Australian/New Zealand Standard™

Performance of electrical appliances— Airconditioners and heat pumps

Part 3: Calculation of performance for minimum energy performance standard (MEPS) requirements





AS/NZS 3823.3:2002

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-015, Quality and Performance of Household Electrical Appliances. It was approved on behalf of the Council of Standards Australia on 25 June 2002 and on behalf of the Council of Standards New Zealand on 24 July 2002. It was published on 27 August 2002.

The following are represented on Committee EL-015:

Australian Consumers Association
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Australian Retail Association
Business New Zealand
Consumer Electronics Suppliers Association
Department of Industrial Relations (Qld)
Electrical Compliance Testing Association
Energy Efficiency and Conservation Authority of New Zealand
New South Wales Ministry of Energy and Utilities
National Appliance and Equipment Energy Efficiency Committee
National Association of Testing Authorities
Office of the Chief Electrical Inspector
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Airconditioning and Refrigeration Equipment Manufacturers Association of Australia

Australian Institute of Refrigeration Air Conditioning and Heating Institute of Refrigeration Heating and AirConditioning Engineers of New Zealand Primary Industries and Resources, South Australia Testing Interests (Australia)

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AS/NZS 3823.3:2002

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-015, Quality and Performance of Household Electrical Equipment

Testing of airconditioners under controlled operating conditions is defined in AS/NZS 3823.1.1, Performance of electrical appliances—Airconditioners and heat pumps, Part 1.1: Test Methods—Non-ducted airconditioners and heat pumps—Testing and rating for performance, and AS/NZS 3823.1.2, Performance of electrical appliances—Airconditioners and heat pumps, Part 1.2: Test Methods—Ducted airconditioners and airto-air heat pumps—Testing and rating for performance. Direct assessment of the performance of airconditioner appliances requires access to large capacity calorimeter or psychrometric loop test facilities. As an alternative to physical testing, this Standard defines an assessment procedure for minimum energy performance requirements based on simplified measurements and a simulation model of airconditioner performance. In all cases, test results obtained by physical testing using the procedures defined in AS/NZS 3823.1.1 or AS/NZS 3823.1.2 take precedence over the results obtained by using this Standard. If the simulation methods described in this Standard are not considered applicable to a particular appliance, then that appliance has to be assessed under AS/NZS 3823.1.1 or AS/NZS 3823.1.2.

The procedure defined in this Standard provides a low cost method for assessing airconditioner performance. It may also be used to assess design modifications for appliances that fail the minimum energy performance standard set in AS/NZS 3823.2.

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

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.

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