

Australian/New Zealand Standard™

**Performance of household electrical
appliances—Room airconditioners**

Part 2: Energy labelling requirements

AS/NZS 3823.2:2000

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/15, Quality and Performance of Household Electrical Appliances. It was approved on behalf of the Council of Standards Australia on 11 February 2000 and on behalf of the Council of Standards New Zealand on 8 March 2000. It was published on 31 March 2000.

The following interests are represented on Committee EL/15:

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Australian Consumers Association
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Australian Retailers Association
Consumer Electronic Suppliers Association
Department of Minerals and Energy, Qld
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Australian/New Zealand Standard™

Performance of household electrical appliances—Room airconditioners

Part 2: Energy labelling requirements

Originated as AS/NZS 3823.2:1998.
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/15, Quality and Performance of Household Electrical Appliances, to supersede AS/NZS 3823.2:1998.

The AS/NZS 3823 series comprises two Parts, as follows:

AS/NZS

3823 Performance of household electrical appliances — Room airconditioners

3823.1.1 Part 1.1: Non-ducted airconditioners and heat pumps — Testing and rating for performance

3823.2 Part 2: Energy labelling requirements (this Standard)

The overall objective of the AS/NZS 3823 series of Standards is to promote high levels of performance and energy efficiency in room airconditioners.

The Parts of the AS/NZS 3823 are summarized as follows:

- (a) Part 1.1 includes performance test procedures for rating non-ducted airconditioners and heat pumps, to be used in conjunction with Part 2.
- (b) Part 2 includes algorithms for the calculation of the energy efficiency star rating and projected energy usage, performance requirements, details of the energy label and requirements for the valid application thereof.

This Standard is published with the approval of the combined state regulatory authorities and it is structured to be suitable for reference in energy labelling regulatory legislation.

This edition contains the new star rating algorithms developed during 1999 which will be introduced together with the new energy label for airconditioners during mid to late 2000.

The main changes in this Standard are as follows:

- (a) Introduction of new energy labelling algorithms to regrade star ratings;
- (b) Introduction of redesigned more consumer friendly energy label;
- (c) A revised format for the application for registration — Appendix B.

This Standard supersedes AS/NZS 3823.2:1998 on 1 October 2000. From 1 April 2000 until 30 September 2000 it is anticipated that regulatory authorities will approve appliances in accordance with either AS/NZS 3823.2:1998 or this Standard. On 1 October 2000, all registrations according to previous Standards will be cancelled. For these appliances to be sold they must be re-registered in accordance with this Standard prior to 1 October 2000.

It is expected that concessions will apply until 1 April 2002 to allow the sale of products with old labels direct from storage facilities and for which it can be demonstrated that they were manufactured locally or imported before 1 October 2000; however, all products on display for sale will be required to display new labels from 1 October 2000, irrespective of their date of manufacture or importation.

All registrations submitted from 1 October 2000 will require test reports to AS/NZS 3823.1.1. Check testing, where applicable, will be undertaken to the version of the test Standard that has been used to support the current energy labelling for that model.

NOTES:

- 1 Given that all products on display have to carry the new label shown in this Standard from 1 October 2000, it is preferred that manufacturers submit the new label in all registration applications from 1 April 2000.
- 2 Models registered prior to 1 April 2000 may be re-registered with the new label shown in this Standard at any time during the period 1 April 2000 to 30 September 2000.

- 3 Some regulators may accept pre-registration applications with the new label shown in this Standard prior to 1 April 2000 to facilitate approval soon thereafter.
- 4 It is not necessary to seek re-approval of the label when the when the label is changed from the transition version to the final version with the solid green bar at the base; however, the final label should also be submitted with the energy labelling application.
- 5 Administrative arrangements during the transition period may vary. Registration holders should contact their regulator to obtain detailed requirements with respect to labelling and registration requirements.

From 1 March 2001, the Scope of this Standard will be expanded to include non-ducted room airconditioners (including heat pumps with no cooling mode) of the vapour compression type intended for household and similar use and for use with single phase power supplies.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to figures, are deemed to be requirements of this Standard.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Performance of household electrical appliances—
Room airconditioners

Part 2: Energy labelling requirements

S E C T I O N 1 S C O P E A N D G E N E R A L

1.1 SCOPE

This Standard specifies the energy labelling requirements for non-ducted room airconditioners of the vapour compression type intended for household and similar use, up to a rated cooling capacity of 7.5 kW. It covers only those units with a single refrigeration circuit with one evaporator and one condenser such as unitary systems (window/wall) and single split systems. It does not cover multi-split systems, ducted systems or evaporative coolers. This Standard does not specify electrical safety requirements.

NOTE: The energy labelling of all single phase systems including non-ducted, multi-split and ducted systems is under consideration.

This Standard specifies the following values for cooling and heating, as applicable:

- (a) Rated power.
- (b) Rated capacity.
- (c) Energy efficiency ratio (EER) for cooling.
- (d) Coefficient of performance (COP) for heating.
- (e) Comparative energy consumption (CEC).
- (f) Star Rating Index (SRI).
- (g) Star rating.
- (h) Some of the requirements for energy label validity.
- (i) The performance criteria for energy labelling validity.
- (j) Test report format.
- (k) Printing requirements for room airconditioner appliance energy labels.

1.2 APPLICATION

This Standard shall be read in conjunction with AS/NZS 3823.1.1.

1.3 OBJECTIVE

The objective of this Standard is to provide detailed information on the performance and energy labelling requirements which a room airconditioning appliance has to meet in order to carry a valid energy efficiency label.