# BS EN 60601-1-11:2015



# **BSI Standards Publication**

# **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



...making excellence a habit."

This British Standard is the UK implementation of EN 60601-1-11:2015. It is identical to IEC 60601-1-11:2015. It supersedes BS EN 60601-1-11:2010, which will be withdrawn on 31 December 2018.

The UK participation in its preparation was entrusted by Technical Committee CH/62, Electrical Equipment in Medical Practice, to Subcommittee CH/62/1, Common aspects of Electrical Equipment used in Medical Practice.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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#### Amendments/corrigenda issued since publication

Date Text affected

#### 

#### EN 60601 1 11

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# **EUROPÄISCHE NORM**

May 2015

ICS 11.040

Supersedes EN 60601-1-11:2010

English Version

### 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 60601-1-11:2015)

Appareils électromédicaux - Partie 1-11: Exigences générales pour la sécurité de base et les performances essentielles - Norme Collatérale: Exigences pour les appareils électromédicaux et les systèmes électromédicaux utilisés dans l'environnement des soins à domicile (IEC 60601-1-11:2015) Medizinische elektrische Geräte - Teil 1-11: Besondere Festlegungen für die Sicherheit einschließlich der wesentlichen Leistungsmerkmale - Ergänzungsnorm: Anforderungen an medizinische elektrische Geräte und medizinische elektrische Systeme für die medizinische Versorgung in häuslicher Umgebung (IEC 60601-1-11:2015)

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#### Foreword

The text of document 62A/959/FDIS, future edition 2 of IEC 60601-1-11, prepared by SC 62A "Common aspects of electrical equipment used in medical practice", of IEC/TC 62 "Electrical equipment in medical practice" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60601-1-11:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2016-01-14 national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2018-12-31 the document have to be withdrawn

This document supersedes EN 60601-1-11:2010.

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(s).

For the relationship with EU Directive 93/42/EEC, see informative Annex ZZ, which is an integral part of this document.

### Endorsement notice

The text of the International Standard IEC 60601-1-11:2015 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 60038:2009	NOTE	Harmonized as EN 60038:2011 (modified).
IEC 60065:2014	NOTE	Harmonized as EN 60065:2014 (modified).
IEC 60335-1:2010	NOTE	Harmonized as EN 60335-1:2012 (modified).
IEC 60364	NOTE	Harmonized in HD 384 / HD 60364 series (partly modified).
IEC 60601-1-9	NOTE	Harmonized as EN 60601-1-9.
IEC 60721-3-7:1995	NOTE	Harmonized as EN 60721-3-7:1995 (not modified).

+ A1.2009 + A2:2013		+ A1.2010 (moailea) + A2:2013 (modified).
+ A2.2013		+ A2.2013 (mounieu).
IEC 61032:1997	NOTE	Harmonized as EN 61032:1998 (not modified).
ISO 10651-2:2004	NOTE	Harmonized as EN ISO 10651-2:2009 (not modified).

(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: <u>www.cenelec.eu</u>.

Publication	Year	Title	<u>EN/HD</u>	Year
IEC 60068-2-27	2008	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009
IEC 60068-2-31	2008	Environmental testing - Part 2-31: Tests - Test Ec: Rough handling shocks, primarily for equipment-type specimens	EN 60068-2-31	2008
IEC 60068-2-64	2008	Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance	EN 60068-2-64	2008
IEC 60529	1989	Degrees of protection provided by	EN 60529	1991
-	-	Degrees of protection provided by enclosures (IP Code) Medical electrical equipment - Part 1: General requirements for basic	+ corrigendum May	1993
+ A1	1999		+ A1	2000
+ A2	2013		+ A2	2013
IEC 60601-1	2005		EN 60601-1	2006
-	-	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock Environmental testing - Part 2-31: Tests - Test Ec: Rough handling shocks, primarily for equipment-type specimens Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance Degrees of protection provided by enclosures (IP Code) EN 60068-2-31 EN 60068-2-64 EN 60068-2-64 EN 60068-2-64 EN 60529 + corrigendum May + A1 + A2 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic disturbances - Requirements for basic safety and electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic disturbances - Requirements for basic safety and electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic disturbances - Requirements for basic Medical electrical equipment - Part 1-6: General requirements for basic	2010	
+ A1	2012		2013	
-	-		+ A1/AC	2014
-	-		+ A12	2014
IEC 60601-1-2	2014	Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic	EN 60601-1-2	2014
IEC 60601-1-6	2010		guidance: $\overline{EN 60068-2-27}$ $\overline{200}$ gh handling -type $EN 60068-2-31$ $200$ ation, $2e$ $EN 60068-2-64$ $200$ by $EN 60529$ $199$ + corrigendum May $199$ + A1 $200$ + A2 $201$ EN 60601-1 $200$ + A1 $201$ + A12 $201$ for basic $EN 60601-1-2$ 201 $EN 60601-1-2$ for basic $EN 60601-1-6$ 201 $EN 60601-1-6$ 201 $EN 60601-1-6$ 201 $A1$	2010
+ A1	2013	safety and essential performance -	+ A1	2015

IEC 60601-1-8	2006	Medical electrical equipment -	EN 60601-1-8	2007
-	-	Part 1-8: General requirements for basic safety and essential performance -	+ corrigendum Mar.	2010
+ A1	2012	Collateral Standard: General requirements,	+ A1	2013
-	-	tests and guidance for alarm systems in medical electrical equipment and medical electrical systems	+ A1/AC	2014
IEC 60601-1-12	2014	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 intended for use in the emergency medical services environment	EN 60601-1-12	2015
IEC 62366	2007	Medical devices - Application of usability	EN 62366	2008
+ A1	2014	engineering to medical devices	+ A1	2015
CISPR 11 (mod)	2009	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN 55011	2009
ISO 7000	-	Graphical symbols for use on equipment - Registered symbols	-	-
ISO 7010	2011	Graphical symbols - Safety colours and E safety signs - Registered safety signs +	EN ISO 7010	2012
+ A1	2012		+ A1	2014
+ A2	2012		+ A2	2014
+ A3	2012		+ A3	2014
+ A4	2013		+ A4	2014
+ A5	2014		+ A5	2015
ISO 15223-1	2012	Medical devices - Symbols to be used with medical device labels, labelling and information to be supplied - Part 1: General requirements	EN ISO 15223-1	2012

(informative)

### **Coverage of Essential Requirements of EU Directives**

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and within its scope the Standard covers all relevant essential requirements given in Annex I of EU Directive 93/42/EEC of 14 June 1993 concerning medical devices.

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directive concerned.

**WARNING**: Other requirements and other EU Directives can be applied to the products falling within the scope of this standard.

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