

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Power transformers –
Part 22-6: Power transformer and reactor fittings – Electric fans for transformers**

**Transformateurs de puissance –
Partie 22-6: Accessoires pour transformateurs de puissance et bobines
d'inductance – Ventilateurs électriques pour transformateurs**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

POWER TRANSFORMERS –

Part 22-6: Power transformer and reactor fittings –
Electric fans for transformers

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

| Draft | Report on voting |
|-------------|------------------|
| 14/1022/CDV | 14/1041A/RVC |

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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

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POWER TRANSFORMERS –

Part 22-6: Power transformer and reactor fittings – Electric fans for transformers

1 Scope

This part of IEC 60076 covers the electric fans used in the cooling circuits of power transformers and reactors. It applies to electric fans mounted on liquid immersed power transformers according to IEC 60076-1 and reactors according to IEC 60076-6 with and without conservator for indoor or outdoor installation. It outlines the service conditions and the mechanical and electrical requirements that are common to all the equipment.

The electric fans concerned by this document are of the axially operating type and are for use on liquid to air coolers and for blowing out radiators.

This document also outlines the operation requirements specific to each equipment as well as the preferred dimensions relevant for interchangeability and uniform fan assembly and the type and routine tests to be performed.

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 60034-1, *Rotating electrical machines – Part 1: Rating and performance*

IEC 60076-1:2011, *Power transformers – Part 1: General*

IEC 60076-10, *Power transformers – Part 10: Determination of sound levels*

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

ISO 281, *Rolling bearings – Dynamic load ratings and rating life*

ISO 5801:2017, *Fans – Performance testing using standardized airways*

ISO 9227, *Corrosion tests in artificial atmospheres – Salt spray tests*

ISO 12944 (all parts), *Paints and varnishes – Corrosion protection of steel structures by protective paint systems*

ISO 13347-1, *Industrial fans – Determination of fan sound power levels under standardized laboratory conditions – Part 1: General overview*

ISO 13347-3, *Industrial fans – Determination of fan sound power levels under standardized laboratory conditions – Part 3: Enveloping surface methods*

ISO 13348, *Industrial fans – Tolerances, methods of conversion and technical data presentation*