IEC 63093-11

Edition 1.0 2018-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

Noyaux ferrites – Lignes directrices relatives aux dimensions et aux limites des irrégularités de surface – Partie 11: Noyaux EC destinés aux applications d'alimentation électrique

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IEC 63093-11:2018-06 (en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.100.10

ISBN 978-2-8322-6203-0

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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

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 bilingual version (2018-11) corresponds to the monolingual English version, published in 2018-06.

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;

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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.

The French version of this standard has not been voted upon.

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,
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- replaced by a revised edition, or
- amended.

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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*

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.

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- IEC Electropedia: available at http://www.electropedia.org/
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4 Primary dimensions

4.1 General

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

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