

# INTERNATIONAL STANDARD

# IEC 60133

Fourth edition  
2000-12

---

---

## Dimensions of pot-cores made of magnetic oxides and associated parts

*Dimensions des circuits magnétiques en pots  
en oxydes magnétiques et pièces associées*



Reference number  
IEC 60133:2000(E)

## Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

## Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

## Further information on IEC publications

The technical content of IEC publications is kept under constant review by the IEC, thus ensuring that the content reflects current technology. Information relating to this publication, including its validity, is available in the IEC Catalogue of publications (see below) in addition to new editions, amendments and corrigenda. Information on the subjects under consideration and work in progress undertaken by the technical committee which has prepared this publication, as well as the list of publications issued, is also available from the following:

- **IEC Web Site ([www.iec.ch](http://www.iec.ch))**
- **Catalogue of IEC publications**  
The on-line catalogue on the IEC web site ([www.iec.ch/catlg-e.htm](http://www.iec.ch/catlg-e.htm)) enables you to search by a variety of criteria including text searches, technical committees and date of publication. On-line information is also available on recently issued publications, withdrawn and replaced publications, as well as corrigenda.
- **IEC Just Published**  
This summary of recently issued publications ([www.iec.ch/JP.htm](http://www.iec.ch/JP.htm)) is also available by email. Please contact the Customer Service Centre (see below) for further information.
- **Customer Service Centre**  
If you have any questions regarding this publication or need further assistance, please contact the Customer Service Centre:

Email: [custserv@iec.ch](mailto:custserv@iec.ch)  
Tel: +41 22 919 02 11  
Fax: +41 22 919 03 00

# INTERNATIONAL STANDARD

# IEC 60133

Fourth edition  
2000-12

---

---

## Dimensions of pot-cores made of magnetic oxides and associated parts

*Dimensions des circuits magnétiques en pots  
en oxydes magnétiques et pièces associées*

© IEC 2000 — Copyright - all rights reserved

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland  
Telefax: +41 22 919 0300 e-mail: [inmail@iec.ch](mailto:inmail@iec.ch) IEC web site <http://www.iec.ch>



Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

PRICE CODE

**G**

*For price, see current catalogue*

## CONTENTS

	Page
FOREWORD .....	3
Clause	
1 Scope .....	4
2 Normative reference.....	4
3 Primary standards .....	4
3.1 Dimensions of pot-cores.....	4
3.1.1 Principal dimensions .....	4
3.1.2 Grooves .....	6
3.1.3 Effective parameter values .....	7
3.2 Main dimensions for coil formers .....	8
Annex A (informative) Pot-core design .....	9
Annex B (informative) Derived standards.....	10
Annex C (informative) Example of a standard for gauges to check the dimensions of pot-cores meeting the IEC primary standard.....	11
Figure 1 – Principal dimensions of pot-cores without slots.....	4
Figure 2 – Principal dimensions of pot-cores with slots.....	5
Figure 3 – Main dimensions for coil formers .....	8
Figure C.1 – Dimensions of gauge A.....	11
Figure C.2 – Dimensions of gauges B and C .....	12
Table 1 – Principal dimensions of pot-cores .....	5
Table 2 – Limits for <i>C</i> and <i>G</i> .....	6
Table 3 – Minimum groove depth .....	6
Table 4 – Effective parameter values pot-cores with a centre hole.....	7
Table 5 – Effective parameter values pot-cores without a centre hole.....	7
Table 6 – Main dimensions for coil formers .....	8
Table A.1 – Ratio of diameter to height .....	9
Table C.1 – Dimensions of gauge A.....	11
Table C.2 – Dimensions of gauges B and C .....	12

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## DIMENSIONS OF POT-CORES MADE OF MAGNETIC OXIDES AND ASSOCIATED PARTS

### 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.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, 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.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60133 has been prepared by technical committee 51: Magnetic components and ferrite materials.

This edition cancels and replaces the third edition published in 1985, of which it constitutes a technical revision.

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

FDIS	Report on voting
51/570/FDIS	51/580/RVD

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 3.

The committee has decided that the contents of this publication will remain unchanged until 2004. At this date, the publication will be

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

A bilingual version of this standard may be issued at a later date.