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Standards

Irish Standard
I.S. EN IEC 63093-2:2020

Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 2: Pot-cores for use in telecommunications, power supply, and filter applications

I.S. EN IEC 63093-2:2020

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National Foreword

I.S. EN IEC 63093-2:2020 is the adopted Irish version of the European Document EN IEC 63093-2:2020, Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 2: Pot-cores for use in telecommunications, power supply, and filter applications

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EUROPEAN STANDARD

EN IEC 63093-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 29.100.10

Supersedes EN 62317-2:2010 and all of its amendments
and corrigenda (if any)

English Version

**Ferrite cores - Guidelines on dimensions and the limits of
surface irregularities - Part 2: Pot-cores for use in
telecommunications, power supply, and filter applications
(IEC 63093-2:2020)**

Noyaux ferrites - Lignes directrices relatives aux
dimensions et limites des irrégularités de surface - Partie 2:
Circuits magnétiques en pots utilisés dans des applications
de télécommunications, d'alimentation électrique et de filtre
(IEC 63093-2:2020)

Ferritkerne - Richtlinien zu Maßen und Grenzen von
Oberflächenbeschädigungen - Teil 2: Schalenkerne für die
Verwendung in Telekommunikations-, Stromversorgungs-
und Filteranwendungen
(IEC 63093-2:2020)

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Europäisches Komitee für Elektrotechnische Normung

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

EN IEC 63093-2:2020 (E)

European foreword

The text of document 51/1299/CDV, future edition 1 of IEC 63093-2, 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 63093-2:2020.

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) 2021-02-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-01

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The text of the International Standard IEC 63093-2:2020 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62317-1 NOTE Harmonized as EN 62317-1

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

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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 and reference of dimensions	-	-
IEC 60424-1	-	Ferrite cores - Guidelines on the limits of surface irregularities - Part 1: General specification	EN 60424-1	-

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IEC 63093-2

Edition 1.0 2020-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Ferrite cores – Guidelines on dimensions and the limits of surface
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Part 2: Pot-cores for use in telecommunications, power supply, and filter
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**Noyaux ferrites – Lignes directrices relatives aux dimensions et limites des
irrégularités de surface –
Partie 2: Circuits magnétiques en pots utilisés dans des applications
de télécommunications, d'alimentation électrique et de filtre**



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IEC 63093-2

Edition 1.0 2020-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Part 2: Pot-cores for use in telecommunications, power supply, and filter applications**

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Partie 2: Circuits magnétiques en pots utilisés dans des applications de télécommunications, d'alimentation électrique et de filtre**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2: Pot-cores for use in telecommunications, power supply, and filter applications

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International Standard IEC 63093-2 has been prepared by technical committee 51: Magnetic components, ferrite and magnetic powder materials.

This first edition cancels and replaces the first edition of IEC 62317-2 published in 2010. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition of IEC 62317-2:

- a) addition of the limits of surface irregularities;
- b) Table 4 and Table 5 are updated in accordance with IEC 60205:2016.

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

CDV	Report on voting
51/1299/CDV	51/1322/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 of 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 2: Pot-cores for use in telecommunications, power supply, and filter applications

1 Scope

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

The selection of core sizes and shapes 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. See IEC 62317-1 for more detail concerning the philosophy of selecting core sizes to be included.

The general considerations upon which the design of this range of cores is based 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:

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