

Fault Zone – Rotor

Rotor health refers to the integrity of the rotor bars, rotor laminations, and end rings of the squirrel cage induction motors. In a joint study by EPRI and General Electric, rotor defects were estimated to be responsible for approximately 10% of the motor failures. The rotor, although responsible for only a small percentage of the motor problems, can influence other fault zones to fail.

MCE[™] motor circuit analysis uses inductance measurements taken from each phase of the stator windings and compares them at different rotor positions to further define the condition of the rotor. Advanced systems like EMAX provide simultaneous analysis of all three phases in its current signature analysis, which is an advantage over analyzing a single current. Using inductance measurements, current analysis, and other rotor testing technology provides the user with the ability to see very early changes in the magnetic signature of the rotor.







