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Tip Of The Week

June 23, 2014

Am I Seeing a Power Factor Capacitor?

We learned from the July 11, 2011 Tip of the Week (http://www.pdma.com/pdfs/tips/2011/7_11_11.pdf) that measuring upstream of the power factor correction capacitors will give an indication of the health of the capacitors. Unfortunately, if you are unaware that capacitors are in the system, a large unbalance resulting from a defective capacitor may be misdiagnosed as a motor problem. So, here are some tips to help your investigation:

- Power factor correction capacitors are not always visible from inside the starter.
- For elevators, multi-speed motors, wye-delta start, and auto-transformers, the power factor capacitors should be installed on the distribution bus upstream of the dedicated line to the motor.
- The preferred installation for the majority of motor applications not mentioned above are downstream of the contactor and upstream of the overload.
- If unsure, test on both sides of the overload and compare values.
- A falsely high power factor may indicate you are upstream of the capacitor

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.