

Three phase oil-immersed distribution transformers, 50 Hz, from 50 to 2500 kVA with highest voltage for equipment not exceeding 36 kV —

**Part 2: Distribution transformers with
cable boxes on the high voltage and/or
low voltage side —**

Section 2.1 General requirements —

**(Implementation of CENELEC
HD 428.2.1 S1:1994)**

UDC 621.314.212

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee PEL/14, Power transformers, upon which the following bodies were represented:

- Association of Consulting Engineers
- BEAMA Ltd. (Transmission and Distribution Association)
- British Cable Makers' Confederation
- British Pump Manufactures' Association
- British Railways Board
- Electricity Association
- Institution of Plant Engineers
- Transmission and Distribution Association (BEAMA Ltd.)

This British Standard, having been prepared under the direction of the Electrotechnical Sector Board, was published under the authority of the Standards Board and comes into effect on 15 September 1995

© BSI 07-1999

The following BSI references relate to the work on this standard:
Committee reference PEL/14
Draft for comment 92/29074 DC

ISBN 0 580 24718 X

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
Foreword	2
1 General	3
2 Definitions	3
3 Electrical characteristics	3
4 Design characteristics	4
5 Transformer requirements	4
6 Distance between bushings	5
7 Tests	5
Figure 1 — Transformer with cable boxes, type 1 side mounted	6
Figure 2 — Unit substation transformer, with cable boxes type 1 side mounted	7
Figure 3 — Transformers with cable boxes, type 1 cover mounted	8
Figure 4 — Cover mounted, air filled common HV/LV cable box type 2	8
Figure 5 — Unit substation transformers, cover mounted	9
Figure 6 — Typical flange for flange box	10
List of references	Inside back cover

National foreword

This British Standard has been prepared by Technical Committee PEL/14 and implements HD 428.2.1 S1:1994, published by the European Committee for Electrotechnical Standardization (CENELEC).

Cross-references

Publication referred to	Corresponding British Standard
HD 398.3:1986	BS 171 <i>Power transformers</i> Part 3:1987 <i>Specification for insulation levels and dielectric tests</i> BS 7821 <i>Three phase oil-immersed distribution transformers, 50 Hz, from 50 to 2 500 kVA with highest voltage for equipment not exceeding 36 kV</i>
HD 428.1 S1:1992	Part 1:1995 <i>General requirements and requirements for transformers with highest voltage for equipment not exceeding 24 kV</i>
HD 428.3:1994	Part 3:1995 <i>Supplementary requirements for transformers with highest voltage for equipment equal to 36 kV</i>
HD 506 S1:1989	BS 7616:1993 <i>Specification for bushings for liquid filled transformers above 1 kV and up to 36 kV</i>

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the HD title page, pages 2 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

UDC 621.314.212

Descriptors: Transformer, three-phase transformer, immersed transformer, distribution transformer, termination in cable boxes, design characteristic, dimension

English version

**Three phase oil-immersed distribution transformers 50 Hz,
from 50 to 2 500 kVA with highest voltage for
equipment not exceeding 36 kV**

**Part 2: Distribution transformers with cable boxes on the
high voltage and/or low voltage side**

Section 1: General requirements

Transformateurs triphasés de distribution
immergés dans l'huile, 50 Hz, de 50
à 2 500 kVA, avec une tension la plus élevée
pour le matériel ne dépassant pas 36 kV
Partie 2: Transformateurs de distribution
raccordés par boîtes à cable côté haute tension
et/ou côté basse tension
Section 1: Prescriptions générales

Drehstrom-Öl-Verteilungstransformatoren
50 Hz von 50 bis 2 500 kVA, mit einer höchsten
Spannung für Betriebsmittel bis 36 kV
Teil 2: Verteilungstransformatoren mit
Kabelanschlußkästen auf der Ober- und/oder
Unterspannungsseite
Hauptabschnitt 1: Allgemeine Anforderungen

This Harmonization Document was approved by CENELEC on 1993-09-22. 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

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