

IEEE Electric Machinery Standards Collection: VuSpec™

Electric machinery standards provide manufacturers and designers with the specifications they need to know on-the-job, while providing tests and diagnosis for various types of electric machines. This VuSpec collection contains 26 Active IEEE standards, Guides and Recommended practices used worldwide pertinent to the generation of electric energy and its conversion into other forms of electric or mechanical energy. Specific topics include:

- Synchronous machines
- Induction machines
- DC and Permanent Magnet machines
- Motor generator sets -Rotating frequency changers
- Electric couplings, brakes and dynamometers
- Magneto-hydrodynamic energy conversion ducts
- Insulation, magnetic, conductor, and super conductor materials as used in electrical machinery
- Linear Electric Machinery
- Power Electronic controls for electric machinery
- Effects of power electronic controls on electric machine components.

Table of Contents

- IEEE Std 11-2000, IEEE Standard for Rotating Electric Machinery for Rail and Road Vehicles
- IEEE Std 43-2000, IEEE Recommended Practice for Testing Insulation Resistance of Rotating Machinery
- IEEE Std 62.2-2004, IEEE Guide for Diagnostic Field Testing
- IEEE Std 67-2005, IEEE Guide for Operation and Maintenance of Turbine Generators
- IEEE Std 95-2002, IEEE Recommended Practice for Insulation Testing of AC Electric Machinery (2300 V and Above) With High Direct Voltage
- IEEE Std 112-2004, IEEE Standard Test Procedure for Polyphase Induction Motors and Generators
- IEEE Std 114-2001, IEEE Standard Test Procedure for Single-Phase Induction Motors
- IEEE Std 115-1995, IEEE Guide: Test Procedures for Synchronous Machines Part I Acceptance and Performance Testing Part II Test Procedures and Parameter Determination for Dynamic Analysis
- IEEE Std 120-1989, IEEE Master Test Guide for Electrical Measurements in Power Circuits
- IEEE Std 252-1995, IEEE Standard Test Procedure for Polyphase Induction Motors Having Liquid in the Magnetic Gap

- IEEE Std 286-2000, IEEE Recommended Practice for Measurement of Power Factor Tip-Up of Electric Machinery Stator Coil Insulation
- IEEE Std 434-2006, IEEE Guide for Functional Evaluation of Insulation Systems for AC Electric Machines Rated 2300 V and Above
- IEEE Std 492-1999, IEEE Guide for Operation and Maintenance of Hydro-Generators
- IEEE Std 522-2004, IEEE Guide for Testing Turn Insulation of Form-Wound Stator Coils for Alternating-Current Electric Machines
- IEEE Std 620-1996(R2003), IEEE Guide for the Presentation of Thermal Limit Curves for Squirrel Cage Induction Machines
- IEEE Std 1110-2002, IEEE Guide for Synchronous Generator Modeling Practices and Applications in Power System Stability Analyses
- IEEE Std 1255-2000, IEEE Guide for Evaluation of Torque Pulsations During Starting of Synchronous Motors
- IEEE Std 1310-1996, IEEE Recommended Practice for Thermal Cycle Testing of Form-Wound Stator Bars and Coils for Large Generators
- IEEE Std 1415-2006, IEEE Guide for Induction Machinery Maintenance Testing and Failure Analysis
- IEEE Std 1432-2000, IEEE Trial-Use Guide to the Measurement of Partial Discharges in Rotating Machinery
- IEEE Std 1553-2002, IEEE Trial-Use Standard for Voltage-Endurance Testing of Form-Wound Coils and Bars for Hydrogenerators
- IEEE Std 1776-2008, IEEE Recommended Practice for Thermal Evaluation of Unsealed or Sealed Insulation Systems for AC Electric Machinery Employing Form-Wound Pre-Insulated Stator Coils for Machines Rated 15 000 V and Below
- IEEE Std C50.12-2005, IEEE Standard for Salient-Pole 50 Hz and 60 Hz Synchronous Generators and Generator/Motors for Hydraulic Turbine Applications Rated 5 MVA and Above
- IEEE Std C50.13-2005, IEEE Standard for Cylindrical-Rotor 50 Hz and 60 Hz Synchronous Generators Rated 10 MVA and Above