

STN	Výkonové transformátory Dopĺňajúce európske požiadavky Časť 3-4: Transformátory veľkého výkonu Špeciálne skúšky pre vlnité nádoby a chladiče	STN EN 50708-3-4 35 1130
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Power transformers - Additional European requirements - Part 3-4: Large power transformer - Special tests for corrugated tank and radiators

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

**Power transformers - Additional European requirements -
Part 3-4: Large power transformer - Special tests for corrugated
tank and radiators**

Transformateurs de puissance - Exigences européennes
supplémentaires: Partie 3-4: Transformateurs de grande
puissance - Essais spéciaux pour cuve ondulée et
radiateurs extensibles

Leistungstransformatoren - Zusätzliche europäische
Anforderungen - Teil 3-4: Großleistungstransformatoren -
Sonderprüfungen für Wellwandkessel und Radiatoren

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EN 50708-3-4:2022 (E)

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European foreword

This document (EN 50708-3-4:2022) has been prepared by CLC/TC 14 “Power transformers”.

The following dates are fixed:

- latest date by which this document has to be (dop) 2023-08-15
implemented at national level by publication of
an identical national standard or by
endorsement
- latest date by which the national standards (dow) 2025-08-15
conflicting with this document have to be
withdrawn

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EN 50708-3-4:2022 (E)**Introduction**

This part of the EN 50708 series deals with a special test for hermetically sealed transformers.

For the purpose of this document, the requirements of the general EN 50708-1-1:2020 apply.

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 the EN 50708 series 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 describes a special test for tanks of liquid-immersed transformers which during service are hermetically sealed and fully filled with liquid and volume change of the liquid due to temperature change compensated by elastic deformation of the cooling element for Large Power Transformers having a rated power greater than 3150 kVA.

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 IEC 60296, *Fluids for electrotechnical applications - Mineral insulating oils for electrical equipment (IEC 60296)*

EN 60836, *Specifications for unused silicone insulating liquids for electrotechnical purposes*

EN 62770, *Fluids for electrotechnical applications - Unused natural esters for transformers and similar electrical equipment (IEC 62770)*

EN IEC 63012, *Insulating liquids - Unused modified or blended esters for electrotechnical applications (IEC 63012)*

IEC 60076-2, *Power transformers — Part 2: Temperature rise for liquid-immersed transformers*

IEC 60076-7, *Power transformers — Part 7: Loading guide for mineral-oil-immersed power transformers*

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