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**Transformatorer –
Torrisolerade distributionstransformatorer –
Del 1: Allmänna fordringar och fordringar på
transformatorer för högst 24 kV**

*Three-phase dry-type distribution transformers 50 Hz, from 100 to 2500 kVA,
with highest voltage for equipment not exceeding 36 kV –*

*Part 1: General requirements and requirements for transformers with highest voltage
for equipment not exceeding 24 kV*

Denna svenska standard innehåller den engelska språkversionen av CENELECs harmoniseringsbeslut redovisat i HD 538.1 S1, 1992, inklusive Amendment No. 1, 1995.

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Descriptors: Power transformer, three-phase transformer, electrical characteristic, design requirement, dimension, accessory

ENGLISH VERSION

Three-phase dry-type distribution transformers 50 Hz, from 100 to 2 500 kVA, with highest voltage for equipment not exceeding 36 kV

Part 1: General requirements and requirements for transformers with highest voltage for equipment not exceeding 24 kV

Transformateurs triphasés de distribution de type sec, 50 Hz, de 100 à 2 500 kVA, avec une tension la plus élevée pour le matériel ne dépassant pas 36 kV

Partie 1: Prescriptions générales et prescriptions pour les transformateurs avec une tension la plus élevée pour le matériel ne dépassant pas 24 kV

Drehstrom-Trocken-Verteilungstransformatoren, 50 Hz, 100 bis 2 500 kVA, mit einer höchsten Spannung für Betriebsmittel \leq 36 kV

Teil 1: Allgemeine Anforderungen und Anforderungen für Transformatoren mit einer höchsten Spannung für Betriebsmittel \leq 24 kV

This Harmonization Document was approved by CENELEC on 1992-09-15. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document on a national level.

Up-to-date lists and bibliographical references concerning national implementation may be obtained on application to the Central Secretariat or to any CENELEC member.

This Harmonization Document exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Three-phase dry-type distribution transformers
50 Hz, from 100 to 2 500 kVA, with highest voltage for
equipment not exceeding 36 kV
Part 1: General requirements and requirements for transformers
with highest voltage for equipment not exceeding 24 kV

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Foreword

This Harmonization Document was prepared by working group WG 1 of CENELEC TC 14, Power transformers.

It was approved by CENELEC as HD 538.1 S1 on 15 September 1992.

The following dates were fixed:

- latest date of announcement
of the HD at national level (doa) 1993-03-01
- latest date of publication of
a harmonized national standard (dop) 1993-09-01
- latest date of withdrawal of
conflicting national standards (dow) 1993-09-01

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given only for information. In this standard, annex A (National deviations) is informative and annex B (normative references) is normative.

Statement

This document has been prepared to allow a standardized production in a series of units and to favour the interchange of products within the CENELEC countries and, if applicable, with other countries.

Every standard prepared by National Committees shall be in line with this CENELEC document, as far as the specific field of application is concerned.

This document comes into use as and when indicated in the tender and contractual documents.

When for special applications particular characteristics are required outside the standard features, the transformers can be specified and ordered individually in accordance with HD 464.

1 **GENERAL**

1.1 Scope

This Harmonization Document covers transformers from 100 to 2 500 kVA intended for operation in three-phase distribution networks. It applies to three-phase dry-type transformers for continuous service, 50 Hz, natural cooling, with two windings:

- a primary (high-voltage) winding with a highest voltage for equipment of 3,6 kV to 24 kV.
- a secondary (low-voltage) winding with a highest voltage for equipment not exceeding 1,1 kV.

NOTE 1: This document may be applied, as a whole or in part to transformers having windings with more than one rated voltage. In this case the rated power for each coupling ratio shall be specified by the purchaser.

NOTE 2: For dry-type transformers installed in power generating plants, additional requirements, not covered by this document, and alternative requirements may be specified.

1.2 Object

The object of this document is to lay down requirements related to electrical characteristics, dimensions and design. Other requirements may be specified in a National Standard.