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1-2: ENERGIATÕHUSUSE HINDAMINE

Power transformers - Additional European
requirements: Part 1-2 Common part - Assessment of
energy performance

EESTI STANDARDI EESSÕNA

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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English Version

Power transformers - Additional European requirements: Part 1- 2 Common part - Assessment of energy performance

Transformateurs de puissance - Exigences européennes
supplémentaires: Partie 1-2 Partie commune - Evaluation
des performances énergétiques

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European foreword

This document (EN 50708-1-2:2021) has been prepared by CLC/TC 14 “Power transformers”

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-09-27
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2024-09-27

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Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Introduction

This document defines the rules for the assessment of energy performance by any interested stakeholders (for example manufacturers, suppliers and importers as well as users etc.) for example to provide a means of demonstrating the product conformity to the Commission Regulation (EU) 548/2014 of 21 May 2014 and Commission Regulation (EU) 2019/1783 of 1 October 2019 amending Regulation (EU) No 548/2014 on implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers.

NOTE In the document, the term Regulation refers to the EU Regulation 548/2014 and amendment 2019/1783.

This document contains particular requirements for specific transformers or transformer applications, which are based on the requirements of the general EN 50708-1-1:2020.

This document should be considered in conjunction with the requirements of the general parts.

The particular requirements of the different sub parts of EN 50708 supplement, modify or replace certain requirements of the general parts of EN 50708-1 and/or EN 50708-1-X being valid at the time of publication of this document. The absence of references to the exclusion of a part or a clause of a general part means that the corresponding clauses of the general part are applicable (undated reference).

Requirements of other -X parts with X greater than 1 being eventually relevant for cases covered by this document also apply. This document could therefore also supplement, modify or replace certain of these requirements valid at the time of publication of this document.

The main clause numbering of each part follows the pattern and corresponding references of EN 50708-1-1:2020. The numbers following the particular number of this document are those of the corresponding parts, or clauses of the other parts of the EN 50708 series, valid at the time of publication of this document.

In the case where new or amended general parts with modified numbering were published after the sub part was issued, the clause numbers referring to a general part in sub parts might no longer align with the latest edition of the general part. Dated references should be observed.

1 Scope

This document applies to all power transformers in scope of TC 14.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 45014, *General criteria for supplier's declaration of conformity (ISO/IEC Guide 22)*

EN 50708-1-1:2020, *Power transformers - Additional European requirements: Part 1-1: Common part - General requirements*

EN 50708 (series), *Power transformers*

EN 60076-1, *Power transformers - Part 1: General (IEC 60076-1)*

EN 60076-19, *Power transformers - Part 19: Rules for the determination of uncertainties in the measurement of the losses on power transformers and reactors (IEC 60076-19)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50708 series apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Assessment of compliance

When CE marking, EC declaration of conformity and the technical documentation are required, the following prescriptions shall be applied:

- The technical documentation shall be provided and recorded by manufacturers or its representative established in the European Community or importers.
- The technical documentation shall always contain the values of energy performance even if transformers are excluded from energy performance requirements.

This clause shall apply even for transformers excluded from the energy performance requirements or even no energy performances requirements exist.

NOTE The values of energy performance, CE marking and EC declaration of conformity requirements are defined by relevant legislation.

Energy performance compliance assessment other than the ones required by EN 60076 and other documents of EN 50708 series are subject to agreement between the involved parties.

Table 1 gives an overview of the requirements for each subject.

Three levels of conformity assessments are defined according to Table 2.

Indication of recommended sampling is given in Clause 8.