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IEEE Standard for the Electronic Reporting of Distribution Transformer Test Data

IEEE Power and Energy Society

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Sponsor

Transformers Committee
of the
IEEE Power and Energy Society

Approved 3 September 2015

IEEE-SA Standards Board

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Abstract: A basis for the electronic reporting of transformer test data on liquid immersed distribution transformers, as defined in the IEEE C57.12.2X, C57.12.3X, and C57.12.4X standards series, is provided in this standard. The specific set of test data to be reported, and the report format, is detailed along with an extended set of data as an option for the user.

Keywords: distribution transformers, electronic reporting, IEEE C57.12.37™, test data

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Introduction

This introduction is not part of IEEE Std C57.12.37-2015, IEEE Standard for the Electronic Reporting of Distribution Transformer Test Data.

The Energy Policy and Conservation Act (EPCA), as amended, directs the Department of Energy (DOE) to adopt energy conservation standards for those transformers for which standards would be technologically feasible and economically justified, and would result in significant energy savings.

The DOE has developed a Final Rule (10 CFR Part 431, Energy Conservation Program for Commercial Equipment: Distribution Transformers Energy Conservation Standard, October 12, 2007)[1] that sets minimum efficiency levels for distribution transformers that are manufactured in the United States, or imported for sale in the United States.

This revision modifies this standard to expand the "Extended Data Set" by three data fields. These fields will be used for the manufacturer to report the efficiency of 1) each individual serial number, 2) the average of the units in the model that is being reported, and 3) DOE Minimum level for that model.

Forty-five (45) extra bytes were built into this document for future expansion. This revision will use eleven (11) of those bytes for reporting efficiency. Two of the expansion fields will utilize five (5) bytes (F5.2), and one field is a single byte alphanumeric (A1).

[1]Information on references can be found in Clause 2.

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1. Overview

This standard is divided into six clauses. Clause 1 provides the scope and purpose of this standard. Clause 2 lists references to other standards that are useful in applying this standard. Clause 3 provides definitions that are either not found in other standards, or have been modified for use with this standard. Clause 4 provides a listing of the data elements in the standard data set and the additional data elements included with the extended data set. Clause 5 gives the specifics of the two test data file formats. Clause 6 addresses the methods of file transfer.

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