



# SLOVENSKI STANDARD

## SIST EN 60360:1999

01-julij-1999

Nadomešča:

SIST EN 60360:2000/A1:2000

SIST EN 60360:2000/A2:2000

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**Standardna metoda za merjenje porasta temperature na vznožku žarnice ali sijalke  
(IEC 60360:1998)**

Standard method of measurement of lamp cap temperature rise

Standardverfahren zur Messung der Lampensockel-Übertemperatur  
(standards.iteh.ai)

Méthode normalisée de mesure de l'échauffement d'un culot de lampe  
SIST EN 60360:1999

<https://standards.iteh.ai/catalog/standards/sist/799eb123-9d3b-483b-a7b2-6efccf169c70/sist-en-60360-1999>

**Ta slovenski standard je istoveten z: EN 60360:1998**

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**ICS:**

29.140.10

Grla in držala žarnic

Lamp caps and holders

**SIST EN 60360:1999**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60360**

August 1998

ICS 29.140.10

Supersedes EN 60360:1989 + A1:1994 + A2:1997

Descriptors: Tungsten filament lamp, lamp cap, temperature rise, test method, test conditions

English version

**Standard method of measurement of lamp cap temperature rise  
(IEC 60360:1998)**

Méthode normalisée de mesure de  
l'échauffement d'un culot de lampe  
(CEI 60360:1998)

Standardverfahren zur Messung der  
Lampensockel-Übertemperatur  
(IEC 60360:1998)

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This European Standard was approved by CENELEC on 1998-08-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**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

The text of document 34A/814/FDIS, future edition 3 of IEC 60360, prepared by SC 34A, Lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60360 on 1998-08-01.

This European Standard supersedes EN 60360:1989 and its amendments A1:1994 and A2:1997.

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) 1999-05-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2001-05-01

Annexes designated "normative" are part of the body of the standard.  
In this standard, annex ZA is normative.  
Annex ZA has been added by CENELEC.

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Endorsement notice  
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The text of the International Standard IEC 60360:1998 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA (normative)****Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60432	series	Safety specifications for incandescent lamps	EN 60432	series

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NORME  
INTERNATIONALE  
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CEI  
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60360

Troisième édition  
Third edition  
1998-06

Méthode normalisée de mesure de l'échauffement  
d'un culot de lampe

Standard method of measurement  
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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## STANDARD METHOD OF MEASUREMENT OF LAMP CAP TEMPERATURE RISE

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60360 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

This third edition cancels and replaces the second edition published in 1987, amendment 1 (1993) and amendment 2 (1996), and constitutes a technical revision.

The text of this standard is based on the second edition, amendments 1 and 2 and the following documents:

FDIS	Report on voting
34A/814/FDIS	34A/828/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

In this standard, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- explanatory matter: in smaller roman type.

The contents of the corrigendum of March 1999 have been included in this copy.

## INTRODUCTION

The temperature rise of the lamp cap is, in practice, very dependent on the mounting of the lamp and the condition of the cap. For this reason, it has been necessary to define a method of measurement based on the use of a standard test lampholder. The temperature rise  $\Delta t_s$  measured on the standard test lampholder is taken as the lamp cap temperature rise for the purpose of this standard.

Compared with the measurement of the temperature rise of the bare lamp cap, the measurement of the temperature rise of a standard test lampholder has the following advantages:

- a better approximation to actual operating conditions;
- improved reproducibility, as there is less influence from lamp cap material, finish and surface conditions (which also have little influence on actual operating conditions);
- levelling (or averaging) of the temperatures of various parts of the cap, giving a better overall picture of the heat transferred from the lamp to the luminaire;
- reduced duration of measurements, as the thermocouple is fixed permanently to the test lampholder.

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# STANDARD METHOD OF MEASUREMENT OF LAMP CAP TEMPERATURE RISE

## 1 General

### 1.1 Scope

This International Standard describes the standard method of measurement of lamp cap temperature rise which is to be used when testing incandescent or discharge lamps for compliance with the limits. Temperature-rise limits for particular lamp types are, for example, listed in IEC 60432.

It covers the method of test and the specifications for test lampholders for lamps fitted with various sizes of Edison screw (ES) and Bayonet (BC) caps. This method has been used widely for incandescent lamps but its application is not limited to that kind of lamp.

### 1.2 Normative reference

The following normative document contains provisions which, through reference in this text, constitutes provisions of this International Standard. At the time of publication, the edition indicated was valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60432: *Safety specification for incandescent lamps*  
SIST EN 60360:1999  
<https://standards.iteh.ai/catalog/standards/sist/799eb123-9d3b-483b-a7b2-6e6ccfd69c70/sist-en-60360-1999>

## 2 Definitions

For the purposes of this International Standard, the following definitions apply:

### 2.1

#### **temperature rise of cap**

surface temperature rise of a standard test lampholder fitted to the lamp cap, when measured under conditions specified in this standard

### 2.2

#### **equilibrium temperature ( $t_m$ )**

steady-state temperature of a standard test lampholder reached after a sufficient lamp operating time

NOTE – The measuring accuracy should be  $\pm 1$  °C.

## 3 General conditions for measurements

### 3.1 Ageing and stabilizing

For these measurements, no previous ageing of the lamp is required. Sufficient stability of the lamp is achieved during the time necessary to reach the equilibrium temperature in the test enclosure.