



A Leader in Electric Motor Testing

## March 3, 2014

All Three Phases Would be Nice...

Thirty-five seconds into the first start of a recently rewound critical cooling pump motor and TRIP! A quick review of the single phase In-Rush/Start-Up data appeared "normal" and peaked at 6 times full load amps (FLA), but then dropped to 20% above FLA at 4 seconds and held constant until the trip at 35 seconds. It may seem strange to be slightly overloaded immediately following the in-rush, but is that enough to cause a trip or was it possible that one of the other phases may have caused the trip? If you are ever faced with this type of question and want to see the raw peak current amplitude at the point when the contacts open, consider using the new three-phase, six channel In-Rush/Start-Up test on your next attempt to start the motor. The three-phase In-Rush/Start-Up stores an RMS envelope and raw data for three phases of voltage and current allowing a detailed look at each phase of voltage and current, and the relationship between them.

For more information on the new three phase, six channel In-Rush/Start-Up test available on the new M-Series test system visit our website at www.pdma.com. To view a video, go to http://www.pdma.com/webinars/Six\_Channel/Six\_Channel.html.

You are invited to submit an Electric Motor Testing Tip of your own and receive a free PdMA<sup>®</sup> mug or hat if we publish it! Contact Lou at 813-621-6463 ext. 126 or lou@pdma.com.

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