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Step Voltage Test

The Step Voltage Test is designed as a controlled over-voltage or proof test to provide an additional evaluation of the insulation system integrity. The Step Voltage test is performed upon completion of a successful Polarization Index (PI) test starting at the same voltage used for the PI test. As the Step Voltage Test progresses, every 60 seconds the voltage applied to the insulation system is increased in specific voltage increments, which is determined by the user. As the voltage is increased, the current is monitored and plotted graphically. A non-linear or abnormal increase in the leakage current at the end of each voltage level may be indicative of insulation issues.

For further information, please refer to IEEE 95 - Recommended Practice for Insulation Testing of AC Electric Machinery with High Direct Voltage.

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.

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