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TEHNOLOOGIAD

Power transformers - Additional European
requirements - Part 2-6: Medium power transformers -
Non-conventional magnetic steel technology

EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN 50708-2-6:2022 sisaldab Euroopa standardi EN 50708-2-6:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 50708-2-6:2022 consists of the English text of the European standard EN 50708-2-6:2022.
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 2-6: Medium power transformers - Non-conventional magnetic steel technology

Transformateurs de puissance - Exigences européennes supplémentaires - Partie 2-6: Transformateurs de moyenne puissance - Technologie à acier magnétique non conventionnel

Leistungstransformatoren - Zusätzliche europäische Anforderungen - Teil 2-6: Mittelleistungstransformatoren - Nicht konventionelle Technologien

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50708-2-6:2022) 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) 2023-07-25
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2025-07-25

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Introduction

This part of the EN 50708 series deals with the energy performance of non-conventional technology Medium Power Transformers.

For the purpose of this document, the requirements of EN 50708-1-1 apply.

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

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. 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 defines the energy performance of non-conventional technology Medium Power Transformers in compliance with EN 50708-1-1.

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 50708 (all parts), *Power transformers — Additional European requirements*

EN 50708-1-1, *Power transformers — Additional European requirements — Part 1-1 Common part*

EN 50708-2-1, *Power transformers — Additional European requirements — Part 2-1 Medium power transformer*

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

EN 60076-3, *Power transformers — Part 3: Insulation levels, dielectric tests and external clearances in air (IEC 60076-3)*

EN 60076-5, *Power transformers — Part 5: Ability to withstand short-circuit (IEC 60076-5)*

EN IEC 60076-11, *Power transformers — Part 11: Dry-type transformers (IEC 60076-11)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50708 series and the following 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/>

3.1

non-conventional magnetic steel technology

magnetic steel technology different from those with a crystalline structure and compliant with EN 50708-2-1

Note 1 to entry: The amorphous steel technology is a non-Conventional magnetic steel technology.

Note 2 to entry: The amorphous steel is described in IEC 60404-8-11.

4 Service conditions

Refer to EN 60076-1.

5 Rating and general requirements

EN 50708-2-1 applies unless otherwise stated in this document.

NOTE Commission Regulation (EU) No 548/2014 of 21 May 2014 and its amendment No 2019/1783 of 1 October 2019 does not include specific energy performance requirements for non-conventional technology transformers.