



**SLOVENSKI STANDARD**  
**SIST EN 61860:2002**  
**01-september-2002**

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**Dimensions of low-profile cores made of magnetic oxides (IEC 61860:2000)**

Dimensions of low-profile cores made of magnetic oxides

Maße von Kernen niedriger Bauhöhe aus magnetischen Oxiden

Dimensions des noyaux faible hauteur en oxydes magnétiques

**Ta slovenski standard je istoveten z: EN 61860:2000**

[SIST EN 61860:2002](https://standards.iteh.ai/catalog/standards/sist/d8e9b479-f696-4075-8515-820807f81732/sist-en-61860-2002)

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**ICS:**

29.100.10      Magnetne komponente      Magnetic components

**SIST EN 61860:2002**      **en**

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EUROPEAN STANDARD

**EN 61860**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2000

ICS 29.100.10

English version

**Dimensions of low-profile cores made of magnetic oxides**  
(IEC 61860:2000)Dimensions des noyaux faible hauteur en  
oxydes magnétiques  
(CEI 61860:2000)Maße von Kernen niedriger Bauhöhe aus  
magnetischen Oxiden  
(IEC 61860:2000)**iTeh STANDARD PREVIEW**

This European Standard was approved by CENELEC on 2000-11-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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 51/564/FDIS, future edition 1 of IEC 61860, 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 61860 on 2000-11-01.

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) 2001-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-11-01

Annexes designated "normative" are part of the body of the standard.  
In this standard, annexes A and ZA are normative.  
Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61860:2000 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

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When 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	1966	Calculation of the effective parameters of magnetic piece parts	-	-
A1	1976		-	-
A2	1981		-	-
IEC 60431	1983	Dimensions of square cores (RM-cores) made of magnetic oxides and associated parts		
+ A1	1995		EN 60431	1997
IEC 61185	1992	Magnetic oxide cores (ETD-cores) intended for use in power supply applications - Dimensions	EN 61185 <sup>1)</sup>	1997
IEC 61246	1994	Magnetic oxide cores (E-cores) of rectangular cross-section and associated parts - Dimensions	-	-
ISO 370	1975	Toleranced dimensions - Conversion from inches into millimetres and vice versa	-	-

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<sup>1)</sup> EN 61185 includes amendment 1:1995 to IEC 61185.

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NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

CEI  
IEC

61860

Première édition  
First edition  
2000-07

Dimensions des noyaux faible hauteur  
en oxydes magnétiques

Dimensions of low-profile cores made  
of magnetic oxides  
**PREVIEW**  
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[SIST EN 61860:2002](https://standards.iteh.ai/catalog/standards/sist/d8e9b479-f696-4075-8515-820807f81732/sist-en-61860-2002)

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

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For price, see current catalogue*

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## DIMENSIONS OF LOW-PROFILE CORES MADE OF MAGNETIC OXIDES

## 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 61860 has been prepared by technical committee 51: Magnetic components and ferrite materials.

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

FDIS	Report on voting
51/564/FDIS	51/568/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.

Annex A forms an integral part of this standard.

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.



## DIMENSIONS OF LOW-PROFILE CORES MADE OF MAGNETIC OXIDES

### 1 Scope

This International Standard specifies the dimensions that are of importance for mechanical interchangeability of a preferred range of low-profile cores made of magnetic oxides and the effective parameter values to be used in calculations involving these cores.

The general considerations upon which the design of this range of cores is based are given in annex A.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

IEC 60205:1966, *Calculation of the effective parameters of magnetic piece parts*  
Amendment 1 (1976)  
Amendment 2 (1981)

IEC 60431:1983, *Dimensions of square cores (RM-cores) made of magnetic oxides and associated parts*  
Amendment 1 (1995)

IEC 61185:1992, *Magnetic oxide cores (ETD-Cores) intended for use in power supply applications – Dimensions*

IEC 61246:1994, *Magnetic oxides cores (E-cores) of rectangular cross-section and associated parts – Dimensions*

ISO 370:1975, *Toleranced dimensions – Conversion from inches into millimeters and vice versa*

### 3 Primary standard

The main dimensions shall be as given in table 1 and figure 1. A uniform dimension nomenclature has been chosen in order to facilitate a comparison of major physical attributes among different core shapes. The existing nomenclature in related standards has been also given. The effective parameters and  $A_{\min}$  values of a pair of cores shall be as given in table 2 (see IEC 60205 for definitions).