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English Version

**Potentiometers for use in electronic equipment - Part 3:
Sectional specification: Rotary precision potentiometers
(IEC 60393-3:2023)**

Potentiomètres utilisés dans les équipements électroniques
- Partie 3: Spécification intermédiaire: Potentiomètres de
précision rotatifs
(IEC 60393-3:2023)

Potentiometer zur Verwendung in Geräten der Elektronik -
Teil 3: Rahmenspezifikation: Drehpräzisionspotentiometer
(IEC 60393-3:2023)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

EN IEC 60393-3:2023 (E)

European foreword

The text of document 40/3058/FDIS, future edition 3 of IEC 60393-3, 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 IEC 60393-3:2023.

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) 2024-06-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-09-22

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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A preceding document on the subject covered by this specification has been:

— CECC 41400:1979

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IEC 60915 NOTE Approved as EN 60915

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where 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.cencenelec.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 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60068-2-1	-	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	-
IEC 60068-2-2	-	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	-
IEC 60393-1	2008	Potentiometers for use in electronic equipment - Part 1: Generic specification	EN 60393-1	2009
IEC 61193-2	-	Quality assessment systems - Part 2: Selection and use of sampling plans for inspection of electronic components and packages	EN 61193-2	-

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IEC 60393-3

Edition 3.0 2023-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Potentiometers for use in electronic equipment –
Part 3: Sectional specification: Rotary precision potentiometers**

**Potentiomètres utilisés dans les équipements électroniques –
Partie 3: Spécification intermédiaire: Potentiomètres de précision rotatifs**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

POTENTIOMETERS FOR USE IN ELECTRONIC EQUIPMENT –**Part 3: Sectional specification: Rotary precision potentiometers**

FOREWORD

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- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
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IEC 60393-3 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

This third edition cancels and replaces the second edition published in 1992. This edition constitutes a technical revision.

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

- a) revised all parts of the document based on the ISO/IEC Directives, Part 2:2018 (eighth edition) and harmonized with other similar kinds of documents;
- b) the document structure has been organized to follow new sectional specification structure decided in TC 40;
- c) revision of the information on the assessment level EZ (zero nonconforming).

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

Draft	Report on voting
40/3058/FDIS	40/3071/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.

A list of all parts in the IEC 60393 series, published under the general title *Potentiometers for use in electronic equipment*, can be found on the IEC website.

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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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 in the data related to the specific document. At this date, the document will be

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

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POTENTIOMETERS FOR USE IN ELECTRONIC EQUIPMENT –

Part 3: Sectional specification: Rotary precision potentiometers

1 Scope

This part of IEC 60393 applies to rotary precision potentiometers for use in electronic equipment.

The object of this document is to prescribe preferred ratings and characteristics and to select from IEC 60393-1, the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements for this type of potentiometer.

This document gives the minimum performance requirements and test severities.

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 60062, *Marking codes for resistors and capacitors*

IEC 60068-1:2013, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-1, *Environmental testing – Part 2-1: Tests – Test A: Cold*

IEC 60068-2-2, *Environmental testing – Part 2-2: Tests – Test B: Dry heat*

IEC 60393-1:2008, *Potentiometers for use in electronic equipment – Part 1: Generic specification*

IEC 61193-2, *Quality assessment systems – Part 2: Selection and use of sampling plans for inspection of electronic components and packages*

3 Terms and definitions

For the purposes of this document, the terms and definitions of IEC 60393-1:2008 apply.

ISO and IEC maintain terminological 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 Preferred characteristics

4.1 General

The values given in detail specifications should be selected from the content of 4.2 to 4.10.