



Electric Motor Testing Tip of the Week

revolutionizing *electrical* reliability

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Effects of Voltage Unbalance on Motor Performance

Unbalanced voltages being applied to a three-phase AC Induction motor will result in unbalanced circulating currents flowing in the stator windings. A general rule of thumb is that for every 1% voltage imbalance a 7% current imbalance is expected. Circulating, or negative sequence current, can significantly increase the current demand for the same load, overheating the insulation system. The HP rating of the motor should be reduced per NEMA MG-1 to prevent overheating.

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 Martindale at 813-621-6463 ext. 126 or lou@pdma.com.

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