

### SLOVENSKI STANDARD SIST EN 55016-1-3:2007/A1:2016

01-julij-2016

Specifikacija za merilne naprave in metode za merjenje radijskih motenj in odpornosti - 1-3. del: Merilne naprave za merjenje radijskih motenj in odpornosti -Pomožna oprema - Moč motenj - Dopolnilo A1

Specification for radio disturbance and immunity measuring apparatus and methods -Part 1-3: Radio disturbance and immunity measuring apparatus - Ancillary equipment -Disturbance power

Anforderungen an Geräte und Einrichtungen sowie Festlegung der Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit - Teil 1-3: Geräte und Einrichtungen zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeiter Zusatze/Hilfseinrichtungen - Störleistungsmessung

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Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Partie 1-3: Appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Matériels auxiliaires - Puissance perturbatrice

Ta slovenski standard je istoveten z: EN 55016-1-3:2006/A1:2016

ICS:

17.220.20 Merjenje električnih in Measurement of electrical

magnetnih veličin and magnetic quantities

33.100.20 **Immunity Imunost** 

SIST EN 55016-1-3:2007/A1:2016 en SIST EN 55016-1-3:2007/A1:2016

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May 2016

ICS 33.100.10; 33.100.20

#### **English Version**

Specification for radio disturbance and immunity measuring apparatus and methods -

Part 1-3: Radio disturbance and immunity measuring apparatus Ancillary equipment - Disturbance power
(CISPR 16-1-3:2004/A1:2016)

Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Partie 1-3: Appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Matériels auxiliaires - Puissance perturbatrice

Anforderungen an Geräte und Einrichtungen sowie
Festlegung der Verfahren zur Messung der hochfrequenten
Störaussendung (Funkstörungen) und Störfestigkeit Teil 1-3: Geräte und Einrichtungen zur Messung der
hochfrequenten Störaussendung (Funkstörungen) und
Störfestigkeit - Zusatz-/Hilfseinrichtungen Störleistungsmessung

(CISPR 16-1-3:2004/A1:2016) AND ARD PREVIEW (CISPR 16-1-3:2004/A1:2016)

This amendment A1 modifies the European Standard EN 55016-1-3:2006; it was approved by CENELEC on 2016-05-05. 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. 40 sist-en-55016-1-3-2007-a1-2016

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: Avenue Marnix 17, B-1000 Brussels

#### EN 55016-1-3:2006/A1:2016

#### **European foreword**

The text of document CIS/A/1111/CDV, future CISPR 16-1-3:2004/A1, prepared by SC A "Radio interference measurements and statistical methods" of IEC/TC CISPR "International special committee on radio interference" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 55016-1-3:2006/A1:2016.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by	(dop)	2017-02-05
	publication of an identical national standard or by endorsement		

 latest date by which the national standards conflicting with the document have to be withdrawn

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# iTeh STENdorsement notice VIEW

The text of the International Standard CISPR 16-1-3:2004/A1:2016 was approved by CENELEC as a European Standard without any modification.

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### **CISPR 16-1-3**

Edition 2.0 2016-03

# INTERNATIONAL **STANDARD**

# **NORME** INTERNATIONALE

INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES

# AMENDMENT 1 AMENDEMENT 1 iTeh STANDARD PREVIEW

(standards.iteh.ai)

Specification for radio disturbance and immunity measuring apparatus and SIST EN 55016-1-3:2007/A1:2016 methods -

Part 1-3: Radio disturbance and immunity measuring apparatus – Ancillary equipment - Disturbance power

Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques -Partie 1-3: Appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques – Matériels auxiliaires – Puissance perturbatrice

INTERNATIONAL **ELECTROTECHNICAL COMMISSION** 

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#### **FOREWORD**

– 2 –

This amendment has been prepared by CISPR subcommittee A: Radio-interference measurements and statistical methods, of IEC technical committee CISPR: International special committee on radio interference.

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

CDV	Report on voting
CIS/A/1111/CDV	CIS/A/1138/RVC

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 ANDARD PREVIEW
- amended. (standards.iteh.ai)

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8cbc5e0e5c40/sist-en-55016-1-3-2007-a1-2016

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- 3 -

#### 3.2 Abbreviations

Delete, from the existing list, the abbreviation "RTF" and associated term "Reference transfer factor".

#### 4.3 The absorbing clamp assembly calibration methods and their relations

Replace, in the existing second paragraph, the two occurrences of the word "three" by the word "two".

Replace, in the last sentence of the existing fourth paragraph, the word "three" by the word "two".

Delete the entire item c) (entitled "The reference device method") and all corresponding text, including Equations (9) and (10).

Replace, in the paragraph immediately following the existing item c), the two occurrences of the word "three" by the word "two".

Delete, in the fourth paragraph following the existing item c), the last sentence "Similarly, the reference transfer factor RTF is determined by" and corresponding Equation (12).

Delete the entire paragraph immediately following Equation (12).

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Replace, in the last paragraph of this subclause, the second sentence by the following new sentence: SIST EN 55016-1-3:2007/A1:2016

calculated using Equation (11).

Add, at the end of this subclause, the following new paragraph:

Absorbing clamps with different geometries, different arrangement and material of ferrites, different current probes as well as different housing material do require a separate determination of the JTF. A new determination is also required if a different type of jig is used, e.g. larger geometry.

#### 4.5.3 Requirements for the ACTS

Add, after the first sentence of item e), the following new text:

It is also permissible to use clamp factors provided on a calibration certificate by a calibration laboratory. However, such clamp factors that are used as a reference for an ACTS validation shall be determined only using the original calibration method.

#### 4.6.1 Overview

Delete, in the second paragraph, the phrases "and the reference device calibration method" as well as "and the reference device clamp factor".

- 4 - CISPR 16-1-3:2004/AMD1:2016 © IEC 2016

## Figure 1 – Overview of the absorbing clamp measurement method and the associated calibration and validation procedures

In the figure, delete the entire item d).

### Table 1 – Overview of the characteristics of the three-clamp calibration methods and their relation

In the title, replace the phrase "three-clamp" by the new phrase "two clamp".

In the table, delete the entire third row (the row having the name "The reference device method").

#### Figure 3 - Schematic overview of the clamp calibration methods

Delete Figure 3d.

Delete, from the key in this figure, the symbol "CF<sub>ref</sub>"

In the note, delete "and 3d", and replace the word "three" by the new word "two".

#### iTeh STANDARD PREVIEW

#### B.2 Calibration methods of the absorbing clamp assembly

Replace, in the first sentence of the first paragraph the words "For all three" by the new word "Both". https://standards.iteh.ai/catalog/standards/sist/8b61e0a0-1ff5-4ca7-9b38-8cbc5e0e5c40/sist-en-55016-1-3-2007-a1-2016

#### **B.2.1.1** Calibration set-up and equipment

Replace, in the first sentence of the second dashed item, the phrase "larger than" by the new word "of".

Add, after the second sentence of the third dashed point, the following new sentence:

For practical reasons it is recommended to use a flexible lead under test.

Add, after the dashed list, the following new note:

NOTE A good match with the requirement of 4 mm diameter can be achieved by using the outer screen of a coaxial cable (for example RG-58).

#### **B.2.1.2** Calibration procedure

Add, after the second sentence of the third paragraph, the following new third sentence:

The receiver cable shall be suspended such that it is always spaced at a minimum of 200 mm from the horizontal ground plane throughout the entire calibration process.

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#### **B.2.2.2** Calibration procedure

Add, after the last sentence of the fourth paragraph, the following new sentence:

The receiver cable shall be treated with a SAD. The SAD shall be positioned as shown in Figures B.3 and B.4.

#### B.2.3 The reference device calibration method

Delete this entire subclause.

#### B.2.4 Measurement uncertainty of the absorbing clamp calibration

Add, immediately after the second bulleted list (pertaining to the jig calibration method) the following new note:

NOTE It is assumed that the measurement instrumentation uncertainty of the required correlation process with the original calibration method is sufficiently small such that there is no appreciable contribution to the uncertainty of the jig calibration method.

Delete the entire third dashed list ("The reference device calibration method").

Replace the last paragraph of this subclause by the following new paragraph:

Detailed guidance on the treatment of the instrumentation uncertainty for disturbance power measurements is given in CISPR 16-4-200-1ff5-4ca7-9b38-

8cbc5e0e5c40/sist-en-55016-1-3-2007-a1-2016

Figure B.3 - Side view of the calibration jig

Replace the existing Figure B.3 by the following new figure:

Dimensions in millimetres

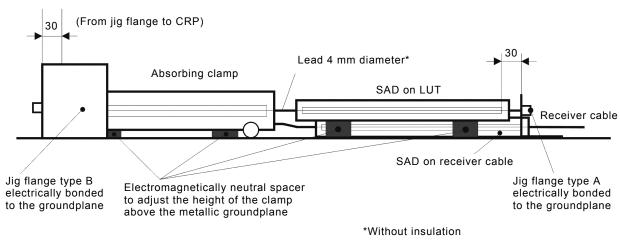


Figure B.3 - Side view of the calibration jig

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