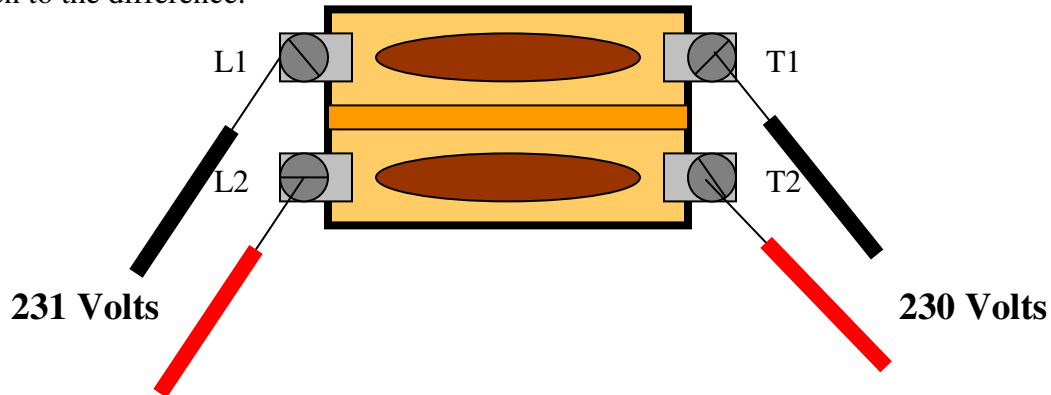


Tech Tip Contactor Measurements

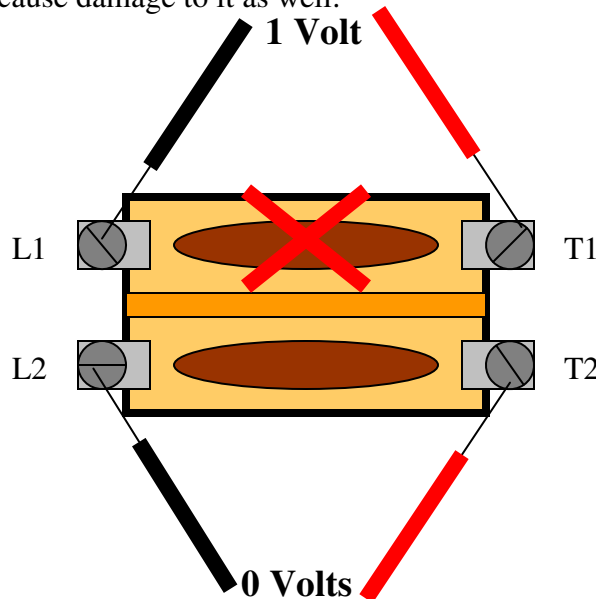
Rick was discussing measurements needed on a maintenance call with a young technician when the subject of voltage drop came up.

“The contactor is one of the easiest places to identify if there is a voltage drop indicating poorly closing contacts” said Rick.

Most technicians check the voltage “In” (L1 and L2) and then voltage “Out” (T1 and T2) of a contactor and, as long as the voltage is not glaringly off from expected, little thought is given to the difference.



The proper way to check is to measure *across the contacts as well*. Any voltage reading of 1 or more volts indicates the contacts are not properly closing and should be **recommended to be replaced**. This 1 volt drop tells the technician that the switch has become a load and ***will produce heat***. This will continue to heat up dropping more voltage until either it burns up the contacts or robs enough voltage from the compressor to possibly cause damage to it as well.



No measureable voltage should be read across the energized terminals of a switch or fuse unless it is open.