Power transformer and reactor fittings - Part 3: Protective relay for hermetically sealed liquid-immersed transformers and reactors without gaseous cushion

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50216-3:2003 sisaldab Euroopa standardi EN 50216-3:2002 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 50216-3:2003 consists of the English text of the European standard EN 50216-3:2002. 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 50216-3 applies to protective relays for hermetically liquid-immersed transformers, complying with the EN 60076 series, and reactors, complying with EN 60289, without gaseous cushions for indoor or outdoor installation.	**Scope:** EN 50216-3 applies to protective relays for hermetically liquid-immersed transformers, complying with the EN 60076 series, and reactors, complying with EN 60289, without gaseous cushions for indoor or outdoor installation.

ICS 29.180

Võtmesõnad: accessories, chokes (electric), electric coils, electric relays, electrical engineering, electrically- operated devices, electrically-opera, inductors, power transformers, protective relays, relays, specification (approval), specifications, testing, transformers

EUROPEAN STANDARD **EN 50216-3**

NORME EUROPÉENNE

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ICS 29.180

English version

Power transformer and reactor fittings
Part 3: Protective relay for hermetically sealed liquid-immersed transformers and reactors without gaseous cushion

Accessoires pour transformateurs
de puissance et bobines d'inductance
Partie 3: Relais de protection pour
transformateurs et bobines d'inductance
hermétiques immergés dans un liquide
et sans matelas gazeux

Zubehör für Transformatoren
und Drosselspulen
Teil 3: Schutzrelais für ohne Gaspolster
hermetisch verschlossene
flüssigkeitsgefüllte Transformatoren
und Drosselspulen

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

Ref. No. EN 50216-3:2002 E

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 50216-3 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 50216-3 is to be read in conjunction with EN 50216-1.

Contents

1 Scope

EN 50216-3 applies to protective relays for hermetically liquid-immersed transformers, complying with the EN 60076 series, and reactors, complying with EN 60289, without gaseous cushions for indoor or outdoor installation.

This part of EN 50216 defines the

- operating limits,
- outline and mounting details,
- operational performance,
- electrical characteristics,
- dynamic characteristics.

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

NOTE EN 50216-3 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 50005	1976	Low-voltage switchgear and controlgear for industrial use - Terminal marking and distinctive number - General rules
EN 50102	1995	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)
EN 60076	series	Power transformers (IEC 60076 series)
EN 60289	1994	Reactors (IEC 60289:1988, mod.)
EN 60947-5-1 + A12	1997 1999	Low-voltage switchgear and controlgear - Part 5-1: Control circuits devices and switching elements - Electromechanical control circuit devices (IEC 60947-5-1:1997)

3 Identification of relays

Two types are identified in EN 50216-3 which shall meet the following functions:

Table 1 – Identification of relays

Function	Relay type 1	Relay type 2
Gas and leakage detection	1 contact	1 contact
Overpressure detection	1 contact	1 contact
Over temperature detection		2 contacts (alarm/tripping)
Temperature indicator	Yes	Yes
Visual leakage control	Yes	Yes
NOTE The two functions gas and leakage detection are usually actuated by one contact in common.		