Power transformer and reactor fittings -Part 4: Basic accessories (earthing terminal, drain and filling devices, thermometer pocket, wheel assembly)

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# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 50216-4:2003 sisaldab Euroopa standardi EN 50216-4:2002 ingliskeelset teksti.

Käesolev dokument on jõustatud 15.01.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 50216-4:2003 consists of the English text of the European standard EN 50216-4:2002.

This document is endorsed on 15.01.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

EN 50216-4 specifies basic accessories of transformers, such as thermometer pockets, to be used for liquid immersed transformers, earth terminals; to be used for liquid immersed and dry-type transformers, draining plugs, to be used for liquid immersed distribution transformers, filling openings, to be used for liquid immersed distribution transformers, wheel assembly, choice and distance between centres, to be used for liquid immersed and dry-type distribution transformers.

## Scope:

EN 50216-4 specifies basic accessories of transformers, such as thermometer pockets, to be used for liquid immersed transformers, earth terminals; to be used for liquid immersed and dry-type transformers, draining plugs, to be used for liquid immersed distribution transformers, filling openings, to be used for liquid immersed distribution transformers, wheel assembly, choice and distance between centres, to be used for liquid immersed and dry-type distribution transformers.

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**Võtmesõnad:** air transport, electric coils, electrically-opera, oil bath transformers, power transformer, properties, ratings, reactors, regulators, relays, specification (approval), specifications, stationary, taxiing, temperature controllers, testing, thermometers, transformers

# **EUROPEAN STANDARD**

# EN 50216-4

# NORME EUROPÉENNE

# **EUROPÄISCHE NORM**

January 2002

ICS 29.180

English version

# Power transformer and reactor fittings Part 4: Basic accessories (earthing terminal, drain and filling devices, thermometer pocket, wheel assembly)

Accessoires pour transformateurs de puissance et bobines d'inductance Partie 4: Accessoires de base (borne de terre, orifice de remplissage, vanne de vidange, doigt de gant, galets de roulement) Zubehör für Transformatoren und Drosselspulen Teil 4: Kleine Zubehörteile (Erdungsanschlussstück, Ablass- und Fülleinrichtungen, Thermometertasche, Rollen)

This European Standard was approved by CENELEC on 2001-07-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, 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

## **Foreword**

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

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50216-4 on 2001-07-01.

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) 2002-08-01

- latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2004-08-01

JO PORTION ORNER DE DE LES EN 50216-4 is to be read in conjunction with EN 50216-1.

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## 1 Scope

EN 50216-4 specifies basic accessories of transformers, such as

- thermometer pockets, to be used for liquid immersed transformers,
- earth terminals; to be used for liquid immersed and dry-type transformers,
- draining plugs, to be used for liquid immersed distribution transformers,
- filling openings, to be used for liquid immersed distribution transformers,
- wheel assembly, choice and distance between centres, to be used for liquid immersed and dry-type distribution transformers.

#### 2 Normative references

# Addition to EN 50216-1.

EN 60076	Series	Power transformers (IEC 60076 Series, mod.)
HD 428	Series	Three-phase oil-immersed distribution transformers 50 Hz, from 50 to 2 500 kVA with highest voltage for equipment not exceeding 36 kV
HD 464 S1+ amendments	1988	Dry-type transformers
HD 538	Series	Three-phase dry-type distribution transformers 50 Hz, from 100 to 2 500 kVA, with highest voltage for equipment not exceeding 36 kV

#### 3 Definitions

For the purpose of this standard, the following definitions apply:

#### 3.1

## thermometer pocket

a device, generally mounted on the transformer or reactor cover, intended to house a thermometer to measure the insulating liquid temperature (marking A)

#### 3.2

## earth terminal

a terminal placed on the dry-type transformer/reactor structure or on the transformer/reactor tank/enclosure, for connection to an earthing system (marking B)

#### 3.3

# draining plug

a device intended to sample or remove the insulating liquid from a transformer tank (marking C)

## 3.4

## filling openings

a facility for filling a transformer tank with insulating liquid (marking D)

# 4 Thermometer pockets to be used for liquid immersed transformers

#### 4.1 General

Clause 4 specifies the thermometer pockets for oil immersed transformers in order to ensure the interchangeability of the accessories to this pocket.