

Australian/New Zealand Standard™

**Household and similar electrical
appliances—Safety**

**Part 2.2: Particular requirements for
vacuum cleaners and water-suction
cleaning appliances
(IEC 60335-2-2 Ed 6.1, MOD)**



AS/NZS 60335.2.2:2010

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-002, Safety of Household and Similar Electrical Appliances and Small Power Transformers. It was approved on behalf of the Council of Standards Australia on 10 September 2010 and by the New Zealand Standards Approval Board on 10 September 2010.

This Standard was published on 29 October 2010.

The following are represented on Committee EL-002:

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Business New Zealand
Consumer Electronic Suppliers Association, Australia
Consumers' Federation of Australia
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This Standard was issued in draft form for comment as DR 10902.

Australian/New Zealand Standard™

Household and similar electrical appliances—Safety

Part 2.2: Particular requirements for vacuum cleaners and water-suction cleaning appliances (IEC 60335-2-2 Ed 6.1, MOD)

Originated in Australia in part as AS C153-1951.
Originated in New Zealand as NZS 6302:1992.
Revised and redesignated AS 3308.1-1984/ NZS 6302:1992.
Jointly revised and redesignated AS/NZS 3350.2.2:1995.
Second edition 2001.
Jointly revised and redesignated AS/NZS 60335.2.2:2002.
Jointly revised and redesignated as AS/NZS 60335.2.2:2010.
Reissued incorporating Amendment No. 1 (October 2011).
Reissued incorporating Amendment No. 2 (June 2014).
Reissued incorporating Amendment No. 3 (November 2015).
Reissued incorporating Amendment No. 4 (November 2017).

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CONTENTS

FOREWORD.....	4
INTRODUCTION	7
1 Scope.....	8
2 Normative references.....	9
3 Terms and definitions	9
4 General requirement.....	10
5 General conditions for the tests.....	10
6 Classification	10
7 Marking and instructions	11
8 Protection against access to live parts.....	12
9 Starting of motor-operated appliances	12
10 Power input and current	12
11 Heating.....	12
12 Void	13
13 Leakage current and electric strength at operating temperature.....	13
14 Transient overvoltages.....	13
15 Moisture resistance.....	13
16 Leakage current and electric strength	14
17 Overload protection of transformers and associated circuits.....	14
18 Endurance	14
19 Abnormal operation	14
20 Stability and mechanical hazards	15
21 Mechanical strength.....	15
22 Construction	17
23 Internal wiring	17
24 Components.....	17
25 Supply connection and external flexible cords.....	17
26 Terminals for external conductors.....	18
27 Provision for earthing.....	18
28 Screws and connections.....	18
29 Clearances, creepage distances and solid insulation	18
30 Resistance to heat and fire.....	18
31 Resistance to rusting	18
32 Radiation, toxicity and similar hazards	18
Annexes	22
Annex B (normative) Appliances powered by rechargeable batteries.....	22
Annex C (normative) Ageing test on motors.....	25
Annex R (normative) Software evaluation	27
Bibliography.....	26

Figure 101 – Apparatus for testing the abrasion resistance of current-carrying hoses	19
Figure 102 – Apparatus for testing the resistance to flexing of current-carrying hoses	20
Figure 103 – Configuration of the hose for the freezing treatment.....	21
Figure 104 – Flexing positions for the hose after removal from the freezing cabinet.....	21

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances

FOREWORD

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- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

This consolidated version of IEC 60335-2-2 consists of the sixth edition (2009) [documents 61/3871/FDIS and 61/3923/RVD] and its amendment 1 (2012) [documents 61/4446/FDIS and 61/4499/RVD]. It bears the edition number 6.1.

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience. A vertical line in the margin shows where the base publication has been modified by amendment 1. Additions and deletions are displayed in red, with deletions being struck through.

International Standard IEC 60335-2-2 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

The principal changes in this edition as compared with the fifth edition of IEC 60335-2-2 is as follows (minor changes are not listed):

- the text is aligned with IEC 60335-1:2001, and its Amendments 1 and 2 (see text marked with a marginal bar).

This publication has been drafted in accordance with the ISO/IEC Directives, Part 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 vacuum cleaners and water-suction cleaning appliances.

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: Normal operation is defined differently (USA).
- 6.1: Class 0 appliances are allowed (Canada, Japan, USA).
- 6.1: Household vacuum cleaners are required to be class II or class III (Denmark, France, Italy, Netherlands, Norway and Turkey).
- 6.2: IPX4 is not required (USA).
- 7.1: The additional marking for appliance outlets for accessories is not required (USA).
- 10.1: The power input of booster settings is taken into account (USA).
- 11.5: Booster settings are activated every 2 min out of 8 min (USA).
- 11.7: The test is carried out with one-third of the cord unreeled until steady conditions are established (USA).
- 15.2: The test is carried out differently (USA).
- 16.3: The test is carried out differently (USA).

A list of all parts of the IEC 60335 series, under the general title: *Household and similar electrical appliances – Safety*, can be found on the IEC website.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the stability 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.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

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

IMPORTANT – The “colour inside” logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

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.

When a part 2 standard does not include additional requirements to cover hazards dealt with in part 1, part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

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.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to part 1 or part 2 standards.

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 that 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 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric vacuum cleaners and **water-suction cleaning appliances** for household and similar purposes, including vacuum cleaners for animal grooming, their **rated voltage** being not more than 250 V. It also applies to **centrally-sited vacuum cleaners** and **automatic battery-powered cleaners**.

This standard also applies to **motorized cleaning heads** and current-carrying hoses associated with a particular vacuum cleaner.

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 and other premises for normal housekeeping purposes, are within the scope of this standard.

NOTE 101 Examples of such appliances are appliances intended to be used for normal housekeeping purposes in hotels, offices, schools, hospitals and similar premises.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account

- persons (including children) whose
 - physical, sensory or mental capabilities; or
 - lack of experience and knowledgeprevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

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 intended 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);
- wet and dry vacuum cleaners, including power brush, for commercial use (IEC 60335-2-69).