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Standards Associated With Electric Motor Testing, Part 4

A combined version of the old IEEE 56 and IEEE 432 is the IEEE 56™/Rev. 18 (currently under a PAR revision) titled a Draft Guide for Insulation Maintenance of Electric Machines. Section 9 - Insulation Maintenance Testing, discusses various test methodologies utilized for maintenance testing of insulation systems.

Among the tests referenced in this section is the Insulation-Resistance Test of Embedded Temperature Detectors. Embedded Temperature Detectors (ETDs) should be tested during the same maintenance testing cycle as the insulation system. Often these are reference to ground. In the event a phase-to-ground fault occurs, circulating currents between the ETD and winding ground fault may occur. To test ETDs, isolate their ground connections, and any ancillary equipment. After the ETDs have been isolated, perform an Insulation Resistance test at 500VDC on all of them together at the same time.

For more information on how the MCEMAX performs Insulation Resistance analysis go to the Insulation Fault Zone on our Web site. For more information on the IEEE 56 standard go to IEEE Standards.

You are invited to submit an Electric Motor Testing Tip of your own and receive a free PdMA mug or hat if we publish it! Contact Lou at 813-621-6463 ext. 126 or lou@pdma.com.