

INTERNATIONAL STANDARD

IEC
60076-2

Second edition
1993-04

Power transformers –

Part 2: Temperature rise

*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.*



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Commission Electrotechnique Internationale
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Международная Электротехническая Комиссия

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CORRIGENDUM 1

Page 10

Article 4.1:

*Dans le cinquième alinéa, commençant par
« La température du fluide... », à la troisième
ligne, au lieu de*

...voir 2.1 de la CEI 76-1...

lire

...voir **1.2** de la CEI 76-1...

Page 11

Clause 4.1:

*In the third paragraph, beginning with
“The cooling medium temperature...”,
third line, instead of*

...see 2.1 of IEC 76-1...

read

...see **1.2** of IEC 76-1...

Page 14

Article 4.3.1:

Dans la deuxième ligne, au lieu de

...en 2.1 de la CEI 76-1...

lire

...en **1.2** de la CEI 76-1...

Page 15

Article 4.3.1:

In the second line, instead of

...in 2.1 of IEC 76-1...

read

...in **1.2** of IEC 76-1...

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

POWER TRANSFORMERS

Part 2: Temperature rise

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 cooperation 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.
- 2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

This part of International Standard IEC 76 has been prepared by IEC technical committee 14: Power transformers.

This second edition cancels and replaces the first edition published in 1976.

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

Six Months' Rule	Report on Voting
14(CO)76	14(CO)78

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

IEC 76 consists of the following parts, under the general title: Power transformers.

Part 1: 1993, General.

Part 2: 1993, Temperature rise.

Part 3: 1980, Insulation levels and dielectric tests.

Part 5: 1976, Ability to withstand short circuit.

Annexes A, B and C are for information only.

POWER TRANSFORMERS

Part 2: Temperature rise

1 Scope

This part of International Standard IEC 76 identifies transformers according to their cooling methods, defines temperature-rise limits and details the methods of test for temperature-rise measurements. It applies to transformers as defined in the scope of IEC 76-1.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 76. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 76 are encouraged to investigate the possibility of applying the most recent edition of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 76-1: 1993, *Power transformers – Part 1: General*

IEC 85: 1984, *Thermal evaluation and classification of electrical insulation*

IEC 279: 1969, *Measurement of the winding resistance of an a.c. machine during operation at alternating voltage*

IEC 354: 1991, *Loading guide for oil-immersed power transformers*

IEC 606: 1978, *Application guide for power transformers*

IEC 726: 1982, *Dry-type power transformers*

IEC 905: 1987, *Loading guide for dry-type power transformers*

ISO 2592: 1973, *Petroleum products – Determination of flash and fire points – Cleveland open-cup method*