

IEEE Standard Test Procedure for Polyphase Induction Motors and Generators

IEEE Power and Energy Society

Sponsored by the
Electric Machinery Committee

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Abstract: Instructions for conducting and reporting the more generally applicable and acceptable tests of polyphase induction motors and generators are covered.

Keywords: acceptance and performance testing, generators, IEEE 112™, induction, machines, motors, polyphase

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Introduction

This introduction is not part of IEEE Std 112-2017, IEEE Standard Test Procedure for Polyphase Induction Motors and Generators.

This standard provides the basic test procedures for evaluating the performance of a polyphase induction motor or generator of any size. Each revision of the standard since its 1964 introduction as an IEEE standard has been to keep the standard current with improvements in instrumentation and test techniques, increased knowledge in the art of measurements, and with the constant change in the needs and desires of the machine users and of those concerned with energy conservation and the like. Portions of the document have been rearranged to accomplish this, and the user is cautioned to check any external references to particular clauses of previous versions for the correct clause number in this version.

Major additions to this revision include load testing by the superposition equivalent loading method. This is an alternative temperature test method that provides advantages for testing large machines that exceed test equipment and power supply limitations. Annex E has been added to this standard to explain the determination of total error.

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