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

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IEEE Power & Energy Society

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Electric Machinery Committee
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Approved 10 December 2008

IEEE-SA Standards Board

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Abstract: A test procedure (Combination of IEEE Std 275™-1992 and IEEE Std 429™-1994) for comparing two or more 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 pre-insulated stator coils rated 15 000 V and below.
Keywords: ac electric machinery, insulation system, stator coils, thermal evaluation

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This recommended practice is intended to provide an evaluation of the thermal capability of an unsealed or 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.

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