ELEKTROMAGNETILINE ÜHILDUVUS. OSA 6-4: ERIALASED PÕHISTANDARDID. TÖÖSTUSKESKKONDADE KIIRGUSLIKE HÄIRINGUTE STANDARD

Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments (IEC 61000-6-4:2018)



### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 61000-6-4:2019 sisaldab Euroopa standardi EN IEC 61000-6-4:2019 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 61000-6-4:2019 consists of the English text of the European standard EN IEC 61000-6-4:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 20.09.2019.	Date of Availability of the European standard is 20.09.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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### ICS 33.100.10

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### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### EN IEC 61000-6-4

September 2019

ICS 33.100.10

Supersedes EN 61000-6-4:2007

#### **English Version**

# Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments (IEC 61000-6-4:2018)

Compatibilité électromagnétique (CEM) - Partie 6-4: Normes génériques - Norme sur l'émission pour les environnements industriels (IEC 61000-6-4:2018) Elektromagnetische Verträglichkeit (EMV) - Teil 6-4: Fachgrundnormen - Störaussendung für Industriebereiche (IEC 61000-6-4:2018)

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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 CIS/H/339A/FDIS, future edition 3 of IEC 61000-6-4, prepared by IEC/SC H of CISPR "Limits for the protection of radio services" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61000-6-4:2019.

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)	2020-03-20
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2022-09-20

This document supersedes EN 61000-6-4:2007 and EN 61000-6-4:2007/A1:2011.

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, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

#### **Endorsement notice**

The text of the International Standard IEC 61000-6-4:2018 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 61000-6-1	NOTE	Harmonized as EN 61000-6-1.
IEC 61000-6-3	NOTE	Harmonized as EN 61000-6-3.
IEC 61158 (series)	NOTE	Harmonized as EN 61158 (series).



# 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,

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60050-161	1990¹	International Electrotechnical Vocabulary (IEV) Chapter 161: Electromagnetic compatibility	-	-
IEC 61000-4-20	2010	Electromagnetic compatibility (EMC) Par 4-20: Testing and measurement techniques - Emission and immunity testing in transverse electromagnetic (TEM) waveguides	tEN 61000-4-20	2010
CISPR 11 (mod)	2015	Industrial, scientific and medical equipmen - Radio-frequency disturbance characteristics - Limits and methods of measurement	tEN 55011	2016
+ A1	2016		+ A1	2017
CISPR 14-1	2016	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	EN 55014-1	2017
CISPR 16-1-1	2015	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	- -	-
CISPR 16-1-2	2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-2: Radio disturbance and immunity measuring apparatus - Coupling devices for conducted disturbance measurements	EN 55016-1-2	2014

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<sup>&</sup>lt;sup>1</sup> Dated as no equivalent European Standard exists.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
CISPR 16-1-4	2010	Specification for radio disturbance and immunity measuring apparatus and methods Part 1-4: Radio disturbance an immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements		2010
+ A1	2012		+ A1	2012
+ A2	2017		+ A2	2017
CISPR 16-1-6	2014	Specification for radio disturbance and immunity measuring apparatus and methods Part 1-6: Radio disturbance an immunity measuring apparatus - EMC-antenna calibration	EN 55016-1-6 d	2015
+ A1	2017		+ A1	2017
CISPR 16-2-1	2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements	EN 55016-2-1	2014
+ A1	2017		+ A1	2017
CISPR 16-2-3	2016	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	EN 55016-2-3	2017
CISPR 16-4-2	2011	Specification for radio disturbance and immunity measuring apparatus and methods Part 4-2: Uncertainties, statistics and limit modelling - Measurement instrumentation uncertainty	EN 55016-4-2	2011
+ A1	2014		+ A1	2014
CISPR 32	2015	Electromagnetic compatibility of multimedi equipment - Emission requirements	aEN 55032	2015
			9,000	7

### Annex ZZ (informative)

# Relationship between this European standard and the essential requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under the European Commission standardisation request C(2016) 7641 final of 30.11.2016<sup>2</sup>, ('M/552'), as regards harmonised standards in support of Directive 2014/30/EU relating to electromagnetic compatibility, to provide one voluntary means of conforming to essential requirements of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZZ.1 – Correspondence between this European standard and the Essential Requirements set out in Directive 2014/30/EU [2014 OJ L96]

Essential requirements of Directive 2014/30/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
Annex I. 1(a) (electromagnetic disturbances)	9 Emission requirements	The limits apply in combination with the relevant measuring method and operating conditions.

WARNING 1: Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2: Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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<sup>&</sup>lt;sup>2</sup> COMMISSION IMPLEMENTING DECISION C(2016) 7641 final of 30.11.2016 on a standardisation request to the European Committee for Standardisation, to the European Committee for Electrotechnical Standardisation and to the European Telecommunications Standards Institute as regards harmonised standards in support of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility.

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### **ELECTROMAGNETIC COMPATIBILITY (EMC) -**

## Part 6-4: Generic standards – Emission standard for industrial environments

#### **FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61000-6-4 has been prepared by CISPR subcommittee H: Limits for the protection of radio services.

This third edition cancels and replaces the second edition published in 2006 and Amendment 1:2010 This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) possible future requirements on DC ports;
- b) possible future radiated polarity specific emission limits within a FAR;
- c) the definition of which average detector is used for emission measurements at frequencies above 1GHz and that results using a peak detector are acceptable for all measurements;
- d) the definition of different EUT test arrangements.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
CIS/H/339A/FDIS	CIS/H/350/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

It forms Part 6-4 of the IEC 61000 series of standards. It has the status of a basic EMC publication in accordance with IEC Guide 107.

A list of all parts in the CISPR 61000 series, published under the general title *Electromagnetic compatibility*, can be found on the IEC website.

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

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

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