SLOVENSKI STANDARD
SIST EN 140201:2002

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Blank detail specification: Fixed power resistors (Assessment level S)

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Vordruck für Bauartspezifikation: Hochbelastbare Festwiderstände (Bewertungsstufe S)

Spécification particulière cadre: Résistances fixes à forte dissipation (Niveau d'assurance de qualité S)

Ta slovenski standard je istoveten z: **EN 140201:1996**

ICS:

31.040.10 Fiksni upor Fixed resistors

SIST EN 140201:2002 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 140201

November 1996

Supersedes CECC 40 201:1981

Descriptors: Electronic components, fixed power resistors, blank detail specification, assessment level S

English version

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CENELEC

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

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

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)3481 was submitted to the formal vote; together with the voting report, circulated as document CECC(Secretariat)3680, it was approved as EN 140201 on 1996-03-14.

This European Standard supersedes CECC 40 201:1981.

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)	1997-02-15
- latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	1998-02-15

Key for page 4

The numbers between square brackets on the first page correspond to the following indications which should be given:

Identification of the harmonised detail specification

[1] The name of the National Standards Organisation under whose authority the detail specification is drafted.

[2] The CECC symbol and the number allotted to the national detail specification by the CECC General Secretariat.

[3] The number and issue number of the national generic and sectional specification.

[4] The national number of the detail specification, date of issue and any further information required by the national system.

Identification of the resistor

[5] A short description of the type of resistor.

[6] Information on typical construction (where applicable) e.g. wire wound insulated.

[7] Outline drawing with main dimensions which are of importance for interchangeability and/or reference to the national or international documents for outlines. Alternatively, this drawing may be given in an appendix to the detail specification.

[8] Application or group of applications covered, or, preferably, the level of quality assessment covered by the detail specification.

[9] Reference data on the most important properties, to allow comparison between the various resistor types.

Specification available from: [1]	CECC 40 201-XXX [2]
ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH: [3]	[4]
Outline and dimensions: (see table 1) [7]	FIXED POWER RESISTORS [5]
	[6]
	ASSESSMENT LEVEL "S" [8]
NOTE 1: Other shapes are permitted within the dimensions given. NOTE 2: These resistors are (not) suitable for printed wiring applications.	

Table 1: Dimensions [9]

Style	Rated dissipation (W at 70 °C)	Limiting element voltage (V d.c. or a.c. rms.)	Isolation voltage (V d.c. or a.c. peak)	Maximum dimensions		d		
				L	D	min	nom	max

All dimensions are in millimetres.

See the relevant Qualified Products List for the availability of components qualified to this detail specification.

1 Ratings and characteristics

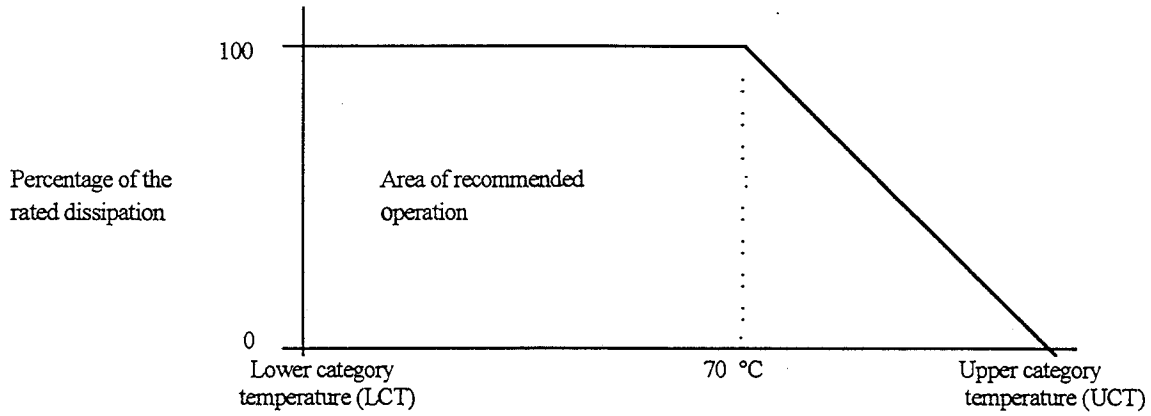
* Resistance range	... Ω to ... Ω
Tolerances on rated resistance	± ... %

* The preferred values are those of the E series of IEC 63. Where the use of intermediate values is essential, they should, wherever possible, be chosen from a series in that document.

Climatic category	... / ... / ...
Vibration severity	... Hz to ... Hz; 0,75 mm or 98 m/s^2 (whichever is the less severe)
Low air pressure	8,5 kPa (85 mbar)
Bump (or shock) severity	... ...
Limit of resistance change after 1 000 h endurance test	± (... % R + ... Ω)
Temperature characteristic of resistance (20 °C to 70 °C)	ΔR : ≤ ± ... % R ($\Delta R/R\Delta T$: ≤ ± ... 10^{-6}/°C)

1.1 Derating

Resistors covered by this specification are derated according to the curve:



NOTE: Various parameters have been precisely specified for this component. It should not be assumed that any parameter not specified will remain unchanged from one component to another.

Should, for any reason, it be necessary for further parameter(s) to be controlled, then a more detailed specification should be used.

The additional test method(s) shall be fully described, and appropriate limits, AQLs and inspection levels specified.

2 Marking

The marking of the component and package shall be in accordance with the requirements of 2.4 of EN 140000.

3 Related documents

National Authorised Institutions will complete this section, making reference to any documents, recommendations and specifications directly referred to in their national equivalent of this document.

4 Ordering information

Orders for resistors covered by this specification shall contain the following information:

- Resistance value.

- Tolerance.

- Style and national specification number of this detail specification.

5 Certified test records

The detailed specification shall indicate in this clause whether certified test records shall be prepared in accordance with 3.9 of EN 140000.

6 Additional information (not for inspection purposes)

The detail specification may include information (which is not required to be verified by the inspection procedure), such as circuit diagrams, curves, drawings and notes needed for the clarification of the detail specification.

7 Inspection requirements (see table 2)

7.1 When drying is required, Procedure I of 4.3 of EN 140000 shall be used.

7.2 When the manufacturer desires to obtain qualification approval by adopting the fixed sample size procedure (see 3.5.3 of EN 140000) use shall be made of the test schedule in table A.1/A.2 of annex A.1 or A.2 of EN 140200. The conditions of the test and the performance requirements shall be identical to those prescribed for quality conformance inspection in the detail specification.

8 Assessed process average procedures

When the Assessed Process Average Procedure as specified in CECC 00 014 is used, the detailed specification shall give the limits that are required in 3.12 of EN 140000. The detail specification shall prescribe at relevant places that non-operatives have to be recorded.

Table 2: Inspection requirements

See notes on page 12

Clause number and test	Conditions of test	IL	AQL	Performance requirements
Group A inspection				
To be conducted on a sampling basis, lot by lot				
Sub-group A1	Non-destructive	S-4	1,0 %	
4.4.1 Visual examination				As in 4.4.1
4.4.1 Marking				As in 4.4.1
Sub-group A2	Non-destructive	S-4	1,0 %	As specified in table 1
4.4.2 Dimensions (gauging)				
4.5 Resistance				As in 4.5.2
Group B inspection				
To be conducted on a sampling basis, lot by lot				
Sub-group B1	Non-destructive	S-3	1,0 %	
4.7 Voltage proof	Insulated resistors only			As in 4.7.3
Sub-group B2	Destructive	S-3	4,0 %	
4.17.1 Soldering-Solderability	Method 1. The detail specification shall indicate whether the terminations are suitable for printed wiring	S-3	4,0 %	As in 4.17
4.16 Robustness of terminations	Tensile test			
	Visual examination			As in 4.16.6
	Resistance			ΔR: $\leq \pm$ (... % R +... Ω)