ICS 33.100.01 SLOVENSKÁ TECHNICKÁ NORMA Marec 2018

STN	**Elektromagnetická kompatibilita (EMC) Časť 2-2: Prostredie Kompatibilné úrovne nízkofrekvenčných rušení šírených vedením a signalizácie vo verejných rozvodných sieťach nízkeho napätia Zmena A1**	**STN EN 61000-2-2/A1** 33 3432

Electromagnetic compatibility (EMC). Part 2-2: Environment. Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/18

STN EN 61000-2-2 z februára 2004 sa bez tejto zmeny A1 môže používať do 1. 8. 2020.

Obsahuje: EN 61000-2-2:2002/A1:2017, IEC 61000-2-2:2002/AMD1:2017

126148

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61000-2-2:2002/A1

October 2017

ICS 33.100.01

English Version

Electromagnetic compatibility (EMC) - Part 2-2: Environment - Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems (IEC 61000-2-2:2002/A1:2017)

Compatibilité électromagnétique (CEM) - Partie 2-2: Environnement - Niveaux de compatibilité pour les perturbations conduites à basse fréquence et la transmission des signaux sur les réseaux publics d'alimentation basse tension (IEC 61000-2-2:2002/A1:2017)

Elektromagnetische Verträglichkeit (EMV) - Teil 2-2: Umgebungsbedingungen - Verträglichkeitspegel für niederfrequente leitungsgeführte Störgrößen und Signalübertragung in öffentlichen Niederspannungsnetzen (IEC 61000-2-2:2002/A1:2017)

This amendment A1 modifies the European Standard EN 61000-2-2:2002; it was approved by CENELEC on 2017-08-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 61000-2-2:2002/A1:2017 E

EN 61000-2-2:2002/A1:2017

European foreword

The text of document 77A/958/FDIS, future IEC 61000-2-2:2002/A1, prepared by SC 77A "Low frequency phenomena" of IEC/TC 77 "Electromagnetic compatibility" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61000-2-2:2002/A1:2017.

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)	2018-05-01
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-08-01

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.

Endorsement notice

The text of the International Standard IEC 61000-2-2:2002/A1:2017 was approved by CENELEC as a European Standard without any modification.

In the Bibliography of EN 61000-2-2:2002, **Replace** the reference to IEC 61000-2-4 as follows:

IEC 61000-2-4	NOTE	Harmonized as EN 61000-2-4.

In the Bibliography EN 61000-2-2:2002, the following note has to be **added** for the standard indicated

IEC 61000-4-19	NOTE	Harmonized as EN 61000-4-19.

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.

Publication	Year	Title	EN/HD	Year
Addition to Annex ZA of EN 61000-2-2:2002:				
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	-	-
CISPR 16-1-1	-	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	EN 55016-1-1	-
CISPR 16-2-1	-	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	-

IEC 61000-2-2

Edition 2.0 2017-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

BASIC EMC PUBLICATION
PUBLICATION FONDAMENTALE EN CEM

AMENDMENT 1
AMENDEMENT 1

Electromagnetic compatibility (EMC) – Part 2-2: Environment – Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems

Compatibilité électromagnétique (CEM) – Partie 2-2: Environnement – Niveaux de compatibilité pour les perturbations conduites à basse fréquence et la transmission des signaux sur les réseaux publics d'alimentation basse tension

IEC 61000-2-2:2002-03/AMD1:2017-06(en-fr)

IEC 61000-2-2

Edition 2.0 2017-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

BASIC EMC PUBLICATION
PUBLICATION FONDAMENTALE EN CEM

AMENDMENT 1
AMENDEMENT 1

Electromagnetic compatibility (EMC) – Part 2-2: Environment – Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems

Compatibilité électromagnétique (CEM) – Partie 2-2: Environnement – Niveaux de compatibilité pour les perturbations conduites à basse fréquence et la transmission des signaux sur les réseaux publics d'alimentation basse tension

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 33.100.01

ISBN 978-2-8322-4431-9

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/958/FDIS	77A/962/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 to Amendment 1

This amendment is related to compatibility levels in the frequency range from 2 kHz to 150 kHz. It contains:

– compatibility levels for signals from mains communicating systems up to 150 kHz;

– compatibility levels for non-intentional emissions between 2 kHz and 30 kHz.

A second amendment is expected soon, containing:

– compatibility levels for non-intentional emissions between 30 kHz and 150 kHz.

1 Scope and object

Replace the existing text with the following new text:

This part of IEC 61000 is concerned with conducted electromagnetic phenomena (disturbances and signals from mains communicating systems) in the frequency range from 0 kHz to 150 kHz. It gives compatibility levels for public low voltage a.c. distribution systems having a nominal voltage up to 420 V, single-phase, or 690 V, three-phase, and a nominal frequency of 50 Hz or 60 Hz.

The compatibility levels specified in this document apply at the point of common coupling. At the power input terminals of equipment receiving its supply from the above systems, the levels of the conducted electromagnetic disturbances can, for the most part, be taken to be the same as the levels at the point of common coupling. In some situations this is not so, particularly in the case of a long line dedicated to the supply of a particular installation, or in

the case of an electromagnetic phenomenon generated or amplified within the installation of which the equipment forms a part.

Compatibility levels are specified for conducted electromagnetic phenomena of the types which can be expected in public low voltage power supply systems, for guidance in the definition of:

– the limits to be set for conducted emissions into public power supply systems (including the planning levels defined in 3.1.5),
– the immunity limits to be set by product committees and others for the equipment exposed to the conducted electromagnetic phenomena present in public power supply systems.

NOTE More information on compatibility levels and other main basic EMC concepts is given in IEC TR 61000-1-1.

The electromagnetic phenomena considered are:

– voltage fluctuations and flicker;
– harmonics up to and including order 40;
– interharmonics up to the 40th harmonic;
– voltage distortion in differential mode at higher frequencies (above the 40th harmonic up to 150 kHz);
– voltage dips and short supply interruptions;
– voltage unbalance;
– transient overvoltages;
– power frequency variation;
– d.c. components;
– signals from mains communicating systems (MCS).

Most of these phenomena are described in IEC TR 61000-2-1. In cases where it is not yet possible to establish compatibility levels, some information is provided in Annex B.

2 Normative references

Add the following new references:

IEC 61000-3-8, *Electromagnetic compatibility (EMC) – Part 3: Limits – Section 8: Signalling on low-voltage electrical installations – Emission levels, frequency bands and electromagnetic disturbance levels*

CISPR 16-1-1, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus*

CISPR 16-2-1, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements*