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(JEMA)

**Household and similar electrical
appliances—Safety—
Part 2-3 : Particular requirements
for electric irons**

ICS 13.120; 97.060

Reference number : JIS C 9335-2-3 : 2004 (E)

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee, as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Electrical Manufacturer's Association (JEMA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently **JIS C 9335-2-3 : 1999** is replaced with this Standard.

This revision has been made based on **IEC 60335-2-3 : 2002** *Household and similar electrical appliances—Safety—Part 2-3 : Particular requirements for electric irons* for the purposes of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Household and similar electrical appliances—Safety—Part 2-3 : Particular requirements for electric irons

Introduction This Japanese Industrial Standard has been prepared based on **IEC 60335-2-3 Household and similar electrical appliances—Safety—Part 2-3 : Particular requirements for electric irons** published in 2002 as the fifth edition with some modifications in the technical contents. This is to be read in conjunction with **JIS C 9335-1 : 2003 Household and similar electrical appliances—Safety—Part 1 : General requirements**.

In this Standard, the portions underlined with dots are the matters modified from the original International Standard. The list of modifications is given in annex 1 (informative) with the explanation being attached.

1 Scope 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.

As 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. However, in general, it does not take into account

- the use of appliances by young children or infirm persons without supervision;
- playing with the appliance by young children.

NOTE 101 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;
- 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 102 This Standard does not apply to

- rotary and flat bottom irons (**JIS C 9335-2-44**);
- 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).

NOTE : The International Standard corresponding to this Standard is as follows.

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are **IDT** (identical), **MOD** (modified), and **NEQ** (not equivalent) according to **ISO/IEC Guide 21**.

IEC 60335-2-3 : 2002 *Household and similar electrical appliances—
Safety—Part 2-3 : Particular requirements for elec-
tric irons (MOD)*

2 Normative references The normative references shall be as specified in clause 2 of **JIS C 9335-1**.

3 Definitions For the purpose of this Standard, in addition to the definitions specified in clause 3 of **JIS C 9335-1**, the definitions stated below shall apply. However, **3.1.9** shall be as stated in this Standard.

3.1.9 Replacement of 3.1.9 of JIS C 9335-1:

normal operation operation of the appliance under the following conditions.

- a) The iron is placed on its stand and is operated with its thermostat at the highest setting.
- b) 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 $250\text{ }^{\circ}\text{C} \pm 10\text{ }^{\circ}\text{C}$ by switching the supply on and off, or at the highest temperature if it is lower.
- c) Steam irons with a separate water reservoir or boiler are operated with the water reservoir or boiler filled with water.
- d) Pressurized steam irons incorporating the boiler are operated with or without water, whichever is more unfavourable.
- e) Other steam irons are operated empty.

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

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

3.102 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 to the iron by a hose.

3.103 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 to the iron by a hose.

3.104 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 reservoir and the boiler are connected to the iron by a hose.

3.105 cordless iron iron that 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.

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

3.107 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.

4 General requirement General requirement shall as stated in clause 4 of **JIS C 9335-1**.

5 General conditions for the test General conditions of the tests shall be as stated in clause 5 of **JIS C 9335-1**, except as follows:

5.2 Addition to 5.2 of JIS C 9335-1:

NOTE 101 If a protective device becomes open circuit during the tests of **21.101**, the test is continued on a separate appliance.

NOTE 102 The additional test of **25.14** is carried out on a separate appliance.

5.3 Addition to 5.3 of JIS C 9335-1:

For irons with a thermostat, the test of **21.101** is carried out before the test of clause **11**. The test of **22.102** is carried out during the test of clause **11**.

5.101 Irons are tested as heating appliances even if they incorporate a motor.

5.102 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.

6 Classification The classification shall be as stated in clause 6 of **JIS C 9335-1**.

7 Marking and instructions The marking and instructions shall be as stated in clause 7 of **JIS C 9335-1**, except as follows.

7.1 Modification of 7.1 of JIS C 9335-1:

The third paragraph shall be replaced.

— rated power input (W or kW)

Addition:

Separate stands shall be marked with

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

— model or type reference of the stand.

Stands of cordless irons shall be marked with their

- rated voltage or rated voltage range (V);
- rated power input or rated power input range (W or kW).

7.12 Addition to 7.12 of JIS C 9335-1:

The instructions shall contain the substance of the following:

- the iron must not be left unattended while it is connected to the supply mains;
- the plug must be removed from the socket-outlet before the water reservoir is filled with water (for steam irons and iron incorporating means for spraying water);
- the filling aperture must not be opened during use. Instructions for the safe refilling of the water reservoir shall be given (for pressurized steam irons);
- the iron must only be used with the stand provided (for cordless irons);
- the iron is not intended for regular use (for travel irons).

7.15 Addition to 7.15 of JIS C 9335-1:

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.

8 Protection against access to live parts Protection against access to live parts shall be as stated in clause 8 of JIS C 9335-1, except as follows.

8.1.2 Addition to 8.1.2 of JIS C 9335-1:

NOTE 101 Connecting devices in stands of cordless irons are not considered to be socket-outlets.

9 Starting of motor-operated appliances Clause 9 of JIS C 9335-1 is not applicable.

10 Power input and current The power input and current shall be as stated in clause 10 of JIS C 9335-1.

11 Heating The heating shall be as specified in clause 11 of JIS C 9335-1 except as follows.

11.2 Replacement of 11.2 of JIS C 9335-1:

- a) 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 with the water reservoir empty and filled but without steam emission.
- b) Irons, other than cordless irons, are also tested with the soleplate in the horizontal position placed on three pointed metallic supports that have a height of at least 100 mm. Vented steam irons with a separate water reservoir, pressurized steam