SLOVENSKI STANDARD
SIST EN IEC 61000-3-2:2019/A1:2021

01-junij-2021

Elektromagnetna združljivost (EMC) - 3-2. del: Mejne vrednosti - Mejne vrednosti za oddajanje harmonskih tokov (vhodni tok opreme do vključno 16 A na fazo) - Dopolnilo A1

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

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

Ta slovenski standard je istoveten z: **EN IEC 61000-3-2:2019/A1:2021**

ICS:

33.100.10 Emisija Emission

SIST EN IEC 61000-3-2:2019/A1:2021 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61000-3-2:2019/A1

April 2021

ICS 33.100.10

English Version

Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase) (IEC 61000-3-2:2018/A1:2020)

Compatibilité électromagnétique (CEM) - Partie 3-2: Limites - Limites pour les émissions de courant harmonique (courant appelé par les appareils ≤ 16 A par phase) (IEC 61000-3-2:2018/A1:2020)

Elektromagnetische Verträglichkeit (EMV) - Teil 3-2: Grenzwerte - Grenzwerte für Oberschwingungsströme (Geräte-Eingangsstrom ≤ 16 A je Leiter) (IEC 61000-3-2:2018/A1:2020)

This amendment A1 modifies the European Standard EN IEC 61000-3-2:2019; it was approved by CENELEC on 2020-08-18. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 77A/1077/FDIS, future IEC 61000-3-2/A1, prepared by SC 77A "EMC - Low frequency phenomena" of IEC/TC 77 "Electromagnetic compatibility" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61000-3-2:2019/A1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-10-09
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-04-09

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

Endorsement notice

The text of the International Standard IEC 61000-3-2:2018/A1:2020 was approved by CENELEC as a European Standard without any modification.

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

IEC 61000-2-2	NOTE	Harmonized as EN 61000-2-2
IEC 61000-3-12	NOTE	Harmonized as EN 61000-3-12

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Replace Annex ZA of EN IEC 61000-3-2:2019 by the following one:

Publication	Year	Title	EN/HD	Year
IEC 60050-161	1990	International Electrotechnical Vocabulary. Chapter 161: Electromagnetic compatibility	-	-
IEC 60107-1	1997	Methods of measurement on receivers for television broadcast transmissions - Part 1: General considerations - Measurements at radio and video frequencies	EN 60107-1	1997
IEC 60155	1993	Glow-starters for fluorescent lamps	EN 60155	1995
IEC 60268-1	1985	Sound system equipment. Part 1: General	HD 483.1 S2	1989
+ A1	1988		-	-
+ A2	1988		-	-
IEC 60268-3	2018	Sound system equipment - Part 3: Amplifiers	EN IEC 60268-3	2018
IEC 60335-2-2	2019		-	-
IEC 60335-2-14 (mod)	2016	Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines	EN 60335-2-14	2017
IEC 60335-2-24	2010	Household and similar electrical appliances - Safety - Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers	EN 60335-2-24	2010
+ A1 (mod)	2012		+ A1	2019
+ A2	2017		+ A2	2019
-	-		+ A11	2020
IEC 60335-2-79	2016	Household and similar electrical appliances - Safety - Part 2-79: Particular requirements for high pressure cleaners and steam cleaners	-	-

Publication	Year	Title	EN/HD	Year
IEC 60598-2-17	2012	Luminaires - Part 2-17: Particular requirements - Luminaires for stage lighting, television and film studios (outdoor and indoor)	EN IEC 60598-2-17	2012
+ A1	2015		-	-
IEC 60974-1	2017	Arc welding equipment - Part 1: Welding power sources	EN IEC 60974-1	2018
IEC 61000-4-7	2002	Electromagnetic compatibility (EMC) - 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
+ A1	2008		+ A1	2009
IEC 62756-1	2015	Digital load side transmission lighting control (DLT) - Part 1: Basic requirements	EN 62756-1	2015

IEC 61000-3-2

Edition 5.0 2020-07

INTERNATIONAL STANDARD

AMENDMENT 1

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

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 33.100.10

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FOREWORD

This amendment has been prepared by subcommittee 77A: EMC – 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/1077/FDIS	77A/1084/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 this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

INTRODUCTION

Replace, under “Part 2: Environment”, *the first line* “Description levels” *with the following:*

Description of the environment

1 Scope

Replace the fourth paragraph with the following:

Arc welding equipment, which is not professional equipment, with a rated input current up to and including 16 A per phase, is included in the scope of this document. All other arc welding equipment is excluded from the scope of this document; however, the harmonics emission can be evaluated using IEC 61000-3-12 and relevant installation restrictions.

2 Normative references

Replace the references with the following:

IEC 60050-161:1990, *International Electrotechnical Vocabulary (IEV) – Part 161: Electromagnetic compatibility* (available at www.electropedia.org)

IEC 60107-1:1997, Methods *of measurement on receivers for television broadcast transmissions – Part 1: General considerations – Measurements at radio and video frequencies*

IEC 60155:1993, *Glow-starters for fluorescent lamps*

IEC 60268-1:1985, *Sound system equipment – Part 1: General*
IEC 60268-1:1985/AMD1:1988
IEC 60268-1:1985/AMD2:1988

IEC 60268-3:2018, *Sound system equipment – Part 3: Amplifiers*

IEC 60335-2-2:2019, *Household and similar electrical appliances – Safety – Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances*

IEC 60335-2-14:2016, *Household and similar electrical appliances – Safety – Part 2-14: Particular requirements for kitchen machines*

IEC 60335-2-24:2010, Household *and similar electrical appliances – Safety – Part 2-24: Particular requirements for refrigerating appl iances, ice-cream appliances and ice makers*
IEC 60335-2-24:2010/AMD1:2012
IEC 60335-2-24:2010/AMD2:2017

IEC 60335-2-79:2016, Household *and similar electrical appliances – Safety – Part 2-79: Particular requirements for high pressure cleaners and steam cleaners*

IEC 60598-2-17:2012, *Luminaires – Part 2-17: Particular requirements – Luminaires for stage lighting, television and film studios (outdoor and indoor)*
IEC 60598-2-17:2012/AMD1:2015

IEC 60974-1:2017, *Arc welding equipment – Part 1: Welding power sources*

IEC 61000-4-7:2002, *Electromagnetic compatibility (EMC) – Part 4-7: Testing and measurement techniques – General guide on harmonics and interharmonics measurements and instrumentation, for power supply systems and equipment connected thereto*
IEC 61000-4-7:2002/AMD1:2008

IEC 62756-1:2015, *Digital load side transmission lighting control (DLT) – Part 1: Basic requirements*

3 Terms and definitions

Replace definition 3.2 including Note 1 to entry with the following:

3.2
lamp
light source provided with at least one cap

Note 1 to entry: For products that have the same physical characteristics as lamps for general lighting but that are built to emit optical radiation mainly in the IR or UV spectrum, the term IR lamp or UV lamp is often used.

[SOURCE: IEC 60050-845:2020, 845-27-008, modified – existing notes 2 and 3 have been removed, the term “electric” has been removed from the term and the definition]

Replace definition 3.3 with the following:

3.3
integrated lamp
electric lamp which cannot be dismantled without being permanently damaged, incorporating lighting control gear, and all additional elements necessary for starting and stable operation of the light source, designed for direct connection to the supply voltage

[SOURCE: IEC 60050-845:2020, 845-27-009]

Replace definition 3.4 with the following:

3.4
luminaire
apparatus which distributes, filters or transforms the light transmitted from at least one source of optical radiation and which includes, except the sources themselves, all the parts necessary for fixing and protecting the sources (IEV 845-21-032) and, where necessary, circuit auxiliaries together with the means for connecting them to the power supply

[SOURCE: IEC 60050-845: 845-30-001:2020, modified – existing note has been removed]

Replace definition 3.6 with the following:

3.6
void

Replace definition 3.7 with the following and delete Note 1 to entry:

3.7
active input power
mean value of the instantaneous power, taken over 10 (50 Hz systems) or 12 (60 Hz systems) fundamental periods and measured in accordance with IEC 61000-4-7:2002 and IEC 61000-4-7:2002/AMD1:2008 at the input supply terminals of the equipment under test

3.12
partial odd harmonic current

Add the following new note to entry:

Note 1 to entry: Details for the calculation of the *POHC* are given in Annex C.

Renumber the existing Note 1 to entry as Note 2 to entry.

Replace definition 3.13 including note 1 to entry with the following:

3.13
lighting equipment
equipment with a primary function of generating and/or regulating and/or distributing the radiation emitted by a light source

Note 1 to entry: See also 5.2.

Replace definition 3.19 including all notes to entry with the following:

3.19
lighting control gear
unit inserted between the power supply and at least one light source, which serves to supply the light source(s) with the voltage and/or current required for its (their) intended operation, and which can consist of one or more separate components.

Note 1 to entry: The lighting control gear can include means for igniting, dimming, correcting the power factor and suppressing radio interference, and further control functions.

Note 2 to entry: The lighting control gear can be partly or totally integrated in the light source.

Note 3 to entry: For the purposes of this document, independent phase control dimmers as defined in 3.23 and 3.24 are not considered to be lighting control gear.

Replace definition 3.20 with the following.

3.20
digital load side transmission lighting control device
DLT control device
device to control lighting parameters of electronic lighting equipment, such as light level and light colour, using data transmission over its load side mains wiring in accordance with IEC 62756-1:2015

Note 1 to entry: A DLT control device is wired like a phase control dimmer, but does not directly make the supply power delivered to the connected dedicated lighting equipment vary. It transmits digital signals over the power cable on the load side to the dedicated lighting equipment, which contains means for receiving and interpreting control signals as well as built-in means for dimming, colour variation and other operating features.

Note 2 to entry: This note applies to the French language only.

Replace definition 3.21 with the following:

3.21
dimmer
device for varying the luminous flux from light sources

[SOURCE: IEC 60050-845: 845-28-063:2020, modified – the existing note has been removed]

Replace definition 3.26 with the following:

3.26
professional luminaire for stage lighting and studios
luminaire (outdoor or indoor) for stage lighting or for television, film or photographic studios within the scope of IEC 60598-2-17:2012 and IEC 60598-2-17:2012/AMD1:2015 and which is professional equipment

Add the following new terms:

3.27
light source
surface or object emitting light

[SOURCE: IEC 60050-845:2020, 845-27-001, modified – the existing notes have been removed]

3.28
instructions for use
information that is provided by manufacturers or distributors for users of the product

3.29
external power supply
EPS
equipment which converts power supplied by the mains into power at a different voltage, which has its own physical enclosure, and which is intended for use with separate equipment that constitutes the load

Note 1 to entry: The output voltage of the EPS can be either AC or DC.

Note 2 to entry: The output of the EPS can be either detachable from, or permanently connected to, the separate equipment being powered.

Note 3 to entry: See also 5.3.