



A Leader in Electric Motor Testing

Tip Of The Week

April 8, 2019

April Showers

For many of us it's the rainy season and with that comes elevated concerns about the insulation integrity of our electric motors and generators. It never ceases to amaze us how water finds a way into places that it's not supposed to be in. As a gentle reminder, the IEEE-43 standard tells us that low voltage random wound motors should have an insulation resistance-to-ground (RTG) reading of $>5\text{M}\Omega$ for continued operation. For a DC or medium voltage form wound motor the insulation RTG should be $>100\text{M}\Omega$ for continued operations. If your motor was manufactured before 1970 the guidelines suggest $1\text{M}\Omega$ per $1000\text{V} + 1\text{M}\Omega$. As an example a low voltage (460v) motor manufactured in 1965 should have a minimum RTG value of $1.46\text{M}\Omega$.

For the latest in IEEE Standards visit their website at <https://standards.ieee.org>. To see a case study on water and insulation systems visit the PdMA YouTube channel at <https://www.youtube.com/watch?v=9SG3INm8u8w>.

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.166 or lou@pdma.com.

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