Electric Motor Testing Tip of the Week

PdMA CORPORATION *revolutionizing electrical reliability*

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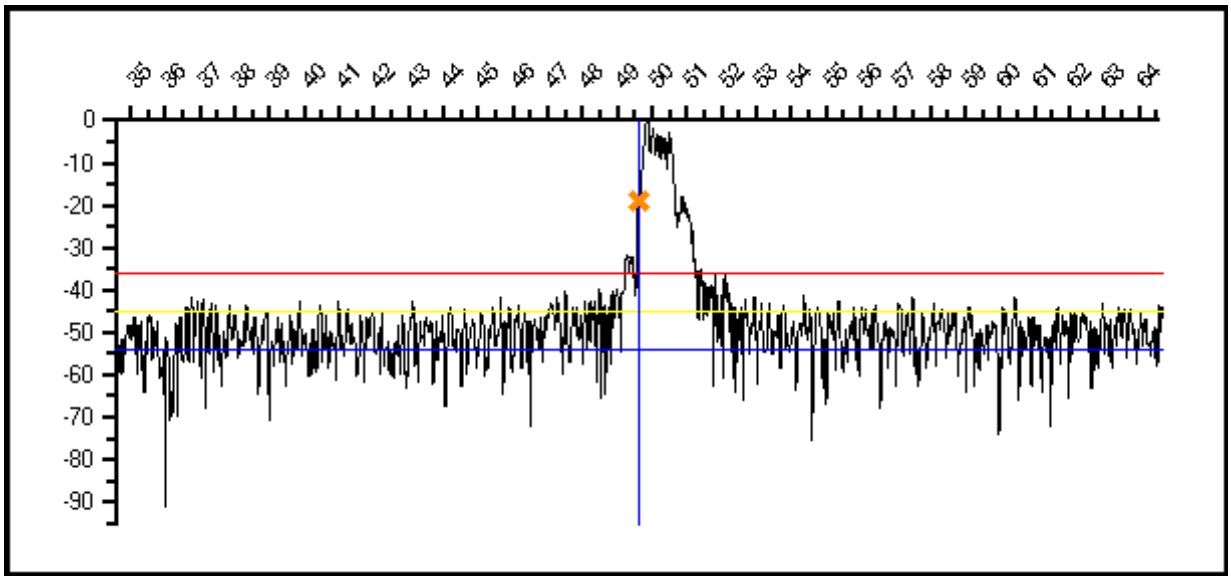
Rotor Testing with VFD

A previous motor testing tip stressed the importance during rotor evaluation of identifying the running speed of an induction motor being powered by a variable frequency drive (VFD).

In many applications, the VFD is set to maintain a constant speed under varying loads. To do this the output frequency is constantly changing as the load changes. This is great for knowing the speed of the motor, but can lead to difficulty when evaluating the rotor evaluation test spectrum, as shown in the spectrum below.

When faced with these kinds of results it is recommended that during the duration of the current signature testing the VFD be operated in manual mode at a constant frequency. In most cases the minor speed fluctuations will not as adversely affect your test results as the changing frequency does.



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.