Power transformer and reactor fittings - Part 2: Gas and oil actuated relay for liquid immersed transformers and reactors with conservator

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 50216-2:2003 sisaldab Euroopa standardi EN 50216-2:2002 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 50216-2:2003 consists of the English text of the European standard EN 50216-2:2002. 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: This standard covers the gas and oil operated relay protection device for liquid immersed power transformers and reactors with expansion tank and intended for indoor or outdoor installation.	**Scope:** This standard covers the gas and oil operated relay protection device for liquid immersed power transformers and reactors with expansion tank and intended for indoor or outdoor installation.

ICS 29.120.70, 29.180

Võtmesõnad: cooling systems, electric pumpsets, insulatingoil, power transformers, reactors, requirements

EUROPEAN STANDARD **EN 50216-2**

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ICS 29.120.70; 29.180

English version

Power transformer and reactor fittings Part 2: Gas and oil actuated relay for liquid immersed transformers and reactors with conservator

Accessoires pour transformateurs de puissance et bobines d'inductance Partie 2: Relais de protection (dégagement gazeux, niveau d'huile) pour transformateurs et réactance immergés dans un diélectrique liquide équipés d'un conservateur

Zubehör für Transformatoren und Drosselspulen Teil 2: Buchholzrelais für flüssigkeitsgefüllte Transformatoren und Drosselspulen mit Ausdehnungsgefäß

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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 50216-2 on 2001-09-25.

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)	2002-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2004-10-01

EN 50216-2 is to be read in conjunction with EN 50216-1.

Contents

1 Scope

EN 50216-2 covers the gas and oil actuated relay (Buchholz relay) for liquid immersed power transformers and reactors with conservator for indoor or outdoor installation.

The device is intended to detect

- gas release from the unit to be protected,
- oil surge from the tank to the conservator,
- complete loss of oil in the conservator.

This part of EN 50216 defines the

- operating limits,
- dimensions,
- operational performance,
- electrical characteristics,
- dynamic characteristics.

It applies to relays with dry contacts.

It is not applicable to flameproof relays.

Should environmental conditions and dynamic stress requirements differ from those detailed in clause 3 of EN 50216-1, EN 50216-2 may then be applied by agreement between purchaser and supplier for those parts which are not affected by such abnormal installation conditions.

NOTE EN 50216-2 may be used as far as applicable for relays with mercury switches. Restrictions on the use of mercury devices may be imposed by national regulations.

2 Normative references

Addition to EN 50216-1:

EN 60947-5-1 + A12	1997 1999	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices (IEC 60947-5-1:1997)
ISO 228-1	1994	Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation

3 Service conditions

In addition to the service conditions specified in EN 50216-1, the relay shall meet the following conditions.

3.1 Maximum inclination

The relay is intended to function in a horizontal position; a positive inclination of up to 5 ° to the horizontal axis is admissible in the arrow direction (see 7.6).

Other values may be agreed between purchaser and supplier.

3.2 Operating pressure

The relay is subjected to a continuous internal gauge pressure of 50 kPa but shall be capable of withstanding an overpressure of 250 kPa for 2 min.