

Harmonized system of quality assessment for electronic components — Sectional specification: Fixed low power non-wire wound resistors

The European Standard EN 140100:1996, with the incorporation of amendment A1:2001, has the status of a British Standard

ICS 31.040.10

National foreword

This British Standard is the English language version of EN 140100:1996, including amendment A1:2001, published by the European Electronic Components Committee (CECC) of the European Committee for Electrotechnical Standardization (CENELEC). It supersedes BS CECC 40100:1981 which will be withdrawn on 1997-06-01.

The UK participation in its preparation was entrusted by Technical Committee EPL/40, Capacitors and resistors for electronic equipment, to Subcommittee EPL/40/2, Resistors, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

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The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

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Descriptors: Electronic components, fixed low power resistors, non-wire wound resistors, sectional specification

English version

Sectional specification: Fixed low power non-wire wound resistors

(includes amendment A1:2001)

Spécification intermédiaire:
Résistances fixes non bobinées de faible
puissance
(inclut l'amendement A1:2001)

Rahmenspezifikation:
Nicht drahtgewickelte Festwiderstände kleiner
Belastbarkeit
(enthält Änderung A1:2001)

This European Standard was approved by CENELEC on 1994-06-20. Amendment A1:2001 was approved by CENELEC on 2000-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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CENELEC

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

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC/CECC SC40XB, Resistors (former CECC/WG 4A)

The text of the draft based on document CECC(Secretariat)3463 was submitted to the formal vote; together with the voting report, circulated as document CECC(Secretariat)3565, it was approved as EN 140100 on 1994-06-20.

This European Standard supersedes CECC 40 100:1980.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1997-06-01

Foreword to amendment A1

This amendment to the European Standard EN 140100 was prepared by the Technical Committee CENELEC TC 40XB, Fixed resistors.

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- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2002-03-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2003-04-01

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1 Scope

This sectional specification prescribes the preferred values for characteristics and ratings and also the inspection requirements for fixed low power non-wire wound resistors of assessed quality. It selects from the generic specification, EN 140000, the appropriate methods of test to be used in detail specifications derived from this specification.

Associated with this specification are one or more blank detail specifications each referenced by an EN number. A blank detail specification which has been completed as specified in 2.5 of this specification forms a detail specification. Such detail specifications may be used for the grant of qualification approval to a resistor and for the performance of quality conformance inspection in accordance with the CECC system.

2 Preferred characteristics, ratings and severities for environmental and overload tests

2.1 Characteristics

The values given in detail specifications shall preferably be selected from the following:

2.1.1 *Climatic severities* (IEC 115-2 clause 2.1.1)

The resistors covered by this document are classified into climatic categories according to the general rules given in the appendix to IEC 68-1.

The preferred severities for the cold, dry heat and damp heat, steady state, tests are within the following ranges:

Cold (Test A)	−40 °C to −55 °C
Dry heat (Test B)	+85 °C to +155 °C
Damp heat, steady state (Test C)	4 to 56 days

Values selected within these ranges shall be chosen from those listed in the relevant tests of IEC 68-2.

The severities for the cold and dry heat tests are the lower and upper category temperatures. For some resistors, these temperatures will occur between two of the preferred temperatures given in IEC 68-2. In this case, the nearest preferred temperature within the category temperature range of the resistors shall be chosen for this severity.