

# SLOVENSKI STANDARD

## SIST EN 61000-4-1:2002

01-maj-2002

Nadomešča:

SIST EN 61000-4-1:1997

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### Electromagnetic compatibility (EMC) - Part 4-1: Testing and measurement techniques - Overview of IEC 61000-4 series (IEC 61000-4-1:2000)

Electromagnetic compatibility (EMC) -- Part 4-1: Testing and measurement techniques - Overview of IEC 61000-4 series

Elektromagnetische Verträglichkeit (EMV) -- Teil 4-1: Prüf- und Messverfahren - Übersicht über die Reihe IEC 61000-4

Compatibilité électromagnétique (CEM) -- Partie 4-1: Techniques d'essai et de mesure - Vue d'ensemble de la série CEI 61000-4

**Ta slovenski standard je istoveten z: EN 61000-4-1:2000**

#### **ICS:**

33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general
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**SIST EN 61000-4-1:2002**

**en**

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EUROPEAN STANDARD

**EN 61000-4-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2000

ICS 33.100.01;33.100.20

Supersedes EN 61000-4-1:1994

English version

**Electromagnetic compatibility (EMC)**  
**Part 4-1: Testing and measurement techniques -**  
**Overview of IEC 61000-4 series**  
**(IEC 61000-4-1:2000)**

Compatibilité électromagnétique (CEM)  
Partie 4-1: Techniques d'essai et de  
mesure -  
Vue d'ensemble de la série CEI 61000-4  
(CEI 61000-4-1:2000)

Elektromagnetische Verträglichkeit (EMV)  
Teil 4-1: Prüf- und Messverfahren -  
Übersicht über die Reihe IEC 61000-4  
(IEC 61000-4-1:2000)

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This European Standard was approved by CENELEC on 2000-08-01. 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 77/225/FDIS, future edition 2 of IEC 61000-4-1, prepared by IEC TC 77, Electromagnetic compatibility, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61000-4-1 on 2000-08-01.

This European Standard supersedes EN 61000-4-1:1994.

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) 2001-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-08-01

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

**iTeh STANDARD PREVIEW**

The text of the International Standard IEC 61000-4-1:2000 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 60050-161	1990	International Electrotechnical Vocabulary (IEV) - Chapter 161: Electromagnetic compatibility	-	-
IEC 61000-1-1	1992	Electromagnetic compatibility (EMC) Part 1: General -- Section 1: Application and interpretation of fundamental definitions and terms	-	-
IEC 61000-2-5	1995	Part 2-5: Environment - Classification of electromagnetic environments - Basic EMC publication	-	-
IEC 61000-3-2	1995	Part 3-2: Limits - Limits for harmonic current emissions (equipment input current up to and including 16 A per phase)	EN 61000-3-2 + corr. July	1995 1997
A1	1997		A1	1998
A2	1998		A2 A14	1998 2000
IEC 61000-3-3	1994	Part 3-3: Limits - Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to 16 A	EN 61000-3-3 + corr. July	1995 1997
IEC 61000-3-4	1998	Part 3-4: Limits - Limitation of emission of harmonic currents in low-voltage power supply systems for equipment with rated current greater than 16 A	-	-
IEC 61000-3-5	1994	Part 3: Limits -- Section 5: Limitation of voltage fluctuations and flicker in low-voltage power supply systems for equipment with rated current greater than 16 A	-	-
IEC 61000-4-2	1995	Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	1995
A1	1998		A1	1998

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-3 (mod)	1995	Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	1996
A1	1998		A1	1998
IEC 61000-4-4	1995	Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	1995
IEC 61000-4-5	1995	Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	1995
IEC 61000-4-6	1996	Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	1996
IEC 61000-4-7	1991	Part 4-7: Testing and measurement techniques - General guide on harmonics and interharmonics measurements and instrumentation, for power supply systems and equipment connected thereto	EN 61000-4-7	1993
IEC 61000-4-8	1993	Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	1993
IEC 61000-4-9	1993	Part 4-9: Testing and measurement techniques - Pulse magnetic field immunity test	EN 61000-4-9	1993
IEC 61000-4-10	1993	Part 4-10: Testing and measurement techniques - Damped oscillatory magnetic field immunity test	EN 61000-4-10	1993
IEC 61000-4-11	1994	Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	1994
IEC 61000-4-12	1995	Part 4-12: Testing and measurement techniques - Oscillatory waves immunity test - Basic EMC publication	EN 61000-4-12	1995
IEC 61000-4-14	1999	Part 4-14: Testing and measurement techniques - Voltage fluctuation immunity test	EN 61000-4-14	1999
IEC 61000-4-15	1997	Part 4: Testing and measurement techniques Section 15: Flickermeter -functional and design specifications	EN 61000-4-15	1998
IEC 61000-4-17	1999	Part 4-17: Testing and measurement techniques - Ripple on d.c. input power port immunity test	EN 61000-4-17	1999

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-24	1997	Part 4: Testing and measurement techniques Section 24: Test methods for protective devices for HEMP conducted disturbance - Basic EMC publication	EN 61000-4-24	1997
IEC 61000-4-28	1999	Part 4-28: Testing and measurement techniques - Variation of power frequency, immunity test	EN 61000-4-28	2000

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INTERNATIONALE  
INTERNATIONAL  
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**CEI  
IEC**

**61000-4-1**

Deuxième édition  
Second edition  
2000-04

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PUBLICATION FONDAMENTALE EN CEM  
BASIC EMC PUBLICATION

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**Compatibilité électromagnétique (CEM) –**

**Partie 4-1:**

**Techniques d'essai et de mesure –**

**Vue d'ensemble de la série CEI 61000-4**

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**Testing and measurement techniques –  
Overview of IEC 61000-4 series**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

**N**

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

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ELECTROMAGNETIC COMPATIBILITY (EMC) –

Part 4-1: Testing and measurement techniques –  
Overview of IEC 61000-4 series

## 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.
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- 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 61000-4-1 has been prepared by IEC technical committee 77: Electromagnetic compatibility.

This standard forms part 4-1 of IEC 61000. It has the status of a basic EMC publication in accordance with IEC Guide 107.

This second edition cancels and replaces the first edition, published in 1992. This second edition constitutes a technical revision.

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

FDIS	Report on voting
77/225/FDIS	77/229/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

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