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INTERNATIONAL STANDARD

**Household and similar electrical appliances – Safety
Part 2-68: Particular requirements for spray extraction appliances, for industrial
and commercial use**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references	7
3 Definitions	7
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	12
10 Power input and current	12
11 Heating	12
12 Void.....	12
13 Leakage current and dielectric strength at operating temperature	12
14 Transient overvoltages	13
15 Moisture resistance	13
16 Leakage current and electric strength.....	14
17 Overload protection of transformers and associated circuits	15
18 Endurance.....	15
19 Abnormal operation	15
20 Stability and mechanical hazards	16
21 Mechanical strength	17
22 Construction.....	19
23 Internal wiring.....	20
24 Components	20
25 Supply connection and external flexible cords	20
26 Terminals for external conductors.....	21
27 Provision for earthing.....	21
28 Screws and connections.....	22
29 Clearances, creepage distances and solid insulation	22
30 Resistance to heat and fire.....	22
31 Resistance to dusting.....	22
32 Radiation toxicity and similar hazards.....	22
Annex A.....	26
Bibliography.....	26
Figure 101 – Impact test apparatus.....	23
Figure 102 – Apparatus for testing the abrasion resistance of current-carrying hoses	24
Figure 103 – Apparatus for testing the resistance to flexing of current-carrying hoses	24
Figure 104 – Configuration of the hose for the freezing treatment	25
Figure 105 – Flexing positions for the hose after removal from the freezing cabinet.....	25

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-68: Particular requirements for spray extraction appliances, for industrial and commercial use

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This part of International Standard IEC 60335 has been prepared by sub-committee 61J: Electrical motor-operated cleaning appliances for industrial use, of IEC technical committee 61: Safety of household and similar electrical appliances.

This consolidated version of IEC 60335-2-68 consists of the third edition (2002) [documents 61J/129/FDIS and 61J/134/RVD], its amendment 1 (2005) [documents 61J/197/FDIS and 61J/210/RVD] and its amendment 2 (2006) [documents 61J/228/CDV and 61J/242/RVC].

The technical content is therefore identical to the base edition and its amendments and has been prepared for user convenience.

It bears the edition number 3.2.

A vertical line in the margin shows where the base publication has been modified by amendments 1 and 2.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fourth edition (2001) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for electric spray extraction appliances, for industrial and commercial use.

When a particular subclause of part 1 is not mentioned in this part 2, 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.

NOTE 2 The following numbering system is used:

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

NOTE 3 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 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The following differences exist in the countries indicated below.

- 3.1.9 A different type of carpet is specified (USA);
- 7.1 Different markings are required (USA);
- 7.12 No requirements for sound marking exist (USA);
- 25.14 The test is not carried out (USA).

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. 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.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features which impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-68: Particular requirements for spray extraction appliances, for industrial and commercial use

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electrical **portable, motor-operated spray extraction appliances** and electrical attachments intended for industrial and commercial use, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances. These appliances employ water-based **cleaning agents** and are used for cleaning fabrics, upholstery, carpets, floor coverings or hard surfaces.

NOTE 101 Commercial uses are for example for use in hotels, schools, hospitals, factories, shops and offices for other than normal housekeeping purposes, and in the rental business.

Machines with or without electrical heating elements and with or without attachments are within the scope of this standard.

This standard covers appliances in which the pressure of the **cleaning agent** is positive and not more than 2,5 MPa, or in which the product of the pressure (in MPa) and the flow of cleaning agent (in litres per minute) does not exceed 100, and in which the temperature of the **cleaning agent** at the spray nozzle outlet does not exceed 85 °C.

This standard also applies to machines handling hazardous dust such as asbestos or liquids for which additional national requirements might apply.

It is also applicable to appliances making use of other forms of energy for the motor; but it is necessary that their influence is taken into consideration.

NOTE 102 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, the national water supply authorities and similar authorities.

NOTE 103 This standard does not apply to

- appliances exclusively designed to handle hazardous solvents, such as flammable or explosive liquids;
- appliances solely designed for household use;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (vapour or gas);
- audio, video and similar electronic apparatus (IEC 60065);
- appliances for medical purposes (IEC 60601);
- hand-held motor-operated electric tools (IEC 60745);
- personal computers and similar equipment (IEC 60950);
- transportable motor-operated electric tools (IEC 61029).

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60312: 1998, *Vacuum cleaners for household use – Methods of measuring the performance*

IEC 60704-2-1, *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 2-1: Particular requirements for vacuum cleaners*

ISO 6344-2, *Coated abrasives – Grain size analysis – Part 2: Determination of grain size distribution of macrogrits P12 to P220*