

Svenska Elektriska Kommissionen, SEK

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Elektromagnetisk kompatibilitet (EMC) – Del 3-2: Gränsvärden – Gränser för övertoner förorsakade av apparater med matningsström högst 16 A per fas

*Electromagnetic compatibility (EMC) –
Part 3-2: Limits –
Limits for harmonic currents emissions
(equipment input current up to and 16 A per phase)*

Som svensk standard gäller europastandarden EN 61000-3-2:2006. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61000-3-2:2006.

Nationellt förord

Europastandarden EN 61000-3-2:2006

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61000-3-2, Third edition, 2005 - Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic currents emissions (Equipment input current up to and 16A per phase)**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61000-3-2, utgåva 3, 2005, gäller ej fr o m 2009-02-01.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

Svenska Elektriska Kommissionen, SEK, svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK

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English version

**Electromagnetic compatibility (EMC)
Part 3-2: Limits -
Limits for harmonic current emissions
(equipment input current ≤ 16 A per phase)
(IEC 61000-3-2:2005)**

Compatibilité électromagnétique (CEM)
Partie 3-2: Limites -
Limites pour les émissions
de courant harmonique (courant appelé
par les appareils ≤ 16 A par phase)
(CEI 61000-3-2:2005)

Elektromagnetische Verträglichkeit (EMV)
Teil 3-2: Grenzwerte -
Grenzwerte für Oberschwingungsströme
(Geräte-Eingangsstrom ≤ 16 A je Leiter)
(IEC 61000-3-2:2005)

This European Standard was approved by CENELEC on 2006-02-01. 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, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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/503/FDIS, future edition 3 of IEC 61000-3-2, 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 61000-3-2 on 2006-02-01.

This European Standard supersedes EN 61000-3-2:2000 + A2:2005.

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) 2006-11-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2009-02-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directives 89/336/EEC and 1999/5/EC. See Annex ZZ.

Annexes ZA and ZZ have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61000-3-2:2005 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 60050-131	- ¹⁾	International Electrotechnical Vocabulary (IEV) Chapter 131: Electric and magnetic circuits	-	-
IEC 60050-161	- ¹⁾	Chapter 161: Electromagnetic compatibility	-	-
IEC 60065 (mod)	- ¹⁾	Audio, video and similar electronic apparatus - Safety requirements	EN 60065 + corr. March	2002 ²⁾ 2006
IEC 60107-1	- ¹⁾	Methods of measurement on receivers for television broadcast transmissions Part 1: General considerations - Measurements at radio and video frequencies	EN 60107-1	1997 ²⁾
IEC 60155	- ¹⁾	Glow-starters for fluorescent lamps	EN 60155	1995 ²⁾
IEC 60268-3	- ¹⁾	Sound system equipment Part 3: Amplifiers	EN 60268-3 + corr. January	2000 ²⁾ 2002
IEC 60335-2-2 (mod)	- ¹⁾	Household and similar electrical appliances - Safety Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances	EN 60335-2-2	2003 ²⁾
IEC 60335-2-14 (mod)	- ¹⁾	Part 2-14: Particular requirements for kitchen machines	EN 60335-2-14	2003 ²⁾
IEC 60974-1	- ¹⁾	Arc welding equipment Part 1: Welding power sources	EN 60974-1	2005 ²⁾
IEC 61000-2-2	- ¹⁾	Electromagnetic compatibility (EMC) Part 2: Environment Section 2: Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems	EN 61000-2-2	2002 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC/TS 61000-3-4	- ¹⁾	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 61000-3-12	- ¹⁾	Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and $\leq$ 75 A per phase	EN 61000-3-12	2005 ²⁾
IEC 61000-4-7	- ¹⁾	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	2002 ²⁾
ITU-R Recommendation BT.471-1	- ¹⁾	Nomenclature and description of colour bar signals	-	-

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ELECTROMAGNETIC COMPATIBILITY (EMC) –

Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)

1 Scope

This part of IEC 61000 deals with the limitation of harmonic currents injected into the public supply system.

It specifies limits of harmonic components of the input current which may be produced by equipment tested under specified conditions.

Harmonic components are measured according to Annexes A and B.

This part of IEC 61000 is applicable to electrical and electronic equipment having an input current up to and including 16 A per phase, and intended to be connected to public low-voltage distribution systems.

Arc welding equipment which is not professional equipment, with input current up to and including 16 A per phase, is included in this standard.

Arc welding equipment intended for professional use, as specified in IEC 60974-1, is excluded from this standard and may be subject to installation restrictions as indicated in IEC 61000-3-4 or IEC 61000-3-12.

The tests according to this standard are type tests. Test conditions for particular equipment are given in Annex C.

For systems with nominal voltages less than 220 V (line-to-neutral), the limits have not yet been considered.

NOTE The words apparatus, appliance, device and equipment are used throughout this standard. They have the same meaning for the purpose of this standard.

2 Normative references

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.

IEC 60050(131), *International Electrotechnical Vocabulary (IEV) – Chapter 131: Electric and magnetic circuits*

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

IEC 60065, *Audio, video and similar electronic apparatus – Safety requirements*