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Elektromagnetisk kompatibilitet (EMC) – Fordringar på audio-, video-, och audiovisuell utrustning och på utrustning för ljusstyrning i studior och dylikt för yrkesmässigt bruk – Del 2: Immunitet

*Electromagnetic compatibility –
Product family standard for audio, video, audio-visual and
entertainment lighting control apparatus for professional use –
Part 2: Immunity*

Som svensk standard gäller europastandarden EN 55103-2:2009. Den svenska standarden innehåller den officiella engelska språkversionen av EN 55103-2:2009.

Nationellt förord

Tidigare fastställd svensk standard SS-EN 55103-2, utgåva 1, 1997, gäller ej fr o m 2012-07-01.

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

SEK Svensk Elstandard 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.

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English version

**Electromagnetic compatibility -
Product family standard for audio, video, audio-visual
and entertainment lighting control apparatus for professional use -
Part 2: Immunity**

Compatibilité électromagnétique -
Norme de famille de produits
pour les appareils à usage professionnel
audio, vidéo, audiovisuels et de
commande de lumière pour spectacles -
Partie 2: Immunité

Elektromagnetische Verträglichkeit -
Produktfamilienorm für Audio-, Video-
und audiovisuelle Einrichtungen sowie
für Studio-Lichtsteuereinrichtungen
für professionellen Einsatz -
Teil 2: Störfestigkeit

This European Standard was approved by CENELEC on 2009-07-01. 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, Bulgaria, 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: Avenue Marnix 17, B - 1000 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 210, Electromagnetic compatibility (EMC).

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 55103-2 on 2009-07-01.

This European Standard supersedes EN 55103-2:1996.

The following dates were fixed proposed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2010-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-07-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers protection requirements of EC Directive 2004/108/EC. See Annex ZZ.

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1 Scope

This European Standard for EMC immunity requirements applies to professional audio, video, audio-visual and entertainment lighting control apparatus as defined in 3.6 intended for use in the environments described in Clause 4. This includes the digital apparatus defined in 3.5 and sub-assemblies, see 7.4.

Disturbances in the frequency range 0 Hz to 400 GHz are covered, but requirements are not established over the whole of that range.

NOTE 1 In Annex C, information is included on infra-red radiation in the wavelength range 0,7 µm to 1,6 µm.

The objective of this standard is to define the immunity test requirements, test signals, performance criteria and test methods for apparatus defined in the scope, in relation to electromagnetic immunity to continuous and transient conducted and radiated electromagnetic disturbances including electrostatic discharges. These test requirements represent essential electromagnetic compatibility requirements.

Fault conditions of source or victim apparatus are not taken into account.

Apparatus as defined in 3.4, 3.5 and 3.6 may be operated with any source of power.

NOTE 2 Sources of power may include, for example: the public low-voltage supply; private supplies with similar characteristics; a d.c. source provided specifically for the apparatus; batteries internal to the apparatus; stand-by generators. Some standards may not apply to private low-voltage supplies.

NOTE 3 If it is intended to use a hand-held transmitter in proximity, additional mitigation measures may have to be employed to increase the electromagnetic immunity further, beyond the specified limits.

This European Standard does not apply to

- consumer apparatus,
- apparatus specifically designed for security systems,
- apparatus designed to radiate electromagnetic energy for radio communications purposes.

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.

EN 55020	2007	<i>Sound and television broadcast receivers and associated equipment - Immunity characteristics - Limits and methods of measurement</i> (CISPR 20:2006)
EN 61000-3-2	2006	<i>Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)</i> (IEC 61000-3-2:2005)
EN 61000-4-2	1995	<i>Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test</i> (IEC 61000-4-2:1995 + A1:1998 + A2:2000)
+ A1	1998	
+ A2	2001	
EN 61000-4-3	2006	<i>Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test</i> (IEC 61000-4-3:2006 + A1:2007)
+ A1	2008	
EN 61000-4-4	2004	<i>Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test</i> (IEC 61000-4-4:2004)