



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 50464-2-3:2007

ICS 29.180

**THREE-PHASE OIL-IMMERSED
DISTRIBUTION TRANSFORMERS 50 HZ,
FROM 50 KVA TO 2 500 KVA WITH
HIGHEST VOLTAGE FOR EQUIPMENT NOT
EXCEEDING 36 KV -- PART 2-3:
DISTRIBUTION TRANSFORMERS WITH
CABLE BOXES ON THE HIGH-VOLTAGE
AND/OR LOW-VOLTAGE SIDE - CABLE
BOXES TYPE 2 FOR USE ON
DISTRIBUTION TRANSFORMERS MEETING
THE REQUIREMENTS OF EN 50464-2-1**

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
<http://www.nsai.ie>

Sales

<http://www.standards.ie>

*This Irish Standard was
published under the authority
of the National Standards
Authority of Ireland and
comes into effect on:
9 May 2007*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
.....**

© NSAI 2007

Price Code D

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 50464-2-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2007

ICS 29.180

Supersedes HD 428.2.3 S1:1998

English version

**Three-phase oil-immersed distribution transformers
50 Hz, from 50 kVA to 2 500 kVA with highest voltage
for equipment not exceeding 36 kV -
Part 2-3: Distribution transformers with cable boxes
on the high-voltage and/or low-voltage side -
Cable boxes type 2 for use on distribution transformers
meeting the requirements of EN 50464-2-1**

Transformateurs triphasés de distribution immergés dans l'huile, 50 Hz, de 50 kVA à 2 500 kVA, de tension la plus élevée pour le matériel ne dépassant pas 36 kV -
Partie 2-3: Transformateurs de distribution raccordés par boîtes à câble côté haute tension et/ou côté basse tension -
Boîtes à câbles de type 2 pour utilisation sur transformateurs de distribution conformes aux exigences de la EN 50464-2-1

Ölgefüllte Drehstrom-Verteilungstransformatoren 50 Hz, 50 kVA bis 2 500 kVA, mit einer höchsten Spannung für Betriebsmittel bis 36 kV -
Teil 2-3: Verteilungstransformatoren mit Kabelanschlusskästen auf der Ober- und/oder Unterspannungsseite -
Kabelanschlusskästen Typ 2 für Verteilungstransformatoren nach EN 50464-2-1

This European Standard was approved by CENELEC on 2006-12-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the Harmonization Document HD 428.2.3 S1:1998, prepared by the Technical Committee CENELEC TC 14, Power transformers, was submitted to the formal vote for conversion into a European Standard and was approved by CENELEC as EN 50464-2-3 on 2006-12-01.

The following date was 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) 2007-12-01

The EN 50464 series consists of the following parts, under the general title “Three-phase oil-immersed distribution transformers 50 Hz, from 50 kVA to 2 500 kVA with highest voltage for equipment not exceeding 36 kV”:

- | | |
|----------|---|
| Part 1 | General requirements |
| Part 2-1 | Distribution transformers with cable boxes on the high-voltage and/or low-voltage side – General requirements |
| Part 2-2 | Distribution transformers with cable boxes on the high-voltage and/or low-voltage side – Cable boxes type 1 for use on distribution transformers meeting the requirements of EN 50464-2-1 |
| Part 2-3 | Distribution transformers with cable boxes on the high-voltage and/or low-voltage side – Cable boxes type 2 for use on distribution transformers meeting the requirements of EN 50464-2-1 |
| Part 3 | Determination of the power rating of a transformer loaded with non-sinusoidal currents |
| Part 4 | Requirements and tests concerning pressurised corrugated tanks |

Contents

1	Scope.....	4
1.1	High-voltage side.....	4
1.2	Low-voltage side	4
2	Normative references.....	4
3	Definitions.....	4
4	High-voltage connections	4
5	Low-voltage connections.....	6
6	Design.....	8
7	Test.....	8

Figures

Figure 1	– High-voltage connection directly to bushings	5
Figure 2	– High-voltage connection via busbar system	6
Figure 3	– Low-voltage connection directly to bushings	7
Figure 4	– Low-voltage connection to busbar system	7

Table

Table 1	– Minimum distances in the cable box.....	5
---------	---	---

1 Scope

Cable boxes described in this European Standard correspond to cable boxes Type 2 in EN 50464-2-1 and are suitable for assembly on the cover of oil-immersed distribution transformers meeting the requirements of EN 50464-2-1.

Cable boxes are air-filled, metal- or non-metal enclosed, for high- and/or low-voltage connections in the following variations:

1.1 High-voltage side

- a) Connection directly to bushings;
- b) Connection via busbar system.

1.2 Low-voltage side

- a) Connection directly to bushings (maximum of four connectors per bushing);
- b) Connection via busbar system.

2 Normative references

For the purposes of this document, the normative references of EN 50464-2-2 apply.

3 Definitions

For the purposes of this document, the terms and definitions of EN 50464-2-2 apply.

4 High-voltage connections

High-voltage bushings shall preferably be in accordance with EN 50180, pollution class II.

Dimension D, which is the minimum distance between live parts and between live parts and earth, is given in Table 1 and indicated in Figures 1 and 2. The value of D may be decreased by inserting barriers of insulating material. In this case, the insulation level shall be demonstrated by test.

Busbars in Figure 2 shall be dimensioned by reference to rated currents and short-circuit forces. Connection may be by single- or multi-core cables.

Figures 1 and 2 show typical arrangements; the actual design may vary.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-