SLOVENSKI STANDARD
SIST EN IEC 60115-8:2026

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Nadomešča:
SIST EN 60115-8:2013

Stalni upori za elektronsko opremo - 8. del: Področna specifikacija - Fiksni upori za površinsko montažo (IEC 60115-8:2023)

Fixed resistors for use in electronic equipment - Part 8: Sectional specification - Fixed surface mount resistors (IEC 60115-8:2023)

Festwiderstände zur Verwendung in Geräten der Elektronik - Teil 8: Rahmenspezifikation - Oberflächenmontierbare (SMD) Festwiderstände (IEC 60115-8:2023)

Résistances fixes utilisées dans les équipements électroniques - Partie 8: Spécification intermédiaire - Résistances fixes pour montage en surface (IEC 60115-8:2023)

Ta slovenski standard je istoveten z: **EN IEC 60115-8:2026**

ICS:

31.040.10	Fiksni upor	Fixed resistors

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60115-8

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Supersedes EN 60115-8:2012

English Version

Fixed resistors for use in electronic equipment - Part 8: Sectional specification - Fixed surface mount resistors (IEC 60115-8:2023)

Résistances fixes utilisées dans les équipements électroniques - Partie 8: Spécification intermédiaire - Résistances fixes pour montage en surface (IEC 60115-8:2023)

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

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

Ref. No. EN IEC 60115-8:2026 E

European foreword

This document (EN IEC 60115-8:2026) consists of the text of document IEC 60115-8:2023, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2027-04-30
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2029-04-30

This document supersedes EN 60115-8:2012 and all its amendments and corrigenda (if any).

This document is read in conjunction with EN IEC 60115-8:2026/A11:2026.

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

a) this edition employs a new document structure of the generic specification EN 60115-1:2023, where the tests of prior Clause 4 are given in Clauses 6 to 12 now;

b) the definitions of product technologies and product classification levels of the generic specification, EN 60115-1:2023, have been adopted;

c) the preferred styles and their respective dimensions given in Tables 1a and 1b have been reviewed and amended for the presentation of styles and dimensions for rectangular (RR), transverse (RT), and cylindrical (RC) shapes, plus special styles and dimensions for SMD wirewound (RW) resistors in Tables 1 through 4;

d) the specifications of recommended test boards have been reviewed and amended to support the preferred styles RR, RT and RC in 5.2.2.2, with supporting information on the measurement of temperature rise given in Annex F and Annex G;

e) the ‘periodic-pulse high-voltage overload test’ of EN 60115-1:2023, 8.3 has been adopted as default test method in 5.3.8, thereby replacing the legacy test ‘periodic-pulse overload test’ of EN 60115-1:2023, 8.4;

f) the revised solderability test of EN 60115-1:2023, 11.1 has been adopted in 5.3.21 and 5.3.22;

g) the combined solvent resistance test of EN 60115-1:2023, 11.3 has been adopted in in 5.3.24;

h) the ‘single-pulse high-voltage overload test’ of EN 60115-1:2023, 8.2, applied with the pulse shape 10/700 in 5.3.7, is complemented with the optional alternative provided by the pulse shape 1,2/50 in 5.4.1;

i) climatic tests for ‘operation at low temperature’ of EN 60115-1:2023, 10.2, and for ‘damp heat, steady state, accelerated’ of EN 60115-1:2023, 10.5, have been adopted as optional tests in 5.4.3. and 5.4.4, respectively;

j) new guidance is provided in 6.2 on the presentation of stability requirements with their permissible absolute and relative deviations;

k) acceptance criteria for the visual examination have been added in 6.5 and in Annex B;

l) visual examination for the primary and proximity packaging has been added in 6.5.3 and in 7.2

m) the periodical evaluation of termination platings has been added as a new topic of quality assessment in 9.8;

n) a new Annex C has been added to summarize workmanship requirements for the assembly of leaded film resistors, e.g. as given in the prior IEC 61192 series of standards;

Preceding documents on the subject covered by this specification have been:

— EN 140400:2003-12,
EN 140400:1996-11 + EN 140400:1996-11/A1:2001-08 + EN 140400:1996/COR:1997-07

— CECC 40 400:1989-00.

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.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60115-8:2023 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60027-1	NOTE	Approved as EN 60027-1
IEC 60063	NOTE	Approved as EN 60063
IEC 60068-2-1	NOTE	Approved as EN IEC 60068-2-1
IEC 60068-2-2	NOTE	Approved as EN IEC 60068-2-2
IEC 60068-2-13	NOTE	Approved as EN IEC 60068-2-13
IEC 60068-2-14	NOTE	Approved as EN IEC 60068-2-14
IEC 60068-2-21	NOTE	Approved as EN IEC 60068-2-21
IEC 60068-2-30	NOTE	Approved as EN IEC 60068-2-30
IEC 60068-2-45	NOTE	Approved as EN 60068-2-45
IEC 60068-2-67:1995	NOTE	Approved as EN 60068-2-67:1996 (not modified)
IEC 60068-2-78	NOTE	Approved as EN IEC 60068-2-78
IEC 60195	NOTE	Approved as EN 60195
IEC 60440	NOTE	Approved as EN 60440
IEC 60695-11-5	NOTE	Approved as EN 60695-11-5
IEC 61191-1	NOTE	Approved as EN IEC 61191-1
IEC 61191-2	NOTE	Approved as EN 61191-2

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Fixed resistors for use in electronic equipment – Part 8: Sectional specification: Fixed surface mount resistors

Résistances fixes utilisées dans les équipements électroniques – Partie 8: Spécification intermédiaire: Résistances fixes pour montage en surface

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FIXED RESISTORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 8: Sectional specification: Fixed surface mount resistors

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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IEC 60115-8 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 2009. This edition constitutes a technical revision.

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

a) definitions of product technologies and product classification levels of the generic specification, IEC 60115 1:2020, have been adopted;
b) new style of transverse (RT) resistors has been added in 3.1.5 and 4.2.2 to cover resistors with wide terminals, which have become common in market;
c) recommended test boards in 5.2.2 have been revised to fit the demands from the market for higher rated dissipation in resistors;

d) test boards have been revised so that they can be set vertically instead of horizontally during specified tests to optimize the temperature rise stability, area and spacing inside the test chamber;

e) 'Periodic-pulse high-voltage overload test' of IEC 60115-1:2020, 8.3 has been added to the default test method in 5.3.8, however, the legacy test 'periodic-pulse overload test' of IEC 60115-1:2020, 8.4 is still maintained for historical products;

f) revised solderability test of IEC 60115-1:2020, 11.1 has been adopted in 5.3.21 and 5.3.22;

g) combined solvent resistance test of IEC 60115-1:2020, 11.3 has been adopted in 5.3.24;

h) 'Single-pulse high-voltage overload test' of IEC 60115-1:2020, 8.2, applied with the pulse shape 10/700 in 5.3.7, is complemented with the optional alternative provided by the pulse shape 1,2/50 in 5.4.1;

i) climatic tests for 'operation at low temperature' of IEC 60115-1:2020, 10.2, and for 'damp heat, steady state, accelerated' of IEC 60115-1:2020, 10.5, have been adopted as optional tests in 5.4.3 and 5.4.4, respectively;

j) new guidance is provided in 6.2 on the presentation of stability requirements with their permissible absolute and relative deviations;

k) acceptance criteria for the visual examination have been added in 6.5 and in Annex B;

l) visual examination for the primary and proximity packaging has been added in 6.5.3 and in 7.2;

m) periodical evaluation of termination plating has been added as a new topic of quality assessment in 9.8;

n) revised test clause numbering of IEC 60115-1:2020 has been applied;

o) normative Annex A has been moved from Annex B of the old version to stay in line with other sectional specifications;

p) normative Annex B has been added to show the criteria for general visual examinations;

q) informative Annex C has been added to summarize workmanship requirements for the assembly;

r) normative Annex D has been moved from Annex A of the old version to stay in line with other sectional specifications;

s) informative Annex E has been added to show guidance for optional and/or additional tests;

t) informative Annex F has been added to show typical temperature rise of recommended test boards in the endurance test at the rated temperature 70 °C;

u) informative Annex G has been added to explain why some recommended test boards have extremely wide copper patterns;

v) informative Annex X has been added to show the cross reference for the prior revision of this document.

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

Draft	Report on voting
40/2973/CDV	40/3031/RVC

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