

IEEE Recommended Practice for Thermal Evaluation of Sealed Insulation Systems for AC Electric Machinery Employing Form-Wound Preinsulated Stator Coils for Machines Rated 6900 V and Below

Sponsor
**Electric Machinery Committee
of the
IEEE Power Engineering Society**

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Abstract: A test procedure for comparing two or more sealed insulation systems in accordance with their expected life at rated temperature is outlined. The procedure is limited to insulation systems for alternating-current (ac) electrical machines using form-wound preinsulated stator coils rated 6900 V and below.

Keywords: ac electric machinery, insulation system, stator coils, thermal evaluation

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Introduction

(This introduction is not part of IEEE Std 429-1994, IEEE Recommended Practice for Thermal Evaluation of Sealed Insulation Systems for AC Electric Machinery Employing Form-Wound Pre-Insulated Stator Coils for Machines Rated 6900 V and Below.)

The revision of this standard, originally issued in 1972, to an IEEE Recommended Practice brings it up to date with the current IEEE policies and into conformance with the requirements of IEEE Std 99-1980 (Reaff 1992), IEEE Recommended Practice for the Preparation of Test Procedures for the Thermal Evaluation of Insulation Systems for Electric Equipment (which was revised to coordinate with international standards).

This recommended practice is intended to provide an evaluation of the thermal capability of a sealed insulation system. Other aging factors—electrical, mechanical, and environmental—are also known to be important. Test procedures for evaluating those factors, both individually and in combination with each other, will be pursued by other working groups.

Comments on, and suggestions for the improvement of, this standard are welcome, and should be sent to the IEEE Standards Board (see previous page).

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