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**Elektromagnetna združljivost (EMC) - 3-2. del: Mejne vrednosti - Mejne vrednosti za oddajanje harmonskih tokov (vhodni tok opreme do vključno 16 A na fazo) - Dopolnilo A2**

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

Elektromagnetische Verträglichkeit (EMV) - Teil 3-2: Grenzwerte – Grenzwerte für Oberschwingungsströme (Geräte-Eingangsstrom  $\leq 16$  A je Leiter)

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

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<https://standards.iteh.ai/standards/SIST/61000-3-2-2019-a2-2025>

Ta slovenski standard je istoveten z: **EN IEC 61000-3-2:2019/A2:2024**

**ICS:**

33.100.10      Emisija      Emission

**SIST EN IEC 61000-3-2:2019/A2:2025**      en



EUROPEAN STANDARD

EN IEC 61000-3-2:2019/A2

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2024

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/AMD2:2024)

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/AMD2:2024)

Elektromagnetische Verträglichkeit (EMV) - Teil 3-2:  
Grenzwerte - Grenzwerte für Oberschwingungsströme  
(Geräte-Eingangsstrom < 16 A je Leiter)  
(IEC 61000-3-2:2018/AMD2:2024)

This amendment A2 modifies the European Standard EN IEC 61000-3-2:2019; it was approved by CENELEC on 2024-04-08. 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

## EN IEC 61000-3-2:2019/A2:2024 (E)

### European foreword

The text of document 77A/1161/CDV, future IEC 61000-3-2/AMD2, 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/A2:2024.

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) 2025-01-08
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2027-04-08

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 standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

### Endorsement notice

The text of the International Standard IEC 61000-3-2:2018/AMD2:2024 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 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.cencenelec.eu](http://www.cencenelec.eu).

The Annex ZA of EN IEC 61000-3-2:2019 applies with the following changes:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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*Replace the references IEC 60335-2-14:2016, as modified by Amendment 1, IEC 60335-2-24:2010, as modified by Amendment 1, and IEC 60335-2-79:2016, as modified by Amendment 1, with the following:*

IEC 60335-2-14	2016	Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines	EN IEC 60335-2-14	2023
+ A1	2019		A1	2023
-	-		A11	2023
IEC 60335-2-24	2020	Household and similar electrical appliances - Safety - Part 2-24: Particular requirements for refrigerating appliances, ice cream appliances and ice makers	EN IEC 60335-2-24	2022
-	-		A11	2022
IEC 60335-2-79	2021	Household and similar electrical appliances - Safety - Part 2-79: Particular requirements for high pressure cleaners and steam cleaners		-

*Replace IEC 60598-2-17:2012, as modified by Amendment 1, with the following:*

IEC 60598-2-17	2017	Luminaires - Part 2-17: Particular requirements - Luminaires for stage lighting, television and film studies (outdoor and indoor)	EN IEC 60598-2-17	2018
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**EN IEC 61000-3-2:2019/A2:2024 (E)**

*Replace IEC 60974-1:2017, as modified by Amendment 1, with the following:*

IEC 60974-1	2021	Arc welding equipment - Part 1: Welding power sources	EN IEC 60974-1	2022
-	-		+ A11	2022
-	-		+ A12	2023

*Add the following new reference:*

IEC Guide 115	2023	Application of uncertainty of measurement - to conformity assessment activities in the electrotechnical sector	-	-
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<https://standards.itih.ai/catalog/standards/sist/fe349b7f-0fa8-4e90-9a8a-c39698f07bfd/sist-en-iec-61000-3-2-2019-a2-2025>



IEC 61000-3-2

Edition 5.0 2024-03

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



AMENDMENT 2  
AMENDEMENT 2

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

**Compatibilité électromagnétique (CEM) –  
Partie 3-2 : Limites – Limites pour les émissions de courant harmonique  
(courant appelé par les appareils  $\leq 16$  A par phase)**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROMAGNETIC COMPATIBILITY (EMC) –****Part 3-2: Limits – Limits for harmonic current emissions  
(equipment input current  $\leq 16$  A per phase)****AMENDMENT 2****FOREWORD**

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Amendment 2 to IEC 61000-3-2:2018 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:

Draft	Report on voting
77A/1161/CDV	77A/1181/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.



The language used for the development of this Amendment is English

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications/](http://www.iec.ch/publications/).

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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## INTRODUCTION to Amendment 2

Amendment 2 to IEC 61000-3-2 Ed. 5.1 (= IEC 61000-3-2:2018 plus IEC 61000-3-2/AMD1:2021) is based on 77A/1098/Q, 77A/1106/DISH, 77A/1123A/RQ, 77A/1149/CD, 77A/1150/CD, 77A/1151/CD, 77A/1152/CD, the observations to these CD's and discussions in SC77A / WG1 during the meetings October 2021, May 2022 and November 2022.

At CD stage the amendment has been split into 4 different fragments:

Fragment 1	Lighting equipment
Fragment 2	Test conditions
Fragment 3	Repeatability and measurement uncertainty
Fragment 4	Miscellaneous

As the number of comments on the 4 different CDs was not very high, SC77A WG1 during its meeting November 2022 in San Diego decided to combine the 4 fragments already at CDV stage.

This amendment contains the following main changes in comparison with IEC 61000-3-2:2018 and IEC 61000-3-2:2018/AMD1:2020:

- Inclusion of Interpretation Sheet IEC 61000-3-2:2018/AMD1:2020/ISH1:2021
- New terms and definitions reflecting the actual luminaires on the market
- Adapted test conditions for actual luminaires on the market
- Consolidate the test conditions for video-cassette recorders
- Revision of test conditions for washing machines
- Clarification of references in clause B.17
- Adding IEC Guide 115 to the normative references
- Better specification for repeatability
- New specification for measurement uncertainty and decision rule where in comparison with 77A/1161/CDV the notes in 8.2.1 have been updated to refer to the newest version of IEC Guide 115
- Adding IEC TR 61000-1-6 to the bibliography
- New definition for an independent function
- New definitions for symmetrical control, asymmetrical control and phase control
- Clarification that special test conditions in Annex B have precedence over the general test conditions in clause 6.3.1
- Clarification for the calculation of THC, THD or POHC (The disregarding of currents less than 0,6 % of input current or less than 5 mA applies only to individual harmonics.)
- Clarification for the application of class D limits
- Clarification for the requirements on the test voltage in A.2, bullet d)
- Addition of an informative Annex D "Symmetry of mains current waveforms"

[SIST EN IEC 61000-3-2:2019/A2:2025](https://standards.iteh.ai/catalog/standards/sist/fe349b7f-0fa8-4e90-9a8a-c39698f07bfd/sist-en-iec-61000-3-2-2019-a2-2025)

<https://standards.iteh.ai/catalog/standards/sist/fe349b7f-0fa8-4e90-9a8a-c39698f07bfd/sist-en-iec-61000-3-2-2019-a2-2025>

## 1 Scope

*Delete the fifth paragraph.*

*Replace the last paragraph with the following:*

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

## 2 Normative references

*Replace IEC 60335-2-14:2016, as modified by Amendment 1, IEC 60335-2-24:2010, as modified by Amendment 1, and IEC 60335-2-79:2016, as modified by Amendment 1, with the following:*

IEC 60335-2-14:2016, *Household and similar electrical appliances – Safety – Part 2-14: Particular requirements for kitchen machines*  
IEC 60335-2-14:2016/AMD1:2019