

Electric Motor Testing Tip of the Week

revolutionizing electrical reliability

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Inductance vs. Resistance

Inductance measurements can be very useful in determining stator problems, even in cases where the resistance measurements do not show a problem. The resistance phase-to-phase values can be extremely low, which means that the amount of resistance per turn may seem non-existent.

Now, with that in mind, we can see how losing a few turns may not be readily seen in the resistance measurements. That said, inductance is exponentially affected by turn changes within the windings. Therefore, changes that occur within the stator windings will be readily seen on the inductance readings, well before they can be seen on the resistance measurements.

Remember, resistance changes are more often related to circuit problems rather than stator issues.

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.

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