

Svenska Elektriska Kommissionen, SEK

Fastställt	Utgåva	Sida	Ingår i
2002-03-20	1	1 (1+11)	SEK Område 14

© Copyright SEK. Reproduction in any form without permission is prohibited.

Transformator- och reaktortillbehör – Del 2: Gasvakt för vätskeisolerade transformatorer och reaktorer med expansionskärl

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

Som svensk standard gäller europastandarden EN 50216-2:2002. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50216-2:2002.

Nationellt förord

SS-EN 50216-2 skall användas tillsammans med tidigare utgiven svensk standard SS-EN 50216-1, utgåva 1, 2002.

**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

This European Standard was approved by CENELEC on 2001-09-25. 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 50216-2 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

	Page
1 Scope	4
2 Normative references.....	4
3 Service conditions	4
3.1 Maximum inclination	4
3.2 Operating pressure.....	4
3.3 Sensitivity of the relay contacts to magnetic fields	5
3.4 Special mechanical conditions	5
4 Dimensions	5
5 Operational performance.....	7
5.1 Alarm and trip contacts.....	7
5.2 Oil loss from tank.....	8
5.3 Latching of trip element.....	8
6 Electrical characteristics of switch	8
6.1 Switch type	8
6.2 Rated currents	8
6.3 Breaking and making capacity.....	8
7 Mechanical requirements	9
7.1 Terminal box.....	9
7.2 Testing facility.....	9
7.3 Gas sampling	9
7.4 Draining device.....	9
7.5 Presence of gas in the relay	9
7.6 Mounting arrangement	9
7.7 Pressure and vacuum.....	9
8 Nameplate	10
9 Tests.....	10
9.1 Routine tests	10
9.2 Type tests.....	10

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