

INTERNATIONAL STANDARD

IEC
62317-7

First edition
2005-09

Ferrite cores – Dimensions –

Part 7: EER-cores

© IEC 2005 — 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, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE

K

For price, see current catalogue

CONTENTS

FOREWORD.....	3
1 Scope.....	6
2 Normative references	6
3 Primary standards	6
3.1 Dimensions of EER-cores.....	6
3.2 Dimensional limits for coil formers.....	6
Annex A (normative) Derived standards.....	9
Annex B (normative) Example of a standard for gauges to check the dimensions of EER-cores meeting this primary standard	10
Figure 1 – Dimensions of EER-cores	7
Figure 2 – Essential dimensions of coil formers	8
Figure B.1 – Gauge dimensions	10
Table 1 – Dimensions of EER-cores.....	7
Table 2 – Effective parameter values of EER-cores	7
Table 3 – Essential dimensions of coil formers	8
Table B.1 – Gauge dimensions	10

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FERRITE CORES – DIMENSIONS

Part 7: EER-cores

FOREWORD

- 1) The International Electrotechnical Commission (IEC) 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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 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 IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative References cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62317-7 has been prepared IEC technical committee 51: Magnetic components and ferrite materials.

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

FDIS	Report on voting
51/834/FDIS	51/840/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 2.

IEC 62317 consists of the following parts, under the general title *Ferrite cores – Dimensions*:

- Part 1: General (under consideration)
- Part 2: Pot cores (under consideration, currently available as IEC 60133)
- Part 3: Half pot cores (under consideration, currently available as IEC 62323)
- Part 4: RM-cores and associated parts
- Part 5: EP-cores (under consideration, currently available as IEC 61596)
- Part 6: ETD-cores (under consideration, currently available as IEC 61185)
- Part 7: EER-cores
- Part 8: E-cores
- Part 9: Planar cores
- Part 10: PM-cores (under consideration, currently available as IEC 61247)
- Part 11: EC-cores (under consideration, currently available as IEC 60647)
- Part 12: Uncoated ring cores (under consideration, currently available as IEC 60604)

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under <http://webstore.iec.ch> in the data related to the specific publication. At this date, the publication will be

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

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

INTRODUCTION

New round centre pole E-cores, which have been developed in the industry, were introduced in IEC 62358, and are in widespread use. This part of IEC 62317 has been developed to specify dimensions and effective parameters for these newer round centre pole E-cores.

This standard replaces Table A.2 and Table B.2 in IEC 62358:2004.

Currently in preview, click buy full version

FERRITE CORES – DIMENSIONS

Part 7: EER-cores

1 Scope

This part of IEC 62317 specifies the dimensions that are of importance for mechanical interchangeability for a preferred range of EER-cores made of ferrite, the essential dimensions of coil formers to be used with them, and the effective parameter values to be used in calculations involving them.

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 60205:2001, *Calculation of the effective parameters of magnetic piece parts*

IEC 62358:2004, *Ferrite cores – Standard inductance factor (A_L) and its tolerance*