
**Enosmerno ali izmenično napajani elektronski pretvorniki za žarnice in sijalke
– Zahteve za tehnične karakteristike (IEC 61047:2004)**

DC or AC supplied electronic step-down convertors for filament lamps -
Performance requirements (IEC 61047:2004)

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EUROPEAN STANDARD

EN 61047

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2004

ICS 29.140.20

Supersedes EN 61047:1992 + A1:1996 + A2:2001

English version

**DC or AC supplied electronic step-down convertors for filament lamps -
Performance requirements
(IEC 61047:2004)**

Convertisseurs abaisseurs électroniques
alimentés en courant continu ou alternatif
pour lampes à incandescence –
Exigences de performance
(CEI 61047:2004)

Gleich- oder wechselstromversorgte
elektronische Konverter für Glühlampen -
Anforderungen an die Arbeitsweise
(IEC 61047:2004)

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This European Standard was approved by CENELEC on 2004-09-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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 34C/635/FDIS, future edition 2 of IEC 61047, prepared by SC 34C, Auxiliaries for lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61047 on 2004-09-01.

This European Standard supersedes EN 61047:1992 + A1:1996 + A2:2001.

It constitutes a technical revision. EN 61047:1992 needed to be revised completely after the decision to delete all EMC-related requirements, given that EMC varies from region to region.

This European Standard is to be read in conjunction with EN 61347-1 and EN 61347-2-2.

In this standard, the following print types are used:

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

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) 2005-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-09-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61047:2004 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE Where 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 60357 (mod)	- ¹⁾	Tungsten halogen lamps (non-vehicle) - Performance specifications	EN 60357	2003 ²⁾
IEC 61347-1	- ¹⁾	Lamp controlgear Part 1: General and safety requirements	EN 61347-1	2001 ²⁾
IEC 61347-2-2	- ¹⁾	Part 2-2: Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps	EN 61347-2-2	2001 ²⁾

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¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

61047

Deuxième édition
Second edition
2004-06

**Convertisseurs abaisseurs électroniques
alimentés en courant continu ou alternatif
pour lampes à incandescence –
Exigences de performances**

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DC OR AC SUPPLIED ELECTRONIC
STEP-DOWN CONVERTORS FOR FILAMENT LAMPS –
PERFORMANCE REQUIREMENTS**

FOREWORD

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International Standard IEC 61047 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition of IEC 61047 cancels and replaces the first edition published in 1991, its Amendment 1 (1996) and Amendment 2 (2001). This second edition constitutes a technical revision. The first edition needed to be revised completely after the decision to delete all EMC-related requirements, given that EMC varies from region to region.

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

FDIS	Report on voting
34C/635/FDIS	34C/643/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.

This standard is to be read in conjunction with IEC 61347-1 and IEC 61347-2-2.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this standard, the following print types are used:

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

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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INTRODUCTION

This International Standard covers performance requirements for electronic step-down convertors for d.c. supplies up to 250 V and a.c. supplies up to 1 000 V at 50 Hz or 60 Hz, operating with controlled voltage filament lamps at frequencies deviating from the supply frequency.

Attention is drawn to the fact that operating frequencies below 20 kHz may cause audio noise.

NOTE CISPR requirements regarding radio interference have to be observed in some countries.

In order to obtain satisfactory performance of filament lamps and electronic convertors, it is necessary that certain features of their designs be properly coordinated.

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