

# possible causes for **poor performance**

1. **Power service is too light.** For example, attempting to start a 15hp motor (using an RPC 15-45 converter) off a 100 amp electrical service could cause the single phase input voltage to drop below 200 volts. Consequently, the motor would not be able to reach full speed.

2. **Improper converter selection.** If load is extremely hard to start or motor is 3450 RPM, converter selection should have been oversized by one or even two sizes. It is very important to gather as much detail on application before sizing converter. Proper sizing gives reliable performance.

3. **Connecting manufactured phase (T3) to magnetic controls.** Never connect control circuits or computerized circuits to manufactured phase (T3). Fluctuating voltage on the manufactured phase (T3) due to varying load can cause magnetic starters and contactors to open or damage computerized controls, if manufactured phase is supplying power to control circuits. Remedy: connect control circuits to converter terminals (T1) and (T2) which are the 230 volt single phase input terminals. This assures a solid and steady voltage to contactor coil or other control devices.

\* **CAUTION:** Automatic equipment (such as air compressors) must be turned off before starting phase converter. An alternative is to install an automatic-start phase converter that is started by the pressure switch of the air compressor (or other application) after which a delay relay starts the load, in this example an air compressor.