IEC 60076-22-3

Edition 1.0 2019-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Power transformers –
Part 22-3: Power transformer and reactor fittings – Insulating liquid to air heat exchangers

Transformateurs de puissance –
Partie 22-3: Accessoires pour transformateurs de puissance et bobines d'inductance – Aéroréfrigérants

IEC 60076-22-3:2019-03(en-fr)

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FOREWORD

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International Standard IEC 60076-22-3 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
14/995/FDIS	14/1003/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- withdrawn,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.

INTRODUCTION

Under the part title “Power transformer and reactor fittings”, this part of IEC 60076-22 covers the insulating liquid to air heat exchangers in the cooling circuits of power transformers and reactors.

POWER TRANSFORMERS –

Part 22-3: Power transformer and reactor fittings – Insulating liquid to air heat exchangers

1 Scope

This part of IEC 60076 applies to liquid to air heat exchangers, using forced air and forced liquid circuits, used 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 this equipment.

It also outlines the operation requirements specific to this equipment as well as the preferred dimensions relevant for interchangeability 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 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)*

ISO 3746, *Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Survey method using an enveloping measurement surface over a reflecting plane*

ISO 4406, *Hydraulic fluid power – Fluids – Method for coding the level of contamination by solid particles*

ISO 7005 (all parts), *Pipe flanges*

ISO 9614-2, *Acoustics – Determination of sound power levels of noise sources using sound intensity – Part 2: Measurement by scanning*

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.