



SLOVENSKI STANDARD
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SIST EN 60424-3:2016

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Feritna jedra - Smernice o merah in mejnih vrednostih površinskih nepravilnosti - 6. del: ETD-jedra za uporabo v napajalnikih

Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 6: ETD-cores for use in power supplies

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ICS:

29.100.10 Magnetne komponente Magnetic components

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EUROPEAN STANDARD

EN IEC 63093-6

NORME EUROPÉENNE

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August 2018

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English Version

Ferrite cores - Guidelines on dimensions and the limits of
surface irregularities - Part 6: ETD-cores for use in power
supplies
(IEC 63093-6:2018)

Noyaux ferrites - Lignes directrices relatives aux
dimensions et limites des irrégularités de surface - Partie 6 :
Noyaux ETD destinés à être utilisés dans les alimentations
électriques
(IEC 63093-6:2018)

Ferritkerne - Richtlinien zu Maßen und Grenzen von
Oberflächenbeschädigungen - Teil 6: ETD-Kerne für den
Einsatz in Stromversorgungsanwendungen
(IEC 63093-6:2018)

This European Standard was approved by CENELEC on 2018-08-30. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 63093-6:2018 (E)**European foreword**

The text of document 51/1215/CDV, future edition 1 of IEC 63093-6, prepared by IEC/TC 51 "Magnetic components, ferrite and magnetic powder materials" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63093-6:2018.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-05-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-08-30

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The text of the International Standard IEC 63093-6:2018 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60424-3:2015	NOTE	Harmonized as EN 60424-3:2016 (not modified)
IEC 62317-6:2015	NOTE	Harmonized as EN 62317-6:2016 (not modified)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60205	-	Calculation of the effective parameters of magnetic piece parts	EN 60205	-
IEC 60401-1	-	Terms and nomenclature for cores made of magnetically soft ferrites – Part 1: Terms used for physical irregularities	EN 60401-1	-
IEC 60424-1	-	Ferrite cores – Guidelines on the limits of surface irregularities – Part 1: General specification	EN 60424-1	-

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IEC 63093-6

Edition 1.0 2018-06

INTERNATIONAL STANDARD

**Ferrite cores – Guidelines on dimensions and the limits of surface irregularities –
Part 6: ETD-cores for use in power supplies**

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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Primary dimensions	6
4.1 General.....	6
4.2 Dimensions of ETD-cores	7
4.2.1 Principal dimensions.....	7
4.2.2 Effective parameter and A_{\min} values	7
4.3 Dimensional limits for coil formers.....	8
4.4 Pin locations and base outlines.....	9
4.5 Pin diameter	12
5 Marking	12
6 Mounting	12
7 Limits of surface irregularities.....	12
7.1 General.....	12
7.2 Examples of surface irregularities	12
7.3 Chips and ragged edges.....	13
7.3.1 General.....	13
7.3.2 Chips and ragged edges on the mating surfaces.....	13
7.3.3 Chips and ragged edges on the other surfaces	13
7.4 Cracks.....	16
7.5 Flash	16
7.6 Pull-outs	16
7.7 Crystallites.....	17
7.8 Pores.....	18
Annex A (normative) Derived standards	19
Annex B (normative) Example of dimensions for gauges to check the dimensions of ETD-cores complying with this document.....	22
B.1 General.....	22
B.2 Procedure and requirements	22
Annex C (informative) Reference of allowable areas of chips	23
Bibliography.....	24
Figure 1 – Dimensions of ETD-cores.....	7
Figure 2 – Essential dimensions of coil formers	8
Figure 3 – Pin locations and base outlines viewed from the upper-side of the board	10
Figure 4 – Examples of surface irregularities	13
Figure 5 – Chip location for ETD-cores	14
Figure 6 – Crack and pull-out locations for ETD-cores	16
Figure 7 – Crystallite location for ETD-cores.....	17
Figure 8 – Pore location for ETD-cores	18
Figure A.1 – Main dimensions of coil formers.....	20
Figure B.1 – Gauge dimensions	22

Table 1 – Dimensions of ETD-cores	7
Table 2 – Effective parameter and A_{\min} values	8
Table 3 – Dimensional limits for coil formers	9
Table 4 – Area and length reference for visual inspection	15
Table 5 – Limits for cracks	17
Table A.1 – Main dimensions of coil formers	21
Table B.1 – Gauge dimensions	22
Table C.1 – Allowable areas of chips for ETD-cores.....	23

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FERRITE CORES – GUIDELINES ON DIMENSIONS
AND THE LIMITS OF SURFACE IRREGULARITIES –****Part 6: ETD-cores for use in power supplies**

FOREWORD

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International Standard IEC 63093-6 has been prepared by IEC technical committee 51: Magnetic components, ferrite and magnetic powder materials.

This first edition cancels and replaces the first edition of IEC 62317-6 published in 2015 and the second edition of IEC 60424-3 published in 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 62317-6:2015 and IEC 60424-3:2015:

- a) This document integrates IEC 62317-6:2015 and IEC 60424-3:2015;
- b) Table 1 – Allowable areas of chips for ETD-cores, of IEC 60424-3:2015, has been moved to Annex C (informative) of this document.

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

CDV	Report on voting
51/1215/CDV	51/1234/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 63093 series, published under the general title *Ferrite cores – Guidelines on dimensions and the limits of surface irregularities*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document 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 – GUIDELINES ON DIMENSIONS AND THE LIMITS OF SURFACE IRREGULARITIES –

Part 6: ETD-cores for use in power supplies

1 Scope

This part of IEC 63093 specifies the dimensions that are of importance for mechanical interchangeability for a preferred range of ETD-cores made of ferrite and the essential dimensions of coil formers to be used with them, as well the effective parameter values to be used in calculations involving them. It also gives guidelines on allowable limits of surface irregularities applicable to ETD-cores.

The specifications contained in this document are useful in negotiations between ferrite core manufacturers and users about surface irregularities.

The use of derived standards which give more detailed specifications of component parts while still permitting compliance with this document is discussed in Annex A.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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, *Calculation of the effective parameters of magnetic piece parts*

IEC 60401-1, *Terms and nomenclature for cores made of magnetically soft ferrites – Part 1: Terms used for physical irregularities*

IEC 60424-1, *Ferrite cores – Guidelines on the limits of surface irregularities – Part 1: General specification*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in IEC 60401-1 and IEC 60424-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Primary dimensions

4.1 General

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