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**February 14, 2011**

## Resistance-to-Ground

Resistance-to-Ground (RTG) measurements are important as they can indicate the cleanliness and health of an insulation system. Questions often arise about 5000V used to execute a RTG test on motors that are rated >12kV. Per the IEEE Recommended Practice for Testing Insulation Resistance of Rotating Machinery (IEEE 43-2000), 5kV-10kV is the suggested test voltage for RTG tests on motors rated >12kV; in addition, a test voltage of 2500V-5kV for motors rated 5001V-12kV. The RTG is a resistance test, which is best utilized as a trending tool to qualify motors for continued operation, not as a high potential stress test. Therefore, using a 5kV-10kV rated supply to perform an insulation test (RTG) on a >12kV motor is completely satisfactory and consistent with the approved and industry accepted IEEE standards.

For more information on the IEEE standards visit <http://standards.ieee.org/findstds>

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](mailto:lou@pdma.com).

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