



SLOVENSKI STANDARD
SIST EN 61549:1999/A1:1999
01-julij-1999

Miscellaneous lamps. Amendment A1 (IEC 61549:1996/A1:1997)

Miscellaneous lamps

Sonderlampen

Lampes diverses

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Ta slovenski standard je istoveten z: EN 61549:1996/A1:1997

[SIST EN 61549:1999/A1:1999](https://standards.iteh.ai/catalog/standards/sist/5cc9080e-5c87-4090-9d05-ccfe9c378c4f/sist-en-61549-1999-a1-1999)

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ICS:

29.140.20	Žarnice z žarilno nitko	Incandescent lamps
29.140.30	Žarnice z žarilno nitko	Fluorescent lamps. Discharge lamps

SIST EN 61549:1999/A1:1999

en

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EUROPEAN STANDARD

EN 61549/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 1997

ICS 29.140.20; 29.140.30

Descriptors: Flash tube, signal lamp, xenon lamp, designation, dimension, interchangeability, characteristics, photometrical property, electrical property, test, test conditions, test duration, vibration test, marking

English version

Miscellaneous lamps (IEC 61549:1996/A1:1997)

Lampes diverses
(CEI 61549:1996/A1:1997)

Sonderlampen
(IEC 61549:1996/A1:1997)

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[ccfe9c378c4f/sist-en-61549-1999-a1-1999](https://standards.iteh.ai/catalog/standards/sist/5cc9080e-5c87-4090-9d05-ccfe9c378c4f/sist-en-61549-1999-a1-1999)

This amendment A1 modifies the European Standard EN 61549:1996; it was approved by CENELEC on 1997-07-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, 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/673/FDIS, future amendment 1 to IEC 61549:1996, 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 amendment A1 to EN 61549:1996 on 1997-07-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-04-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 1998-04-01

For products which have complied with EN 61549:1996 before 1998-04-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2003-04-01.

Endorsement notice

The text of amendment 1:1997 to the International Standard IEC 61549:1996 was approved by CENELEC as an amendment to the European Standard without any modification.

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
61549

1996

AMENDEMENT 1
AMENDMENT 1

1997-04

Amendement 1

Lampes diverses

Amendment 1

STANDARD PREVIEW
Miscellaneous lamps
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SIST EN 61549:1999/A1:1999

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

G

*Pour prix, voir catalogue en vigueur
For price, see current catalogue*

FOREWORD

This amendment has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

The text of this standard is based on the following documents:

FDIS	Report on voting
34A/673/FDIS	34A/732/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.

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Replace the existing subclause 3.2 by the following:

3.2 Data sheets

3.2.1 List of data sheets

61549-IEC-01 Double-capped metal halide lamps

61549-IEC-02 Double-capped incandescent lamps

61549-IEC-03 Xenon flash lamp with ignition transformer

Add, after subclause 3.2.1, the following new data sheet:

<https://standards.iteh.ai/catalog/standards/sist/5cc9080e-5c87-4090-9d05-ccfe9c378c4f/sist-en-61549-1999-a1-1999>

**Xenon flash lamp
with ignition transformer
Category X1**

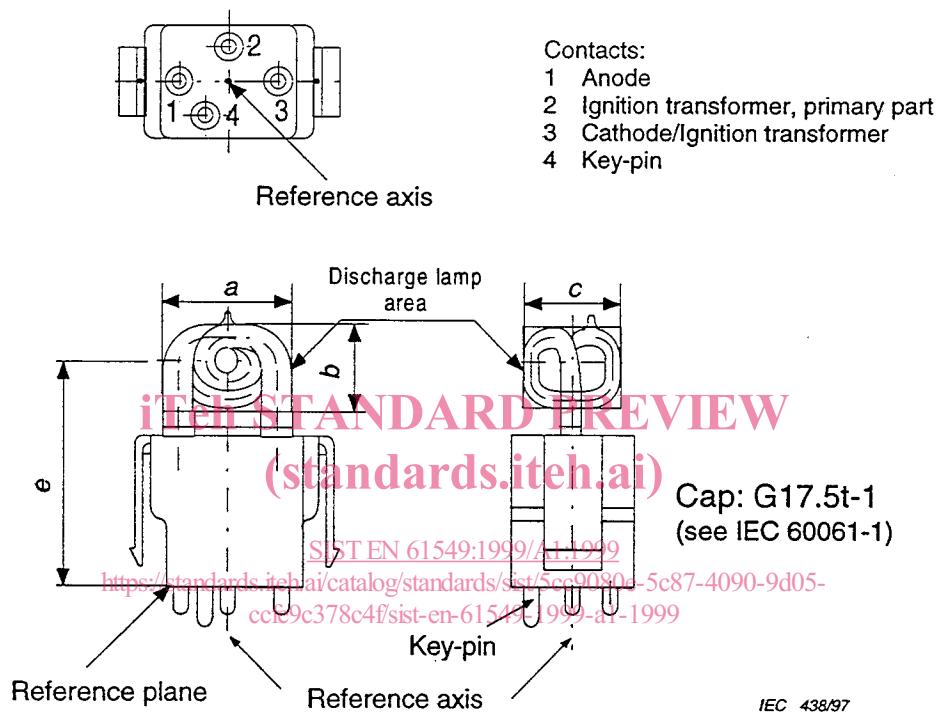
Page 1

1 Introduction

This set of data sheets specifies dimensions and technical data for the exchangeability of flash lamp category X1. The flash lamp serves to generate light flashes in special warning lamps.

2 Dimensions and designations

Not indicated details shall be chosen appropriately

**Figure 1 – Lamp dimensions****Table 1**

Dimension	Production flash lamp	Standard flash lamp
<i>a</i>	(24,5 ± 2,5) mm	(24,5 ± 0,3) mm
<i>b</i>	(17,0 ± 2) mm	(17,0 ± 0,3) mm
<i>c</i>	(18,0 ± 2) mm	(18,0 ± 0,3) mm
<i>e</i> nominal	41 mm	
Reference quantity of light	200 lm s ± 6 %	200 lm s

**Xenon flash lamp
with ignition transformer
Category X1**

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3 Technical data

Table 2

Direct voltage at anode	$U_{AN \text{ nom}}$	360 V
	$U_{AN \text{ max}}$	400 V
	$U_{AN \text{ min}}$	280 V
Flash energy	W_{BN}	12 J
Capacity of storage capacitor	C_B	$(186 \pm 1) \mu\text{F}$
Quantity of light	Q	200 lms \pm 6 %
Range of ignition voltage supply	U_{Vi}	200V - 250 V
Capacity of ignition capacitor	C_i	0,1 μF
Minimum rated average life		1 000 h
Colour distribution		Given by the gas filling (Xenon pure)

4 Marking

The cap of the flash lamp shall be marked clearly, legibly and indelibly with the following information:

4.1 Trade name or mark of origin

4.2 Category

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5 General test conditions

5.1 Unless otherwise specified all tests are to be carried out at an ambient temperature of $25 \text{ }^\circ\text{C} \pm 5 \text{ K}$ and a relative humidity of $60 \% \pm 30 \%$.

5.2 *Schematic circuit for measurement and ignition* (see figure 2)

For measurements according to clauses 6, 7 and 8, the circuit shown in figure 2 shall be used.

For testing the flash lamp, the storage capacitor C shall be a low-loss foil or metal foil capacitor with low internal inductance, which is suitable for discharges of short-time operation.

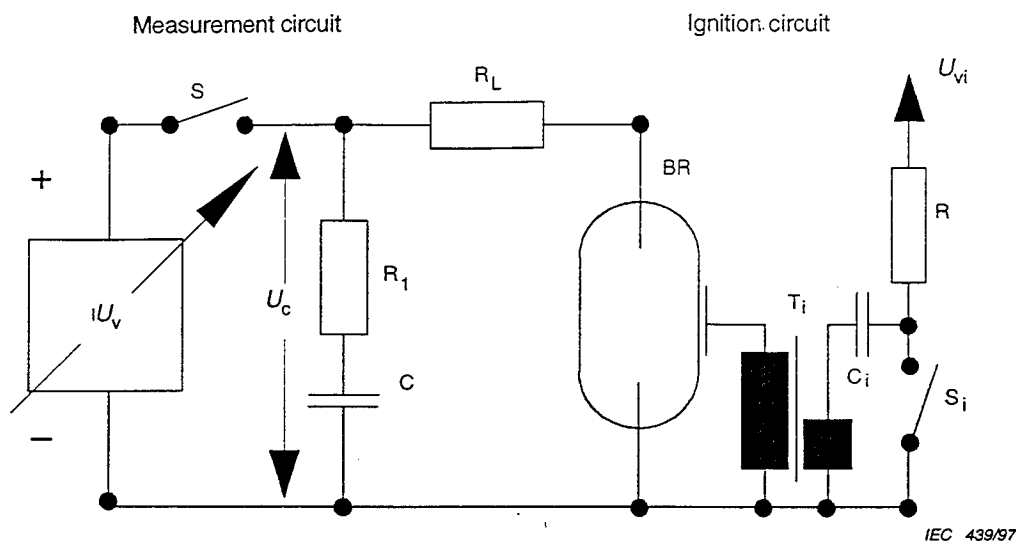
The connecting wires between the storage capacitor and the flash lamp shall have a cross-section of sufficient size. The resistor R_L shall have a resistance of $0,03 \ \Omega \pm 10 \%$. If a separate capacitor is used for the pre-heat period, the switching mechanism shall be designed for high impulse currents and shall not hinder the discharge.

If the ignition circuit or part of it is integrated in the lamp cap, it shall be used as prescribed in the measurement circuit and in clauses 6, 7 and 8. The ignition circuit shall be operated at its minimum required supply voltage.

5.3 The sequence of tests shall be according to the following clauses.

**Xenon flash lamp
with ignition transformer**
Category X1

Page 3



- IEC 439/97*
- U_v adjustable supply voltage
 - S switch
 - C storage capacitor
 - BR flash lamp under test
 - U_c voltage at storage capacitor
 - R_L total series resistance between storage capacitor and flash lamp ($0,03 \Omega \pm 10\%$)
 - R_1 substitution resistor for simulation of the series resistance of the electrolytic capacitor at different operating temperatures
 - T_i ignition transformer
 - C_i ignition capacitor
 - S_i switch to initiate the trigger impulse
 - U_{vi} supply voltage of the ignition circuit with charge resistor R (optionally connected to the supply voltage source)

Figure 2 – Measurement circuit

6 Photometrical characteristics

6.1 Test

The light flashes are produced by the discharge of a storage capacitor caused by an ignitor.

For the photometric assessment of the flash lamp, the quantity of light emitted under determined conditions shall be measured. For this purpose, the flash lamp shall be operated in the circuit shown in figure 2. The storage capacitor shall have a capacity as specified. In order to make available sufficient energy which is determined for each flash lamp, the voltage U_c at the storage capacitor C shall be set by means of an adjustable voltage supply U_v to the value

$$U_c = 10^3 \sqrt{\frac{2W_{BN}}{C_B}}$$

where

- U_c (V) is the voltage at the storage capacitor;
- W_{BN} (J) is the energy to be provided to the flash lamp;
- C_B (μ F) is the capacity of the storage capacitor.