MCA™ Resistance

Resistance testing in Motor Circuit Analysis™ (MCA™) is used primarily to find high resistance connections. These tests are taken directly at the motor junction box. A resistance test can reveal a miss-connected motor, or cold solder joints.

A phase resistance test performed in a Motor Control Center (MCC) or at a controller tests the entire motor circuit. This test can reveal high resistance connections in intermediate junction boxes, local disconnect switches and issues in the motor junction box itself. These high resistance connections generate heat, never get better, always get worse and almost always lead to unscheduled production losses.

In addition to spot heat damage and potential phase to phase or phase to ground faults which can cause expensive catastrophic damage, high resistance connections cause voltage unbalances which in turn lead to motor overheating and decreased operating efficiency.