

BUREAU OF INDIAN STANDARDS
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Draft Indian Standard

**Safety of Household and Similar Electrical Appliances - Part 2 Particular Requirements -
Sec 4 - Spin Extractors**

(First Revision)

(ICS 97.060, 13.120)

Electrical Appliances Sectional
Committee, ETD 32

Last date of receipt of comments: **07 November 2025**

NATIONAL FOREWORD

This draft Indian Standard which is identical with IEC 60335-2-4:2023 “Household and similar electrical appliances – Safety –Part 2-4: Particular requirements for spin extractors” issued by the International Electrotechnical Commission (IEC) is proposed be adopted by the Bureau of Indian Standards on the recommendation of the Electrical Appliances Sectional Committee and approval of the Electrotechnical Division Council.

This standard was first published in 1993. This revision has been undertaken primarily to align the existing standard with the latest International Standard.

This standard covers the general and safety requirements of spin extractors. This standard however does not cover the performance requirements.

This standard is to be read in conjunction with IS 302 (Part 1): 2024, Household and Similar Electrical Appliances — Safety Part 1 General Requirements (Seventh Revision).

NOTE — When "Part 1" is mentioned in this standard, it refers to IS 302 (Part 1).

This standard supplements or modifies the corresponding clauses in IS 302 (Part 1), so as to convert that publication into the Indian standard: Particular requirements for spin extractors.

When a particular subclause of Part 1 is not mentioned in this standard, 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.

NOTES

1 The following numbering system is used:

- a) subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- b) 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;
- c) additional annexes are lettered AA, BB, etc.

2 The following print types are used:

- a) requirements: in roman type;
- b) test specifications: in italic type;
- c) notes: in small roman type.

This edition includes the following significant technical changes with respect to the previous edition (minor changes are not listed):

- 1) Alignment with IS 302 (Part 1):2024.
- 2) Updation of scope of the standard including increase in load capacity and inclusion of direct current (DC) supplied appliances and battery-operated appliances. **(1)**
- 3) Introduction of minimum IP Requirements (at least IPX4) **(6)**.
- 4) Additional Marking requirements **(7)**
- 5) Addition of test probe 19 **(8.1.1, 20.2)**
- 6) Test for starting of motor operated appliance made not applicable **(9)**
- 7) Addition of accessible surface temperature limits **(11.3, 11.8)**
- 8) Introduced requirements for metal-ion batteries including a new Clause **12** Charging of metal- ion batteries **(12)**
- 9) Modification in requirements for Moisture resistance **(15)**
- 10) Addition of Endurance test **(18)**
- 11) Additional tests for construction added **(22.101)**
- 12) Introduced Annex B Battery-operated appliances, separable batteries and detachable batteries for battery-operated appliances.
- 13) Introduced Annex C Ageing test on motors.
- 14) Introduced Annex R Software evaluation

Should however, any deviation exist between IS 302 (Part 1):2024 and this standard, the provisions of the latter shall apply.

The text of IEC Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker, while in Indian Standards the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to International Standards for which Indian Standards also exists. The corresponding Indian Standards, which are to be substituted, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
IEC 60584-1, Thermocouples – Part 1: EMF specifications and tolerances	IS 16923 (Part 1) : 2018 / IEC 60584-1 : 2013, Thermocouples Part 1 EMF Specifications and Tolerances (<i>First Revision</i>)	Identical

The technical committee has reviewed the provisions of the following international standards referred in this adopted standard and decided that they are acceptable for use in conjunction with this standard.

<i>International Standard</i>	<i>Title</i>
IEC 60730-2-12:2015	Automatic electrical controls – Part 2-12: Particular requirements for electrically operated door locks

This standard is one among the IS 302 series of Indian Standards on safety of household and similar electrical appliances. Part 1 of the series specifies the general requirements, and sections of Part 2 of the series specify the particular requirements for the safety of different types of household and similar electrical appliances. Information on IS 302 (Part 1) and all sections of the IS 302 (Part 2) series, published under the general title ‘Household and similar electrical appliances — Safety’, can be accessed from the BIS website www.bis.gov.in.

Only the English language text has been retained while adopting it in this Indian Standard, and as such, the page numbers given here are not the same as in the IEC Publication.

India specific changes have been made to the adopted IEC 60335-2-4 as outlined in National Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated expressing the result of a test or analysis shall be rounded off in accordance with IS 2:2022 ‘Rules for rounding of numerical values (*Second Revision*)’. The

number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

NOTE — The technical content of this document has not been enclosed as it is identical with the corresponding IEC standard. For details, please refer the corresponding IEC 60335-2-4: 2023 or kindly contact:

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NATIONAL ANNEX A *(National Foreword)*

The National Annex A of Part 1 is applicable.