



A Leader in Electric Motor Testing

Tip Of The Week

April 25, 2016

Why Wye?

Sometimes your six lead motors are configured to start in a Wye configuration and switch to a Delta configuration during the start-up known commonly as Wye Start/Delta Run. This starting method minimizes current demand during starting and reduces the impact on the power system, therefore, reducing the chance of the motor tripping off-line in a distressed power system. As motor analysts and technicians we need to remember that when de-energized the three phases are completely disconnected from each other. Connecting your MCE® test leads to motor leads 1,2,3 will indicate an open phase with no conductivity. The recommended approach is to move your test leads to each phase and test that phase separately. Referring to the handy dandy EASA Electrical Engineering Handbook we can determine which motor leads make up the three independent phases. Motor lead 1 and 4 (phase 1), motor lead 2 and 5 (phase 2), and motor lead 3 and 6 (phase 3). Also, remember that each phase can have its own independent resistance and capacitance-to-ground reading as a result of being disconnected from the other phases.

For a more complete Wye Start/Delta Run test procedure, contact PdMA Technical Support.

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.

Copyright 2016 PdMA® Corporation. All rights reserved. The PdMA Tip of the Week is produced by PdMA. PdMA shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon.