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Elektromagnetisk kompatibilitet (EMC) – Del 4-14: Mät- och provningsmetoder – Provning av immunitet mot spänningsvariationer

*Electromagnetic compatibility (EMC) –
Part 4-14: Testing and measurement techniques –
Voltage fluctuation immunity test*

Som svensk standard gäller europastandarden EN 61000-4-14:1999. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61000-4-14:1999.

Nationellt förord

Europastandarden EN 61000-4-14:1999

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61000-4-14, First edition, 1999 - Electromagnetic compatibility (EMC) -
Part 4-14: Testing and measurement techniques -
Voltage fluctuation immunity test**

utarbetad inom International Electrotechnical Commission, IEC.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61000-4-14

April 1999

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English version

Electromagnetic compatibility (EMC)
Part 4-14: Testing and measurement techniques
Voltage fluctuation immunity test
(IEC 61000-4-14:1999)

Compatibilité électromagnétique (CEM)
Partie 4-14: Techniques d'essai et de
mesure - Essai d'immunité aux
fluctuations de tension
(CEI 61000-4-14:1999)

Elektromagnetische
Verträglichkeit (EMV)
Teil 4-14: Prüf- und Meßverfahren -
Prüfung der Störfestigkeit gegen
Spannungsschwankungen
(IEC 61000-4-14:1999)

This European Standard was approved by CENELEC on 1999-04-01. 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 77A/263/FDIS, future edition 1 of IEC 61000-4-14, prepared by SC 77A, Low-frequency phenomena, of IEC TC 77, Electromagnetic compatibility, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61000-4-14 on 1999-04-01.

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) 2000-01-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2002-04-01

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 A informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61000-4-14:1999 was approved by CENELEC as a European Standard without any modification.

In the official version, Bibliography, the following notes have to be added for the standards indicated:

- IEC 61000-2-2 NOTE: Harmonized as ENV 61000-2-2:1993 (modified).
 - IEC 61000-4-1 NOTE: Harmonized as EN 61000-4-1:1994 (not modified).
 - IEC 61000-4-11 NOTE: Harmonized as EN 61000-4-11:1994 (not modified).
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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 60068-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1 ¹⁾	1994
IEC 61000-2-4 + corr. August	1994 1994	Electromagnetic compatibility (EMC) Part 2: Environment Section 4: Compatibility levels in industrial plants for low-frequency conducted disturbances	EN 61000-2-4	1994

1) EN 60068-1 includes the corrigendum October 1988 and A1:1992 to IEC 60068-1.

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ELECTROMAGNETIC COMPATIBILITY (EMC) –

Part 4-14: Testing and measurement techniques – Voltage fluctuation immunity test

1 Scope

This part of IEC 61000 is a basic electromagnetic compatibility (EMC) publication. It considers immunity tests for electrical and/or electronic equipment in their electromagnetic environment. Only conducted phenomena are considered, including immunity tests for equipment connected to public and industrial power supply networks.

This part aims to establish a reference for evaluating the immunity of electric and electronic equipment when subjected to positive and negative low amplitude voltage fluctuations.

The voltage fluctuations considered by this standard do not include flicker, which is a physiological phenomenon due to lighting luminance fluctuations.

This standard applies to electrical and/or electronic equipment that have a rated input current up to 16 A per phase. It does not apply to electrical and/or electronic equipment connected to d.c. or a.c. 400 Hz distribution networks. Tests concerning these networks will be covered by other IEC standards.

The immunity test levels required for a specific electromagnetic environment, together with the performance criteria, are indicated in the product, product family or generic standards as applicable. However, most product groups do not have a history of being susceptible to voltage fluctuations. Consequently, testing for these phenomena is often not required.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61000. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61000 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050(161):1990, *International Electrotechnical Vocabulary (IEV) – Chapter 161: Electromagnetic compatibility*

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*

IEC 61000-2-4:1994, *Electromagnetic compatibility (EMC) – Part 2: Environment – Section 4: Compatibility levels in industrial plants for low-frequency conducted disturbances*