



SLOVENSKI STANDARD
SIST EN 143001:2002
01-september-2002

Blank detail specification: Directly heated negative temperature coefficient thermistors (Beads in solid glass or vitreous enamel)

Blank Detail Specification: Directly heated negative temperature coefficient thermistors (Beads in solid glass or vitreous enamel)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: ^{SIST EN 143001:2002} **EN 143001:1991**
<https://standards.iteh.ai/catalog/standards/sist/en/143001-2002>
[48e22dbd39ce/sist-en-143001-2002](https://standards.iteh.ai/catalog/standards/sist/en/143001-2002)

ICS:

31.040.30 Termistorji Thermistors

SIST EN 143001:2002 **en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 143001:2002](#)

<https://standards.iteh.ai/catalog/standards/sist/ef1a2ea6-be57-40d6-9ce0-48e22dbd39ce/sist-en-143001-2002>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 143001

October 1991

UDC:

Descriptors: Quality, electronic components, thermistors

English version

**Blank Detail Specification:
Directly heated negative temperature coefficient
thermistors (Beads in solid glass or vitreous enamel)**

Spécification Particulière Cadre:
Thermistances à coefficient de
température négatif à chauffage
direct
(perles enrobées de verre solide ou
d'émail vitrifié)

Vordruck für Bauartspezifikation:
Direkt geheizte
temperaturabhängige
Widerstände mit negativen
Temperatur- Koeffizienten
(Perlen in massivem Glas oder
glasartiger Emaille)

This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 14 October 1991. The text of this standard consists of the text of CECC 43001 Issue 1 1983 of the corresponding CECC Specification. CENELEC members are bound to comply with CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the General Secretariat of the CECC 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 CECC General 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. The membership of the CECC is identical, with the exception of the national electrotechnical committees of Greece, Iceland and Luxembourg.

CECC

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

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognised Mark, or Certificate, of Conformity. The components produced under the System are thereby accepted by all member countries without further testing.

This specification has been formally approved by the CECC and has been prepared for those countries taking part in the System who wish to issue national harmonized specifications for DIRECTLY HEATED NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS. It should be read in conjunction with document CECC 00100: Basic Rules (1974).

STANDARD PREVIEW
(standards.iteh.ai)

Preface

This blank detail specification was prepared by CECC Working Group 4: "RESISTORS".

It is one of a series of blank detail specifications for directly heated negative temperature coefficient thermistors, all relating to the generic specification CECC 43000.

[SIST EN 143001:2002](https://standards.iteh.ai/catalog/standards/sist/ef1a2ea6-be57-40d6-9ce0-13e72dbd39ce/sist-en-143001-2002)

<https://standards.iteh.ai/catalog/standards/sist/ef1a2ea6-be57-40d6-9ce0-13e72dbd39ce/sist-en-143001-2002>

Voting

The text of this blank detail specification was circulated to the CECC for voting in the documents listed below and was ratified by the President of the CECC for printing as a CECC Specification:

Document	Date of Vote	Report on the Voting
CECC (Secretariat)883	April 1980	CECC (Secretariat)995

European Committee for Electrotechnical Standardization (CENELEC)
Genelec Electronic Components Committee

CECC

English version

Harmonized System of Quality Assessment for
Electronic Components

**BLANK DETAIL SPECIFICATION:
DIRECTLY HEATED NEGATIVE
TEMPERATURE COEFFICIENT
THERMISTORS**
(Beads in solid glass or vitreous enamel)

iTeh STANDARD PREVIEW

Système Harmonisé d'Assurance de la Qualité
des Composants Electroniques

**SPECIFICATION PARTICULIERE CADRE:
THERMISTANCES A COEFFICIENT
DE TEMPERATURE NEGATIF
A CHAUFFAGE DIRECT**
(Perles enrobées de verre solide ou d'email vitrifié)

Harmonisiertes Gütebestätigungssystem für
Bauelemente der Elektronik

**VORDRUCK FÜR
BAUARTSPEZIFIKATION:
DIREKT GEHEIZTE
TEMPERATURABHÄNGIGE
WIDERSTÄNDE MIT NEGATIVEN
TEMPERATUR-KOEFFIZIENTEN**
(Perlen in massivem Glas oder glasartiger Emaille)



1

Edition
Issue
Ausgabe

CECC 43001

1983

Key for page 3

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

Identification of the detail specification (DS)

- [1] The name of the National Standards Institution under whose authority the detail specification (DS) is published and, if applicable, the organization from whom the DS is available.
- [2] The CECC symbol and the number allotted to the DS by the CECC General Secretariat.
- [3] The number and issue number of the CECC generic or sectional specification as relevant; also national reference if different.
- [4] If different from the CECC number, the national number of the DS, date of issue and any further information required by the national system, together with any amendment numbers.


Identification of the thermistor

- [5] A short description of the type of thermistor.
- [6] Information on typical construction (where applicable).
- [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 thermistor types.

For [5] and [6] the text to be given in the DS should be suitable for an entry in CECC 00200 (QPL) or CECC 00300.

[SIST EN 143001:2002](https://standards.iteh.ai/catalog/standards/sist/ef1a2ea6-be57-40d6-9ce0-48e22dbd39ce/sist-en-143001-2002)

<https://standards.iteh.ai/catalog/standards/sist/ef1a2ea6-be57-40d6-9ce0-48e22dbd39ce/sist-en-143001-2002>

Specification available from:-- [1]	CECC 43001 – XXX [2]	
	Page of [4]	
ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH: [3]		
Outline and dimensions:-- (See Table 1) (First angle projection) [7]	DIRECTLY HEATED NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS PRIMARILY INTENDED FOR TEMPERATURE SENSING [5]	
	BEADS IN SOLID GLASS OR VITREOUS ENAMEL [6]	
	INSULATED/NON-INSULATED HUMIDITY PROOF/NON-HUMIDITY PROOF Reference temperature: -- °C ASSESSMENT LEVEL "S" [8]	

NOTE 1 Other shapes are permitted within the dimensions given.

NOTE 2 The non-dimensioned details do not affect the performance of the device.

NOTE 3 The leads are (not) suitable for soldering.

NOTE 4 The leads are (not) suitable for printed wiring applications.

<https://standards.iteh.ai/catalog/standards/sist/ef1a2ea6-be57-40d6-9ce0-48e22dbd39ce/EN-143001-2002>

Table 1 143001-2002

[9]

Style	B-value --	^a Range of rated resistance values		Rated dissipation (W)	Dissipation Factor	Time Constant	Dimensions (mm)			
							Body		Terminations	
		R _{min}	R _{max}				L	D	l	d

^a Values shall be chosen from the E-series of IEC 63. Where the use of intermediate values is essential, they shall be chosen from a series in that document.

Information about manufacturers who have components qualified to this detail specification is available in the current CECC 00200: Qualified Products List

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 143001:2002

<https://standards.iteh.ai/catalog/standards/sist/ef1a2ea6-be57-40d6-9ce0-48e22dbd39ce/sist-en-143001-2002>

1 Ratings and characteristics

Standard selection tolerances	± -- %
Climatic category	-/-/-
Bump or Shock	4 000 bumps at 390 m/s ² (1 333 in each of 3 directions). 490 m/s ² , 11 ms, half sine wave
Vibration	10 Hz to 55 Hz or ; 0,75 mm or 98 m/s ² 10 Hz to 500 Hz (whichever is the less severe)
Limit of resistance change after 1 000 h endurance test	± -- %
B-value tolerance	± -- %
Resistance ratio	(The ratio shall be specified if applicable).
Resistance/temperature characteristic	(The applicable temperatures and resistance tolerances shall be specified.)
Proof voltage (insulated thermistors only)	-- V a.c. peak (Voltage to be applied in Sub-Groups B1, C2 and D1 for the voltage proof test.)

1.1 Derating

Thermistors covered by this specification are derated according to: (Derating curve to be included in the detail specification.)

2 Marking

The marking of the component and package shall be in accordance with the requirements of 2.4 of CECC 43000. (If the thermistor is so small that it cannot be marked this shall be stated in the detail specification).

3 Related documents

National Authorized Institutions (ONH) will complete this section, making reference to any documents, recommendations or specifications directly referred to in their national equivalent of this document.

4 Ordering information

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

- Resistance value
- Tolerance
- B-value
- Style and national specification number of this detail specification.

5 Certified test records

National Authorized Institutions (ONH) shall indicate in this clause whether certified test records shall be prepared in accordance with 3.4 of CECC 43000.

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 for clarification of the detail specification.

Inspection requirements (See Table 2)

Drying clause is not applicable to thermistors manufactured in accordance with this detail specification.