

# INTERNATIONAL STANDARD

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Ferrite cores - Guidelines on dimensions and the limits of surface irregularities -  
Part 4: RM-cores

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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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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 63093-4:2019. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 63093-4 has been prepared by IEC technical committee 51: Magnetic components, ferrite and magnetic powder materials. It is an International Standard.

This second edition cancels and replaces the first edition published in 2019. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) revision of Table 3 and Table 4 according to IEC 60205 ED4.

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

Draft	Report on voting
51/1586/FDIS	51/1599/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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 [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

## 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 and reference of dimensions*

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

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IEC 63093-1, *Ferrite cores - Guidelines on dimensions and 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~~ IEC 63093-1 apply.

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

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

## 4 Primary dimensions

### 4.1 General

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