

Australian/New Zealand Standard®

**Approval and test specification—
Particular requirements for
refrigerators and food freezers**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/2, Electrical Approvals Standards. It was approved on behalf of the Council of Standards Australia on 4 July 1995 and on behalf of the Council of Standards New Zealand on 5 August 1995. It was published on 5 November 1995.

The following interests are represented on Committee EL/2:

Association of Certification Bodies, Australia
Association of New Zealand Electrical Appliance Distributors
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Consumer Electronics Suppliers Association, Australia
Electrical regulatory authorities
Electrical Supply Association of Australia
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AS 3303—1995/NZS 6324:1995

Australian/New Zealand Standard[®]

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Particular requirements for
refrigerators and food freezers**

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/2 on Electrical Approvals Standards to supersede AS 3303—1990/NZS 6324:1990. It was prepared to align Australian Approval and Test Specifications and New Zealand Standards progressively with International Electrotechnical Commission (IEC) Standards for appliances.

This Standard closely follows IEC 335-2-24:1984, *Safety of household and similar electrical appliances, Part 2: Particular requirements for refrigerators and food freezers*, including Amendment No. 1. It is to be read in conjunction with AS 3300/NZS 6300, *Approval and test specification—General requirements for household and similar electrical appliances*, and modifies the corresponding clauses of AS 3300/NZS 6300 to convert that Specification into the Australian and New Zealand safety standard for refrigerators and food freezers in the following manner:

- (a) Where a particular clause of AS 3300/NZS 6300 is not referred to in this Standard, that clause of AS 3300/NZS 6300 is applicable.
- (b) Where the word 'ADDITION' is used it means that the corresponding requirement of AS 3300/NZS 6300 is added to by the requirement of this Standard.
- (c) Where the word 'REPLACEMENT' is used it means that the corresponding requirement of AS 3300/NZS 6300 is replaced by the requirement of this Standard.

Where the word 'VOID' is used it means that the requirement in IEC 335-2-24:1984 is not used in Australia or New Zealand. The word is also used where the deletion of a requirement would lead to consequential renumbering of references within the body of this Standard.

A number of variations have been made in this Standard to the test of IEC 335-2-24:1984. These variations are necessary to take into account the national requirements for electrical appliances that apply in both Australia and New Zealand. The variations are indicated throughout the text of this Standard by marginal bars located against the changed text or figure. The majority are technical. Other variations to notes, explanatory matter, figures and references to Australian and New Zealand Standards and Specifications are also included for completeness.

Descriptions of these variations are to be found in the Annex to this Standard, given in the order found within the body of this Standard. These variations also form the Australian national variations for purposes of the IEC scheme for recognition of results of testing to Standards for safety of electrical equipment (the CB scheme).

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

The numbering of clauses and figures closely follows that of IEC 335-2-24:1984. To allow for the introduction of additional material by the IEC, the numbers 101 to 200 have been reserved. To allow for additional material to be introduced by Australia or New Zealand, the numbers 301 to 400 are used. This scheme has been introduced to reduce the likelihood of the IEC and Australia or New Zealand using the same clause or figure number for differing requirements. Where Australia or New Zealand has added a requirement or made a change to a particular clause of IEC 335-2-24 that clause number remains unchanged.

In this Standard the requirements appear in roman type, notes and explanatory matter are indented and tests appear in italic type.

In Australia this Standard supersedes AS 3303—1990 on publication. In New Zealand this Standard supersedes NZS 6324:1990 on publication.

This Standard incorporates Amendment Nos. 1, 2, 3, 4 and 5 to the 1990 edition and contains changes which more closely align it with IEC 335-2-24:1984. It has also been editorially changed to align it with the latest edition of AS 3300/NZS 6300.

This Standard requires reference to the following:

STANDARDS

AS

1430 Household refrigerators and freezers

1939 Degrees of protection provided by enclosures for electrical equipment (IP Code)

APPROVAL AND TEST SPECIFICATIONS

AS

3109 Appliance couplers for household and similar general purposes

3109.1 Part 1: General requirements

3305 Particular requirements for motor compressors

AS 3300/NZS 6300 General requirements for household and similar electrical appliances

NOTE: Where no relevant New Zealand Standard is listed, the referenced Australian Standard is deemed to be appropriate for the purpose of this Standard.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Approval and test specification — Particular requirements for refrigerators and food freezers**

1 SCOPE This Clause of AS 3300/NZS 6300 is applicable except as follows:

REPLACEMENT Replace Clause 1.1 with the following:

1.1 Scope and application This Standard applies to electrical refrigerators with or without frozen food storage compartments and food freezers and their combination for household and similar use.

It deals with safety requirements for the electrical equipment of such appliances, but does not cover features of construction and operation which are dealt with in AS 1430.

NOTES:

- 1 Where applicable, clauses of AS 3300/NZS 6300 related to safety of heating appliances apply to absorption-type refrigerators or food freezers, and to heating elements incorporated in compression-type refrigerators or food freezers.
- 2 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, in light industry and on farms, are within the scope of this Standard.
- 3 This Standard does not take into account the special hazards which exist in nurseries and other places where there are young children or aged or infirm persons without supervision; in such cases additional requirements may be necessary.
- 4 This Standard does not apply to—
 - (a) appliances designed exclusively for industrial purposes;
 - (b) 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); or
 - (c) separate motors.
- 5 For appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary.
- 301 For the purpose of this Standard, refrigerators and food freezers are considered to be unattended appliances.

2 DEFINITIONS This Clause of AS 3300/NZS 6300 is applicable except as follows:

ADDITIONS Add the following:

2.2.101 A *refrigerator* denotes an enclosed thermally insulated appliance designed for the storage of food and primarily intended for household use. The term 'refrigerator' includes 'freezer' either as part of the refrigerator or as a separate appliance.

Clauses 2.2.102, 2.2.103 and 2.2.104 are void.

2.2.105 *Compression-type appliance* denotes an appliance in which refrigeration is effected by the vaporization at low pressure in a heat exchanger (evaporator) of a liquid refrigerant, the vapour thus formed being restored to the liquid state by mechanical compression to a higher pressure and subsequent cooling in another heat exchanger (condenser).