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**Feritna jedra - Smernice o merah in mejnih vrednostih površinskih nepravilnosti -
11. del: EC-jedra za uporabo v napajalnikih**

Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 11:
EC-cores for use in power supply applications

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29.100.10 Magnetne komponente Magnetic components

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EUROPEAN STANDARD

EN IEC 63093-11

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 11: EC-cores for use in power supply
applications
(IEC 63093-11:2018)

Noyaux ferrites - Lignes directrices relatives aux
dimensions et limites des irrégularités de surface –
Partie 11 : Noyaux EC utilisés dans des applications
d'alimentation électrique
(IEC 63093-11:2018)

Ferritkerne - Richtlinien zu Maßen und Grenzen von
Oberflächenbeschädigungen - Teil 11: EC-Kerne für den
Einsatz in Netzteilen
(IEC 63093-11:2018)

This European Standard was approved by CENELEC on 2018-07-26. 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 63093-11:2018 (E)**European foreword**

The text of document 51/1214/CDV, future edition 1 of IEC 63093-11, 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 63093-11:2018.

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) 2019-04-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-07-26

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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The text of the International Standard IEC 63093-11:2018 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 ¹	NOTE	Harmonized as EN 60424-3:2016 (not modified)
IEC 62317-11 ²	NOTE	Harmonized as EN 62317-11

¹ Withdrawn publication.

² Withdrawn publication.

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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INTERNATIONAL STANDARD

**Ferrite cores – Guidelines on dimensions and the limits of surface irregularities –
Part 11: EC-cores for use in power supply applications**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FERRITE CORES – GUIDELINES ON DIMENSIONS AND THE LIMITS OF SURFACE IRREGULARITIES –

Part 11: EC-cores for use in power supply applications

FOREWORD

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International Standard IEC 63093-11 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 62317-11 published in 2015 and the second edition of IEC 60424-3 published in 2015. This edition constitutes a technical revision.

This document includes the following significant technical changes with respect to IEC 62317-11:2015 and IEC 60424-3:2015:

- a) This document integrates IEC 62317-11:2015 and IEC 60424-3:2015;
- b) Table 3 – Allowable areas of chips for EC-cores, of IEC 60424-3:2015, has been moved to Annex B (informative) of this document.

The text of this International Standard is based on the following documents:

CDV	Report on voting
51/1214/CDV	51/1236/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 11: EC-cores for use in power supply applications

1 Scope

This part of IEC 63093 specifies the dimensions that are of importance for mechanical interchangeability for a preferred range of EC-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 EC-cores.

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

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*

<https://standards.iteh.ai/catalog/standards/sist/0c3483a-1ef9-47a2-b987->

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 purposes 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 mechanical interchangeability of complete assemblies and coil formers.