



SLOVENSKI STANDARD SIST EN 61000-4-30:2015

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Nadomešča:

SIST EN 61000-4-30:2009

Elektromagnetna združljivost (EMC) - 4-30. del: Preskusne in merilne tehnike - Metode merjenja kakovosti napetosti (IEC 61000-4-30:2015)

Electromagnetic Compatibility (EMC) -- Part 4-30: Testing and measurement techniques - Power quality measurement methods

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Compatibilité Electromagnétique (CEM) -- Partie 4-30 : Techniques d'essai et de mesure - Méthodes de mesure de la qualité de l'alimentation

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ICS:

33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general
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EUROPEAN STANDARD

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Electromagnetic compatibility (EMC) - Part 4-30: Testing and measurement techniques - Power quality measurement methods (IEC 61000-4-30:2015)

Compatibilité Electromagnétique (CEM) - Partie 4-30:
Techniques d'essai et de mesure - Méthodes de mesure de
la qualité de l'alimentation
(IEC 61000-4-30:2015)

Elektromagnetische Verträglichkeit (EMV) - Teil 4-30: Prüf-
und Messverfahren - Verfahren zur Messung der
Spannungsqualität
(IEC 61000-4-30:2015)

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Comité Européen de Normalisation Electrotechnique
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Foreword

The text of document 77A/873/FDIS, future edition 3 of IEC 61000-4-30, 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 61000-4-30:2015.

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) 2015-12-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-03-27

This document supersedes EN 61000-4-30:2009.

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Endorsement notice

The text of the International Standard IEC 61000-4-30:2015 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 60044-1:1996	NOTE	Harmonized as EN 60044-1:1996.
IEC 60044-2:1997	NOTE	Harmonized as EN 60044-2:1997.
IEC 61000-2-2:2002	NOTE	Harmonized as EN 61000-2-2:2002.
IEC 61000-2-12	NOTE	Harmonized as EN 61000-2-12.
IEC 61000-4-19	NOTE	Harmonized as EN 61000-4-19.
IEC 61010 (Series)	NOTE	Harmonized as EN 61010 (Series).
IEC 61010-2-032	NOTE	Harmonized as EN 61010-2-032.
IEC 61869-1	NOTE	Harmonized as EN 61869-1.
IEC 61869-2	NOTE	Harmonized as EN 61869-2.
CISPR 16-1-1	NOTE	Harmonized as EN 55016-1-1.
CISPR 16-1-2	NOTE	Harmonized as EN 55016-1-2.
CISPR 16-2-1	NOTE	Harmonized as EN 55016-2-1.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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> series	<u>Title</u>	<u>EN/HD</u>	<u>Year</u> series
IEC 60050		International Electrotechnical Vocabulary	-	
IEC 61000-2-4	-	Electromagnetic compatibility (EMC) -- Part 2-4: Environment - Compatibility levels in industrial plants for low-frequency conducted disturbances	EN 61000-2-4	-
IEC 61000-3-8	-	Electromagnetic compatibility (EMC) -- Part 3-8: Limits - Signalling on low-voltage electrical installations - Emission levels, frequency bands and electromagnetic disturbance levels	-	-
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 61000-4-15	2010	Electromagnetic compatibility (EMC) -- Part 4-15: Testing and measurement techniques - Flickermeter - Functional and design specifications	EN 61000-4-15	2011
IEC 61180	series	High-voltage test techniques for low-voltage equipment	EN 61180	series
IEC 62586-1	-	Power quality measurement in power supply systems -- Part 1: Power Quality Instruments (PQI)	EN 62586-1	-
IEC 62586-2	-	Power quality measurement in power supply systems -- Part 2: Functional tests and uncertainty requirements	EN 62586-2	-

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PUBLICATION FONDAMENTALE EN CEM

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Part 4-30: Testing and measurement techniques – Power quality measurement
methods

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Partie 4-30: Techniques d'essai et de mesure – Méthodes de mesure de la qualité
de l'alimentation

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROMAGNETIC COMPATIBILITY (EMC) –**Part 4-30: Testing and measurement techniques –
Power quality measurement methods**

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 61000-4-30 has been prepared by subcommittee 77A: EMC – Low- frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility.

This standard forms part 4-30 of IEC 61000. It has the status of a basic EMC publication in accordance with IEC Guide 107.

This third edition cancels and replaces the second edition published in 2008. This edition constitutes a technical revision.

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

- a) the measurement method for current, previously informative, is now normative with some changes;
- b) the measurement method for RVC (rapid voltage change) has been added;

- c) the measurement method for conducted emissions in the 2 kHz to 150 kHz range has been added in informative Annex C;
- d) underdeviation and overdeviation parameters are moved to informative Annex D;
- e) Class A and Class S measurement methods are defined and clarified, while Class B is moved to informative Annex E and considered for future removal;
- f) measurement methods continue in this standard, but responsibility for influence quantities, performance, and test procedures are transferred to IEC 62586-2.

The text of this standard is based on the following documents:

FDIS	Report on voting
77A/873/FDIS	77A/878/RVD

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

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

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

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

- reconfirmed, [SIST EN 61000-4-30:2015](https://standards.iteh.ai/catalog/standards/sist/c68a657a-68f4-44e8-a93f-d1e6ee45a425/sist-en-61000-4-30-2015)
- withdrawn, <https://standards.iteh.ai/catalog/standards/sist/c68a657a-68f4-44e8-a93f-d1e6ee45a425/sist-en-61000-4-30-2015>
- replaced by a revised edition, or
- amended.

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INTRODUCTION

IEC 61000 is published in separate parts according to the following structure:

Part 1: General

General considerations (introduction, fundamental principles)
Definitions, terminology

Part 2: Environment

Description of the environment
Classification of the environment
Compatibility levels

Part 3: Limits

Emission limits
Immunity limits (in so far as they do not fall under the responsibility of the product committees)

Part 4: Testing and measurement techniques

Measurement techniques
Testing techniques

Part 5: Installation and mitigation guidelines

Installation guidelines [SIST EN 61000-4-30:2015](https://standards.iteh.ai/catalog/standards/sist/c68a657a-68f4-44e8-a93f-11e6ce45a425/sist-en-61000-4-30-2015)
Mitigation methods and devices <https://standards.iteh.ai/catalog/standards/sist/c68a657a-68f4-44e8-a93f-11e6ce45a425/sist-en-61000-4-30-2015>

Part 6: Generic standards

Part 9: Miscellaneous

Each part is further subdivided into several parts, published either as International Standards or as Technical Specifications or Technical Reports, some of which have already been published as sections. Others will be published with the part number followed by a dash and completed by a second number identifying the subdivision (example: 61000-6-1).