ATTENTION: Mayu Shiozaki

COMMITTEE: EL-002 Safety of Household and Similar Electrical Appliances and Small Power Transformers

DR 24004 CP

DRAFT

COMBINED POSTAL BALLOT/ AUSTRALIAN / NEW ZEALAND STANDARD FOR COMMENT

LIABLE TO ALTERATION DO NOT USE AS A STANDARD

DATE OF ISSUE: CLOSING DATE FOR COMMENT:

23 May 2024 18 July 2024

DR 24004 CP

AS/NZS 60335.2.11:2024

Household and similar electrical appliances – Safety –

Part 2.11: Particular requirements for tumble dryers





COMBINED DRAFT FOR COMMENT/POSTAL BALLOT STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Committee EL-002- Safety of Household and Similar Electrical Appliances and Small Power Transformers

DRAFT Australian/New Zealand Standard

Household and similar electrical appliances – Safety –

Part 2.11: Particular requirements for tumble dryers

Please note that this document is currently being voted by the committee and the results of the postal ballot will be contingent on public comment received.

Comment on the proposal is invited from persons and organizations concerned with this subject.

Attention is drawn to the fact that this document is a draft only and is liable to alteration in the light of comment received. It is not to be regarded as an Australian/New Zealand Standard until finally issued as such by Standards Australia and Standards New Zealand.

NOTES OF THE SECRETARY:

THE INTRODUCTION OF ANY NATIONAL VARIATIONS TO BE INCLUDED IN THIS STANDARD WILL OCCUR AFTER THE PUBLIC COMMENT HAS BEEN CONSIDERED AND PRIOR TO THE PUBLICATION OF THE STANDARD.

THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH IEC 60335-2-11 ED 9, COPIES OF WHICH MAY BE VIEWED BY CONTACTING enquiries@standards.govt.nz.

AS/NZS 60335.2.11:2024

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 Standards Australia's Standards Development and Accreditation Committee on xxxxxxxx and by the New Zealand Standards Approvals Board on xxxxxxx. It was published on xxxxxxxx.

The following interests are represented on Committee EL-002

Association of Accredited Certification Bodies

Australian Industry Group

Australian Retailers Association

Better Regulation Division (Fair Trading, Safework NSW, TestSafe)

Business New Zealand

Consumer Electronic Suppliers Association, Australia

Consumers' Federation of Australia

Electrical Regulatory Authorities, Australia

Electrical consultants

Engineers Australia

JAS-ANZ

National Retailers Association (Australia)

New Zealand Electric Fence Energizer Manufacturers' Standards Group

Testing Interests New Zealand

WorkSafe, New Zealand

Keeping Standards up-to-date

Standards are living documents, which reflect progress in science, technology and systems. To maintain their currency, all standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current standard, which should include any amendments which may have been published since the standard was purchased.

For more information about joint standards, visit www.standards.govt.nz or www.standards.org,au.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national standards organisation.

We also welcome suggestions for improvement in our standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comment to either the Chief Executive of Standards Australia or the New Zealand Standards Executive at the address shown on the title page.

This standard was issued in draft form for comment as DR 24004 CP.

AS/NZS 60335.2.11:2024 (IEC 60335-2-11 ED 9, MOD)

Australian/New Zealand Standard™

Household and similar electrical appliances – Safety –

Part 2.11: Particular requirements for tumble dryers

(IEC 60335-2-11 ED 9, MOD)

Originated in Australia as AS 3185-1972 Originated in New Zealand as NZS 6311:1993 Jointly revised and redesignated AS/NZS 3350.2.11:1995 Previous edition AS/NZS 3350.2.11:2001 Jointly revised and designated AS/NZS 60335.2.11:2009 Jointly revised and designated AS/NZS 60335.2.11:2017 Jointly revised and designated AS/NZS 60335.2.11:2020 Jointly revised and designated AS/NZS 60335.2.11:2020 Jointly revised and designated AS/NZS 60335.2.11:2020

COPYRIGHT

 $\ensuremath{\mathbb{C}}$ Standards Australia/The Crown in right of New Zealand, administered by the New Zealand Standards Executive

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Published jointly by: Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 Australia, and Standards New Zealand PO Box 1473 Wellington 6140.

ISBN (Print) xxxxxxxxxxxxxx ISBN (PDF) xxxxxxxxxxxxxxxx

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 60335.2.11:2024

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2.11: Particular requirements for tumble dryers

Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-002 - Safety of Household and Similar Electrical Appliances and Small Power Transformers to supersede AS/NZS 60335.2.11:2020 three years from the date of publication of this Standard. During this period AS/NZS 60335.2.11:2020 and its amendments will also remain current. Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with safety requirements designed to give the user protection against hazards that might occur during normal operation and abnormal operation of the appliance and which may be used as the basis for approval for sale or for connection to the electricity supply mains in Australia and New Zealand.

The text of IEC 60335-2-11 ED 9, prepared by IEC Technical TC 61, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption of the IEC standard as a Standards Australia/Standards New Zealand joint standard.

The principal changes in this edition as compared with the 2020 edition of AS/NZS 60335.2.11 are as follows (minor changes are not listed):

- a) alignment with AS/NZS 60335.1:2022;
- b) conversion of some notes to normative text (Clause 1, Annex AA);
- c) implement new definitions to type of appliances (3.5.102, 3.5.103, 3.5.104);
- d) specific requirements have been added in 22.51 for remote operation;
- e) specific requirements have been added in Clause 24 for motor running capacitors;
- f) new modifications in Annex R;
- g) update of requirements for appliance that use flammable refrigerants in Clause 21 and Clause 22 of Annex AA;
- h) implement new requirements for non-sparking "n" electrical apparatus in Annex BB.

This Standard is an adoption with national modifications of the ninth edition of IEC 60335-2-11, *Household and similar electrical appliances – Safety – Part 2-11: Particular requirements for tumble dryers.* It has been varied as indicated to take account of Australian and New Zealand conditions.

This part 2 has to be used in conjunction with the latest edition of AS/NZS 60335.1 *Household* and similar electrical appliances – Safety – Part 1: General requirements and its Amendments, unless that edition precludes it; in that case, the latest edition that does not preclude it is used. It was established on the basis of AS/NZS 60335.1:2022.

This part 2 supplements or modifies the corresponding clauses of AS/NZS 60335.1 so as to convert it into the Australian/New Zealand Standard: Safety requirements for tumble dryers.

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 of Part 1 is to be adapted accordingly.

NOTE 1 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.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letters AZ.

NOTE 2 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 associated noun are also in bold.

p NOTE 3 In this document, p is used in the margin to indicate instructions for preparing a consolidated version.

The essential safety requirements in AS/NZS 3820¹ that could be applicable to requirements for tumble dryers are covered by this standard.

The national variations to IEC 60335-2-11 ED 9 form the Australian and New Zealand national variations for purposes of the IECEE scheme for recognition of results of testing to standards for safety of electrical equipment (the CB scheme).

The text of the International Standard IEC 60335-2-11 ED 9 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

AUSTRALIAN NATIONAL VARIATIONS

The following national variations to this part 2 are additional to those listed in the national variations in AS/NZS 60335.1:2022

7 Marking and instructions

p **7.1** After the first paragraph *insert* the following variation:

If applicable, the appliance shall be marked with the substance of the following warning.

WARNING: Regularly clean the lint trap

The appliance shall be marked with symbol ISO 7010 W021

- p **7.6** *Insert* the following variation:
 - 7.6 Addition:



Symbol ISO 7010 W021

Warning; Risk of fire / Flammable materials

p 7.12 After the second paragraph, insert the following variation:

The meaning of symbol ISO 7010 W021 shall be explained

In the existing third paragraph after the dash items, *insert* the following variation:

- Oil-affected items can ignite spontaneously, especially when exposed to heat sources such as in a tumble dryer. The items become warm, causing an oxidation reaction in the oil. Oxidation creates heat. If the heat cannot escape, the items can become hot enough to catch fire. Piling, stacking or storing oil-affected items can prevent heat from escaping and so create a fire hazard;
- If it is unavoidable that fabrics that contain vegetable or cooking oil or have been contaminated by hair care products be placed in a tumble dryer they should first be washed in hot water with extra detergent - this will reduce, but not eliminate, the hazard.
- p **7.14** After the last paragraph *insert* the following variation:

The marking relating to the cleaning of the lint trap shall be in letters not less than 8 mm high and shall be upright, irrespective of the tumble dryer mounting position.

The base of the triangle of symbol ISO 7010 W021 shall be not less than 50 mm.

p 7.15 After the first paragraph *insert* the following variation:

The marking relating to the cleaning of the lint trap shall be visible when the door is open.

Symbol ISO 7010 W021 shall be readily visible when the appliance is installed as in normal use.

NEW ZEALAND NATIONAL VARIATIONS

The following national variations to this part 2 are additional to those listed in the national variations in AS/NZS 60335.1:2022

7 Marking and instructions

p 7.1 After the first paragraph *insert* the following variation:

If applicable, the appliance shall be marked with the substance of the following warning.

WARNING: Regularly clean the lint trap

The appliance shall be marked with symbol ISO 7010 W021

- p 7.6 Insert the following variation:
 - 7.6 Addition:



Symbol ISO 7010 W021

Warning; Risk of fire / Flammable materials

p **7.12** After the second paragraph, *insert* the following variation:

The meaning of symbol ISO 7010 W021 shall be explained

In the existing third paragraph after the dash items, *insert* the following variation:

- Oil-affected items can ignite spontaneously, especially when exposed to heat sources such as in a tumble dryer. The items become warm, causing an oxidation reaction in the oil. Oxidation creates heat. If the heat cannot escape, the items can become hot enough to catch fire. Piling, stacking or storing oil-affected items can prevent heat from escaping and so create a fire hazard;
- If it is unavoidable that fabrics that contain vegetable or cooking oil or have been contaminated by hair care products be placed in a tumble dryer they should first be washed in hot water with extra detergent - this will reduce, but not eliminate, the hazard.
- p 7.14 After the last paragraph *insert* the following variation:

The marking relating to the cleaning of the lint trap shall be in letters not less than 8 mm high and shall be upright, irrespective of the tumble dryer mounting position.

The base of the triangle of symbol ISO 7010 W021 shall be not less than 50 mm.

p **7.15** After the first paragraph *insert* the following variation:

The marking relating to the cleaning of the lint trap shall be visible when the door is open.

Symbol ISO 7010 W021 shall be readily visible when the appliance is installed as in normal use.

(normative)

Normative references to international publications with their corresponding joint Australia/New Zealand publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by national variations the relevant joint Australia/New Zealand publications applies if the national variations are needed to ensure the safety of the appliance for Australia/New Zealand conditions. These international publications are indicated by (mod). If an international publication is not so indicated, then either it or the listed Australia/New Zealand publication may be used. Where there is no equivalent international publication listed to a listed Australia/New Zealand publication, then the Australia/New Zealand publication applies

Publication	Year	<u>Title</u>	AS/NZS	<u>Year</u>
IEC 60068-2-6,		Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)		
IEC 60079(all parts)		Explosive atmospheres		
IEC 60079-7 IEC 60079- 7/AMD1 ¹⁾	2015 2017	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"	60079.7	2016
IEC 60079-15	2017	Explosive atmospheres – Part 15: Equipment protection by type of protection "n"	60079.15 A1	2020 2021
IEC 60335-2-34	2021	Household and similar electrical appliances – Safety – Part 2-34: Particular requirements for motor- compressors	60335.2.34	2021
IEC 60584-1		Thermocouples – Part 1: EMF specifications and tolerances		
ISO 817		Refrigerants – Designation and safety classification		
ISO 7010	2010	Graphical symbols – Safety colours and safety signs – Registered safety signs		

There exists a consolidated edition 5.1:2017 that includes IEC 60079-7:2015 and its Amendment 1:2017.
© Standards Australia Limited/Standards New Zealand 2024

NOTES

Standards Australia

Standards Australia is an independent company, limited by guarantee, which prepares and publishes most of the voluntary technical and commercial standards used in Australia. These standards are developed through an open process of consultation and consensus, in which all interested parties are invited to participate. Through a Memorandum of Understanding with the Commonwealth government, Standards Australia is recognised as Australia's peak national standards body.

Standards New Zealand

The first national standards organisation was created in New Zealand in 1932. The New Zealand Standards Executive is established under the Standards and Accreditation Act 2015 and is the national body responsible for the production of standards.

Australian/New Zealand Standards

Under a Memorandum of Understanding between Standards Australia and Standards New Zealand, Australian/New Zealand standards are prepared by committees of experts from industry, governments, consumers, and other sectors. The requirements or recommendations contained in published standards are a consensus of the views of representative interests and also take account of comments received from other sources. They reflect the latest scientific and industry experience. Australian/New Zealand standards are kept under continuous review after publication and are updated regularly to take account of changing technology.

International involvement

Standards Australia and Standards New Zealand are responsible for ensuring that the Australian and New Zealand viewpoints are considered in the formulation of international standards and that the latest international experience is incorporated in national and joint standards. This role is vital in assisting local industry to compete in international markets. Both organisations are the national members of ISO (the International Organization for Standardization) and provide the secretariat to their respective national committees of the IEC (the International Electrotechnical Commission).

Visit our websites

www.standards.org.au

www.standards.govt.nz