BRITISH STANDARD

BS EN
60335-2-3:1995
IEC
60335-2-3:1993
Incorporating
Amendment No. 1

Safety of household and similar electrical appliances —

Part 2-3: Particular requirements for electric irons

The European Standard EN 60335-2-3:1995, with the incorporation of amendment A1:1999, has the status of a British Standard

ICS 97.060

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee CPL/61, Safety of electrical appliances, to Subcommittee CPL/61/30, Heating appliances (other than room heaters), upon which the following bodies were represented:

Association of Control Manufacturers (BEAMA Ltd.)
Association of Manufacturers of Domestic Electrical Appliances
British Burn Association
British Electrotechnical Approvals Board
Consumer Policy Committee of BSI
Consumers' Association
Department of Trade and Industry (Consumer Safety Unit, CA Division)
Electricity Association
Royal Society for the Prevention of Accidents
Small Electrical Appliances Marketing Association

This British Standard, having been prepared under the direction of the Electrotechnical Sector Board, was published under the authority of the Standards Board and comes into effect on 15 November 1995

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10754	February 2000	See national foreword

Contents

National foreword

This British Standard has been prepared by Subcommittee CPL/61/30 and is the English language version of EN 60335-2-3:1995 *Safety of household and similar electrical appliances* — Part 2: *Particular requirements for electric irons* including amendment A1:1999, published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 60335-2-3:1993 including amendment 1:1999, published by the International Electrotechnical Commission (IEC).

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 ⟨A1. 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.

This British Standard supersedes BS EN 60335-2-3:1991 which will be withdrawn on 1 January 1998 in accordance with the CENELEC Internal Regulations. Certification and marks will not be awarded after this date with respect to BS EN 60335-2-3:1991. However, such certification and marks, already awarded, may continue to apply to production until 1 January 2003.

This British Standard is to be read in conjunction with BS EN 60335-1:1995 *General requirements.* The many references to part 1 should be read as references to BS EN 60335-1, which is the English language version of EN 60335-1:1994 which was derived from IEC 335-1:1991. Amendments and revisions of part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of part 1.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled "International Standards Correspondence Index" or by using the "Find" facility of the BSI Standards Electronic Catalogue.

Product approval. Attention is drawn to the fact that products conforming to this British Standard may be approved by the British Electrotechnical Approvals Board for the purposes of participation in the CENELEC Certification Agreement and in the CB Scheme of the IECEE. (Details of the BEAB Approval Marks Scheme are given on page 11.)

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 11 and a back cover.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60335-2-3

June 1995

+ A1

August 1999

ICS 13.120; 97.060

Supersedes EN 60335-2-3:1990 and its amendments

Descriptors: Household electrical appliances, electric irons, safety requirements, protection against electric shock, fire protection, protection against mechanical hazard

English version

Safety of household and similar electrical appliances Part 2: Particular requirements for electric irons

(includes amendment A1:1999)

(IEC 60335-2-3:1993 + A1:1999)

Sécurité des appareils électrodomestiques et analogues
Partie 2: Règles particulières pour les fers à repasser électriques
(inclut l'amendement A1:1999)
(CEI 60335-2-3:1993 + A1:1999)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke
Teil 2: Besondere Anforderungen für elektrische Bügeleisen
(enthält Änderung A1:1999)
(IEC 60335-2-3:1993 + A1:1999)

This European Standard was approved by CENELEC on 1995-05-15; amendment A1 was approved by CENELEC on 1999-08-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Ref. No. EN 60335-2-3:1995 + A1:1999 E

Foreword

The proposal to endorse IEC 335-2-3:1993, document CLC/TC 61 (SEC) 912, was circulated under the enquiry procedure in September 1993. This proposal was discussed during the Oslo meeting in April 1994, when it was decided to submit a draft for EN 60335-2-3 to the formal vote.

This draft was circulated in November 1994 and was ratified by CENELEC as EN 60335-2-3 on 1995-05-15.

This European Standard has been prepared by the secretariat of CENELEC Technical Committee TC 61.

The following dates are applicable:

— latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dow) 1996-01-01

— latest date by which national standards conflicting with the EN have to be withdrawn (dow) 1998-01-01

For products which have complied with EN 60335-2-3:1990 including its amendments A1:1992 and A52:1992 before 1998-01-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2003-01-01.

This standard has to be used in conjunction with EN 60335-2, *Safety of household and similar electrical appliances,* Part 1: *General requirements.* It was established on the basis of the 1994 edition of that standard. Amendments and revisions of part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of part 1.

This part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: *Safety requirements for electric irons.*

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

Subclauses which are additional to those in part 1 are numbered starting from 101.

There are no special national conditions causing a deviation from this European Standard, other than those listed in Annex ZA to EN 60335-1.

There are no national deviations from this European Standard other than those listed in Annex ZB to EN 60335-1.

NOTE 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 **2**. When a definition of part 1 concerns an adjective, the adjective and the associated noun are also in bold.

Foreword to amendment A1

The text of document 61/1563/FDIS, future amendment to IEC 60335-2-3:1993 prepared by the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60335-2-3 on 1999-08-01.

The following dates are applicable:

— latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dow) 2000-05-01

— date on which national standards conflicting with the amendment have to be withdrawn (dow) 2002-08-01

This amendment supplements or modifies the corresponding clauses of EN 60335-2-3:1995.

There are no special national conditions causing a deviation from this amendment.

There are no national deviations from this amendment.

Introduction

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. If the product has mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 89/392/EEC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

Contents

1 Scope

This clause of part 1 is replaced by:

This standard deals with the safety of electric dry irons and **steam irons,** including those with a separate water reservoir or boiler having a capacity not exceeding 5 l, for household and similar purposes, their **rated voltage** being not more than 250 V.

Appliances not intended for normal household use, but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

So far as is practicable, this standard deals with the common hazards presented by appliances which are encountered by all persons in and around the home.

This standard does not in general take into account

— the use of appliances by young children or infirm persons without supervision;

— playing with the appliance by young children.

NOTE 1 Attention is drawn to the fact that:

— for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;

— for appliances intended to be used in tropical countries, special 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.

— additional requirements for pressure vessels may be specified by the national authorities responsible for the safety of pressure vessels.

NOTE 2 This standard does not apply to:

— rotary and flat-bed ironers (IEC 335-2-44);

— appliances designed 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).

2 Definitions

This clause of part 1 is applicable except as follows:

2.2.9
Replacement:

normal operation

the iron is placed on its **stand** and is operated with its **thermostat** at the highest setting

if the iron does not have a **thermostat**, the surface temperature at the mid-point of the centre line of the **soleplate** is maintained at 250 °C ± 10 °C by switching the supply on and off or at the highest temperature if it is lower

steam irons with a separate water reservoir or boiler are operated with the water reservoir or boiler filled with water

pressurized steam irons incorporating the boiler are operated with or without water, whichever is more unfavourable

other **steam irons** are operated empty

2.101
steam iron

iron having means to produce and supply steam to the textile material while ironing

NOTE Steam irons may incorporate a means for blowing steam on clothes.

2.102
vented steam iron

steam iron in which steam is produced when the water contacts the **soleplate**, the water reservoir being at atmospheric pressure

NOTE The water reservoir may be incorporated in the iron or is connected by a hose to the iron.

2.103
pressurized steam iron

steam iron in which steam is produced in a boiler at a pressure exceeding 50 kPa

NOTE The boiler may be incorporated in the iron or is connected by a hose to the iron.

2.104
instantaneous steam iron

steam iron in which small quantities of water are pumped from the water reservoir and in which steam is produced when the water contacts the walls of the boiler, the water reservoir and the boiler being at atmospheric pressure

NOTE The water and the boiler are connected to the iron by a hose.

2.105
cordless iron

iron which is connected to the supply only when placed on its **stand**

NOTE **Cordless irons** may be directly connected to the supply mains during ironing by a **detachable part** to which the **supply cord** is fixed.

2.106
soleplate

heated part of the iron which is pressed against the textile material while ironing

2.107
stand

heel of the iron or a separate part provided with the iron, on which the iron is placed when at rest

NOTE The separate water reservoir or boiler may serve as the **stand**.

3 General requirement

This clause of part 1 is applicable.

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4 General condition for the tests

This clause of part 1 is applicable except as follows:

A1

4.2 *Addition:*

NOTE The additional test of **25.14** is carried out on a separate appliance. A1

4.3 *Addition:*

*For irons with a **thermostat** the test of **21.101** is made before that of clause 11. The test of **22.103** is made at the end of the test of clause 11.*

4.101 *Unless otherwise specified, irons are tested as **heating appliances** even if they incorporate a motor.*

4.102 *If a **cordless iron** can also be directly connected to the supply mains during ironing, the relevant tests are applicable for both modes of operation.*

5 Void

6 Classification

This clause of part 1 is applicable.

7 Marking and instructions

This clause of part 1 is applicable except as follows:

7.1 *Modification:*

Instead of the text of the third dashed item, the following applies:

— **rated power input** in watts or kilowatts.

Addition:

Stands of **cordless irons** shall be marked with:

— **rated voltage** or **rated voltage range,** in volts;

— **rated power input** or **rated power input range,** in watts or kilowatts.

7.12 *Addition:*

The instructions for use shall contain the substance of the following:

— that the user must not leave the iron unattended while it is connected to the supply;

— for **steam irons** and irons incorporating means for spraying water, that the plug of the supply cord must be removed from the socket-outlet before the water reservoir is filled with water;

— for **pressurized steam irons**, that the filling aperture must not be opened during use. Instructions for the safe refilling of the water reservoir shall be given;

— for **cordless irons**, that the iron must only be used with the stand provided;

— for travel irons, that they are not intended for regular use.

7.15 *Addition:*

For **steam irons** with a separate water reservoir or boiler, the total **rated power input** shall be marked on the part containing the supply terminals or **supply cord**.

7.101 Separate **stands** shall be marked with:

— name, trademark or identification mark of the manufacturer or responsible vendor;

— model or type reference of the **stand**.

8 Protection against access to live parts

This clause of part 1 is applicable except as follows:

8.1.2 *Addition:*

NOTE Connecting devices in **stands** of **cordless irons** are not regarded as socket-outlets.

9 Starting of motor-operated appliances

This clause of part 1 is not applicable.

10 Power input and current

This clause of part 1 is applicable.

11 Heating

This clause of part 1 is applicable except as follows:

11.2 *Replacement:*

*Irons are placed on their **stands** on the floor of a test corner and away from the walls. However, the separate water reservoir or boiler of **steam irons** is placed as near to the walls as possible. Dull black painted plywood approximately 20 mm thick is used for the test corner.*

***Vented steam irons** with a separate water reservoir, **pressurized steam irons** and **instantaneous steam irons** are tested both with the water reservoir empty and filled but without steam emission.*

*Irons, other than **cordless irons**, are also tested with the **soleplate** in the horizontal position placed on three pointed metallic supports which have a height of at least 100 mm. **Vented steam irons** with a separate water reservoir, **pressurized steam irons** and **instantaneous steam irons** are operated with the water reservoir or boiler filled.*

For appliances provided with an automatic cord reel, one-third of the total length of the cord is unreeled. The temperature rise of the cord sheath is determined as near as possible to the hub of the reel and also between the two outermost layers of the cord on the reel. However, if the cord reel is incorporated in a part which is moved during ironing, the cord is completely unreeled.

For cord storage devices, other than automatic cord reels, which are intended to partially accommodate the ***supply cord*** *while the appliance is in operation, 50 cm of the cord is unwound. However, for cord storage devices on parts which are moved during ironing, the cord is completely unwound. The temperature rise of the stored part of the cord is determined at the most unfavourable place.*

11.4 *Addition*

If the temperature rise limits are exceeded in appliances incorporating motors, transformers or ***electronic circuits*** *and the power input is lower than the* ***rated power input,*** *the test is repeated with the appliance supplied at 1,06 times* ***rated voltage.***

11.6 *Not applicable.*

11.7 *Replacement:*

Irons are operated until steady conditions are established.
When ***vented steam irons*** *with a separate water reservoir,* ***pressurized steam irons*** *and* ***instantaneous steam irons*** *are tested with the iron placed on the pointed supports, steam is emitted in cycles, each cycle having a period of 10 s with steam emission and a period of 10 s with the steam emission interrupted.*

11.8 *Addition:*

During the test with the iron placed on the pointed supports, only the temperature rises of the insulation of internal wiring and flexible cords are measured. However, the temperature rise limits apply to the water reservoir and the hose of ***pressurized steam irons*** *and* ***instantaneous steam irons.*** *The temperature rise of the* ***accessible surface*** *of the hose shall comply with the temperature rise limits for handles which in normal use are held for short periods only.*

The temperature rise limits of motors, transformers, components of electronic circuits and parts directly influenced by them may be exceeded when the appliance is operated at 1,15 times ***rated power input.***

Modification:

Instead of the temperature rise limit of 50 K for rubber or polyvinyl chloride insulation of internal and external wiring, including ***supply cords*** *without T-marking, 60 K applies.*

12 Void

13 Leakage current and electric strength at operating temperature

This clause of part 1 is applicable.

14 Void

15 Moisture resistance

This clause of part 1 is applicable except as follows:

15.2 *Addition:*

Steam irons, *other than those with a separate water reservoir or boiler, are tested instead as follows:*

The iron is placed in the filling position according to the instructions for use and filled with water containing approximately 1 % NaCl. A further quantity of 0,1 l is steadily poured into the filling opening over a period of 1 min. The iron shall then withstand the electric strength test of ***16.3*** *which is repeated after 10 min.*

The iron while still filled is operated at ***rated power input*** *for 1 min under* ***normal operation.*** *It shall then withstand the electric strength test of* ***16.3.***

For ***cordless irons*** *the spillage test is also made with the iron on its* ***stand,*** *if the iron can easily be filled in that position. For this test the iron is positioned on its* ***stand*** *as in normal use.*

16 Leakage current and electric strength

This clause of part 1 is applicable.

17 Overload protection of transformers and associated circuits

This clause of part 1 is applicable.

18 Endurance

This clause of part 1 is not applicable.

19 Abnormal operation

This clause of part 1 is applicable except as follows:

19.1 *Modification:*

Instead of the indication of subclauses applicable to appliances incorporating heating elements, compliance is checked by the tests of ***19.4, 19.6*** *and* ***19.101*** *as applicable and by* ***19.5*** *for separate boilers.*

19.4 *Replacement:*

The appliance is tested under the conditions specified in clause 11 but at ***rated power input.*** *Any control which limits the temperature during the test of clause 11 is shortcircuited. For* ***steam irons,*** *any control which limits the pressure during the test of clause 11 is rendered inoperative. Irons without* ***thermostats*** *are operated continuously.*

All ***steam irons*** *are tested with or without water, whichever is more unfavourable.*

The test is made only with the iron on its ***stand.***

NOTE If the appliance is provided with more than one control, these are short-circuited or rendered inoperative in turn.

19.7 *Addition:*

The test is made for 5 min if the motor is not kept switched on by hand.

19.101 ***Cordless irons*** *are operated under* ***normal operation*** *at* ***rated power input*** *until the* ***thermostat*** *operates for the first time. The iron is then placed on its* ***stand*** *in the position that most adversely affects the material of the* ***stand.***

20 Stability and mechanical hazards

This clause of part 1 is applicable except as follows:

20.1 *Replacement:*

Irons shall have adequate stability.

Compliance is checked by the following test.

Irons incorporating a ***stand*** *are placed on their* ***stand*** *on a plane inclined at an angle of 10° to the horizontal, the cord resting on the inclined plane in the most unfavourable position. Irons provided with a separate* ***stand*** *are placed on the* ***stand*** *on a plane inclined at an angle of 15° to the horizontal.*

Appliances intended to be filled with liquid by the user in normal use are tested empty or filled with the most unfavourable quantity of water up to the capacity indicated in the instructions for use.

NOTE 1 The **stand** may be tapped to overcome static friction between the iron and the **stand**.

NOTE 2 The appliance is not connected to the supply.

If the iron overturns or slips off the ***stand*** *in one or more positions, it is tested as specified in clause 11 in all positions.*

The temperature rise shall not exceed the values specified in Table 7.

21 Mechanical strength

This clause of part 1 is applicable except as follows:

Addition:

Compliance is also checked by the test of ***21.101.***

21.101 *The iron is operated under* ***normal operation*** *at* ***rated power input*** *and, except for* ***cordless irons,*** *the* ***soleplate*** *temperature is maintained under these conditions throughout the test.*

The iron is then suspended by its handle with the ***soleplate*** *in the horizontal position. It is dropped from a height of 40 mm onto a rigidly supported steel plate having a thickness of at least 15 mm and a mass of at least 15 kg. The test is carried out 1 000 times at a rate not exceeding 20 drops per min.*

The test is conducted so that the iron rests on the steel plate for approximately 15 % of the time.

NOTE The iron is suspended so that the impact energy is only influenced by its mass.

After the test, the iron shall not be damaged to such an extent that compliance with this standard, in particular with ***8.1****,* ***15.1*** *and* ***29.1****, is impaired. In case of doubt,* ***supplementary insulation*** *and* ***reinforced insulation*** *is subjected to the electric strength test of* ***16.3.***

22 Construction

This clause of part 1 is applicable except as follows:

22.7 *Replacement:*

Pressurized steam irons and **instantaneous steam irons** shall incorporate adequate safeguards against the risk of excessive pressure.

If jets of steam or hot water are emitted through **protective devices,** the electrical insulation shall not be affected or the user exposed to a hazard.

Compliance is checked by inspection and by the following test.

For ***pressurized steam irons,*** *the maximum pressure occurring during the test of clause 11 with the boiler filled but without steam emission, is measured. All pressure regulating devices which operated during the test are rendered inoperative and the pressure measured again. The pressure shall not increase by more than 200 kPa (2 bars).*

Any pressure limiting ***protective device*** *is then rendered inoperative and the pressure in the boiler is raised hydraulically to five times the pressure measured originally or twice the pressure measured with the pressure regulating device operating during the test of clause 11 rendered inoperative, whichever is higher. There shall be no leakage from the water reservoir.*

Pressurized steam irons *in which the device regulating the steam supply is within the boiler, are operated as specified in clause* ***11*** *but with all pressure regulating devices operating during the test of clause* ***11*** *rendered inoperative. All vents in the* ***soleplate*** *are sealed and the device regulating the steam supply is opened.*

There shall be no leakage from the hose except at an intentionally weak place within the enclosure of the boiler. If this occurs, the test is repeated on another appliance which shall also leak in the same way.

All vents in the ***soleplate*** *of* ***instantaneous steam irons,*** *are sealed and the pressure in the water reservoir is raised hydraulically until the pressure limiting* ***protective device*** *operates. The pressure shall not exceed 50 kPa (0,5 bar).*

The outlet through the ***protective device*** *is then sealed and the pressure is raised to 100 kPa (1 bar) and maintained at this value for 1 min. There shall be no leakage from the container.*

22.101 *Irons shall be provided with a* ***stand.***

Compliance is checked by inspection.

22.102 Any device incorporated in an iron in order to comply with **19.4** shall be a non-self-resetting type which is accessible only by means of a **tool.**

For **steam irons** with a separate boiler, the water reservoir shall incorporate at least one **non-self-resetting thermal cut-out** accessible only by means of a **tool.**

Compliance is checked by inspection.

22.103 Steam irons shall be constructed so that there is no spillage of water or sudden jets of steam or hot water likely to expose the user to a hazard when the iron is used in accordance with the instructions for use.

When removing the filling cap of boilers, the pressure shall be relieved in a controlled manner before the cap is removed completely, so as to avoid the emission of jets of steam or hot water in a manner likely to expose the user to a hazard.

Compliance is checked by inspection during the test of clause 11 and by removing the filling cap at the end of the test.

22.104 Pressure limiting **protective devices** which operate during the tests of **19.4** and **22.7** shall have an inlet aperture at least 5 mm in diameter or 20 mm^2 in area and a width of at least 3 mm. The area of the aperture at the outlet shall not be less than that of the aperture at the inlet.

Compliance is checked by measurement.

22.105 The connection contacts of **cordless irons** shall be constructed so that any electrical or mechanical failure ocurring in normal use will not give rise to a hazard.

Compliance is checked by the following test:

The two live pins of the iron are connected together and an external resistive load is connected in series with the supply. The external load is such that the current is 1,1 times the ***rated current*** *when the iron is supplied at* ***rated voltage.***

The iron is placed on its ***stand*** *and withdrawn 50 000 times, at a rate of 10 times per min. The test is continued for a further 50 000 times without current flowing.*

After the test the iron shall be fit for further use and compliance with ***8.1, 16.3, 27.5*** *and* ***29.1*** *shall not be impaired.*

22.106 Cordless irons which may be directly connected to the supply mains during ironing shall be constructed so that the force necessary to withdraw the connector from the iron is at least 30 N.

Compliance is checked by measurement.

NOTE Any locking device is engaged before carrying out the test.

23 Internal wiring

This clause of part 1 is applicable.

24 Components

This clause of part 1 is applicable except as follows:

24.1.3 *Addition:*

Switches which control steam or water emission are subjected to 50 000 cycles of operation.

A1

24.4 *Add the following note:*

NOTE This requirement is not applicable to the connection between the iron and the **stand** of **cordless irons.**

24.5 *Add the following note:*

NOTE This requirement is not applicable to the connection between the iron and the **stand** of **cordless irons.** A1

25 Supply connection and external flexible cords

This clause of part 1 is applicable except as follows:

25.5 *Addition:*

Type Z attachment is allowed for travel irons and **cordless irons.**

NOTE **Type Z attachment** is not allowed for **cordless irons** which may also be directly connected to the supply mains during ironing.

25.7 *Addition:*

Braided cords may be used.

Polyvinyl chloride sheathed cords are only allowed for the connection to the supply mains of **stands** of **cordless irons** and for the separate water reservoir or boiler of **steam irons**.

NOTE Polyvinyl chloride cords are not allowed for **cordless irons** which may also be directly connected to the supply mains during ironing.

25.14 *Modification:*

Instead of the load specified for the cord, the cord is loaded with a mass of 2 kg.

Instead of the number of flexings specified, the number of flexings is 20 000.

NOTE 1 The test is not carried out on **cordless irons** unless the iron can also be directly connected to the supply mains during ironing.

Addition:

*For **steam irons** with a separate water reservoir or boiler, the test is made on the steam hose and the **interconnection cord** together. If they are contained in one sheath or otherwise attached to each other, the assembly is not turned through an angle of 90°.*

The test shall not result in:

- *loosening of the hose;*
- *damage to the hose to such an extent that compliance with this standard is impaired;*
- *leakage from the hose.*

A1 *Appliances are also subjected to the following test while mounted on an apparatus similar to that of Figure 11.*

*Initially the **supply cord** hangs vertically and is loaded so that a force of 10 N is applied. The oscillating member is moved through an angle of 180° and back to the initial position. The number of flexings is 2 000, the rate of flexing being six per minute.*

NOTE 2 The appliance is mounted so that the direction of flexing corresponds to that most likely to occur when the **supply cord** is wound around it for storage.

NOTE 3 The test is not carried out if it is unlikely that the cord will be wrapped around the appliance, for example cordless irons and irons with a separate water reservoir. A1

26 Terminals for external conductors

This clause of part 1 is applicable.

27 Provision for earthing

This clause of part 1 is applicable.

28 Screws and connections

This clause of part 1 is applicable.

29 Creepage distances, clearances and distances through insulation

This clause of part 1 is applicable except as follows:

29.1 *Addition:*

For **stands** of **cordless irons** the distance between the socket contact and the surface shall be at least 5,7 mm.

30 Resistance to heat, fire and tracking

This clause of part 1 is applicable except as follows:

30.1 *Addition:*

*For irons with **thermostats**, the temperature rises occurring during clause **19** are not taken into consideration.*

30.2 *Addition:*

30.2.3 Not applicable.

31 Resistance to rusting

This clause of part 1 is applicable.

32 Radiation, toxicity and similar hazards

This clause of part 1 is applicable.

Annexes

The annexes of part 1 are applicable.

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