



BSI Standards Publication

Household and similar electrical appliances — Safety

Part 2-105: Particular requirements for multifunctional shower cabinets

National foreword

This British Standard is the UK implementation of EN IEC 60335-2-105:2021+A11:2021. It is derived from IEC 60335-2-105:2016 incorporating amendment A1:2019. It supersedes BS EN 60335-2-105:2005+A2:2020, which will be withdrawn on 27 September 2024.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by **A1** **A1**.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to text carry the number of the CENELEC amendment. For example, text altered by CENELEC amendment A11 is indicated by **A11** **A11**.

The UK participation in its preparation was entrusted to Technical Committee CPL/61/7, Safety of electrical appliances - Heated appliance group.

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

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

This publication has been prepared under a mandate given to the European Standards Organizations by the European Commission and the European Free Trade Association. It is intended to support requirements of the EU legislation detailed in the European Foreword. A European Annex, usually Annex ZA or ZZ, describes how this publication relates to that EU legislation.

For the Great Britain market (England, Scotland and Wales), if UK Government has designated this publication for conformity with UKCA marking (or similar) legislation, it may contain an additional National Annex. Where such a National Annex exists, it shows the correlation between this publication and the relevant UK legislation. If there is no National Annex of this kind, the relevant Annex ZA or ZZ in the body of the European text will indicate the relationship to UK regulation applicable in Great Britain. References to EU legislation may need to be read in accordance with the UK designation and the applicable UK law. Further information on designated standards can be found at www.bsigroup.com/standardsandregulation.

For the Northern Ireland market, UK law will continue to implement relevant EU law subject to periodic confirmation. Therefore Annex ZA/ZZ in the European text, and references to EU legislation, are still valid for this market.

UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

© The British Standards Institution 2022
Published by BSI Standards Limited 2022

ISBN 978 0 580 92885 7

ICS 13.120; 97.170

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2022.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

English Version

Household and similar electrical appliances - Safety - Part 2-105:
Particular requirements for multifunctional shower cabinets
(IEC 60335-2-105:2016)

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-105: Exigences particulières pour les cabines de
douche multifonctions
(IEC 60335-2-105:2016)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-105: Besondere Anforderungen für
multifunktionelle Duscheinrichtungen
(IEC 60335-2-105:2016)

This European Standard was approved by CENELEC on 2021-09-27. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 European Standard 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN IEC 60335-2-105:2021) consists of the text of IEC 60335-2-105:2016 prepared by IEC/TC 61 “Safety of household and similar electrical appliances”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022–09–27
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2024–09–27

This document supersedes EN 60335-2-105:2005 and all of its amendments and corrigenda (if any).

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.

This document is read in conjunction with EN IEC 60335-2-105:2021/A11:2021 and EN IEC 60335-2-105:2021/A1:2021.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZZA, which is an integral part of EN IEC 60335-2-105:2021/A11:2021.

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60335-2-105:2016 was approved by CENELEC as a European Standard.

European foreword to amendment A1

This document (EN IEC 60335-2-105:2021/A1:2021) consists of the text of IEC 60335-2-105:2016/A1:2019 prepared by IEC/TC 61 “Safety of household and similar electrical appliances”.

The following dates are fixed:

- latest date by which this document has to be (dop) 2022–12–01 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2024–12–01 conflicting with this 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 is read in conjunction with EN IEC 60335-2-105:2021 and EN IEC 60335-2-105:2021/A11:2021.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZZA, which is an integral part of EN IEC 60335-2-105:2021/A11:2021.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60335-2-105:2016/A1:2019 was approved by CENELEC as a European Standard.

European foreword to amendment A11

This document (EN IEC 60335-2-105:2021/A11:2021) has been prepared by CLC/TC 61 “Safety of household and similar electrical appliances”.

The following dates are fixed:

- latest date by which this document has to be (dop) 2022-12-01 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2024-12-01 conflicting with this document have to be withdrawn

The numbering system for European clauses, subclauses, notes, tables, figures and annexes that are additional to those in the IEC standard are prefixed with the letter “Z”.

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.

This document is read in conjunction with EN IEC 60335-2-105:2021 and EN IEC 60335-2-105:2021/A1:2021

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

CONTENTS

FOREWORD	4
INTRODUCTION	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	9
4 General requirement	9
5 General conditions for the tests	9
6 Classification	9
7 Marking and instructions	9
8 Protection against access to live parts	11
9 Starting of motor-operated appliances	11
10 Power input and current	11
11 Heating	11
12 Void	12
13 Leakage current and electric strength at operating temperature	12
14 Transient overvoltages	12
15 Moisture resistance	12
16 Leakage current and electric strength	13
17 Overload protection of transformers and associated circuits	13
18 Endurance	13
19 Abnormal operation	13
20 Stability and mechanical hazards	13
21 Mechanical strength	13
22 Construction	14
23 Internal wiring	15
24 Components	15
25 Supply connection and external flexible cords	15
26 Terminals for external conductors	15
27 Provision for earthing	15
28 Screws and connections	15
29 Clearances, creepage distances and solid insulation	15
30 Resistance to heat and fire	15
31 Resistance to rusting	16
32 Radiation, toxicity and similar hazards	16
Annexes	17
 Annex R (normative) Software evaluation	17 
Annex AA (informative) Example of a multifunctional shower cabinet	18
Annex BB (informative) Example of a separate multifunctional shower unit	19
Bibliography	20
Figure AA.1 – Example of a multifunctional shower cabinet	20

Figure BB.1 – Example of a separate multifunctional shower unit.....	19
--	----

Table 101 – Maximum temperature rises.....	12
--	----