Tap-changers –

Part 1: Performance requirements and test methods

This English-language version is derived from the original bilingual publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.
Tap-changers –

Part 1: Performance requirements and test methods

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

TAP-CHANGERS –

Part 1: Performance requirements
and test methods

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

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International Standard IEC 60214-1 has been prepared by IEC technical committee 14: Power transformers

This first edition of IEC 60214-1 cancels and replaces IEC 60214 published in 1989. This first edition constitutes a technical revision.

The text of this standard is based on the following documents:

<table>
<thead>
<tr>
<th>FDIS</th>
<th>Report on voting</th>
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<tbody>
<tr>
<td>14/457/FDIS</td>
<td>14/462/RVD</td>
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</tbody>
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Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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

IEC 60214 consists of the following parts, under the general title Tap-changers:

Part 1: Performance requirements and test methods
Part 2: Application guide (under consideration)
The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

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

This part of IEC 60214 applies to on-load tap-changers of both resistor and reactor types, off-circuit tap-changers, and their motor drive mechanisms. It applies mainly to tap-changers immersed in transformer oil according to IEC 60296 but may also be used for tap-changers with gas insulation or immersed in other insulating liquids insofar as conditions are applicable.

It applies to power and distribution transformers of all types and also to reactors.

It does not apply to transformers and reactors mounted on railway rolling stock.

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.

IEC 60060, High voltage test techniques


IEC 60076-3:2000, Power transformers – Part 3: Insulation levels, dielectric tests and external clearances in air

IEC 60137, Insulated Bushings for alternating voltages above 1000 volts\(^1\)

IEC 60214-2, Tap-changers – Part 2: Application guide\(^2\)

IEC 60270, High voltage test techniques – Partial discharge measurements

IEC 60296, Specification for unused mineral insulating oils for transformers and switchgear

IEC 60354, Loading guide for oil-immersed transformers

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

\(^1\) To be published.

\(^2\) At present under revision, document currently IEC 60542.