

IEEE Standard Test Code for Dry-Type Distribution and Power Transformers

IEEE Power & Energy Society

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Transformers Committee

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(Revision of
IEEE Std C57.12.91-2001)

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**Transformers Committee
of the
IEEE Power & Energy Society**

Approved 7 December 2011

IEEE-SA Standards Board

Abstract: This revision addresses substantive changes to Clause 5, Clause 10, and Clause 11 of IEEE Std C57.12.91-2001 to reflect current practice in the testing procedures of dry-type transformers. This revision does not address transformer requirements and specific test criteria; rather they are contained in appropriate standards such as IEEE Std C57.12.01 or in user specifications.

Keywords: dry-type transformer, IEEE C57.12.91, power transformer

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This revision of IEEE Std C57.12.91-2001 incorporates changes to Clause 5, Clause 10, and Clause 11.

Clause 5 has been restructured and now uses more clauses and subclauses to enable quicker identification of required information, although the content remains substantially the same. An additional subclause, 5.6, describes connections to be used for resistance measurements and methods of reporting the measurements to aid consistency in the test reports provided by manufacturers. The note in 5.4 defining the value for T_k has been clarified. A similar note, which appears in Clause 11, has also been revised to read the same as the note in 5.4 for consistency. The wording of this note was different in Clause 5 and Clause 11 in the previous revision of this standard.

Clause 10 and Clause 11 have been changed to incorporate minor revisions and corrections to the text as a result of comments received after the previous revision of the standard.

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1. Overview

1.1 Scope

This standard describes methods for performing tests specified in IEEE Std C57.12.01TM and other referenced standards applicable to dry-type distribution and power transformers.¹ It is intended for use as a basis for performance, safety, and the proper testing of dry-type distribution and power transformers.

This standard applies to all dry-type transformers except instrument transformers, step-voltage and induction voltage regulators, arc furnace transformers, rectifier transformers, specialty transformers, and mine transformers.

1.2 Purpose

The purpose of this standard is to provide information regarding the procedures for the testing of dry-type transformers. Transformer requirements and specific test criteria are not a part of this standard but are contained in appropriate standards such as IEEE Std C57.12.01 or in user specifications.

¹ Information on references can be found in Clause 2.