



A Leader in Electric Motor Testing

# Tip Of The Week

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## Keep Power Quality Simple...Think Heat

Often when we hear technical terms involving power quality such as total harmonic distortion, common coupling, and harmonic voltage factor our eyes glaze over and we throw up the white flag. Yes, there are some impressive algorithms involved in some of those terms, but in the maintenance and reliability world we can look beyond the details to the end game which is heat. Heat has been identified as the number one killer of electric motor insulation and the bottom line is poor power quality creates excessive heat. High distortion levels in the power being delivered to a motor will result in current flow through the motor that performs no real work. This harmonic current added to the real work current often results in the motor running in an overloaded condition electrically even though the horsepower delivered is at or less than rated horsepower.

For more information on how poor power quality can affect your motor go to [http://www.pdma.com/webinars/Power\\_Quality\\_Fault\\_Zone/Power\\_Quality.html](http://www.pdma.com/webinars/Power_Quality_Fault_Zone/Power_Quality.html) to view a short video on power quality.

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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