

SLOVENSKI STANDARD
SIST EN 61000-4-15:2001/A1:2003
01-december-2003

**Elektromagnetna združljivost (EMC) - 4-15. del: Preskusne in merilne tehnike -
Flikermeter - Specifikacije funkcij in zasnove - Dopolnilo A1 (IEC 61000-4-
15:1997/A1:2003)**

Electromagnetic compatibility (EMC) - Part 4-15: Testing and measurement techniques -
Flickermeter - Functional and design specifications

Elektromagnetische Verträglichkeit (EMV) - Teil 4-15: Prüf- und Messverfahren -
Flickermeter - Funktionsbeschreibung und Auslegungsspezifikation
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Compatibilité électromagnétique (CEM) - Partie 4-15: Techniques d'essai et de mesure -
Flickermètre - Spécifications fonctionnelles et de conception

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Ta slovenski standard je istoveten z: EN 61000-4-15:1998/A1:2003

ICS:

33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general
33.100.20	Imunost	Immunity

SIST EN 61000-4-15:2001/A1:2003 **en**

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EUROPEAN STANDARD

EN 61000-4-15/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2003

ICS 33.100.20

English version

Electromagnetic compatibility (EMC)
Part 4-15: Testing and measurement techniques -
Flickermeter -
Functional and design specifications
(IEC 61000-4-15:1997/A1:2003)

Compatibilité électromagnétique (CEM)
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Flickermètre -
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(CEI 61000-4-15:1997/A1:2003)

Elektromagnetische Verträglichkeit (EMV)
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This amendment A1 modifies the European Standard EN 61000-4-15:1998; it was approved by CENELEC on 2003-03-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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/389/FDIS, future amendment 1 to IEC 61000-4-15:1997, 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 amendment A1 to EN 61000-4-15:1998 on 2003-03-01.

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) 2003-12-01
- latest date by which the national standards conflicting
with the amendment have to be withdrawn (dow) 2006-03-01

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.

Endorsement notice

The text of amendment 1:2003 to the International Standard IEC 61000-4-15:1997 was approved by CENELEC as an amendment to the European Standard without any modification.

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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>
Delete:				
IEC 61000-3-3	1994	Electromagnetic compatibility (EMC) Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection	EN 61000-3-3 + corr. July	1995 1997

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

61000-4-15

1997

AMENDEMENT 1
AMENDMENT 1
2003-01

PUBLICATION FONDAMENTALE EN CEM
BASIC EMC PUBLICATION

Amendement 1

Compatibilité électromagnétique (CEM) –

Partie 4-15:

**Techniques d'essai et de mesure –
Flickermètre – Spécifications fonctionnelles
et de conception**

[SIST EN 61000-4-15:2001/A1:2003](https://standards.iteh.ai/catalog/standards/sist/6271ed5c-7a25-4413-9634-0074559c1010/sist-en-61000-4-15-2001-a1-2003)

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Amendment 1

Electromagnetic compatibility (EMC) –

Part 4-15:

**Testing and measurement techniques –
Flickermeter – Functional and design
specifications**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
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CODE PRIX
PRICE CODE

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For price, see current catalogue*

FOREWORD

This amendment has been prepared by subcommittee 77A: Low-frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility.

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

FDIS	Report on voting
77A/389/FDIS	77A/399/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 amendments will remain unchanged until 2006. At this date, the publication will be

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

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Replace the title of Figure 1 and add the title of Figure B.1 as follows:

Figure 1 – Functional diagram of IEC flickermeter

Figure B.1 – Rectangular voltage change $\Delta V/V = 40\%$, 8,8 Hz, 17,6 changes/second

Add, after the figures, the following table titles:

Table 1 – Normalized flickermeter response for sinusoidal voltage fluctuations

Table 2 – Normalized flickermeter response for rectangular voltage fluctuations

Table 3 – Ranges of rated input voltage

Table 4 – Relationship between the range selector values and sensation levels

Table 5 – Test specifications for flickermeter classifier

Table 6 – Insulation tests for input and power supply connection

Table 7 – Immunity assessment tests to electromagnetic interference

Table 8 – Indicative values for the parameters of lamps

Add, after the title of Annex A, the following new elements:

Annex B – Meaning of $\Delta V/V$ and number of voltage changes

Bibliography

Page 9

1 Scope and object

Replace the second paragraph by the following:

This section is based partly on work by the “Disturbances” Working Group of the International Union for Electroheat (UIE), partly on work of the IEEE, and partly on work within IEC itself. The flickermeter specifications in this section relate only to measurements of 230 V, 50 Hz inputs and 120 V, 60 Hz inputs; specifications for other voltages and other frequencies are under consideration.

2 Normative references

Delete, from the existing list, the following standard:

IEC 61000-3-3:1994, *Electromagnetic compatibility (EMC) – Part 3: Limits – Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current ≤ 16 A*

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3.2 Block 1 – Input voltage adaptor and calibration checking circuit

Delete the existing note. <https://standards.iteh.ai/catalog/standards/sist/6271ed5c-7a25-4413-9634-6e74359c1616/sist-en-61000-4-15-2001-a1-2003>

3.4 Blocks 3 and 4 – Weighting filters, squaring and smoothing

Change the first sentence of the third paragraph to read as follows:

The second filter is a weighting filter block that simulates the frequency response to sinusoidal voltage fluctuations of a coiled filament gas-filled lamp (60 W – 230 V and/or 60 W – 120 V) combined with the human visual system.

Change the first sentence of the note following the third paragraph to read:

NOTE A reference filament lamp for 100 V systems would have a different frequency response and would require a corresponding adjustment of the weighting filter.

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4.1 Analogue response

Add to the end of the first paragraph the following new sentence:

Tables 1 and 2 give values for 120 V/60 Hz and 230 V /50 Hz systems.