

SLOVENSKI STANDARD SIST EN 60062:2002

01-september-2002

Marking codes for resistors and capacitors (IEC 60062:1992)

Marking codes for resistors and capacitors

Kennzeichnung von Widerständen und Kondensatoren

Codes pour le marquage des résistances et des condensateurs

Ta slovenski standard je istoveten z: (standards.iteh.ai)

SIST EN 60062:2002

https://standards.iteh.ai/catalog/standards/sist/ba02477e-95fa-42a9-971e-9f2d2c7582e2/sist-en-60062-2002

ICS:

31.040.01 Upori splošno Resistors in general 31.060.01 Kondenzatorji na splošno Capacitors in general

SIST EN 60062:2002 en

SIST EN 60062:2002

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60062:2002

https://standards.iteh.ai/catalog/standards/sist/ba02477e-95fa-42a9-971e-9f2d2c7582e2/sist-en-60062-2002

EUROPEAN STANDARD

EN 60062

NORME EUROPEENNE

EUROPÄISCHE NORM

October 1993

UDC 621.316.8-777:621.319.4-777

Supersedes HD 334 S3:19

Descriptors: Marking, codes, resistors, capacitors

ENGLISH VERSION

Marking codes for resistors and capacitors (IEC 62:1992)

Codes pour le marquage des résistances et des condensateurs (CEI 62:1992) Kennzeichnung von Widerständen und Kondensatoren (IEC 62:1992)

iTeh STANDARD PREVIEW

(standards.iteh.ai)

This European Standard was approved by CENELEC on 1993-09-22. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulatenthe aconditions also rangiving bith 1876 upopean 9 Standard the status of a national standard without 20 my 8 alteration 62-2002

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German) A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, 8-1050 Brussels

Page 2 EN 60062:1993

FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 62:1992 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as European Standard.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60062 on 22 September 1993.

This European Standard replaces HD 334 S3:1991.

The following dates were fixed:

- latest date of publication of an identical national standard
- (dop) 1994-10-01

 latest date of withdrawal of conflicting national standards

(dow) 1994-10-01

iTeh STENDORSEMENT NOTICE EVIEW

(standards.iteh.ai)

The text of the International Standard IEC 62:1992 was approved by CENELEC as a European Standard without any modification.

https://standards.iteh.ai/catalog/standards/sist/ba02477e-95fa-42a9-971e-9f2d2c7582e2/sist-en-60062-2002

NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 62

Quatrième édition Fourth edition 1992-04

Codes pour le marquage des résistances et des condensateurs

iTeh Marking codes for resistors and capacitors (standards.iteh.ai)

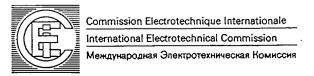
<u>SIST EN 60062:2002</u> https://standards.iteh.ai/catalog/standards/sist/ba02477e-95fa-42a9-971e-9f2d2c7582e2/sist-en-60062-2002

© CEI 1992 Droits de reproduction réservés — Copyright – all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse



CODE PRIX
PRICE CODE



Pour prix, voir catalogue en vigueur For price, see current catalogue -3-

CONTENTS

| | · · · · · · · · · · · · · · · · · · · | Lugi |
|-----------|--|--------|
| Foreword. | ······································ | 5 5 |
| | | |
| Clause | | |
| 1. | Scope | 7 |
| 2. | Colour code for fixed resistors | 7 |
| 3. | Letter and digit code for resistance and capacitance values | 13 |
| 4. | Letter code for tolerance on resistance and capacitance values | 19 |
| 5. | Date code system for capacitors and resistors | 21 |
| Table I | - Values corresponding to colours | 9 |
| Table II | - Examples of code marking for resistance values | 15 |
| Table III | - Examples of code marking for capacitance values | 17 |
| | iTeh STANDARD PREVIEW | |
| | (standards.iteh.ai) | |

<u>SIST EN-60062:2002</u> https://standards.iteh.al/catalog/standards/sist/ba02477e-95fa-42a9-971e-9f2d2c7582e2/sist-en-60062-2002

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MARKING CODES FOR RESISTORS AND CAPACITORS

FOREWORD

- The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

iTeh STANDARD PREVIEW

This standard has been prepared by IEC Technical Committee No. 40: Capacitors and Resistors for Electronic Equipment.

This standard replaces IEC Publication 62,62 third edition, (1974): "Marking codes for resistors and capacitors" alamendment Nost 202 (1989) and the following documents:

| Six Months' Rule | Report on Voting | |
|------------------|------------------|--|
| 40(CO)712 | 40(CO)749 | |
| 40(CO)763 | 40(CO)795 | |

Further information can be found in the relevant Reports on Voting indicated in the table above.

-7-

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MARKING CODES FOR RESISTORS AND CAPACITORS

l. <u>Scope</u>

This standard specifies marking codes for resistors and capacitors.

The code specified in Clause 2 gives a colour coding for fixed resistors.

It is intended for use with the values of the E6 to E192 series as specified in IEC Publication 63, Preferred Number Series of Resistors and Capacitors.

The code specified in Clause 3 gives a system for marking resistance and capacitance values by means of letters and digits.

The code specified in Clause 4 gives a system for marking the tolerance on resistance and capacitance values by means of a letter.

The code specified in Clause 5 gives systems for marking of date codes on capacitors and resistors by means of letters and digits.

(standards.iteh.ai)

- 2. Colour code for fixed resistors
- 2.1 The colour code for indicating resistance values to two and three significant figures, tolerances and if needed, the indication of the temperature coefficient of fixed resistors shall be as given in Sub-clauses 2.2, 2.3 and 2.4.
- 2.2 The first band shall be the one nearest to the end of the resistor and the bands shall be so placed and spaced that there can be no confusion in reading the coding.
- 2.3 Any additional coding shall be so applied as not to confuse the coding for value and tolerance.

TABLE I

Values corresponding to colours

-9-

| Colour | Significant figures | Multiplier | Tolerance | Temperature coefficient (10 ⁻⁶ °C) |
|--------|---|---------------------------|--|---|
| Silver | _ | 10-2 | ± 10 % | - |
| Gold | _ | 10-1 | ± 5 % | - |
| Black | 0 | 1 | ı | ± 250 |
| Brown | 1 | 10 | ± 1 % | ± 100 |
| Red | 2 | 10 ² | ± 2 % | ± 50 |
| Orange | 3 | 10 ³ | - | ± 15 |
| Yellow | 4 | 104 | _ | ± 25 |
| Green | 5 | 10 ⁵ | ± 0,5 % | ± 20 |
| Blue | 6 | 10 ⁶ | ± 0,25 % | ± 10 |
| Violet | iTeh,STAI | | RE _± V ₀ ,E ₂ W | ± 5 |
| Grey | 8(star | idards.iteh | .ai) _ | ± 1 |
| White | 9 <u>£</u> s://standards.iteh.ai/cat | <u>SIST EN 66952:2002</u> | 477a 05fa 42a0 071a | - |
| None | A CONTROL OF CALCULATION OF COLUMN | 7582e2/sist_en-60062- | 11/10 3510 1203 3/10 | _ |

For the indication of temperature coefficients according to the code as described above one of the following methods shall be used:

- a) a colour band as the sixth and wider band;
- b) an interrupted colour band as the sixth band;
- c) a helix.

For cylindrical types the helix shall be superimposed on the full length of the existing bands of colour code indicating the resistance value and tolerance, with the helix covering not less than 270 degrees of the circumference.

For other types similar methods of colour coding should be used as described in the detail specification.

Colour code marking of the temperature coefficient shall only be used in combination with three significant figures.