



NSAI
Standards

Irish Standard
I.S. EN 50541-1:2011

Three phase dry-type distribution transformers 50 Hz, from 100 kVA to 3 150 kVA, with highest voltage for equipment not exceeding 36 kV -- Part 1: General requirements

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I.S. EN 50541-1:2011

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Supersedes HD 538.1 S1:1992 + A1:1995, HD 538.2 S1:1995

English version

**Three phase dry-type distribution transformers 50 Hz, from 100 kVA to 3 150 kVA, with highest voltage for equipment not exceeding 36 kV -
Part 1: General requirements**

Transformateurs triphasés de distribution de type sec, 50 Hz, de 100 kVA à 3 150 kVA, avec une tension la plus élevée pour le matériel ne dépassant pas 36 kV -
Partie 1: Prescriptions générales

Drehstrom-Trocken-Verteilungstransformatoren, 50 Hz, 100 kVA bis 3 150 kVA, mit einer höchsten Spannung für Betriebsmittel kleiner oder gleich 36 kV -
Teil 1: Allgemeine Anforderungen

This European Standard was approved by CENELEC on 2011-01-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

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

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 14, Power transformers.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50541-1 on 2011-01-02.

This document supersedes HD 538.1 S1:1992 + A1:1995 and HD 538.2 S1:1995.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2012-01-02
 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2014-01-02
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1 Scope

This European Standard covers dry type transformers from 100 kVA to 3 150 kVA intended for operation in three phases distribution networks, for indoor 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 36 kV;
- a secondary (low voltage) winding with a highest voltage for equipment not exceeding 1,1 kV.

For outdoor application, special design or enclosure (enclosure with adapted IP and IK degrees protections) should be requested.

NOTE 1 This European Standard 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 should be specified by the purchaser.

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

NOTE 3 For dry type transformers dedicated to wind turbines applications additive requirements are specified in EN 60076-16.

The object of this European Standard is to lay down requirements related to electrical characteristics, dimensions and designs of three phases distribution dry type transformers. These transformers should be in accordance with EN 60076-11 for general requirements.

2 Normative references

The following referenced documents are indispensable for the application 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 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 60076-10	Power transformers - Part 10: Determination of sound levels
EN 60076-11:2004	Power transformers - Part 11: Dry-type transformers (IEC 60076-11:2004)
EN 60076-16:201X ¹⁾	Power transformers - Part 16: Transformers for wind turbines application (IEC 60076-16)
EN 60529	Degrees of protection provided by enclosures (IP Code) (IEC 60529)
EN 62262	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code) (IEC 62262)
EN 62271-202:2007	High-voltage switchgear and controlgear - Part 202: High voltage/low voltage prefabricated substation (IEC 62271-202:2006)

¹⁾ At draft stage.

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