or other load) protects the controller from either a short circuit in the load, or a surge in output current. It accomplishes this by limiting the short circuit current and slowing down and limiting surges.

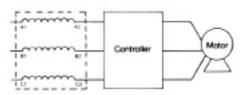
Our reactors also reduce operating temperature and audible noise in motor loads. Harmonic compensation of all Guard-AC reactors allows standard units to be used here with confidence. They improve the waveform integrity, thus enhancing motor performance and system efficiency.

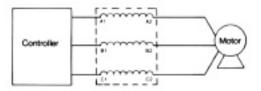
MULTIPLE CONTROLLERS:

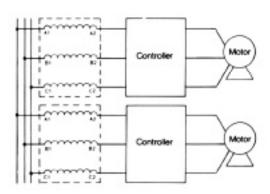
Multiple drives or inverters on a common power line require one reactor per controller. Individual reactors provide filtering between each controller (reduce crosstalk) and also provide optimum surge protection for each unit. A single reactor serving several controllers does not provide adequate protection or filtering when the system is partially loaded.

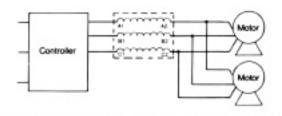
MULTIPLE MOTORS:

When more than one motor is controlled by a single drive, a single reactor can typically be used between the controller and the motors, as illustrated. The reactor should be sized based on the total motor/load horsepower.



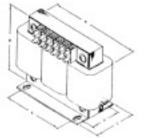




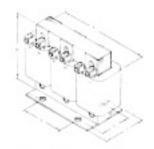


OUTLINE DIMENSIONS:

All Guard-AC reactors are supplied with field wiring terminals, as illustrated. Units rated 80 amperes or below are supplied with the international terminal block as shown. Reactors rated above 80 amperes are supplied with solid copper box lugs.



(80 amperes and below)



(above 80 amperes)

