

Australian/New Zealand Standard™

**Performance of electrical appliances—  
Airconditioners and heat pumps**

**Part 1.4: Multiple split-system  
airconditioners and air-to-air heat  
pumps—Testing and rating for  
performance (ISO 15042:2011, MOD)**



## **AS/NZS 3823.1.4:2012**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-056, Room Air Conditioners. It was approved on behalf of the Council of Standards Australia on 26 October 2012 and on behalf of the Council of Standards New Zealand on 29 October 2012.

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The following are represented on Committee EL-056:

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Australian Building Codes Board  
Australian Industry Group  
CHOICE  
Consumer Electronics Association of New Zealand  
Consumer Electronics Suppliers Association  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-056, Room Air Conditioners.

This Standard is an adoption with national modifications and has been reproduced from ISO 15042:2011, *Multiple split-system air-conditioners and air-to-air heat pumps—Testing and rating for performance* and has been varied as indicated to take account of Australian/New Zealand conditions. The modifications are specified in Appendix ZZ.

The following clauses in ISO 15042:2011 have been varied or added:

Contents, Clauses 2; 3.6; 3.16; 3.20; 3.21; 3.22; 6.1.1.2; 6.1.1.3; 6.1.1.7; 7.1.1.2; 7.1.1.4; and 7.1.1.7; Annex B, Clause B2.5; Annex D, Clauses D.1.3 and D.1.4; and Annex F.

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

This Standard is Part 1.4 of the AS 3823.1 series, which provides testing and rating for performance requirements for airconditioners and heat pumps. The series comprises:

## AS/NZS

- 3823 Performance of electrical appliances—Airconditioners and heat pumps
- 3823.1.1 Part 1.1: Non-ducted airconditioners and heat pumps—Testing and rating for performance (ISO 5151:2010, MOD)
- 3823.1.2 Part 1.2: Ducted airconditioners and air-to-air heat pumps—Testing and rating for performance (ISO 13253:2011, MOD)
- 3823.1.3 Part 1.3: Water-source heat pumps—Water-to-air and brine-to air heat pumps—Testing and rating of performance (ISO 13256-1:1998, MOD)
- 3823.1.4 Part 1.4: Multiple split-system airconditioners and air-to-air heat pumps—Testing and rating for performance (ISO 15042:2011, MOD)

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

## CONTENTS

1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	2
4	Symbols .....	4
5	Airflow setting .....	5
5.1	General .....	5
5.2	Airflow setting for ducted indoor units .....	7
5.3	ESP for rating .....	8
5.4	Airflow setting for non-ducted indoor units measured by air-enthalpy method .....	10
5.5	Outdoor airflow .....	10
5.6	Unit supplied without indoor fan .....	10
6	Cooling tests .....	10
6.1	Cooling capacity test .....	10
6.2	Maximum cooling performance test .....	13
6.3	Minimum cooling test .....	14
6.4	Freeze-up drip test (applies to non-ducted multi-splits) .....	15
6.5	Condensate control test and enclosure sweat test .....	16
7	Heating tests .....	18
7.1	Heating capacity tests .....	18
7.2	Maximum heating performance test .....	23
7.3	Minimum heating performance test .....	24
7.4	Automatic defrost test .....	25
8	Heat recovery test .....	26
8.1	Heat recovery capacity ratings .....	26
9	Test methods and uncertainties of measurement .....	26
9.1	Test methods .....	26
9.2	Uncertainty of measurement .....	27
9.3	Test tolerances for the capacity tests .....	28
9.4	Test tolerances for performance tests .....	29
10	Test results .....	29
10.1	Capacity calculations .....	29
10.2	Data to be recorded .....	31
10.3	Test report .....	33
11	Marking provisions .....	34
11.1	Nameplate requirements .....	34
11.2	Nameplate information .....	34
11.3	Additional information .....	34
12	Publication of ratings .....	34
12.1	Standard ratings .....	34
12.2	Other ratings .....	34
	Annex A (normative) Airflow settings for ducted units .....	35
	Annex B (normative) Test requirements .....	39
	Annex C (informative) Airflow measurement .....	45

	<i>Page</i>
<b>Annex D</b> (normative) <b>Calorimeter test method</b> .....	51
<b>Annex E</b> (normative) <b>Indoor air enthalpy test method</b> .....	60
<b>Annex F</b> (informative) <b>Part-load capacity tests and determination of energy efficiency ratios and coefficients of performance</b> .....	66
<b>Annex G</b> (informative) <b>Individual indoor unit capacity tests</b> .....	67
<b>Annex H</b> (normative) <b>Heat recovery test method</b> .....	69
<b>Annex I</b> (informative) <b>Compressor calibration test method</b> .....	70
<b>Annex J</b> (informative) <b>Refrigerant enthalpy test method</b> .....	73
<b>Annex K</b> (informative) <b>Outdoor air enthalpy test method</b> .....	75
<b>Annex L</b> (informative) <b>Indoor calorimeter confirmative test method</b> .....	78
<b>Annex M</b> (informative) <b>Outdoor calorimeter confirmative test method</b> .....	80
<b>Annex N</b> (informative) <b>Balanced-type calorimeter confirmative test method</b> .....	82
<b>Annex O</b> (informative) <b>Cooling condensate measurements</b> .....	83
<b>Annex P</b> (normative) <b>Supplemental requirements when rating fan-coil (coil only) type units</b> .....	84
<b>Annex Q</b> (informative) <b>Pictorial examples of the heating capacity test procedures given in 7.1</b> .....	87
<b>Bibliography</b> .....	94

## AUSTRALIAN/NEW ZEALAND STANDARD

**Performance of electrical appliances—Airconditioners and heat pumps**

## Part 1.4:

## Multiple split-system airconditioners and air-to-air heat pumps—Testing and rating for performance (ISO 15042:2011, MOD)

**1 Scope**

This International Standard establishes performance testing and rating criteria for factory made residential, commercial and industrial, electrically driven, mechanical-compression, air-cooled air-conditioners and air-to-air heat pumps, described as basic multi-split systems, modular multi-split systems and modular heat recovery multi-split systems. These multi-split systems include air-to-air systems with non-ducted and/or ducted indoor units with integral fans and indoor units supplied without fans.

This International Standard is limited to single- and multiple-circuit split-systems which utilize one or more compressors with no more than two steps of control of the outdoor unit. It is also limited to split-systems with a single refrigeration circuit which utilize one or more variable-speed compressors or alternative compressor combinations for varying the capacity of the system by three or more steps. These split-systems are designed to operate with a combination of one or more outdoor units and two or more indoor units designed for individual operation, and such modular systems that are capable of transferring recovered heat from one or more indoor units to other units in the same system.

The requirements of testing and rating contained in this International Standard are based on the use of matched assemblies.

This International Standard is not applicable to the testing and rating of:

- a) water-cooled or water source equipment;
- b) mobile (single-duct) units having a condenser exhaust duct;
- c) individual assemblies not constituting a complete refrigeration system;
- d) equipment using the absorption refrigeration cycle.

This International Standard does not cover the determination of either seasonal efficiencies or seasonal part-load performances which can be required in some countries because they provide a better indication of efficiency under actual operating conditions.

NOTE Throughout this International Standard, the terms “equipment” and “systems” mean “multi-split air-conditioners” and/or “multi-split heat pumps”.

**2 Normative references**

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.

ISO 817, *Refrigerants — Designation and safety classification*<sup>1)</sup>

1) To be published. (Revision of ISO 817:2005.)