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Power transformer and reactor fittings -- Part 11: Oil and winding temperature indicators

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Power transformer and reactor fittings - Part 11: Oil and winding temperature indicators

Accessoires pour transformateurs de puissance et bobines d'inductance - Partie 11: Indicateurs de température de l'huile et des enroulements

Zubehör für Transformatoren und Drosselspulen - Teil 11: Öl- und Wicklungstemperaturanzeiger

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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

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Foreword

This European Standard has been prepared by the Technical Committee CENELEC TC 14, Power transformers.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50216-11 on 2008-07-01

This EN 50216-11 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)	2009-07-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2011-07-01

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1 Scope

EN 50216-11 covers oil temperature and winding temperature (thermal image) indicators of the interchangeable mechanical (not electronic) type with contacts for use with liquid immersed power transformers and reactors for indoor or outdoor installation.

This standard defines the characteristics of the instruments in order to ensure the interchangeability achieving the same performance.

Except where otherwise specified or implied herein, oil and winding temperature indicators shall comply with the requirements of EN 50216-1.

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 amendments) applies.

EN 50216-1:2002	Power transformer and reactor fittings - Part 1: General
EN 50216-4:2002	Power transformer and reactor fittings - Part 4: Basic accessories (earthing terminal, drain and filling devices, thermometer pocket, wheel assembly)
EN 60255-21-1	Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section 1: Vibration tests (sinusoidal) (IEC 60255-21-1)
EN 60255-21-2	Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section 2: Shock and bump tests (IEC 60255-21-2)
EN 60255-21-3	Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section 3: Seismic tests (IEC 60255-21-3)
EN 60529	Degrees of protection provided by enclosures (IP Code) (IEC 60529)

3 Direct reading mechanical dial type oil and winding temperature indicators

The oil and winding temperature indicators must be of the mechanical dial type.

Winding temperature indicator must be only thermal image principle.

3.1 General

Nominal diameter (or equivalent size in case of non circular dial):

– ND = 150 mm (-10/+20) mm, for oil and winding temperature indicators.

For a good readability it is recommended that the scale diameter is minimum 130 mm for all.

The choice of the colours of the background, letters and pointer should guarantee good readability; for example: white background with black letters, black background with white letters.

The marking shall be 2 °C or 5 °C.

Marking of the dial plate shall be indelible and protected with UV stabilised polycarbonate or safety glass with UV filter.