



**NSAI**  
Standards

Irish Standard  
I.S. EN 50216-7:2002

# Power transformer and reactor fittings -- Part 7: Electric pumps for transformer oil

## I.S. EN 50216-7:2002

*Incorporating amendments/corrigenda issued since publication:*

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EUROPEAN STANDARD

**EN 50216-7**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2002

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ICS 29.180

English version

**Power transformer and reactor fittings  
Part 7: Electric pumps for transformer oil**

Accessoires pour transformateurs  
de puissance et bobines d'inductance  
Partie 7: Pompes électriques  
pour transformateur immergé

Zubehör für Transformatoren  
und Drosselspulen  
Teil 7: Elektrische Pumpen  
für Transformatorenöl

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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.

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**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**

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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 formal vote and was approved by CENELEC as EN 50216-7 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with the EN have to be withdrawn (dow) 2004-08-01

EN 50216-7 is to be read in conjunction with EN 50216-1.

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## 1 Scope

EN 50216-7 covers requirements for electric pumps which generate the circulation of insulating oil in transformers and reactors conforming to the EN 60076 series and their associated cooling systems.

The pumps covered in this standard are rotodynamic pumps driven by a squirrel cage induction motor which is immersed in the insulating oil.

Pump sets conforming to this standard may be of in-line or end suction design.

This standard includes requirements for the electrical and hydraulic performance, mechanical design, routine testing and type testing. Additionally, performance and dimensions of preferred sizes of pump sets are specified (see normative annexes A and B).

The insulating oils considered comply with subclause 2.5 of IEC 60296-1. If other insulating liquids are to be used, the performance and design of the pump shall be agreed between purchaser and manufacturer.

## 2 Normative references

Addition to EN 50216-1:

EN 809	1998	Pumps and pump units for liquids - Common safety requirements
EN 60034-1	1998	Rotating electrical machines - Part 1: Rating and performance (IEC 60034-1:1996, mod)
EN 60034-9	1997	Rotating electrical machines - Part 9: Noise limits (IEC 60034-9:1997)
EN 60076	Series	Power transformers (IEC 60076 series, mod)
EN 60076-1	1997	Power transformers - Part 1: General (IEC 60076-1:1993, mod)
HD 53.8 S5	1998	Rotating electrical machines - Part 8: Terminal markings and direction of rotation of rotating machines (IEC 60034-8:1972 + A1:1990 + A2:1996)
HD 566 S1	1990	Thermal evaluation and classification of electrical insulation (IEC 60085:1984)
IEC 60279	1969	Measurement of the winding resistance of an a.c. machine during operation at alternating voltage
ISO 179	1993	Determination of Charpy impact strength
ISO 185	1988	Grey cast iron - Classification
ISO 281	1990	Rolling bearings - Dynamic load ratings and rating life
ISO 3522	1984	Cast aluminium alloys - Chemical composition and mechanical properties

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