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Krafttransformatorer – Del 22-7: Transformator- och reaktortillbehör – Tillbehör och anslutningar

*Power transformers –
Part 22-7: Power transformer and reactor fittings –
Accessories and fittings*

Som svensk standard gäller europastandarden EN IEC 60076-22-7:2020. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60076-22-7:2020.

Nationellt förord

Europastandarden EN IEC 60076-22-7:2020

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60076-22-7, First edition, 2020 - Power transformers - Part 22-7: Power transformer and reactor fittings - Accessories and fittings**

utarbetad inom International Electrotechnical Commission, IEC.

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English Version

**Power transformers - Part 22-7: Power transformer and reactor
fittings - Accessories and fittings
(IEC 60076-22-7:2020)**

Transformateurs de puissance - Partie 22-7:
Transformateur de puissance et bobines d'inductance -
Accessoires et équipements
(IEC 60076-22-7:2020)

Leistungstransformatoren - Teil 22-7: Zubehörteile von
Leistungstransformatoren und Drosselspulen - Zubehörteile
und Armaturen
(IEC 60076-22-7:2020)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 14/1044/FDIS, future edition 1 of IEC 60076-22-7, prepared by IEC/TC 14 "Power transformers" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60076-22-7:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-03-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-06-11

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Endorsement notice

The text of the International Standard IEC 60076-22-7:2020 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60076-5	NOTE	Harmonized as EN 60076-5
IEC 60076-6	NOTE	Harmonized as EN 60076-6
IEC 60255-5:2000	NOTE	Harmonized as EN 60255-5:2001 (not modified)

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-3-3	1991	Environmental testing - Part 3-3: Guidance - Seismic test methods for equipments	EN 60068-3-3	1993
IEC 60068-3-3	2019	Environmental testing - Part 3-3: Supporting documentation and guidance - Seismic test methods for equipment	EN IEC 60068-3-3	2019
IEC 60076-1	-	Power transformers - Part 1: General	EN 60076-1	-
IEC 60076-7	-	Power transformers -- Part 7: Loading - guide for oil-immersed power transformers	-	-
IEC 60255-27	-	Measuring relays and protection equipment - Part 27: Product safety requirements	EN 60255-27	-
IEC 60296	-	Fluids for electrotechnical applications - Unused mineral insulating oils for transformers and switchgear	EN 60296	-
IEC 60529	-	Degrees of protection provided by - enclosures (IP Code)	-	-
IEC 60721-3-4	-	Classification of environmental conditions - Part 3-4: Classification of groups of environmental parameters and their severities - Stationary use at non-weatherprotected locations	EN IEC 60721-3-4	-
ISO 3601-1	-	Fluid power systems - O-rings – Part 1: Inside diameters, cross-sections, tolerances and designation codes	-	-
ISO 7005-1	-	Pipe flanges – Part 1: Steel flanges for industrial and general service piping systems	-	-
ISO 12944-6	-	Paints and varnishes – Corrosion protection of steel structures by protective paint systems – Part 6: Laboratory performance test methods	EN ISO 12944-6	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

POWER TRANSFORMERS –**Part 22-7: Power transformer and reactor fittings –
Accessories and fittings****FOREWORD**

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International Standard IEC 60076-22-7 has been prepared by IEC technical committee 14: Power transformers.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
14/1044/FDIS	14/1048/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60076 series, published under the general title *Power transformers*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

POWER TRANSFORMERS –

Part 22-7: Power transformer and reactor fittings – Accessories and fittings

1 Scope

This part of IEC 60076-22 applies to a selection of accessories and fittings mounted on liquid immersed power transformers according to IEC 60076-1 and reactors according to IEC 60076-6 with or without conservator for indoor or outdoor installation. It outlines the service conditions and the mechanical requirements that are common to all the accessories and fittings.

This document also outlines the operation requirements specific to each device as well as the preferred dimensions relevant for interchangeability and the type and routine test to be performed.

This document covers an exhaustive selection of the accessories and fittings that are currently used on transformers or reactors.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 60068-3-3:2019, *Environmental testing – Part 3-3: Supporting documentation and guidance – Seismic test methods for equipment*

IEC 60068-3-3:1991, *Environmental testing – Part 3-3: Guidance – Seismic test methods for equipments*

IEC 60076-1, *Power transformers – Part 1: General*

IEC 60076-7, *Power transformers – Part 7: Loading guide for mineral-oil-immersed power transformers*

IEC 60296, *Fluids for electrotechnical applications – Unused mineral insulating oils for transformers and switchgear*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60721-3-4, *Classification of environmental conditions – Part 3-4: Classification of groups of environmental parameters and their severities – Stationary use at non-weatherprotected locations*

IEC 60255-27, *Measuring relays and protection equipment – Part 27: Product safety requirements*

ISO 3601-1, *Fluid power systems – O-rings – Part 1: Inside diameters, cross-sections, tolerances and designation codes*

ISO 7005-1, *Pipe flanges – Part 1: Steel flanges for industrial and general service piping systems*

ISO 12944-6, *Paints and varnishes – Corrosion protection of steel structures by protective paint systems – Part 6: Laboratory performance test methods*