



# Electric Motor Testing Tip of the Week

revolutionizing *electrical* reliability

**August 18,2008**

## Verify Your Current Readings

When testing, current imbalances can often leave us wondering if the test equipment is functioning properly, or if there something seriously wrong with the motor. The question is easily answered, by utilizing test equipment you already own. Did I mention it is pretty quick and painless to do?

First connect all three voltage clips and all three current clips to the same phase. Then, run a Power test. This short test (it takes longer to set up the test than to run it) will provide you with a three-phase Time Domain graph. In the Time Domain, you should see all three voltages flowing identically. The currents should also do the same. If either the voltages or the currents do not flow together, in-phase, then there is a strong possibility the test equipment you are using may need to be evaluated for repair or calibration.

If you are using an EMAX unit, then it is also recommended to run a current capture (the Eccentricity test being the shortest) in the same manner. This will check another set of channels used for current captures. Again, look at the Time Domain to verify all three phases flow together.

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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).