

## **Ferrite cores – Dimensions Part 7: EER-cores**

Ferrite cores – Dimensions Part 7: EER-cores

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 62317-7:2005 sisaldab Euroopa standardi EN 62317-7:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.12.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 62317-7:2005 consists of the English text of the European standard EN 62317-7:2005.</p> <p>This document is endorsed on 19.12.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> 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.</p>	<p><b>Scope:</b> 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.</p>
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**ICS** 29.100.10

**Võtmesõnad:**

English version

**Ferrite cores –  
Dimensions  
Part 7: EER-cores  
(IEC 62317-7:2005)**

Noyaux ferrites –  
Dimensions  
Partie 7: Noyaux EER  
(CEI 62317-7:2005)

Ferritkerne –  
Maße  
Teil 7: EER-Kerne  
(IEC 62317-7:2005)

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 51/834/FDIS, edition 1 of IEC 62317-7, prepared by IEC TC 51, Magnetic components and ferrite materials, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62317-7 on 2005-10-01.

The following dates were fixed:

- |  |       |            |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2006-07-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn   | (dow) | 2008-10-01 |

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 62317-7:2005 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

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.

NOTE Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60205	2001	Calculation of the effective parameters of magnetic piece parts	EN 60205	2001
IEC 62358	2004	Ferrite cores - Standard inductance factor (AL) and its tolerance	EN 62358	2004

# INTERNATIONAL STANDARD

**IEC**  
**62317-7**

First edition  
2005-09

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## **Ferrite cores – Dimensions –**

### **Part 7: EER-cores**



Reference number  
IEC 62317-7:2005(E)

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## Ferrite cores – Dimensions –

### Part 7: EER-cores

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FERRITE CORES – DIMENSIONS****Part 7: EER-cores****FOREWORD**

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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 61604)

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.

## 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*

#### 3 Primary standards

Compliance with the following requirements ensures mechanical interchangeability of complete assemblies and coil formers.

##### 3.1 Dimensions of EER-cores

###### 3.1.1 Principal dimensions

The principal dimensions of EER-cores are given in Table 1. The dimensions of the cores may be checked by means of gauges. By way of example, a possible standard for these gauges is given in Annex B. In order to facilitate production, it may be necessary to use gauges having dimensions differing from those given in Annex B, although no relaxation of the requirements for the dimensions of the cores given in Table 1 is permitted. The dimensions specified in Table 1 are illustrated in Figure 1.

###### 3.1.2 Effective parameter and $A_{\min}$ values

The effective parameter values of a pair of cores whose dimensions comply with 3.1.1 shall be as given in Table 2.

##### 3.2 Dimensional limits for coil formers

The essential dimensions of coil formers suitable for use with a pair of EER-cores shall be as given in Table 3. The dimensions specified in Table 3 are illustrated in Figure 2.