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

ATTENTION: Mayu Shiozaki

DR **24003** CP

DRAFT

COMBINED POSTAL BALLOT/ AUSTRALIAN / NEW ZEALAND STANDARD FOR COMMENT

LIABLE TO ALTERATION DO NOT USE AS A STANDARD

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DR 24003 CP

AS/NZS 60335.2.7:2024

Household and similar electrical appliances – Safety –

Part 2.7: Particular requirements for washing machines

STANDARDS Australia

STANDARDS NEW ZEALAND
TE MANA TAUTIKANGA O AOTEAROA

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 2.7: Particular requirements for washing machines

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 60335-2-7 ED 9, COPIES OF WHICH MAY BE VIEWED BY CONTACTING enquiries@standards.govt.nz.

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 xxxxxxxx. 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

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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 24003 CP.

AS/NZS 60335.2.7:2024
(IEC 60335-2-7 ED 9, MOD)

Australian/New Zealand Standard™

Household and similar electrical appliances – Safety –

Part 2.7: Particular requirements for washing machines

(IEC 60335-2-7 ED 9, MOD)

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AS/NZS 60335.2.7:2024

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2.7: Particular requirements for washing machines

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 60335.2.7:2020 three years from the date of publication of this Standard. During this period AS/NZS 60335.2.7:2020 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 60335-2-7 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 60335.2.7 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, 20.104, 20.105);

c) addition of requirements for restarting the spin cycle of agitator washing machines and impeller washing machines (20.108);

d) addition of requirements for remote operation (22.51);

e) application of test probe 19 has been introduced (8.1.1, 20.2).

This Standard is an adoption with national modifications of the ninth edition of IEC 60335-2-7, *Household and similar electrical appliances – Safety – Part 2-7: Particular requirements for washing machines*. 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 washing machines.

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 3820[1] that could be applicable to requirements for washing machines are covered by this standard.

The national variations to IEC 60335-2-7 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).

1 AS/NZS 3820 *Essential safety requirements for electrical equipment*

The text of the International Standard IEC 60335-2-7 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 of AS/NZS 60335.1:2022.

20 Stability and mechanical hazards

p **20.106** *Replace the text by the following:*

For appliances with a front opening door having an opening dimension exceeding 200 mm, and drum volume exceeding 60 dm^3, it shall not be possible to

- start the washing cycle or a drying cycle if any, until two separate independent means that control the movement of the drum are operated manually in turn, in less than 60 s, after the door has been closed;
- recommence the washing cycle or a drying cycle if any, until two separate independent means that control the movement of the drum are operated manually in turn in less than 60 s, after the door has been opened and closed again.

NOTE 1 The volume of the drum can be calculated by measuring the maximum internal diameter and maximum internal length of the drum.

NOTE 2 Manual operation of a single means twice is not considered to be manual operation of two separate independent means, for example, touching at the same location on the same screen twice is not acceptable, however, touching two different locations on the same screen is acceptable.

NOTE 3 Setting or revising the washing or drying programme is not considered to be one of the two separate independent means, unless the selection of the washing or drying programme only occurs after the door has been closed.

Compliance is checked by inspection, measurement ignoring any non-metallic seal fitted in the door opening and by the following tests with the appliance supplied at ***rated voltage****.*

The door is closed and the two separate independent means that control the movement of the drum are operated manually in turn with a time delay of less than 60 s between the operations. The washing cycle or drying cycle shall only start after both of the independent means have been operated.

The door is closed and the two separate independent means that control the movement of the drum are operated manually in turn with a time delay of 60^{+1}_{0} *s between the operations. The washing cycle or drying cycle shall not start.*

The door is opened and closed again the two separate independent means that control the movement of the drum are then operated manually in turn with a time delay of less than 60.s between the operations. The washing cycle or drying cycle shall only recommence after both of the independent means have been operated.

The door is opened and closed again the two separate independent means that control the movement of the drum are then operated manually in turn with a time delay of 60^{+1}_{0} *s between the operations. The washing cycle or drying cycle shall not recommence*

If compliance relies on the operation of an ***electronic circuit****, the tests are repeated under the following conditions applied separately:*

– *the fault conditions in a) to g) of 19.11.2 are applied one at a time to the* ***electronic circuit****;*

– *the electromagnetic phenomena tests of 19.11.4.2 and 19.11.4.5 are applied to the appliance.*

The washing cycle or drying cycle shall not start or recommence.

NEW ZEALAND NATIONAL VARIATIONS

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

20 Stability and mechanical hazards

p **20.106** *Replace the text by the following:*

For appliances with a front opening door having an opening dimension exceeding 200 mm, and drum volume exceeding 60 dm^3, it shall not be possible to

- start the washing cycle or a drying cycle if any, until two separate independent means that control the movement of the drum are operated manually in turn, in less than 60 s, after the door has been closed;
- recommence the washing cycle or a drying cycle if any, until two separate independent means that control the movement of the drum are operated manually in turn in less than 60 s, after the door has been opened and closed again.

NOTE 1 The volume of the drum can be calculated by measuring the maximum internal diameter and maximum internal length of the drum.

NOTE 2 Manual operation of a single means twice is not considered to be manual operation of two separate independent means, for example, touching at the same location on the same screen twice is not acceptable, however, touching two different locations on the same screen is acceptable.

NOTE 3 Setting or revising the washing or drying programme is not considered to be one of the two separate independent means, unless the selection of the washing or drying programme only occurs after the door has been closed.

Compliance is checked by inspection, measurement ignoring any non-metallic seal fitted in the door opening and by the following tests with the appliance supplied at ***rated voltage****.*

The door is closed and the two separate independent means that control the movement of the drum are operated manually in turn with a time delay of less than 60 s between the operations. The washing cycle or drying cycle shall only start after both of the independent means have been operated.

The door is closed and the two separate independent means that control the movement of the drum are operated manually in turn with a time delay of 60^{+1}_{0} *s between the operations. The washing cycle or drying cycle shall not start.*

The door is opened and closed again the two separate independent means that control the movement of the drum are then operated manually in turn with a time delay of less than 60.s between the operations. The washing cycle or drying cycle shall only recommence after both of the independent means have been operated.

The door is opened and closed again the two separate independent means that control the movement of the drum are then operated manually in turn with a time delay of 60^{+1}_{0} *s between the operations. The washing cycle or drying cycle shall not recommence*

If compliance relies on the operation of an ***electronic circuit****, the tests are repeated under the following conditions applied separately:*

– *the fault conditions in a) to g) of 19.11.2 are applied one at a time to the* ***electronic circuit****;*

– *the electromagnetic phenomena tests of 19.11.4.2 and 19.11.4.5 are applied to the appliance.*

The washing cycle or drying cycle shall not start or recommence.

Annex ANZ
(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	Title	AS/NZS	Year
IEC 60068-2-52		*Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium, chloride solution)*		
IEC 60079-15		*Explosive atmospheres – Part 15: Equipment protection by type of protection "n"*		
IEC 60584-1		*Thermocouples – Part 1: EMF specifications and tolerances*		
IEC 60730-2-12	2015	*Automatic electrical controls – Part 2-12: Particular requirements for electrically operated door locks*		

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).

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