
Feritna jedra (ETD-jedra) za uporabo v napajalnikih – Mere (IEC 61185:2005)

Ferrite cores (ETD-cores) intended for use in power supply applications –
Dimensions (IEC 61185:2005)

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EUROPEAN STANDARD

EN 61185

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2005

ICS 29.100.10

Supersedes EN 61185:1997

English version

**Ferrite cores (ETD-cores) intended for use
in power supply applications –
Dimensions
(IEC 61185:2005)**

Noyaux ferrites (noyaux ETD)
destinés à être utilisés
dans les alimentations –
Dimensions
(CEI 61185:2005)

Ferritkerne (ETD-Kerne)
für die Stromversorgung –
Maße
(IEC 61185:2005)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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 51/818/FDIS, future edition 2 of IEC 61185, 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 61185 on 2005-06-01.

This European Standard supersedes EN 61185:1997.

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) 2006-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2008-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61185:2005 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

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INTERNATIONAL STANDARD

IEC 61185

Second edition
2005-06

Ferrite cores (ETD-cores) intended for use in power supply applications – Dimensions

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FERRITE CORES (ETD-CORES) INTENDED
FOR USE IN POWER SUPPLY APPLICATIONS –
DIMENSIONS**

FOREWORD

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International Standard IEC 61185 has been prepared by IEC technical committee 51: Magnetic components and ferrite materials.

This second edition cancels and replaces the first edition published in 1992 and its amendment 1 (1995).

The main changes with respect to the previous edition consist in combining it with the amendment.

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

FDIS	Report on voting
51/818FDIS	51/826/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.

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.

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FERRITE CORES (ETD-CORES) INTENDED FOR USE IN POWER SUPPLY APPLICATIONS – DIMENSIONS

1 Scope

This International Standard specifies the dimensions that are of importance for mechanical interchangeability for ETD-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.

NOTE 1 Whilst this standard mainly applies to ferrite, its validity for iron powder cores should not be overlooked.

NOTE 2 The cores covered by this standard are designed for use in power transformers and chokes operating at high flux density and generally at frequencies higher than those feasible with EC-cores of the same material, due to a core proportioning more suitable for high-frequency applications. They are generally used in pairs.

The use of “derived” standards which give more detailed specifications of component parts whilst still permitting compliance with this standard is discussed in Annex A, which also contains an example of a derived standard for coil formers.

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 normative document (including any amendments) applies.

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

3 Primary standards

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

3.1 Dimensions of ETD-cores

3.1.1 Principal dimensions

The principal dimensions of ETD-cores shall be as given in Table 1.

NOTE 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.

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 ETD-cores shall be as given in Table 3.