



BSI Standards Publication

Ferrite cores – Guidelines on dimensions and the limits of surface irregularities

Part 4: RM-cores (IEC 63093-4:2019)

National foreword

This British Standard is the UK implementation of EN IEC 63093-4:2019. It is identical to IEC 63093-4:2019. It supersedes BS EN 60424-2:2016 and BS EN 62317-4:2005, which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/51, Transformers, inductors, magnetic components and ferrite materials.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

**Ferrite cores - Guidelines on dimensions and the limits of
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(IEC 63093-4:2019)**

Noyaux ferrites - Lignes directrices relatives aux
dimensions et aux limites des irrégularités de surface -
Partie 4: Noyaux RM
(IEC 63093-4:2019)

Ferritkerne - Richtlinien zu Maßen und Grenzen von
Oberflächenbeschädigungen - Teil 4: RM-Kerne
(IEC 63093-4:2019)

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

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European foreword

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This document supersedes EN 60424-2:2016, EN 62317-4:2005.

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Endorsement notice

The text of the International Standard IEC 63093-4:2019 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 60424-2:2015	NOTE	Harmonized as EN 60424-2:2016 (not modified)
IEC 62044-2	NOTE	Harmonized as EN 62044-2
IEC 62317-2	NOTE	Harmonized as EN 62317-2

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FERRITE CORES –
GUIDELINES ON DIMENSIONS AND
THE LIMITS OF SURFACE IRREGULARITIES****Part 4: RM-cores****FOREWORD**

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International Standard IEC 63093-4 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 62317-4 published in 2005 and the second edition of IEC 60424-2 published in 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 62317-4:2005 and IEC 60424-2:2015:

- a) IEC 63093-4 integrates the contents of IEC 62317-4:2005 and IEC 60424-2:2015;
- b) IEC 60424-2:2015, Table 2, has been included in Annex C as Table C.1.

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

FDIS	Report on voting
51/1265/FDIS	51/1275/RVD

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.

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

Part 4: RM-cores

1 Scope

This part of IEC 63093 specifies the dimensions that are of importance for mechanical interchangeability for a preferred range of RM-cores and low-profile RM-cores made of ferrite, and the locations of their terminal pins on a 2,54 mm printed wiring grid in relation to the base outlines of the cores. It also gives guidance on allowable limits of surface irregularities applicable to RM-cores in accordance with the relevant generic specification.

The selection of core sizes for this document is based on the philosophy of including those sizes which are industrial standards, either by inclusion in a national standard, or by broad-based use in industry.

This document is a specification useful in the negotiations between ferrite core manufacturers and customers about surface irregularities.

The general considerations that the design of this range of cores is based upon are given 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 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>