

# INTERNATIONAL STANDARD

# IEC 60335-2-4

2002-03

AMENDMENT 1  
2004-01

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Amendment 1

**Household and similar electrical appliances –  
Safety –**

**Part 2-4:  
Particular requirements for spin extractors**

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**D**

*For price, see current catalogue*

## FOREWORD

This amendment has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61/2533/FDIS	61/2577/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn
- replaced by a revised edition, or
- amended.

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## FOREWORD

*Add the following to the list of differences existing in some countries.*

- 6.1: Class 0I appliances are allowed (Japan).

*Delete the following from the list of differences existing in some countries:*

- 20.105: The requirement is different (USA).
- 20.106: The requirement is different (USA).

## INTRODUCTION

*Replace the second sentence of the second paragraph by the following:*

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.

## 1 Scope

*Replace the text of Note 101 by the following:*

Spin extractors incorporated in washing machines that have separate containers for washing and spin extraction are within the scope of this standard.

## 2 Normative references

*Replace the existing text by the following:*

This clause of Part 1 is applicable except as follows.

*Addition:*

IEC 60730-2-12:1993, *Automatic electrical controls for household and similar use – Part 2: Particular requirements for electrically operated door locks*

## **5 General conditions for the tests**

*Add:*

### **5.2 Addition**

*The tests of 21.101, 21.102 and 22.101 shall be carried out on the same appliance as that used for the test of Clause 18.*

### **5.3 Replace the text of the addition by the following:**

*The tests of 21.101 and 21.102 are carried out before the test of Clause 18. The test of 22.101 is carried out after the test of Clause 18.*

#### **5.101 Delete this subclause.**

## **18 Endurance**

*Replace the fourth paragraph of the test specification by the following:*

*The test is carried out*

- *for braking mechanisms:*
  - *3 500 times for separate spin extractors;*
  - *1 000 times for spin extractors incorporated in washing machines;*
- *for lid interlocks, 6 000 times.*

## **20 Stability and mechanical hazards**

### **20.103 Replace the first paragraph by the following:**

For appliances having a drum with a rotational kinetic energy exceeding 1 500 J or a maximum peripheral speed exceeding 20 m/s, it shall not be possible to open the lid while the drum is in motion.

*In Note 2, replace "kinetic energy" by "rotational kinetic energy" (in two places).*

### **20.104 Replace the first paragraph by the following:**

For appliances having a drum with a rotational kinetic energy not exceeding 1 500 J and a maximum peripheral speed not exceeding 20 m/s, moving parts shall not be accessible while the motor is energized or when the drum speed exceeds 60 rev/min.

*Replace the third dashed item of the test specification by the following:*

- *with an opening greater than 12 mm, the motor shall be disconnected from the supply and within 7 s the drum speed shall not exceed 60 rev/min. However, if the appliance incorporates a second lid that is opened independently, the dimension of 12 mm is increased to 50 mm.*

NOTE 1 The first two conditions are met by appliances incorporating a second lid that is opened independently.

NOTE 2 The rotational kinetic energy is measured in accordance with the formula in 20.103.

**20.105** *Delete this subclause.*

**20.106** *Delete this subclause.*

## **21 Mechanical strength**

**21.102** *In the last line of the test specification, replace “20.106” by*

## **24 Components**

*Addition:*

**24.1.4** *Add the following:*

*For lid interlocks, the number of cycles of operation declared for subclauses 6.10 and 6.11 of IEC 60730-2-12 shall not be less than 6 000.*

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