



# Tip Of The Week

**November 29, 2010**

For the remainder of 2010, our Tip of the Week will consist of a question presented to the Tip of the Week recipients.

**Question for November 29:** A fully loaded squirrel cage induction motor exhibits a 10% impedance imbalance and a 10% current imbalance. Which of the three answers is the most likely to cause this imbalance:

- A. High Resistance Connection in the Power Circuit.
- B. Turn-to-turn Fault in the Stator Winding.
- C. Multiple Broken Rotor Bars at the End Ring.

The correct answer is A. High resistance connections generally cause similar increases in both current and impedance imbalance. If impedance imbalance is significantly higher than current imbalance, then turn-to-turn fault in the stator winding is more likely.

If you answered incorrectly and feel you need additional training OR if you answered correctly and still feel you need additional training, we can help you. Our training department offers classes on various topics, click here (<http://www.pdma.com/PdMA-training.php>) to go to the training page. We also have a Data Interpretation Book available to help you. Contact PdMA ([pdma@pdma.com](mailto:pdma@pdma.com)) or call (813) 621-6463 for information.

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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