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Power transformer and reactor fittings -- Part 9: Oil-to-water heat exchangers

I.S. EN 50216-9:2009

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English version

**Power transformer and reactor fittings -
Part 9: Oil-to-water heat exchangers**

Accessoires pour transformateurs
de puissance et bobines d'inductance -
Partie 9: Echangeurs thermiques huile-eau

Zubehör für Transformatoren
und Drosselspulen -
Teil 9: Öl-Wasser-Kühler

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CENELEC

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

Central Secretariat: avenue Marnix 17, B - 1000 Brussels

I.S. EN 50216-9:2009

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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 50216-9 on 2008-10-21.

This European Standard is to be read in conjunction with EN 50216-1:2002, *Power transformer and reactor fittings - Part 1: General*.

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) 2009-11-01
 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2011-11-01
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1 Scope

EN 50216-9 deals with oil-to-water heat exchangers that means a heat exchanger for the cooling of the transformer oil using a forced oil circuit and a forced water circuit.

The oil-side of the oil-to-water heat exchangers is not included in the scope of the Pressure Equipment Directive 97/23/EC according to Article 1, § 3.12. The water-side falls into Article 3, § 3 of the Pressure Equipment Directive, therefore the rating plate must not contain a CE sign according to Article 15 of the Pressure Equipment Directive.

This standard establishes essential dimensions and the requirements to ensure interchangeability and adequate mounting of the oil-to-water heat exchangers.

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 amendment) applies.

EN 50216-1:2002	Power transformers and reactor fittings - Part 1: General
EN 60296	Fluids for electrotechnical applications - Unused mineral insulating oils for transformers and switchgear (IEC 60296)
EN 60721-3-4	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 4: Stationary use at non-weatherprotected locations (IEC 60721-3-4)
EN 1092-1	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories , PN designated - Part 1: Steel flanges
EN 1561	Founding - Grey cast irons
EN 1653	Copper and copper alloys - Plate, sheet and circles for boilers, pressure vessels and hot water storage units
EN 10025:1990 ¹⁾	Hot rolled products of non-alloy structural steels - Technical delivery conditions
EN 10027-2	Designation systems for steels - Part 2: Numerical system
EN 10088-2	Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes
EN 10130	Cold rolled low carbon steel flat products for cold forming - Technical delivery conditions
EN 12451	Copper and copper alloys - Seamless, round tubes for heat exchangers
EN 12452	Copper and copper alloys - Rolled, finned, seamless tubes for heat exchangers
EN 12502-1	Protection of metallic materials against corrosion - Guidance on the assessment of corrosion likelihood in water distribution and storage systems - Part 1: General
EN ISO 3506-1	Mechanical properties of corrosion-resistant stainless steel fasteners - Part 1: Bolts, screws and studs (ISO 3506-1)
ISO 4406	Hydraulic fluid power - Fluids - Methods for coding the level of contamination by solid particles

¹⁾ Replaced by EN 10025 series, Hot rolled products of structural steels.

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