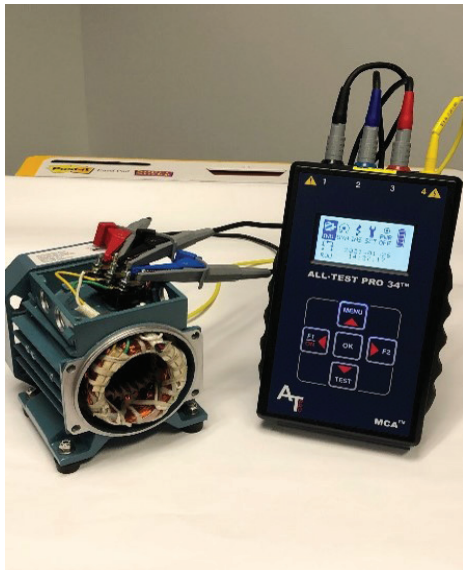


Unassembled Motor Analysis

If a motor has been disassembled for any reason, it is recommended to verify the health of a motor's winding system prior to assembly. For example, after replacing a bearing, removing the rotor for inspection, cleaning the winding or even a complete stator rewind, it is always a good idea to test the stator for potential faults before reassembly. ALL-TEST Pro's line of deenergized instruments are perfect tools for this but there are a few things that need to be considered when analyzing the test results.



When the rotor is removed from the motor, any mutual inductance unbalance, that is caused by any variance in Rotor Bar/Winding ratio, is removed as well.

Therefore, the only portion of the motor winding system that is responding to the AC signal, from the instrument, is the self-inductance from the stator windings and back iron. This means the fault tolerance guidelines of an unassembled motor should be tighter than the criteria of a full assembled motor. It is recommended to follow the unassembled motor tolerance table below.

Test Result	Tolerance
Resistance (R)	<5%
Impedance (Z)	<3%
Inductance (L)	<3%
Phase Angle (Fi)	+/- 0*
Current frequency Response (I/F)	+/- 0*
TVS, Stator & Rotor Signatures	Not Applicable