

<b>STN</b>	<b>Odporúčané číselné rady pre rezistory a kondenzátory.</b>	<b>STN EN 60063</b>  35 8015
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Preferred number series for resistors and capacitors

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/15

Obsahuje: EN 60063:2015, IEC 60063:2015

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EUROPEAN STANDARD

**EN 60063**

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2015

ICS 31.040; 31.060

English Version

**Preferred number series for resistors and capacitors  
(IEC 60063:2015)**

Séries de valeurs normales pour résistances et  
condensateurs  
(IEC 60063:2015)

Vorzugsreihen für die Nennwerte von Widerständen und  
Kondensatoren  
(IEC 60063:2015)

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

The text of document 40/2340A/FDIS, future edition 3 of IEC 60063, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60063:2015.

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) 2016-02-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-05-01

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NOTE 1 When 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60062	-	Marking codes for resistors and capacitors	EN 60062	-



IEC 60063

Edition 3.0 2015-03

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Preferred number series for resistors and capacitors**

**Séries de valeurs normales pour résistances et condensateurs**





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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Preferred number series for resistors and capacitors**

**Séries de valeurs normales pour résistances et condensateurs**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PREFERRED NUMBER SERIES FOR RESISTORS AND CAPACITORS**

## FOREWORD

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International Standard IEC 60063 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

This third edition cancels and replaces the second edition published in 1963 and constitutes a technical revision.

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

- revision of the information on a relationship between an E Series and the tolerance of a resistance or capacitance value of a respective component;
- introduction of advice on a possible deduction from the marking of a component to an associated E Series and also to an associated tolerance;
- complete editorial revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
40/2340A/FDIS	40/2370/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

## PREFERRED NUMBER SERIES FOR RESISTORS AND CAPACITORS

### 1 Scope

This International Standard provides series of preferred values for the resistance of resistors and for the capacitance of capacitors.

The definition of such series with a defined numeric resolution is a basic prerequisite for the marking and coding of capacitors and resistors with their respective capacitance or resistance values as described in IEC 60062.

NOTE The number series defined in this standard are based on progressive ratios of  $\sqrt[i]{10}$ , with  $r = 3 \cdot 2^i$ , and  $i$  being a whole number in the range of 0 to 6, hence e.g. of  $\sqrt[12]{10}$ .

This system of progressive ratios had been established prior to the 1952 release of the first edition of this standard<sup>1</sup> as a consequence of the standardisation of tolerances at  $\pm 5\%$ ,  $\pm 10\%$  and  $\pm 20\%$  and the related commercial practice. An adoption of the ISO practice, based on a  $\sqrt[10]{10}$  system, was never considered achievable.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60062, *Marking codes for resistors and capacitors*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**

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<sup>1</sup> IEC 60063:1952, *Series of preferred values and their associated tolerances for resistors and capacitors*