



**SLOVENSKI STANDARD**  
**SIST EN 60947-1:2000/A1:2001**  
**01-oktober-2001**

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**Nizkonapetostne stikalne in krmilnih naprave – 1. del: Splošna pravila – Dopolnilo A1**

Low-voltage switchgear and controlgear -- Part 1: General rules

Niederspannungsschaltgeräte -- Teil 1: Allgemeine Festlegungen

Appareillage à basse tension -- Partie 1: Règles générales

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**Ta slovenski standard je istoveten z: EN 60947-1:1999/A1:2000**

SIST EN 60947-1:2000/A1:2001  
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**ICS:**

29.130.20	Nizkonapetostne stikalne in krmilne naprave	Low voltage switchgear and controlgear
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**SIST EN 60947-1:2000/A1:2001**                      **en**

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EUROPEAN STANDARD

**EN 60947-1/A1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2000

ICS 29.130.20

English version

**Low-voltage switchgear and controlgear**  
**Part 1: General rules**  
(IEC 60947-1:1999/A1:2000)

Appareillage à basse tension  
Partie 1: Règles générales  
(CEI 60947-1:1999/A1:2000)

Niederspannungsschaltgeräte  
Teil 1: Allgemeine Festlegungen  
(IEC 60947-1:1999/A1:2000)

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This amendment A1 modifies the European Standard EN 60947-1:1999; it was approved by CENELEC on 2000-09-01. 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. <https://standards.iteh.ai/catalog/standards/sist/a249a3e6-9909-4206-aa5b-7df42363311d/sist-en-60947-1-2000-a1-2001>

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, 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 17B/1050/FDIS, future amendment 1 to IEC 60947-1:1999, prepared by SC 17B, Low-voltage switchgear and controlgear, of IEC TC 17, Switchgear and controlgear, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60947-1:1999 on 2000-09-01.

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) 2001-06-01
- latest date by which the national standards conflicting  
with the amendment have to be withdrawn (dow) 2003-09-01

Annexes designated "normative" are part of the body of the standard.  
Annexes designated "informative" are given for information only.  
In this standard, annex ZA is normative and annex O is informative.  
Annex ZA has been added by CENELEC.

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### Endorsement notice

The text of amendment 1:2000 to the International Standard IEC 60947-1:1999 was approved by CENELEC as an amendment to the European Standard without any modification.

[SIST EN 60947-1:2000/A1:2001](https://standards.iteh.ai/catalog/standards/sist/a249a3e6-9909-4206-aa5b-7d42363311d/sist-en-60947-1-2000-a1-2001)

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
<b>Add:</b>				
IEC Guide 106	1996	Guide for specifying environmental conditions for equipment performance rating	-	-
IEC 60068	Series	Environmental testing	EN 60068	Series
IEC 60721	Series	Classification of environmental testing	EN 60721	Series
ISO 14040	1997	Environmental management - Life cycle assessment - Principles and framework	EN ISO 14040	1997

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**60947-1**

1999

AMENDEMENT 1  
AMENDMENT 1  
2000-08

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Amendement 1

**Appareillage à basse tension –**

**Partie 1:  
Règles générales**

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Amendment 1

SIST EN 60947-1:2000/A1:2001

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**Low-voltage switchgear and controlgear –**

**Part 1:  
General rules**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

**J**

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

## FOREWORD

This amendment has been prepared by subcommittee 17B: Low-voltage switchgear and controlgear, of IEC technical committee 17: Switchgear and controlgear.

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

FDIS	Report on voting
17B/1050/FDIS	17B/1084/RVD

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

The committee has decided that the contents of the base publication and its amendment will remain unchanged until 2001. At this date, the publication will be

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

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*Add, on page 7, under Annexes, the title of the new annex O:*

O Environmental aspects

Page 91

### 7.1 Constructional requirements

*Add, at the end of the subclause, the following note:*

NOTE The need to minimize the impact on the natural environment of a product during all phases of its life is recognized. Assistance in the consideration of environmental aspects relating to products according to the IEC 60947 series is given in annex O.



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Add, after annex N, the following new annex O:

## **Annex O** (informative)

### **Environmental aspects**

#### **Introduction**

The need to minimize the impact on the natural environment of a product during all phases of its life – from acquiring materials to manufacturing, distribution, use, re-use, recycling and disposal – is recognized in most countries around the world. The choices made largely decide what those impacts will be during each phase of that product's life. There are, however, considerable obstacles that make the task of selecting the best environmental options very difficult. For example, selecting design options to minimize environmental impact can involve difficult trade-off such as less recyclability for more energy efficiency.

The continuous introduction of new products and materials can make evaluation increasingly difficult, since additional data must be developed to assess the life cycle impacts of such new products and materials. Moreover, there is currently very little data available on the environmental impacts of existing materials. However, those which exist can be used as a basis for improvement of the products with respect to environmental impact. Environmental impact assessment (EIA) and design for environment (DFE) principles provide additional instruments that may be useful in this respect. This annex details some EIA principles to give background information on these issues.

Until more data are available, manufacturers can document more extensively, through the use of environmental impact assessments (EIAs), the specific design choices and the reasons behind them. This expands the knowledge based on such options and choices, and it may also assist in the recycling and disposal of the product at the end of life (EOL).

It should be noted that this annex can assist only insofar as the state of the art has been developed. As more studies and analyses are completed, more life-cycle data will be accumulated and better environmentally sound choices will be possible. Until then, the recommendation is to use this annex with care, professional judgement and a sound critical ability.

#### **O.1 Scope**

This annex is intended to give assistance in the consideration of environmental aspects relating to the impacts on the "natural" environment of products of the IEC 60947 series.

The term environment, as used in this annex, differs from the term used in the IEC standards dealing with the impact of environmental conditions on electrotechnical products.

NOTE As regards the impact of environmental conditions on the performance of products, reference is made to the IEC 60068 and IEC 60721 series and to IEC Guide 106.