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Responsible committee: CPL/61 Safety of household and similar electrical appliances

Interested committees:

Title: Draft BS IEC 60335-2-115 Household and Similar Electrical Appliances - Safety. Part 2-115: Particular requirements for beauty care appliances.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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This draft is issued to allow comments from interested parties; all comments will be given consideration prior to publication. No acknowledgement will normally be sent. **See overleaf for information on the submission of comments.**

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



61/5698/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER:

IEC 60335-2-115 ED1

DATE OF CIRCULATION:

2018-06-22

CLOSING DATE FOR COMMENTS:

2018-08-17

SUPERSEDES DOCUMENTS:

61/5484/NP, 61/5550/RVN

IEC TC 61 : SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

SECRETARIAT:

United States of America

SECRETARY:

Ms Randi Myers

OF INTEREST TO THE FOLLOWING COMMITTEES:

PROPOSED HORIZONTAL STANDARD:

☐

Other TC/SCs are requested to indicate their interest, if any, in this CD to the secretary.

FUNCTIONS CONCERNED:

☐ EMC

☐ ENVIRONMENT

☐ QUALITY ASSURANCE

☒ SAFETY

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

TITLE:

Household and Similar Electrical Appliances – Safety – Part 2-115: Particular requirements for beauty care appliances

NOTE FROM TC/SC OFFICERS:

This CD is circulated according to the decisions taken at the meeting of TC 61 in Wellington in 61/5694/RM, topic 40b, report from Project Team 115.

Refer to 61/5484/NP and 61/5550/RVN

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –**Part 2-115: Particular requirements for beauty care appliances****FOREWORD**

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This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61/xxxx/FDIS	61/xxxx/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.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fifth edition (2010) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for beauty care appliances.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

NOTE 3 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The committee has decided that the contents of this 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.

NOTE 4 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 the publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

NOTE 1 For example, if appliances within the scope of this Part 2 include an ion generator, then IEC 60335-2-65 is applicable as far as is reasonable.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 2 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 3 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-115: Particular requirements for beauty care appliances

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335 deals with the safety of electric appliances for beauty care of persons and intended for household, commercial and similar purposes, their **rated voltage** being not more than 250 V.

NOTE 101 **Battery-operated appliances** and other d.c. supplied appliances are within the scope of this standard. Dual supply appliances, either mains-supplied or battery-operated, are regarded as **battery-operated appliances** when operated in the battery mode.

NOTE 102 Examples of appliances that are within the scope of this standard are

- Appliances with high frequency current outputs (i.e. ≥ 10 kHz) including equipment for heat-producing effects for skin care;
- Appliances with medium frequency current outputs (i.e. ≥ 1 kHz, < 10 kHz), including interferential outputs, for skin stimulation or muscle stimulation;
- Appliances with low frequency (i.e. < 1 kHz) current outputs (e.g. faradic currents) for application such as skin stimulation or muscle stimulation;
- Appliances with extra-low voltage d.c. outputs (e.g. galvanic currents), such as electro-epilation (hair removal);
- Beauty care appliances with ultrasonic outputs for skin care;
- Appliances having vacuum-pressure functions for skin care;
- Beauty care appliances for melting wax;
- Appliances intended to produce surface cooling effect for skin care;
- Facial cleaning appliances;
- Microneedling appliances for skin care.

This standard deals with the common hazards presented by appliances that are encountered by all persons. However, in general, it does not take into account

- persons (including children) whose
 - physical, sensory or mental capabilities; or
 - lack of experience and knowledgeprevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

NOTE 103 Attention is drawn to the fact that

- it is recognized that persons having very extensive and complex disabilities can have needs beyond the level addressed in this standard.
- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

NOTE 104 This standard does not apply to

- appliances intended exclusively for industrial purposes;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);
- shavers, hair clippers and similar appliances (IEC 60335-2-8);
- blankets, pads, clothing and similar flexible heating appliances (IEC 60335-2-17);
- appliances for skin or hair care (IEC 60335-2-23)

- 221 – appliances for skin exposure to optical radiation (IEC 60335-2-27);
- 222 – sauna heating appliances and infrared cabins (IEC 60335-2-53);
- 223 – cosmetic and beauty care appliances incorporating lasers and intense light sources (IEC 60335-2-113)
- 224 – appliances intended for medical purposes (IEC 60601).

225 2 Normative references

226 This clause of Part 1 is applicable except as follows:

227 *Addition:*

228 IEC 61689:2013, *Ultrasonics—Physiotherapy systems Field Specifications and methods of*
229 *measurement in the frequency range 0.5 MHz to 5 MHz*

230 IEC 62127-1:2007, *Ultrasonics—Hydrophones—Part 1: Measurement and characterization of*
231 *medical ultrasonic fields up to 40 MHz*
232 AMD 1:2103

233 IEC 62127-3:2007, *Ultrasonics—Hydrophones—Part 3: Properties of hydrophones for*
234 *ultrasonic fields up to 40 MHz*
235 AMD 1:2013

236 IEC 60601-2-5:2009, *Medical Electrical Equipment Part 2-5: Particular requirements for the*
237 *basic safety and essential performance of Ultrasonic Physiotherapy Equipment*

238 ISO 7000:2004, *Graphical symbols for use on equipment –Index and synopsis*

239 ISO 7010:2011, *Graphical symbols – Safety colours and safety signs – Registered safety*
240 *signs*

241 ISO 14155, *Clinical investigation of medical devices for human subjects – Good clinical*
242 *practice*

243 3 Terms and definitions

244 This clause of Part 1 is applicable except as follows.

245 3.1 Definitions relating to physical characteristics

246 3.1.9 *Replacement:*

247 **normal operation**

248 conditions under which the appliance is operated as in normal use in accordance with the
249 manufacturer's instructions

250 Appliances for producing vapour are operated in the normal position of use and filled with
251 liquid. liquid is added, when necessary, to maintain the vapour output.

252 3.1.101

253 **specific absorption rate (SAR)**

254 amount of radio frequency power absorbed by the tissue divided by the mass of the tissue
255 (unit: W/kg)

256 3.1.102

257 **local specific absorption rate (local SAR)**

258 **specific absorption rate** of cubical tissue with a mass of 10 g (unit: W/kg)

