

### SLOVENSKI STANDARD SIST EN 60601-2-45:2011/A1:2015

01-december-2015

Medicinska električna oprema - 2-45. del: Posebne zahteve za osnovno varnost in bistvene lastnosti rentgenske opreme za mamografijo in stereotaktičnih naprav za mamografijo - Dopolnilo A1

Medical electrical equipment -- Part 2-45: Particular requirements for the basic safety and essential performance of mammographic X-ray equipment and mammographic stereotactic devices

iTeh STANDARD PREVIEW
Medizinische elektrische Geräte -- Teil 2-45: Besondere Festlegungen für die Sicherheit einschließlich der wesentlichen Leistungsmerkmale von Röntgen-Mammographiegeräten und mammographischen Stereotaxie-Einrichtungen

https://standards.iteh.ai/catalog/standards/sist/035cdb7d-0ed9-489b-b85e-

Appareils électromédicaux -- Partie 2,45: Exigences particulières pour la sécurité de base et les performances essentielles des appareils de mammographie à rayonnement X et des appareils mammographiques stéréotaxiques

Ta slovenski standard je istoveten z: EN 60601-2-45:2011/A1:2015

### ICS:

11.040.50 Radiografska oprema Radiographic equipment 13.280 Varstvo pred sevanjem Radiation protection

SIST EN 60601-2-45:2011/A1:2015 en SIST EN 60601-2-45:2011/A1:2015

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60601-2-45:2011/A1:2015</u> https://standards.iteh.ai/catalog/standards/sist/035cdb7d-0ed9-489b-b85e-4c4ffa22796a/sist-en-60601-2-45-2011-a1-2015 EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM EN 60601-2-45:2011/A1

September 2015

ICS 11.040.50

### **English Version**

Medical electrical equipment - Part 2-45: Particular requirements for the basic safety and essential performance of mammographic X-ray equipment and mammographic stereotactic devices (IEC 60601-2-45:2011/A1:2015)

Appareils électromédicaux - Partie 2-45: Exigences particulières pour la sécurité de base et les performances essentielles des appareils de mammographie à rayonnement X et des appareils mammographiques stéréotaxiques (IEC 60601-2-45:2011/A1:2015)

Medizinische elektrische Geräte - Teil 2-45: Besondere Festlegungen für die Sicherheit einschließlich der wesentlichen Leistungsmerkmale von Röntgen-Mammographiegeräten und mammographischen Stereotaxie- Einrichtungen (IEC 60601-2-45:2011/A1:2015)

This amendment A1 modifies the European Standard EN 60601-2-45:2011; it was approved by CENELEC on 2015-07-23. 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.

### (standards.iteh.ai)

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.

SIST EN 60601-2-45:2011/A1:2015

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, 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

#### EN 60601-2-45:2011/A1:2015

### **European foreword**

The text of document 62B/917/CDV, future IEC 60601-2-45:2011/A1, prepared by SC 62B "Diagnostic imaging equipment" of IEC/TC 62 "Electrical equipment in medical practice" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60601-2-45:2011/A1:2015.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by	(dop)	2016-04-23
	publication of an identical national standard or by endorsement		

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

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] 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.

For the relationship with EU Directive 93/42/EEC, see informative Annex ZZ, included in EN 60601-2-45:2011.

## iTeh STENDORSEMENT NOTICE VIEW

The text of the International Standard IEC 60601-2-45:2011/A1:2015 was approved by CENELEC as a European Standard without any modification.

SIST EN 60601-2-45:2011/A1:2015

In the Bibliography lofp: EN:60601: i2:45:2011 lowings note: has 9 to 8 be ladded for the standard indicated: 4c4 fia: 22796a/sist-en-60601-2-45-2011-a1-2015

IEC 61223-3-2:2007 NOTE Harmonized as EN 61223-3-2:2008 (not modified).

EN 60601-2-45:2011/A1:2015

### 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:

### Annex ZA of EN 60601-2-45:2011 applies, except as follows:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
Replace the exis following:	ting refe	erences to IEC 60601-1-2:2007 and IE	C 60601-1-3:2008	by the
IEC 60601-1-2	2014 iT	Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard; Electromagnetic disturbances - Requirements and tests	EW 60601-1-2	2015
IEC 60601-1-3 +A1	2008 2013 https://stan	Medical electrical equipment - Part 1-3: General requirements for basic safety and essential performance 015 Collateral Standard Radiation protection in diagnostic X-ray equipment 15-2011-a1-2015		2008 2010 2013 2014
Delete the follow	ving refe	rence:		
IEC 61223-3-2	2007	Evaluation and routine testing in medical imaging departments - Part 3-2: Acceptance tests - Imaging	EN 61223-3-2	2008

performance of mammographic X-ray

equipment

SIST EN 60601-2-45:2011/A1:2015

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<u>SIST EN 60601-2-45:2011/A1:2015</u> https://standards.iteh.ai/catalog/standards/sist/035cdb7d-0ed9-489b-b85e-4c4ffa22796a/sist-en-60601-2-45-2011-a1-2015



### IEC 60601-2-45

Edition 3.0 2015-06

# INTERNATIONAL STANDARD

### **AMENDMENT 1**

Medical electrical equipment ANDARD PREVIEW

Part 2-45: Particular requirements for the basic safety and essential performance of mammographic X-ray equipment and mammographic stereotactic devices

<u>SIST EN 60601-2-45:2011/A1:2015</u> https://standards.iteh.ai/catalog/standards/sist/035cdb7d-0ed9-489b-b85e-4c4ffa22796a/sist-en-60601-2-45-2011-a1-2015

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 11.040.50 ISBN 978-2-8322-2727-5

Warning! Make sure that you obtained this publication from an authorized distributor.

IEC 60601-2-45:2011/AMD1:2015 © IEC 2015

### **FOREWORD**

This amendment has been prepared by subcommittee 62B: Diagnostic imaging equipment, of IEC technical committee 62: Electrical equipment in medical practice.

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

CDV	Report on voting
62B/917/CDV	62B/954/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 web site 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.

### iTeh STANDARD PREVIEW

A bilingual version of this publication may be issued at a later date.

#### SIST EN 60601-2-45:2011/A1:2015

NOTE The attention of National Committees is drawn to the fact that equipment MANUFACTURERS and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests. It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 3 years from the date of publication.

### INTRODUCTION TO THE AMENDMENT

This first amendment to the third edition of this particular standard has been prepared to provide a complete set of safety requirements for MAMMOGRAPHIC X-RAY EQUIPMENT, based on IEC 60601-1:2005 and IEC 60601-1:2005/AMD1:2012, IEC 60601-1-2:2014, and IEC60601-1-3:2008 and IEC60601-1-3:2008/AMD1:2013. This particular standard addresses the system level of MAMMOGRAPHIC X-RAY EQUIPMENT and introduces equipment for MAMMOGRAPHIC TOMOSYNTHESIS.

– 2 –

IEC 60601-2-45:2011/AMD1:2015 © IEC 2015 - 3 -

### **FOREWORD**

Replace, in the second paragraph, the reference to "IEC 60601-1-3 (2010)" by "IEC 60601-1-3 (2008)".

### 201.1 Scope, object and related standards

Replace, in footnote 1, the reference to "IEC 60601-1:2005" by "IEC 60601-1:2005 and IEC 60601-1:2005/AMD1:2012".

### 201.1.1 Scope

Add, in the first paragraph, after the term "MAMMOGRAPHIC X-RAY EQUIPMENT" the phrase "including equipment for MAMMOGRAPHIC TOMOSYNTHESIS,".

Replace, in the first dashed item of the third paragraph, the words "modes of operation" by "other than MAMMOGRAPHIC TOMOSYNTHESIS"

Add, after this first dashed item, the following new dashed item:

- ct scanners covered by IEC 60601-2-44rds.iteh.ai)

#### SIST EN 60601-2-45:2011/A1:2015

# **201.1.3 Collateral standards**: iteh.ai/catalog/standards/sist/035cdb7d-0ed9-489b-b85e-4c4ffa22796a/sist-en-60601-2-45-2011-a1-2015

Replace, in the first sentence of the second paragraph, the reference to "IEC 60601-1-2:2007" by "IEC 60601-1-2:2014

Replace the reference to "IEC 60601-1-3:2008" by "IEC 60601-1-3:2008 and IEC 60601-1-3:2008/AMD1:2013"

Replace the second sentence of the second paragraph, including its footnote, with the following new sentence and footnote:

IEC 60601-1-8, IEC 60601-1-9, IEC 60601-1-10, IEC 60601-1-11 and IEC 60601-1-12 do not apply  $^{1}$ .

<sup>1</sup> IEC 60601-1-9:2007, Medical electrical equipment — Part 1-9: General requirements for basic safety and essential performance — Collateral Standard: Requirements for environmentally conscious design. IEC 60601-1-10:2007, Medical electrical equipment — Part 1-10: General requirements for basic safety and essential performance — Collateral Standard: Requirements for the development of physiologic closed-loop controllers. IEC 60601-1-11:2010, Medical electrical equipment — Part 1-11: General requirements for basic safety and essential performance — Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment. IEC 60601-1-12:2004, Medical Electrical Equipment — Part 1-12: General requirements for basic safety and essential performance — Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the emergency medical services environment.