Reprint
as at 1 July 2021

Energy Efficiency (Energy Using Products) Regulations 2002

(SR 2002/9)

Silvia Cartwright, Governor-General

Order in Council

At Wellington this 5th day of February 2002

Present:
The Right Hon Helen Clark presiding in Council

Pursuant to section 36(1) of the Energy Efficiency and Conservation Act 2000, Her Excellency the Governor-General, acting on the advice and with the consent of the Executive Council, makes the following regulations.

Contents

Note

Changes authorised by subpart 2 of Part 2 of the Legislation Act 2012 have been made in this official reprint.

Note 4 at the end of this reprint provides a list of the amendments incorporated.

These regulations are administered by the Ministry of Business, Innovation, and Employment.

Regulations

1 Title

These regulations are the Energy Efficiency (Energy Using Products) Regulations 2002.

2 Commencement

These regulations come into force on 1 April 2002.

3 Interpretation

In these regulations, unless the context otherwise requires,—

accredited laboratory means—

(a) a laboratory accredited for the relevant test by the Accreditation Council (as that term is defined in section 4(1) of the Standards and Accreditation Act 2015) operating as International Accreditation New Zealand; or

(b) an equivalent overseas laboratory recognised by International Accreditation New Zealand under a mutual recognition agreement

AS means Australian Standard

AS/NZS means a joint Australian and New Zealand Standard

Authority means the Energy Efficiency and Conservation Authority established under section 20 of the Energy Efficiency and Conservation Act 2000

consumer means a person who acquires an item for use; but excludes any person who acquires an item for the purpose of—

(a) resupplying the item in trade; or

(b) using the item in a process of production or manufacture

display front means a representation of the front of an item presented for public viewing in a retail outlet

item means an individual product

manufacture includes any modification to an item that affects the item's energy performance characteristics

model means a range of items of the same brand where each item has the same energy performance characteristics

NZS means New Zealand Standard

prescribed form means the form prescribed in the relevant standards

registered in Australia means registered under the laws of any State or Territory of Australia that relate to minimum energy performance standards or mandatory energy performance labelling

sample means an item that is a representative example of a model

second-hand item means an item that has been used by a consumer in New Zealand

standards, in relation to a product class, means third party standards, or other requirements, that are—

(a) listed in Schedule 1 as minimum energy performance standards or testing standards for the product class; or

(b) listed in Schedule 2 as mandatory energy performance labelling or testing standards for the product class

test report means a report of the test results of a sample that is presented in the prescribed form

working day means any day of the week other than—

(a) a Saturday, a Sunday, Waitangi Day, Good Friday, Easter Monday, Anzac Day, the Sovereign's birthday, and Labour Day; and

(ab) if Waitangi Day or Anzac Day falls on a Saturday or a Sunday, the following Monday; and

(b) a day in the period commencing with 20 December in a year and ending with 15 January in the following year.

Regulation 3 **accredited laboratory** paragraph (a): amended, on 21 October 2015, by section 45(2) of the Standards and Accreditation Act 2015 (2015 No 91).

Regulation 3 **AS**: inserted, on 16 June 2006, by regulation 4 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2006 (SR 2006/149).

Regulation 3 **AS/NZS**: inserted, on 16 June 2006, by regulation 4 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2006 (SR 2006/149).

Regulation 3 **NZS**: inserted, on 16 June 2006, by regulation 4 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2006 (SR 2006/149).

Regulation 3 **standards**: replaced, on 1 July 2021, by regulation 4(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Regulation 3 **VRF system testing standard**: revoked, on 1 July 2021, by regulation 4(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Regulation 3 **working day** paragraph (ab): inserted, on 1 January 2014, by section 8 of the Holidays (Full Recognition of Waitangi Day and ANZAC Day) Amendment Act 2013 (2013 No 19).

Minimum energy performance standards

4 Duties of manufacturers and importers

(1) A person who manufactures in New Zealand or imports into New Zealand an item in a product class described or referred to in Schedule 1, or an assembly that incorporates that item, may not sell that item or the assembly to any other person in New Zealand unless—

(a) the energy performance characteristics of that item comply with the standards for that item's product class; and

(b) the manufacturer or importer completes and submits the prescribed form for that item's product class to the Authority.

(2) The manufacturer or importer must, if the Authority requests, supply a copy of the test report for a sample to the Authority within 5 working days of receiving the request.

(3) Subclause (1)(b) does not apply if the item's model is registered in Australia.

(4) This regulation does not apply if the item is intended to be exported from New Zealand.

Regulation 4(1): amended, on 1 July 2021, by regulation 5 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

5 Duties of persons dealing directly with consumers

A person may not make available for sale, lease, hire, or hire purchase in New Zealand an item in a product class described or referred to in Schedule 1, or an assembly that incorporates that item, to a consumer unless the energy performance characteristics of that item comply with the standards for that item's product class.

Regulation 5: amended, on 1 July 2021, by regulation 6 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Requirements in relation to labelling

6 Duties of manufacturers and importers

(1) A person who manufactures in New Zealand or imports into New Zealand an item in a product class described or referred to in Schedule 2 may not sell that item to any other person in New Zealand unless—

(a) a label that complies with the standards for that item's product class—

(i) is attached to that item as required by those standards; or

(ii) is supplied with that item along with instructions on how to attach the label to that item as required by those standards; and

(b) the model and brand designations on the label correspond to the model and brand designations of that item; and

(c) the energy performance characteristics information on the label corresponds with the energy performance characteristics for that item; and

(d) the manufacturer or importer completes and submits the prescribed form for that item's product class to the Authority.

(2) The manufacturer or importer must, if the Authority requests, supply a copy of the test report for a sample to the Authority within 5 working days of receiving the request.

(3) Subclause (1)(d) does not apply if the item's model is registered in Australia.

(4) This regulation does not apply if the item is intended to be exported from New Zealand.

Regulation 6(1): amended, on 1 July 2021, by regulation 7 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

7 Duties of persons dealing directly with consumers

(1) A person may not make available for sale, lease, hire, or hire purchase in New Zealand an item in a product class described or referred to in Schedule 2 to a consumer unless—

(a) a label that complies with the standards for that item's product class is attached to that item and to any display front as required by those standards; and

(b) the model and brand designations on the label correspond to the model and brand designations of that item.

(2) Despite anything in subclause (1), if a person who is selling, leasing, or hiring out an item received from another person in a packaged form does not unpack the item before supplying that item to a consumer, a label need not be attached to that item, but the label must be supplied to the consumer with that item.

Regulation 7(1): amended, on 1 July 2021, by regulation 8 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

General requirements and exemptions

8 Requirement for representations to be in accordance with standards

(1) This regulation applies if—

(a) representations are made about a model that is in a product class described or referred to in Schedule 1 or Schedule 2; and

(b) those representations are made—

(i) in trade; or

(ii) in connection with—

(A) the sale of an item of the model to a person in New Zealand; or

(B) the lease, hire, or hire purchase of an item of the model by a person in New Zealand.

(2) If this regulation applies, a person may not make—

(a) a representation about the energy performance characteristics of the model that is inconsistent with the standards for that model; or

(b) a false or misleading representation about the energy performance characteristics of the model.

(3) In this regulation, **trade** has the same meaning as in section 2(1) of the Fair Trading Act 1986.

Regulation 8(1)(a): amended, on 1 July 2021, by regulation 9 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

9 Requirement to provide information for statistical purposes

(1) A person who manufactures in New Zealand or imports into New Zealand an item in a product class described or referred to in Schedule 1 or Schedule 2, or an assembly that incorporates that item, must provide the Authority with the following information every year no later than 4 months after the end of each year:

(a) the number of items of each model that the person sold in New Zealand in that year; and

(b) the number of items of each model that the person exported from New Zealand in that year; and

(c) the number of items of each model that the person imported into New Zealand that year; and

(d) the name of each model that the person discontinued—

(i) manufacturing in that year; or

(ii) exporting in that year; or

(iii) importing in that year; and

(e) a copy of any existing test report, or other energy performance data specified by the Authority, for each model named under paragraph (d).

(2) If asked by the Authority in writing, a person who manufactures in New Zealand or imports into New Zealand an energy-using item must provide the following information no later than 40 working days after receiving the request:

(a) the number of items in each product class specified by the Authority that the person sold to a purchaser in New Zealand in each of the preceding 3 years; and

(b) the energy performance characteristics of the items (as specified in the request).

(3) In this regulation, **year** means the period from 1 April to 31 March.

Regulation 9(1): amended, on 1 July 2021, by regulation 10 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

10 Requirement for further information

If asked by the Authority in writing, a person who manufactures in New Zealand or imports into New Zealand an item in a product class described or referred to in Schedule 1 with a rating greater than 30 kW or 30 kVA must provide the Authority with a test report for a sample that is certified by an accredited laboratory within—

(a) 40 working days of receiving the request; or

(b) if the test report must be obtained from an overseas laboratory, 80 working days of receiving the request.

Regulation 10: amended, on 1 July 2021, by regulation 11 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

11 Exemption for second-hand items

Regulations 4 to 9 and 12 to 16 do not apply to second-hand items.

12 Exemptions for minimal quantities

(1) Regulations 4(2), 6, and 7 do not apply if—

(a) the total quantity of items of the same model manufactured in New Zealand or imported into New Zealand does not exceed 50, regardless of who manufactured or imported the items; and

(b) the manufacturer or importer of the item has completed and submitted to the Authority the form set out in Schedule 3.

(2) Despite subclause (1), if asked by the Authority in writing, the manufacturer or importer of an item must provide the Authority with any information on the energy performance characteristics of the item or items (as specified in the request) no later than 20 working days after receiving the request.

Offences and defences

13 Offences

(1) Every person commits an offence and is liable on conviction to a fine not exceeding $10,000 who—

(a) contravenes any of regulations 4 to 7, 8(2)(a), 9, 10, or 12(2); or

(b) prepares or signs a prescribed form or a form required under regulation 12(1)(b) knowing that the information contained in it, or on which it is based, is false.

(2) Each contravention of any of regulations 4 to 7, 8(2)(a), 9, 10 or 12(2) is a separate offence.

(3) In any prosecution for an offence arising out of the contravention of any of regulations 4 to 7 and 8(2)(a), it is not necessary to prove that the defendant intended to commit the offence.

(4) Every person who contravenes regulation 8(2)(b) commits an offence under the Fair Trading Act 1986 and is liable in accordance with section 40 of that Act.

Regulation 13(1): amended, on 1 July 2013, by section 413 of the Criminal Procedure Act 2011 (2011 No 81).

14 Defences

(1) It is a defence to a prosecution for an offence against regulation 4 if the defendant proves that the defendant—

(a) did not know that the energy performance characteristics of the item did not comply with the standards for that item's product class; and

(b) reasonably relied on information supplied by—

(i) an overseas manufacturer who is the item's manufacturer; or

(ii) a laboratory that has tested a sample for compliance with the relevant standards.

(2) It is a defence to a prosecution for an offence against regulation 5 if the defendant proves that—

(a) the defendant did not know that the energy performance characteristics of the item did not comply with the standards for that item's product class; and

(b) the defendant—

(i) exercised reasonable care to ascertain whether or not the energy performance characteristics of that item complied with the relevant standards; or

(ii) reasonably relied on representations or information from the person who supplied that item to the defendant.

(3) It is a defence to a prosecution for an offence against regulation 6(1)(c) if the defendant proves that the defendant—

(a) did not know that the information on the label did not correspond with the energy performance characteristics for that item; and

(b) reasonably relied on information supplied by—

(i) an overseas manufacturer who is that item's manufacturer; or

(ii) a laboratory that has tested a sample for compliance with the relevant standards.

(4) The defendant may not assert reasonable reliance on another person or laboratory unless—

(a) the defendant has, no later than 7 days before the proceedings, served on the prosecutor a notice in writing that identifies that person; or

(b) the District Court gives leave.

Regulation 14(4)(a): amended, on 1 July 2013, by section 413 of the Criminal Procedure Act 2011 (2011 No 81).

Transitional provisions

15 Transitional provisions for pre-existing items

Regulations 4 and 5 do not apply to an item if that item—

(a) was manufactured in New Zealand before 1 July 2002; or

(b) was imported into New Zealand before 1 July 2002.

16 Transitional provisions for electric storage water heaters and ballasts for fluorescent lamps

Despite anything in regulation 15, regulations 4 and 5 do not apply to an electric storage water heater or a ballast for a fluorescent lamp if the heater or ballast was manufactured in, or imported into, New Zealand before 1 February 2003.

Application of regulations to air conditioners up to 65kW and refrigerated cabinets

Heading: inserted, on 1 July 2021, by regulation 12 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

16A Application of regulations to air conditioners up to 65kW and refrigerated cabinets

Schedules 2A and 2B have effect in relation to the products covered by them (*see* clauses 2 and 3 of each of Schedules 2A and 2B and the references to those schedules in Schedules 1 and 2).

Regulation 16A: inserted, on 1 July 2021, by regulation 12 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Application of regulations to certain items if standard in Schedule 1 or Schedule 2 replaced or new standard added

Heading: added, on 16 June 2006, by regulation 5 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2006 (SR 2006/149).

17 Application of regulations to certain items if standard in Schedule 1 or Schedule 2 replaced or new standard added

(1) This regulation applies to an item if—

(a) the item belongs to a product class listed or referred to in Schedule 1 or Schedule 2; and

(b) a standard referred to in the Schedule that applies to the product class is replaced with a new or revised standard, or a reference to a new standard is added to the schedule and applies to the product class; and

(c) the item—

(i) was manufactured in New Zealand before the date on which the new or revised standard was included in the Schedule; or

(ii) was imported into New Zealand before the new or revised standard was included in the Schedule.

(2) Regulations 4 to 7 apply to an item as if the standard had not been replaced by the new or revised standard.

Regulation 17: added, on 16 June 2006, by regulation 5 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2006 (SR 2006/149).

Regulation 17 heading: amended, on 1 October 2012, by regulation 4(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Regulation 17(1)(a): amended, on 1 July 2021, by regulation 13 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Regulation 17(1)(b): amended, on 1 October 2012, by regulation 4(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

18 Application of regulations to certain items if new product class and standard added to Schedule 1 or Schedule 2

(1) This regulation applies to an item if—

(a) a product class is added to the list of product classes that are described or referred to in Schedule 1 or 2 and the item belongs to the product class; and

(b) a reference to a standard is added to the Schedule at the same time and applies to the product class; and

(c) the item—

(i) was manufactured in New Zealand before the date on which the new product class and standard were added in the Schedule; or

(ii) was imported into New Zealand before the date on which the new product class and standard were added in the Schedule.

(2) Regulations 4 to 7 do not apply to an item to which this regulation applies.

Regulation 18: added, on 16 June 2006, by regulation 5 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2006 (SR 2006/149).

Regulation 18 heading: amended, on 1 October 2012, by regulation 5(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Regulation 18(1)(a): replaced, on 1 October 2012, by regulation 5(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Regulation 18(1)(a): amended, on 1 July 2021, by regulation 14 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Regulation 18(1)(b): amended, on 1 October 2012, by regulation 5(3) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Regulation 18(1)(c)(i): amended, on 1 October 2012, by regulation 5(4) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Regulation 18(1)(c)(ii): amended, on 1 October 2012, by regulation 5(4) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Regulation 18(2): replaced, on 1 October 2012, by regulation 5(5) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Schedule 1
List of product classes subject to minimum energy performance standards and list of applicable standards

rr 4(1), 5, 8, 9(1), 10, 17, 18

Schedule 1: substituted, on 9 June 2011, by regulation 4 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2011 (SR 2011/129).

Product class	Minimum energy performance standards (MEPS)	Testing standards
Air conditioner product classes specified in clause 2 of Schedule 2A (and not excluded by clause 3 of that schedule)	The requirements specified in Part 2 of Schedule 2A	The requirements specified in Part 4 of Schedule 2A
Ballasts for fluorescent lamps	AS/NZS 4783.2:2002: Performance of electrical lighting equipment—Ballasts for fluorescent lamps—Energy labelling and minimum energy performance standards requirements	AS/NZS 4783.1:2001: Performance of electrical lighting equipment—Ballasts for fluorescent lamps—Method of measurement to determine energy consumption and performance of ballasts lamp circuits
Chillers	AS/NZS 4776.2:2008: Liquid-chilling packages using the vapour compression cycle—Minimum energy performance standard (MEPS) and compliance requirements	AS/NZS 4776.1.1:2008: Liquid-chilling packages using the vapour compression cycle—Method of rating and testing for performance—Rating; and AS/NZS 4776.1.2:2008: Liquid-chilling packages using the vapour compression cycle—Method of rating and testing for performance—Testing
Close control air conditioners	AS/NZS 4965.2:2008: Performance of close control airconditioners—Minimum energy performance standard (MEPS) requirements	AS/NZS 4965.1:2008: Performance of close control airconditioners—Testing for rating
Compact fluorescent lamps	AS/NZS 4847.2:2010: Self-ballasted lamps for general lighting services—Minimum Energy Performance standards (MEPS) requirements, except that, despite clauses 4.2 and 5.3, the standard applies, with all necessary modifications, as if the provisions concerning the option for alternative certification by the Efficient Lighting Initiative or UK Energy Saving Trust programmes that is available in Australia is also available in New Zealand	AS/NZS 4847.1:2010: Self-ballasted lamps for general lighting services—Test methods—Energy performance

Product class	Minimum energy performance standards (MEPS)	Testing standards
Computer monitors	AS/NZS 5815.2:2013: Information technology equipment—Energy performance of computer monitors—Part 2: Minimum energy performance standards (MEPS) and energy rating labels	AS/NZS 5815.1:2012: Information technology equipment—Energy performance of computer monitors—Part 1: Methods of measurement of energy performance
Computers	AS/NZS 5813.2:2012: Information technology equipment—Energy performance of computers—Part 2: Minimum energy performance standards (MEPS) for computers	AS/NZS 5813.1:2012: Information technology equipment—Energy performance of computers—Part 1: Methods of measurement of energy performance In the case of "deemed to comply" computers (refer clause 4.4 of 5813.2:2012), AS/NZS 5814.1:2012: Information technology equipment—Energy performance of internal power supplies—Part 1: Methods of measurement of energy performance
Distribution transformers	AS 2374.1.2–2003: Power transformers—Minimum Energy Performance Standard (MEPS) requirements for distribution transformers	AS 60076.1–2005: Power transformers—Part 1: General
Dry-type distribution transformers	AS 2374.1.2–2003: Power transformers—Minimum Energy Performance Standard (MEPS) requirements for distribution transformers	AS 60076.11–2006: Power transformers—Part 11: Dry-type transformers
External power supplies	AS/NZS 4665.2:2005: Performance of external power supplies—Minimum energy performance standard (MEPS) requirements	AS/NZS 4665.1:2005: Performance of external power supplies—Test method and energy performance mark
Gas water heaters	AS/NZS 4552.2:2010: Gas fired water heaters for hot water supply and/or central heating—Minimum energy performance standards for gas water heaters	AS 4552–2005: Gas fired water heaters for hot water supply and/or central heating
Household refrigerating appliances	AS/NZS 4474.2:2009: Performance of household electrical appliances—Refrigerating appliances—Energy labelling and minimum energy performance standard requirements	AS/NZS 4474.1:2007: Performance of household electrical appliances—Refrigerating appliances—Energy consumption and performance
Low-pressure copper thermal storage electric water heaters	AS/NZS 4692.2:2005: Electric water heaters—Minimum Energy Performance Standard (MEPS) requirements and energy labelling	AS/NZS 4692.1:2005: Electric water heaters—Energy consumption, performance and general requirements; or NZS 4602:1988: Low pressure copper thermal storage electric water heaters

Product class	Minimum energy performance standards (MEPS)	Testing standards
Refrigerated cabinet product classes specified in clause 2 of Schedule 2B (and not excluded by clause 3 of that schedule)	The requirement specified in clause 4 of Schedule 2B	The requirements specified in clauses 6 and 7 of Schedule 2B
Set-top boxes	AS/NZS 62087.2.1:2008: Power consumption of audio, video and related equipment—Minimum energy performance standards (MEPS) requirements for digital television set-top boxes	AS/NZS 62087.1:2010: Power consumption of audio, video and related equipment—Methods of measurement
Storage water heaters (electrically heated)	AS/NZS 4692.2:2005: Electric water heaters—Minimum Energy Performance Standard (MEPS) requirements and energy labelling	AS/NZS 4692.1:2005: Electric water heaters—Energy consumption, performance and general requirements; or NZS 4606.1:1989: Storage water heaters—General requirements
Television sets	AS/NZS 62087.2.2:2011: Power consumption of audio, video and related equipment—Part 2.2: Minimum energy level performance standards (MEPS) and energy rating label requirements for television sets	AS/NZS 62087.1:2010: Power consumption of audio, video and related equipment—Methods of measurement
Three-phase cage induction motors	AS/NZS 1359.5:2004: Rotating electrical machines—General requirements—Three-phase cage induction motors—High efficiency and minimum energy performance standards requirements	Test method A or test method B in AS/NZS 1359.5:2004: Rotating electrical machines—General requirements—Part 5: Three-phase cage induction motors—High efficiency and minimum energy performance standards requirements
Tubular fluorescent lamps	AS/NZS 4782.2:2004: Double-capped fluorescent lamps—Performance specifications—Minimum Energy Performance Standard (MEPS)	AS/NZS 4782.1:2004: Double-capped fluorescent lamps—Performance specifications—General

Schedule 1: amended, on 1 July 2021, by regulation 15(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 1: amended, on 1 July 2021, by regulation 15(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 1: amended, on 1 July 2021, by regulation 15(3) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 1: amended, on 1 July 2021, by regulation 15(4)(a) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 1: amended, on 1 July 2021, by regulation 15(4)(b) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 1: amended, on 1 July 2021, by regulation 15(4)(c) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 1: amended, on 1 April 2014, by regulation 5(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations (No 2) 2013 (SR 2013/394).

Schedule 1: amended, on 1 April 2014, by regulation 5(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations (No 2) 2013 (SR 2013/394).

Schedule 1: amended, on 1 October 2013, by regulation 6 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2013 (SR 2013/28).

Schedule 1: amended, on 1 April 2013, by regulation 4(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2013 (SR 2013/28).

Schedule 1: amended, on 1 April 2013, by regulation 4(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2013 (SR 2013/28).

Schedule 1: amended, on 1 October 2012, by regulation 6(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Schedule 1: amended, on 1 October 2012, by regulation 6(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Schedule 2
List of product classes subject to mandatory energy performance labelling and list of applicable standards

rr 6(1), 7(1), 8, 9(1), 17, 18

Schedule 2: substituted, on 9 June 2011, by regulation 4 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2011 (SR 2011/129).

Product class	Mandatory energy performance labelling	Testing standards
Air conditioner product classes specified in clause 2 of Schedule 2A (and not excluded by clause 3 of that schedule)	The requirements specified in Part 3 of Schedule 2A	The requirements specified in Part 4 of Schedule 2A
Clothes washing machines	AS/NZS 2040.2:2005: Performance of household electrical appliances—Clothes washing machines—Part 2: Energy efficiency labelling requirements	AS/NZS 2040.1:2005: Performance of household electrical appliances—Clothes washing machines—Part 1: Methods for measuring performance, energy and water consumption
Computer monitors	AS/NZS 5815.2:2013: Information technology equipment—Energy performance of computer monitors—Part 2: Minimum energy performance standards (MEPS) and energy rating labels	AS/NZS 5815.1:2012: Information technology equipment—Energy performance of computer monitors—Part 1: Methods of measurement of energy performance
Dishwashers	AS/NZS 2007.2:2005: Performance of household electrical appliances—Dishwashers—Part 2: Energy efficiency labelling requirements	AS/NZS 2007.1:2005: Performance of household electrical appliances—Dishwashers—Part 1: Methods for measuring performance, energy and water consumption
Household refrigerating appliances	AS/NZS 4474.2:2009: Performance of household electrical appliances—Refrigerating appliances—Energy labelling and minimum energy performance standard requirements	AS/NZS 4474.1:2007: Performance of household electrical appliances—Refrigerating appliances—Energy consumption and performance
Refrigerated cabinet product classes specified in clause 2 of Schedule 2B (and not excluded by clause 3 of that schedule)	The requirement specified in clause 5 of Schedule 2B	The requirements specified in clauses 6 and 7 of Schedule 2B
Rotary clothes dryers	AS/NZS 2442.2:2000: Performance of household electrical appliances—Rotary clothes dryers—Energy labelling requirements	AS/NZS 2442.1:1996: Performance of household electrical appliances—Rotary clothes dryers—Energy consumption and performance

Product class	Mandatory energy performance labelling	Testing standards
Television sets	AS/NZS 62087.2.2:2011: Power consumption of audio, video and related equipment—Part 2.2: Minimum energy performance standards (MEPS) and energy rating label requirements for television sets	AS/NZS 62087.1:2010: Power consumption of audio, video, and related equipment—Methods of measurement

Schedule 2: amended, on 1 July 2021, by regulation 16(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 2: amended, on 1 July 2021, by regulation 16(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 2: amended, on 1 July 2021, by regulation 16(3) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 2: amended, on 1 April 2014, by regulation 6 of the Energy Efficiency (Energy Using Products) Amendment Regulations (No 2) 2013 (SR 2013/394).

Schedule 2: amended, on 1 October 2013, by regulation 7 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2013 (SR 2013/28).

Schedule 2: amended, on 1 April 2013, by regulation 5(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2013 (SR 2013/28).

Schedule 2: amended, on 1 April 2013, by regulation 5(2) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2013 (SR 2013/28).

Schedule 2: amended, on 1 October 2012, by regulation 7(1) of the Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249).

Schedule 2A
Air conditioners up to 65kW

Schedules 1, 2

Schedule 2A: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Contents

Part 1
Preliminary

Schedule 2A Part 1: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

1 Overview of schedule

(1) This schedule specifies—

(a) 23 product classes of heat pumps and other air conditioners (clause 2):

(b) minimum energy performance standards (**MEPS**) for each product class (Part 2):

(c) mandatory energy performance labelling standards for each product class (Part 3):

(d) testing standards for the MEPS and labelling standards (Part 4).

(2) This schedule specifies some of the product classes and standards by reference to third party standards (for example, joint Australian and New Zealand standards).

(3) Definitions are set out in Part 5.

Schedule 2A clause 1: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Product classes covered by schedule

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

2 Product classes covered by schedule

(1) A numbered product class indicated in column 2 of the following table is a class of products covered by this schedule:

Kind of product	Product class	Characteristics	Value of R	MEPS level
Air-to-air unitary air conditioners	1	Wall-mounted unitary double-duct air conditioners	R ≤ 65 kW	3.1
	2	Portable unitary double-duct air conditioners	R ≤ 65 kW	2.5
	3	Wall-mounted unitary single-duct air conditioners	R ≤ 65 kW	3.1
	4	Portable unitary single-duct air conditioners	R ≤ 65 kW	2.5
	5	Ducted or non-ducted, excluding product classes 1 to 4	R < 10 kW	3.1
	6	Ducted or non-ducted, excluding product classes 1 to 4	10 kW ≤ R ≤ 39 kW	3.1
	7	Ducted or non-ducted, excluding product classes 1 to 4	39 kW < R ≤ 65 kW	2.9
Air-to-air single-split systems	8	Non-ducted	R < 4 kW	3.66
	9	Non-ducted	4 kW ≤ R < 10 kW	3.22
	10	Ducted	R < 10 kW	3.1
	11	Ducted or non-ducted	10 kW ≤ R ≤ 39 kW	3.1
	12	Ducted or non-ducted	39 kW < R ≤ 65 kW	2.9
Air-to-air single-split outdoor units (not supplied or offered for supply as part of a single-split system)	13	Supplied or offered for supply to create a non-ducted system	R < 4 kW	3.66
	14	Supplied or offered for supply to create a non-ducted system	4 kW ≤ R < 10 kW	3.22
	15	Supplied or offered for supply to create a ducted system	R < 10 kW	3.1
	16	Whether supplied or offered for supply to create a ducted or a non-ducted system	10 kW ≤ R ≤ 39 kW	3.1
	17	Whether supplied or offered for supply to create a ducted or a non-ducted system	39 kW < R ≤ 65 kW	2.9
Air-to-air multi-split outdoor units (whether or not supplied or offered for supply as part of a multi-split system)	18		R < 4 kW	3.66
	19		4 kW ≤ R < 10 kW	3.22
	20		10 kW ≤ R < 39 kW	3.1
	21		39 kW ≤ R ≤ 65 kW	2.9
Water-to-air air conditioners	22		R < 39 kW	3.5
	23		39 kW ≤ R ≤ 65 kW	3.2

(2) Each numbered product class consists of products that—

(a) are the kind of product indicated in the first column; and

(b) have the characteristics (if any) indicated in the third column; and

(c) have a value of R in the range indicated in the fourth column; and

(d) are not excluded by clause 3.

(3) In this clause, **R** is—

(a) the rated standard cooling full capacity; or

(b) for heating-only products, the rated standard heating full capacity.

(4) For the purposes of determining the relevant product class, R must be rounded to the nearest 0.1 kW.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus), s 16, Schedule 1

Schedule 2A clause 2: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

3 Product classes not covered by schedule

(1) The following are not covered by this schedule:

(a) close-control air conditioners:

(b) liquid-chilling packages:

(c) evaporative coolers or any other cooling systems that are not of the vapour compression type:

(d) ground-water air conditioners or ground-loop air conditioners:

(e) spot coolers:

(f) dehumidifiers:

(g) air conditioners powered by mains electricity that are specifically designed and sold only for installation in end-use mobile applications, such as caravans, mobile homes, camper vans, boats, and railway carriages:

(h) air conditioners powered by mains electricity that are specifically designed and sold only for installation in specialised high-temperature industrial applications, such as crane cabins used over blast furnaces:

(i) air conditioners that do not condition air sourced from within the conditioned space, but instead condition air sourced from outside the conditioned space, and deliver that air to the conditioned space.

(2) In this schedule,—

close-control air conditioner means an air conditioner designed for high sensible heat ratio applications that is capable of maintaining close control of both temperature and humidity

dehumidifier means an encased assembly designed to remove moisture from its surrounding atmosphere using either an electrically operated refrigeration system or a desiccant type of material, and any connected—

(a) means of circulating air; or

(b) drain arrangement for 1 or more of the following:

(i) collecting the condensate:

(ii) storing the condensate:

(iii) disposing of the condensate

ground-loop air conditioner means a brine-to-air air conditioner that uses a brine solution circulating through a subsurface piping loop as a heat source or a heat sink

ground-water air conditioner means a water-to-air air conditioner that uses water pumped from a well, lake, or stream as a heat source or a heat sink

liquid-chilling package means a factory-made and prefabricated assembly (not necessarily shipped as 1 package) that—

(a) consists of 1 or more compressors, condensers, and evaporators, with interconnections and accessories; and

(b) is designed to cool water by using a vapour-compression refrigeration cycle to reject heat from the water to a cooling medium, usually air or water

spot cooler—

(a) means a unitary air conditioner that lies wholly within a conditioned space, draws air for both the evaporator and condenser from the conditioned space, and expels the air back into the conditioned space; but

(b) does not include a product that can be configured as—

(i) a portable unitary double-duct air conditioner; or

(ii) a portable unitary single-duct air conditioner.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 17

Schedule 2A clause 3: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Part 2
Minimum energy performance standards

Schedule 2A Part 2: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

MEPS level requirements

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

4 Meaning of relevant MEPS level

In this Part, **relevant MEPS level**, in relation to a product in a particular product class, means the MEPS level specified for that product class in the table in clause 2(1).

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 19

Schedule 2A clause 4: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

5 Meanings of ACOP, AEER, COP, and EER

(1) In this schedule,—

annual coefficient of performance or **ACOP** means the measure of the energy efficiency of the heating function of air conditioners, as calculated in accordance with subclause (2)

annual energy efficiency ratio or **AEER** means the measure of the energy efficiency of the cooling function of air conditioners, as calculated in accordance with subclause (2)

coefficient of performance or **COP** means a ratio of the standard heating full capacity to the power input to the product (watts/watts)

energy efficiency ratio or **EER** means the ratio of the standard cooling full capacity to the power input to the product (watts/watts).

Calculation of ACOP and AEER

(2) A product's ACOP and AEER are calculated in accordance with the following formula:

$$\text{ACOP or AEER} = \text{capacity} \times 2000 \div [(\text{power input} \times 2000) + (P_{ia} \times 6.76)]$$

where—

capacity is,—

(a) in relation to the product's ACOP, the product's standard heating full capacity or standard heating part-load capacity, as appropriate, in kW; and

(b) in relation to the product's AEER, the product's standard cooling full capacity or standard cooling part-load capacity, as appropriate, in kW

power input is the product's power input, in kW, when determining the relevant capacity

P_{ia} is the Weighted Average Inactive Power Consumption, in watts, as defined in Annex B of AS/NZS 3823.4.1:2014 and AS/NZS 3823.4.2:2014.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 20

Schedule 2A clause 5: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

6 MEPS level requirements for product classes 2, 3, and 4

Application of clause

(1) This clause applies to a product in product class 2, 3, or 4.

Cooling requirement

(2) If the product is capable of cooling, the product's rated and tested EER must be greater than or equal to the relevant MEPS level.

Heating requirement

(3) If the product is capable of heating, the product's rated and tested COP must be greater than or equal to the relevant MEPS level.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 21

Schedule 2A clause 6: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

7 MEPS level requirements for other product classes: products without variable capacity

Application of clause

(1) This clause applies to a product that—

(a) is in product class 1 or 5 to 23; and

(b) is not of variable capacity.

Cooling requirement

(2) If the product is capable of cooling, the product's rated and tested AEER at full load must be greater than or equal to the relevant MEPS level.

Heating requirement

(3) If the product is capable of heating, the product's rated and tested ACOP at full load must be greater than or equal to the relevant MEPS level.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 22

Schedule 2A clause 7: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

8 MEPS level requirements for other product classes: products with variable capacity

Application of clause

(1) This clause applies to a product that—

(a) is in product class 1 or 5 to 23; and

(b) is of variable capacity.

Cooling requirement

(2) If the product is capable of cooling, then either—

(a) the product's rated and tested AEER at full load must be greater than or equal to the relevant MEPS level; or

(b) both of the following must be satisfied:

(i) the product's rated and tested AEER at full load must be greater than or equal to 95% of the relevant MEPS level; and

(ii) when operating at a part-load point nominated by the manufacturer, either,—

(A) for a part-load point between 83.3% and 100% of full load, the tested AEER at that part-load point must be greater than or equal to the relevant MEPS level; or

(B) for a part-load point between 50% and 83.3% of full load, the tested AEER at that part-load point must be greater than or equal to the amount $AEER_{part\text{-}load}$ as calculated in accordance with subclause (4).

Heating requirement

(3) If the product is capable of heating, then either—

(a) the product's rated and tested ACOP at full load must be greater than or equal to the relevant MEPS level; or

(b) both of the following must be satisfied:

(i) the product's rated and tested ACOP at full load must be greater than or equal to 95% of the relevant MEPS level; and

(ii) when operating at a part-load point nominated by the manufacturer, either,—

(A) for a part-load point between 83.3% and 100% of full load, the tested ACOP at that part-load point must be greater than or equal to the relevant MEPS level; or

(B) for a part-load point between 50% and 83.3% of full load, the tested ACOP at that part-load point must be greater than or equal to the amount $ACOP_{part\text{-}load}$ as calculated in accordance with subclause (4).

(4) For the purposes of this clause, the amounts $AEER_{part\text{-}load}$ and $ACOP_{part\text{-}load}$, at a particular part load point, are calculated in accordance with the following formula:

$$AEER_{part\text{-}load} \text{ or } ACOP_{part\text{-}load} = [1.25 - (0.3 \times capacity_{part\text{-}load} \div capacity_{full\text{-}load})] \times MEPS$$

where—

$capacity_{part\text{-}load}$ is,—

(a) in relation to the product's $AEER_{part\text{-}load}$, the product's standard cooling part-load capacity, in kW, at that part-load point; and

(b) in relation to the product's $ACOP_{part\text{-}load}$, the product's standard heating part-load capacity, in kW, at that part-load point

$capacity_{full\text{-}load}$ is,—

(a) in relation to the product's $AEER_{part\text{-}load}$, the product's standard cooling full capacity, in kW; and

(b) in relation to the product's $ACOP_{part\text{-}load}$, the product's standard heating full capacity, in kW

MEPS is the relevant MEPS level.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 23

Schedule 2A clause 8: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Part 3
Labelling requirements

Schedule 2A Part 3: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

9 Interpretation

In this schedule,—

energy label, in relation to a product, means a label that is, or purports to be, designed to assist consumers to compare the energy efficiency and energy consumption of products covered by this schedule

energy rating icon means an energy label whose content and format comply with the requirements of subpart 3

energy rating label means an energy label whose content and format comply with the requirements of subpart 2

non-residential product means a product that is in any of product classes 1 to 12 and that—

(a) is designed for non-residential applications; and

(b) is not on display for sale through retail outlets; and

(c) is not promoted in any catalogue or advertising material that could be interpreted as implying that it is suitable for some residential applications

retail premises means any premises—

(a) that are open to the public on a regular basis; and

(b) that are used for, or in connection with, the supply of 1 or more products; and

(c) at which products that are covered by this schedule are displayed for the purposes of retail supply or offers of retail supply.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 26

Schedule 2A clause 9: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Subpart 1—Requirements relating to energy labels

Schedule 2A Subpart 1: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

When energy labels are and are not required or permitted

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

10 Prohibition on energy labels

(1) An energy label must not be provided with, displayed with, or otherwise communicated in connection with, a product covered by this schedule in the course of the retail supply, or offer of retail supply, of the product.

(2) This clause is subject to clauses 11 and 16.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 27

Schedule 2A clause 10: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

11 When energy labels are required or permitted

Products covered by this clause

(1) This clause covers a product—

(a) that is in any of product classes 1 to 12; and

(b) that has a rated standard cooling full capacity or, for a heating-only product, a rated standard heating full capacity, of < 30kW.

(2) However, this clause does not cover such a product if test simulation software was used in place of any physical test.

When energy rating labels are required

(3) An energy rating label must be communicated in connection with the retail supply, or offer of retail supply, of a product that—

(a) is covered by this clause; and

(b) is single-phase and non-ducted; and

(c) is supplied, or offered for supply, at retail premises; and

(d) is not a single-split system that has a ceiling cassette as the indoor unit.

When energy rating labels are permitted

(4) An energy rating label may, but need not, be communicated in connection with the retail supply, or offer of retail supply, of any other product that is covered by this clause.

When energy rating icons are permitted

(5) An energy rating icon may, but need not, be used in an online or a print advertisement for a product covered by this clause.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 28

Schedule 2A clause 11: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

12 Manner of communication of energy rating labels

(1) If an energy rating label is communicated under clause 11, it must adhere to, be printed on, be part of, or be included in the packaging of each unit of the product.

(2) If an energy rating label is communicated under clause 11, and 1 or more units or packages of the product, or 1 or more units of another product that looks like or is otherwise represented as being the product, are displayed at retail premises,—

(a) at least 1 energy rating label must be clearly visible in relation to the display; and

(b) if all units on display are packaged, an energy rating label must adhere to, be printed on, or be part of, the outside of each package; and

(c) if 1 or more units are not packaged,—

(i) for each unpackaged unit, an energy rating label must—

(A) adhere to, be printed on, or be part of, the unit; or

(B) be attached to the unit in the form of a double-sided swing tag or a non-rotating single-sided swing tag; and

(ii) for each packaged unit (if any), the energy rating label may, but need not, adhere to, be printed on, or be part of, the unit's package.

(3) For the purposes of subclause (2), if a display relating to the product includes a model of the product, a non-functioning display unit, or another item that represents a unit of the product, subclause (2)(c) applies as if it were an unpackaged unit.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 29

Schedule 2A clause 12: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Calculation of amounts for energy rating label and energy rating icon

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

13 Calculating cooling season total energy consumption and heating season total energy consumption

Products other than unitary single-duct air conditioners

(1) In this schedule, for a product other than a unitary single-duct air conditioner, the cooling season total energy consumption is the amount TEC_{CS} as calculated in accordance with the following formula:

$$TEC_{CS} = C_{CSE} + (0.6 \times C_{IAE})$$

where—

C_{CSE} is the cooling seasonal energy consumption (CSEC), as calculated in accordance with clause 6 of AS/NZS 3823.4.1:2014 and based on rated inputs

C_{IAE} is the annual inactive energy consumption, as calculated in accordance with Annex B of AS/NZS 3823.4.1:2014 and based on rated inputs.

(2) In this schedule, for a product other than a unitary single-duct air conditioner, the heating season total energy consumption is the amount TEC_{HS} as calculated in accordance with the following formula:

$$TEC_{HS} = C_{HSE} + (0.4 \times C_{IAE})$$

where—

C_{HSE} is the heating seasonal energy consumption (HSEC), as calculated in accordance with clause 6 of AS/NZS 3823.4.2:2014 and based on rated inputs

C_{IAE} is the annual inactive energy consumption, as calculated in accordance with Annex B of AS/NZS 3823.4.2:2014 and based on rated inputs.

Temperature bins for energy rating label calculations

(3) When calculating the cooling season total energy consumption and heating season total energy consumption using subclauses (1) and (2) for the purposes of clause 24, calculations must be based on the residential temperature bins of clause 6.3 of AS/NZS 3823.4.1:2014 and AS/NZS 3823.4.2:2014.

Unitary single-duct air conditioners

(4) For the purposes of clause 24, for a unitary single-duct air conditioner within product class 3 or 4, the cooling season total energy consumption and (if applicable) heating season total energy consumption must be calculated for each climate zone by multiplying the rated power input specified by subclause (5) or (6) by the hours of operation set out in the following table:

Zone	Cooling hours	Heating hours
Hot	2,247	277
Average	840	1,291
Cold	545	2,660

(5) A wall-mounted unitary single-duct air conditioner in product class 3 must use the rated power input derived from the standard cooling capacity test at full load.

(6) A portable unitary single-duct air conditioner in product class 4 must use the rated power input derived from,—

(a) if the duration of the supplementary water tank is 4 hours or longer, the standard cooling full capacity test using the supplementary water tank in accordance with the additional requirements of Appendix B of AS/NZS 3823.1.5:2015; and

(b) otherwise, the standard cooling capacity test at full load.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 30

Schedule 2A clause 13: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

14 Star ratings

Products other than unitary single-duct air conditioners

(1) For the purposes of clauses 25 and 36, for a product other than a unitary single-duct air conditioner,—

(a) the cooling star rating is based on the total cooling seasonal performance factor (TCSPF or F_{TCSP}) calculated in accordance with Annex B of AS/NZS 3823.4.1:2014 and derived from the use of rated values; and

(b) the heating star rating is based on the heating seasonal performance factor (HSPF or F_{HSP}) calculated in accordance with clause 6.1 of AS/NZS 3823.4.2:2014 and derived from the use of rated values.

(2) For the purposes of subclause (1), calculations must be based on the residential temperature bins of clause 6.3 of AS/NZS 3823.4.1:2014 and AS/NZS 3823.4.2:2014.

(3) The TCSPF and HSPF correspond to a star rating as set out in the following table:

TCSPF or HSPF value			Star rating
	TCSPF / HSPF	< 2	0
2 ≤	TCSPF / HSPF	< 2.5	0.5
2.5 ≤	TCSPF / HSPF	< 3	1
3 ≤	TCSPF / HSPF	< 3.5	1.5
3.5 ≤	TCSPF / HSPF	< 4	2
4 ≤	TCSPF / HSPF	< 4.5	2.5
4.5 ≤	TCSPF / HSPF	< 5	3
5 ≤	TCSPF / HSPF	< 5.5	3.5
5.5 ≤	TCSPF / HSPF	< 6	4
6 ≤	TCSPF / HSPF	< 6.5	4.5
6.5 ≤	TCSPF / HSPF	< 7	5
7 ≤	TCSPF / HSPF	< 7.5	5.5
7.5 ≤	TCSPF / HSPF	< 8	6
8 ≤	TCSPF / HSPF	< 8.5	6.5
8.5 ≤	TCSPF / HSPF	< 9	7
9 ≤	TCSPF / HSPF	< 9.5	7.5
9.5 ≤	TCSPF / HSPF	< 10	8
10 ≤	TCSPF / HSPF	< 10.5	8.5
10.5 ≤	TCSPF / HSPF	< 11	9
11 ≤	TCSPF / HSPF	< 11.5	9.5
11.5 ≤	TCSPF / HSPF		10

Unitary single-duct air conditioners

(4) For the purposes of clauses 25 and 36, unitary single-duct air conditioners within product class 3 or 4 must always display a star rating of zero for cooling and heating (if applicable) in all climate zones on the energy rating label or the energy rating icon, as appropriate.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 31, Schedule 5 s 1

Schedule 2A clause 14: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Seasonal energy efficiency ratio ratings

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

15 Meaning of SEER rating

In this schedule,—

commercial SEER rating means a SEER rating calculated—

(a) using the commercial-based temperature bins set out in clause 17; and

(b) according to subclause 6.2 of AS/NZS 3823.4.1:2014 and AS/NZS 3823.4.2:2014, using the t_0 and t_{100} values set out in clause 18

residential SEER rating means a SEER rating calculated in accordance with clause 13 or 14

SEER rating (seasonal energy efficiency ratio rating) means any of the following:

(a) the total cooling seasonal performance factor (**TCSPF**):

(b) the heating seasonal performance factor (**HSPF**):

(c) the cooling season total energy consumption:

(d) the heating season total energy consumption.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) ss 32, 33

Schedule 2A clause 15: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

16 Advertising material: references to SEER ratings

(1) Sales literature that is provided at the time a product is supplied, or offered for supply, may include either or both of the following:

(a) a commercial SEER rating:

(b) a residential SEER rating.

(2) If a SEER rating is included, the sales literature must indicate—

(a) whether the SEER rating is a commercial SEER rating or a residential SEER rating; and

(b) the temperature zone or zones (hot, average, or cold) to which the SEER rating applies.

(3) If a star rating is included, the sales literature must indicate the temperature zone or zones (hot, average, or cold) to which the star rating applies.

(4) This clause does not apply to—

(a) unitary single-duct air conditioners (product classes 3 and 4); or

(b) water-to-air air conditioners (product classes 22 and 23).

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) ss 32 and 34

Schedule 2A clause 16: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

17 Commercial-based temperature bins

For the purposes of paragraph (a) of the definition of commercial SEER rating in clause 15, the commercial-based temperature bins are set out in the following tables:

Commercial cooling outdoor temperature distribution bins

Outdoor temperature tj °C	Hot/humid zone hours	Mixed zone hours	Cold zone hours
15	0	0	181
16	0	0	183
17	0	0	170

Commercial cooling outdoor temperature distribution bins

Outdoor temperature tj °C	Hot/humid zone hours	Mixed zone hours	Cold zone hours
18	100	229	177
19	117	238	175
20	141	251	185
21	185	225	165
22	235	242	143
23	256	208	118
24	282	185	112
25	290	178	82
26	306	129	72
27	304	125	69
28	265	89	45
29	271	70	66
30	219	39	40
31	137	52	45
32	101	39	32
33	85	21	22
34	57	21	11
35	30	18	6
36	17	17	5
37	13	14	0
38	4	14	0
39	0	2	0
40	0	3	0
41	0	2	0
Totals	3415	2411	2104

Commercial heating outdoor temperature distribution bins

Outdoor temperature tj °C	Hot/humid zone hours	Mixed zone hours	Cold zone hours
-7	0	0	0
-6	0	0	2
-5	0	0	4
-4	0	1	4
-3	0	0	8
-2	0	1	11
-1	0	2	17
0	0	6	14
1	0	6	17
2	0	9	28
3	0	18	29
4	0	16	38
5	3	15	48
6	4	23	62
7	7	29	122

Commercial heating outdoor temperature distribution bins

Outdoor temperature tj °C	Hot/humid zone hours	Mixed zone hours	Cold zone hours
8	14	33	127
9	15	48	176
10	18	52	163
11	15	77	222
12	28	87	197
13	27	126	184
14	30	170	0
15	38	210	0
16	62	221	0
17	0	0	0
Totals	261	1150	1473

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 6 s 1

Schedule 2A clause 17: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

18 Values of t_0 and t_{100}

For the purposes of paragraph (b) of the definition of commercial SEER rating in clause 15, the values of t_0 and t_{100} are given by the following table:

AS/NZS 3823.4 zone	Standard	t_0 (°C)	t_{100} (°C)
Hot/humid	AS/NZS 3823.4.1:2014	17	33
Hot/humid	AS/NZS 3823.4.2:2014	17	0
Mixed	AS/NZS 3823.4.1:2014	17	35
Mixed	AS/NZS 3823.4.2:2014	17	0
Cold	AS/NZS 3823.4.1:2014	14	35
Cold	AS/NZS 3823.4.2:2014	14	0

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 6 s 1

Schedule 2A clause 18: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Subpart 2—Format of energy rating labels

Schedule 2A Subpart 2: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

19 Interpretation

In this subpart,—

diagram 1 means the diagram in clause 21(3)

diagram 2 means the diagram in clause 22(8)

diagram 3 means the diagram in clause 22(9)

diagram 4 means the diagram in clause 22(10)

diagram 5 means the diagram in clause 22(11)

diagram 6 means the diagram in paragraph (a) of the examples in clause 25(6)

diagram 7 means the diagram in paragraph (b) of the examples in clause 25(6)

diagram 8 means the diagram in paragraph (c) of the examples in clause 25(6)

diagram 9 means the diagram in clause 27(4)

diagram 10 means the diagram in clause 27(5)

diagram 11 means the diagram in clause 27(6)

diagram 12 means the diagram in clause 27(7)

diagram 13 means the diagram in clause 28(2)

diagram 14 means the diagram in clause 29(2)

diagram 15 means the diagram in clause 29(3)

diagram 16 means the diagram in clause 29(4)

diagram 17 means the diagram in clause 29(5)

elements has the meaning given in clause 21(2).

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 1

Schedule 2A clause 19: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

20 Meaning of certain details in diagrams

In a diagram in this subpart, numbers, model details, and star ratings are illustrative only. The actual numbers, model details, and star ratings for the energy rating label for a particular product must be those specified in this subpart.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 2

Schedule 2A clause 20: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

21 Default elements of energy rating label

(1) Unless this subpart provides otherwise,—

(a) the energy rating label for a product must include each element mentioned in subclause (2); and

(b) the elements must contain the objects and text shown for them in diagram 1; and

(c) the elements, and the objects and text within them, must be arranged as shown in diagram 1.

(2) In this subpart, the **elements** of an energy rating label for a product are the following, as identified by a letter in diagram 1:

(a) the heading strip (**element a**):

(b) the cooling capacity strip (**element b**):

(c) the heating capacity strip (**element c**):

(d) the star rating statement (**element d**):

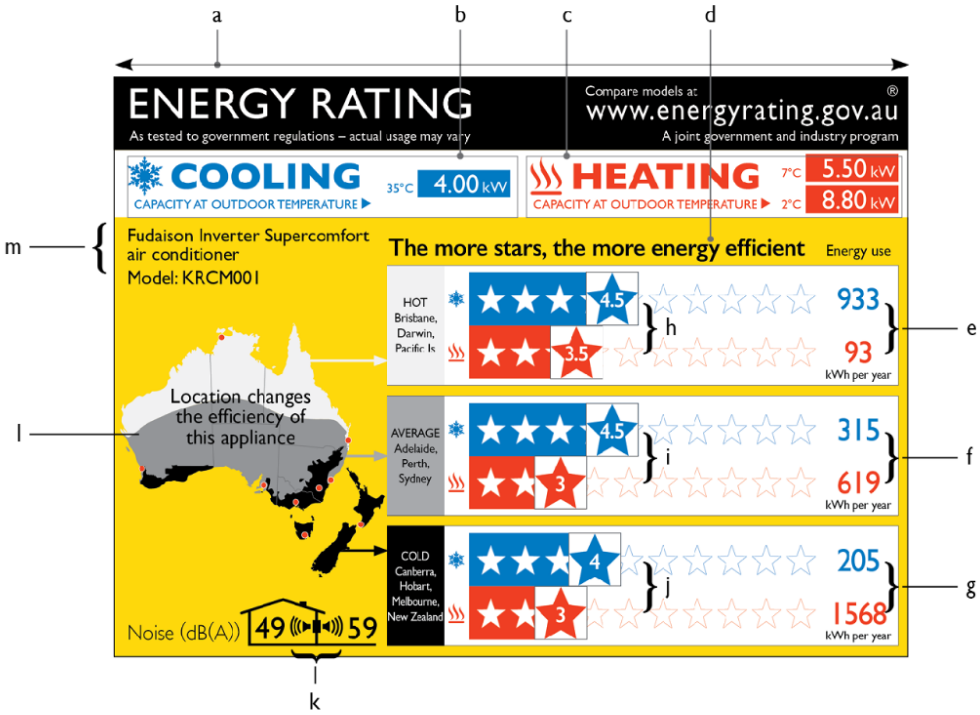
(e) the hot, average, and cold area cooling season total energy consumption and heating season total energy consumption figures (**elements e, f, and g**):

(f) the hot, average, and cold area star ratings (**elements h, i, and j**):

(g) the climate zone map (**element l**):

(h) the model details (**element m**).

(3) *Diagram 1*



Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 3

Schedule 2A clause 21: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

22 Content of elements b and c (cooling capacity strip and heating capacity strip)

Heating-only and cooling-only products

(1) Despite any other provision in this subpart,—

(a) for a cooling-only product, the heating capacity strip must be left blank, as shown in diagram 2; and

(b) for a heating-only product, the cooling capacity strip must be left blank, as shown in diagram 3.

Products that are capable of cooling

(2) For a product that is capable of cooling, the cooling capacity strip must—

(a) state the product's rated standard cooling full capacity; and

(b) have the wording, and be in the arrangement, shown in element b of diagram 1.

(3) Subclause (2) is subject to subclauses (4) and (5).

(4) For a product in product class 2 or 4 that has a supplementary tank with a duration of 4 hours or more and can operate with or without it, the cooling capacity strip must instead—

(a) state the rated standard cooling full capacity both with and without the supplementary water tank in use; and

(b) have the wording, and be in the arrangement, shown in,—

(i) for a product in product class 2, element b of diagram 2; and

(ii) for a product in product class 4, element b of diagram 4.

(5) For a product in product class 4 that has no supplementary water tank, or that has a supplementary tank with a duration of 4 hours or more and cannot operate without it, the cooling capacity strip must instead—

(a) state the product's rated standard cooling full capacity; and

(b) have the wording, and be in the arrangement, shown in element b of diagram 5.

Products that are capable of heating

(6) For a product that is capable of heating, the heating capacity strip must state—

(a) the product's rated standard heating full capacity; and

(b) for a product other than one in product class 3 or 4,—

(i) if the product is capable of heating extended-load operation, the product's rated low-temperature heating extended-load capacity; or

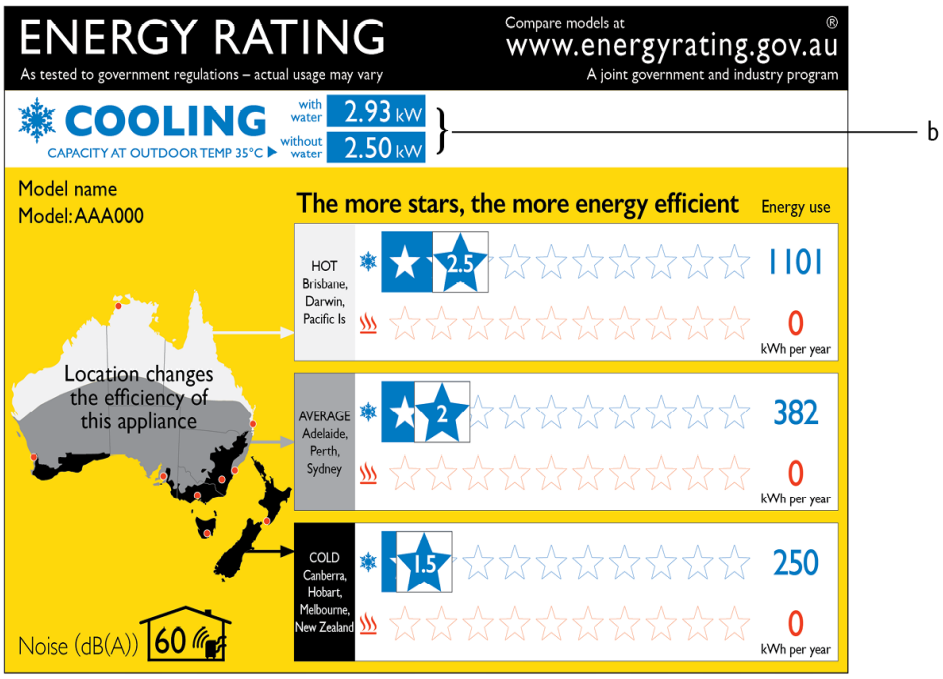
(ii) otherwise, the product's rated low-temperature heating full capacity.

(7) The heating capacity strip must have the wording, and be in the arrangement, shown in,—

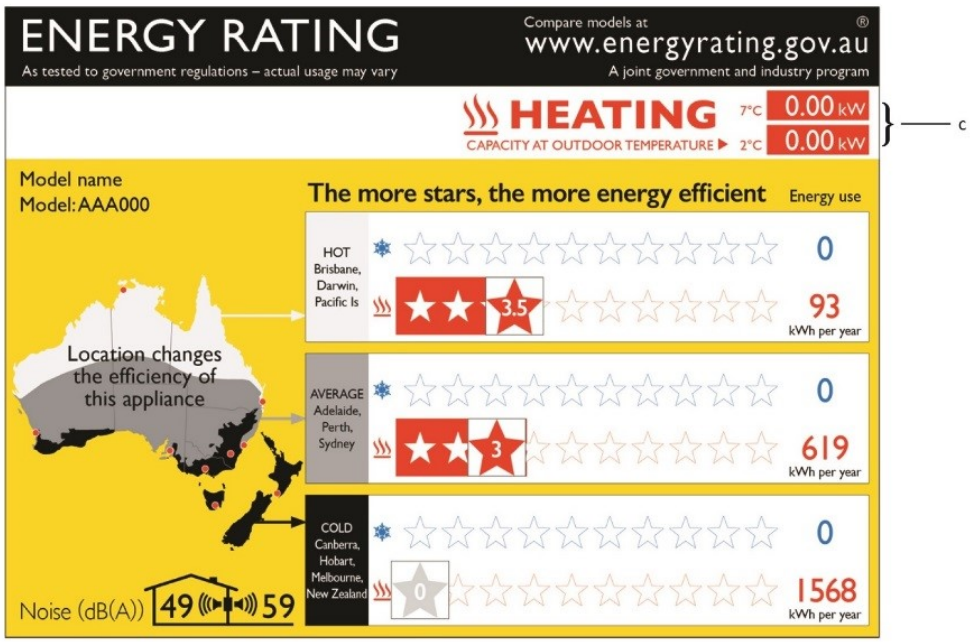
(a) for a product in product class 3 or 4, element c of diagram 5; and

(b) otherwise, element c of diagram 1.

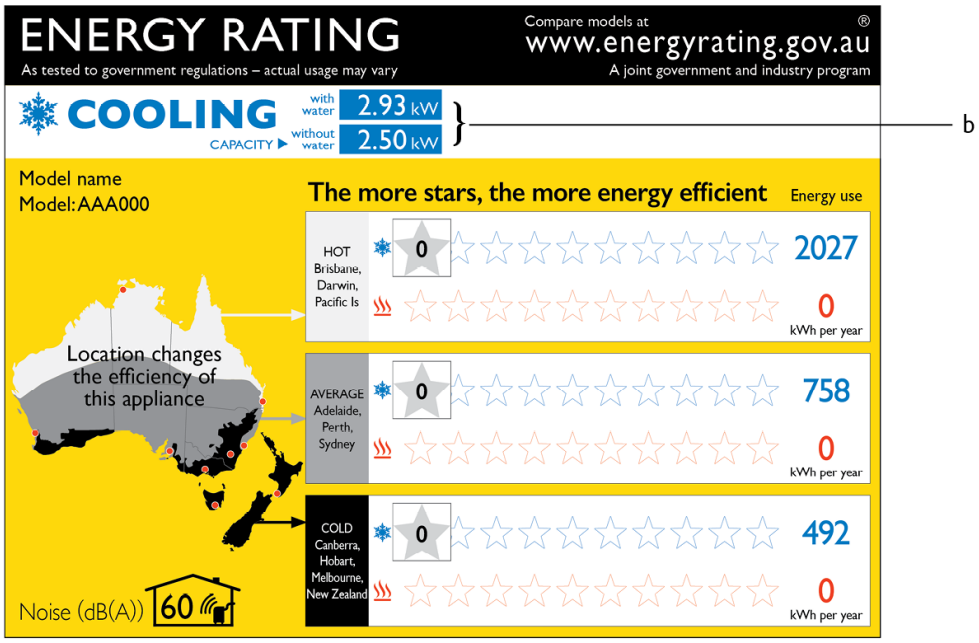
(8) *Diagram 2*



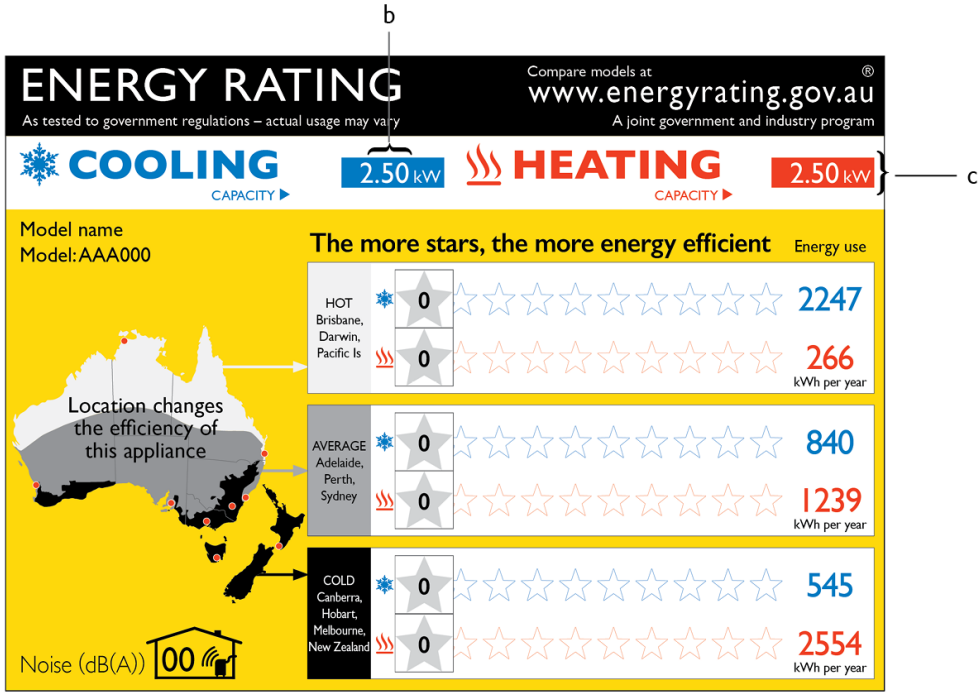
(9) *Diagram 3*



(10) *Diagram 4*



(11) *Diagram 5*



Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 4

Schedule 2A clause 22: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

23 Content of element d (star rating statement)

The text of the star rating statement must be set out as shown in element d of diagram 1.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 5

Schedule 2A clause 23: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

24 Content of elements e, f, and g (hot, average, and cold area cooling season total energy consumption and heating season total energy consumption figures)

Elements e, f, and g must set out the product's—

(a) cooling season total energy consumption for each temperature zone, calculated on the basis of the residential temperature bins; and

(b) heating season total energy consumption for each temperature zone, calculated on the basis of the residential temperature bins.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 6

Schedule 2A clause 24: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

25 Content of elements h, i, and j (hot, average, and cold area star ratings)

(1) The hot, average, and cold area star ratings for a product determined in accordance with clause 14 must be set out as shown in elements h, i, and j of diagram 1, with any modifications or variations required by this clause.

(2) For each relevant heating and cooling function, a star rating must be shown in numerals in a star, positioned as detailed below. There must be a set of such ratings for each geographical region. For a product that does not provide either a cooling or heating service, a rating star must not be placed on the star band for that service.

(3) The cooling function star rating (the **rating star**) must be shown in a blue star within a square box with black outline. A rating of 0 must be shown in a grey star (*see*, for example, diagrams 3 and 5). A rating of 0.5 must be shown in a star whose left half is blue and right half grey.

(4) The heating function rating star must be shown as a red star within a square box with black outline. A rating of 0 must be shown in a grey star (*see*, for example, diagram 5). A rating of 0.5 must be shown in a star whose left half is red and right half grey (*see*, for example, diagrams 7 and 15).

(5) The rating star must be vertically centred on the centre of the relevant star in the star band. For example, if the rating is "4 stars", the rating star aligns with the fourth star in the band; this obscures the fourth star, and some of the third. Rating stars from 0 to 1 are placed in the same location; the centre of the rating star must sit on the centre of the first star in the star band. For a rating involv-

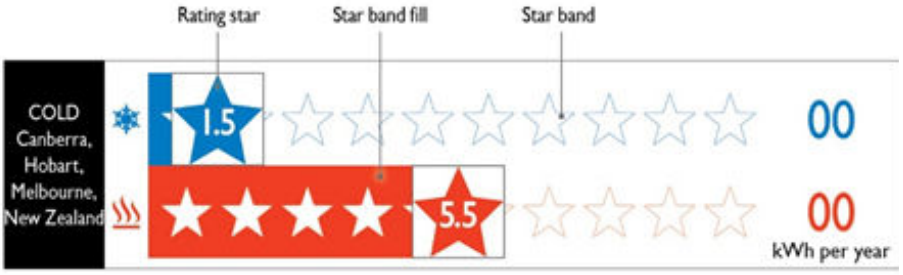
ing a half star, the rating star must bisect the gap between the stars that bracket the value.

(6) The coloured band for the star rating must extend to the edge of the rating star box.

Examples

The following diagrams (diagrams 6, 7, and 8) show the appropriate star bands for different types of products, and their dimensions:

(a) *diagram 6*

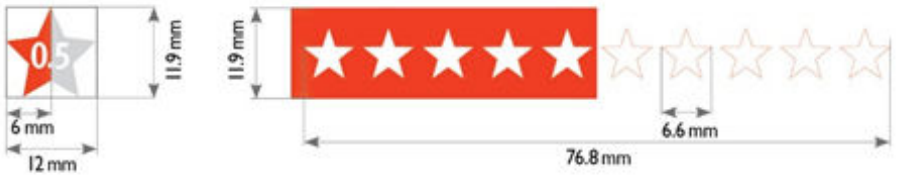


Rating stars with a half star rating are placed at the midpoint of the two relevant stars in the star band.
The star band fill goes from the start of the star band to the edge of the rating star.

(b) *diagram 7*

For ratings between 0 and 1, the rating star is centre-aligned with the first star of the star band.

(c) *diagram 8*



Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 7

Schedule 2A clause 25: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

26 Content of element m (model details)

(1) The brand and model of the product must be set out as shown in element m of diagram 1. The text must—

(a) be complete and concise; and

(b) not exceed a width of 58 mm; and

(c) not exceed a height of 17 mm (or 4 lines of text); and

(d) be left-aligned in the area allowed.

(2) For a single-split system, the model details must consist of,—

(a) if there is a model number for the system as a whole, that number; and

(b) otherwise, the model numbers of the individual units, using the format "outdoor unit model number/indoor unit model number".

(3) A family name may be used in place of an individual model name or number for a family of models. Wildcard characters may be used in the family name, but may not represent more than 1 character.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 9

Schedule 2A clause 26: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

27 Colours and fonts for energy rating label

(1) The energy rating label must be printed on a white background using the following colours in the elements as shown in diagram 9:

Colour	For a printed label
Yellow	Pantone 116
Blue	Pantone 300
Red	Pantone Warm red
Light grey	Pantone Black 5%
Dark grey	Pantone Black 40%
Black	Pantone Black

(2) The entire label must be in only 1 font, which may be any 1 of the following:

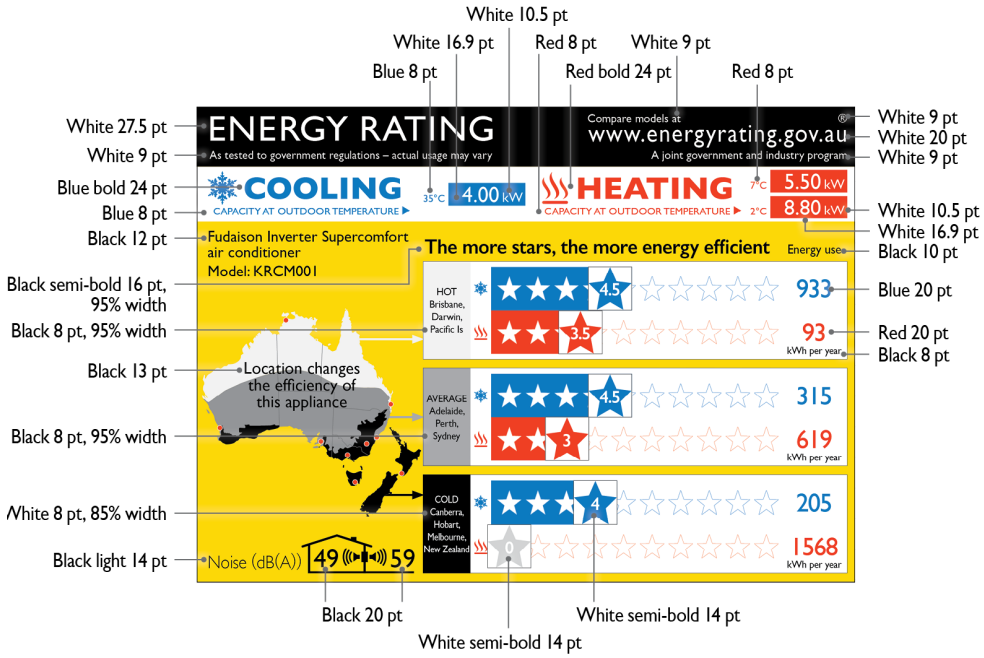
(a) Gill Sans:

(b) Humanist 521:

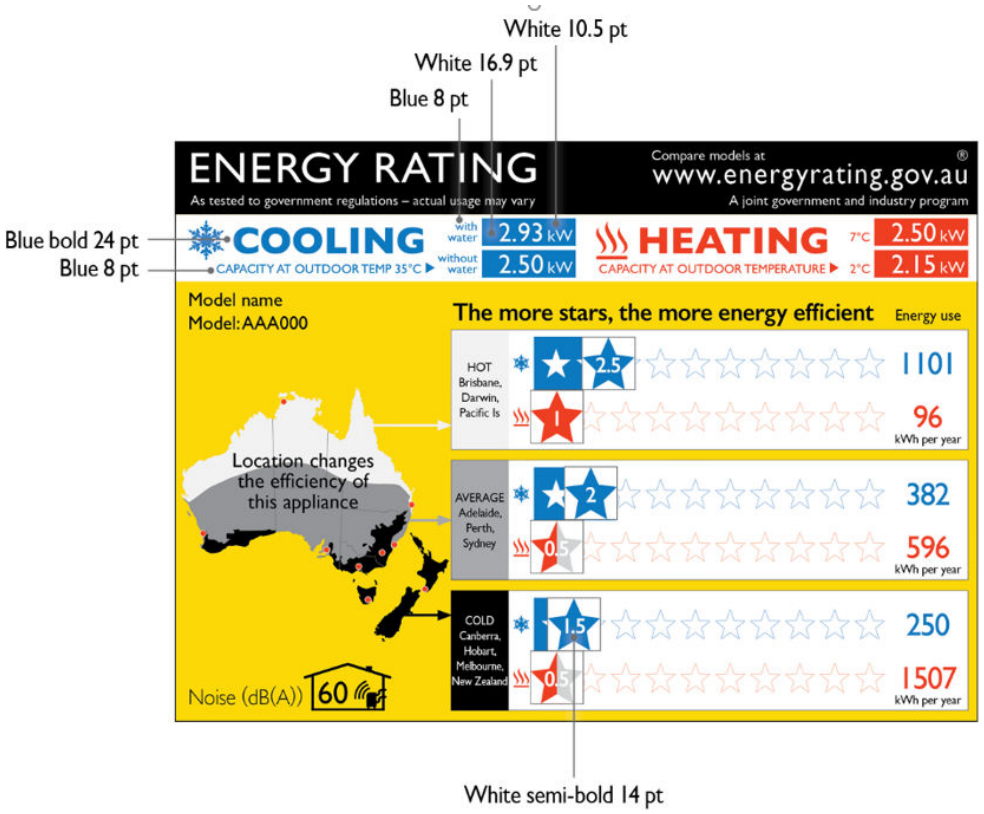
(c) Hammersmith.

(3) The text in an energy rating label must be of the font size and colour shown in diagrams 14 to 17. All type weights must be regular.

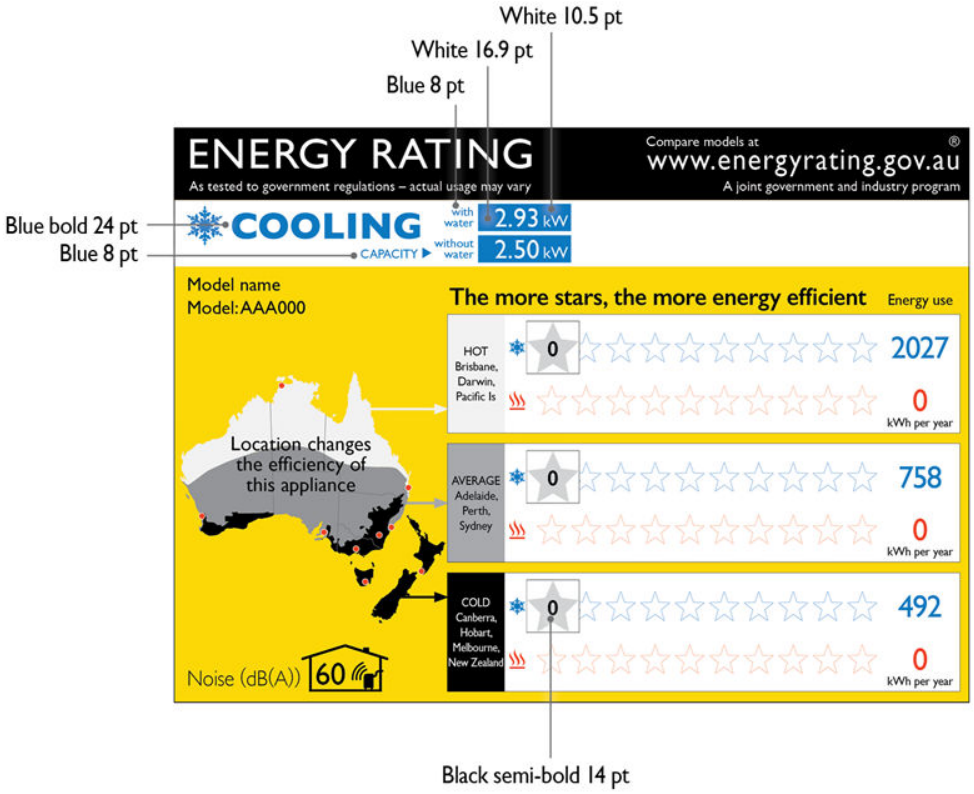
(4) *Diagram 9* (default requirements)



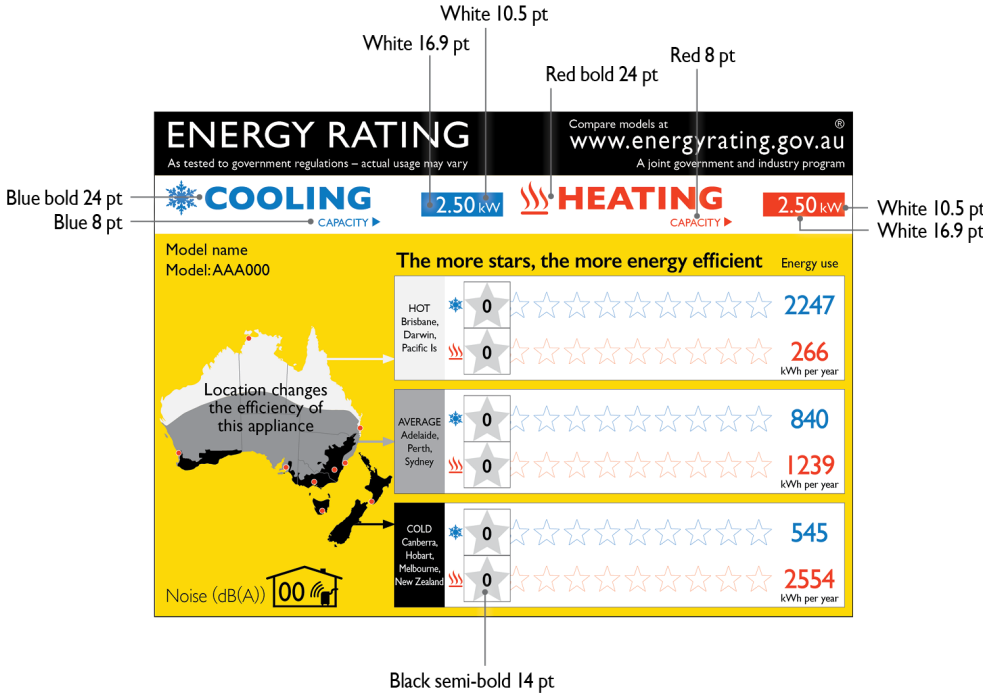
(5) *Diagram 10* (requirements for cooling capacity strip shown in diagram 2)



(6) *Diagram 11* (requirements for cooling capacity strip shown in diagram 4)



(7) *Diagram 12* (requirements for heating and cooling capacity strips shown in diagram 5)



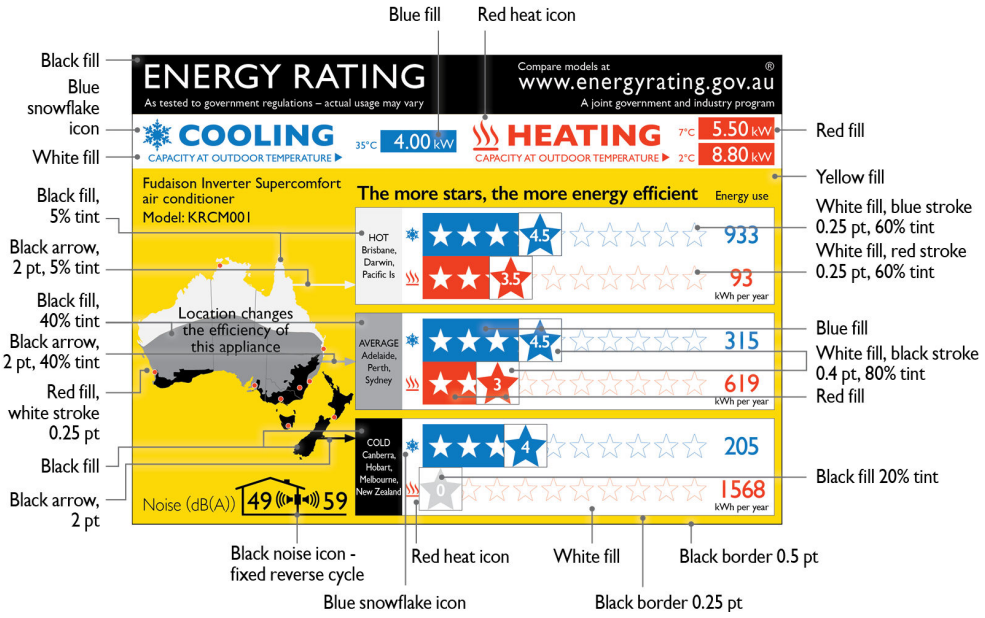
Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 10

Schedule 2A clause 27: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

28 Object requirements for energy rating label: diagram

(1) The objects in an energy rating label must be as shown in diagram 13.

(2) *Diagram 13* (default requirements)



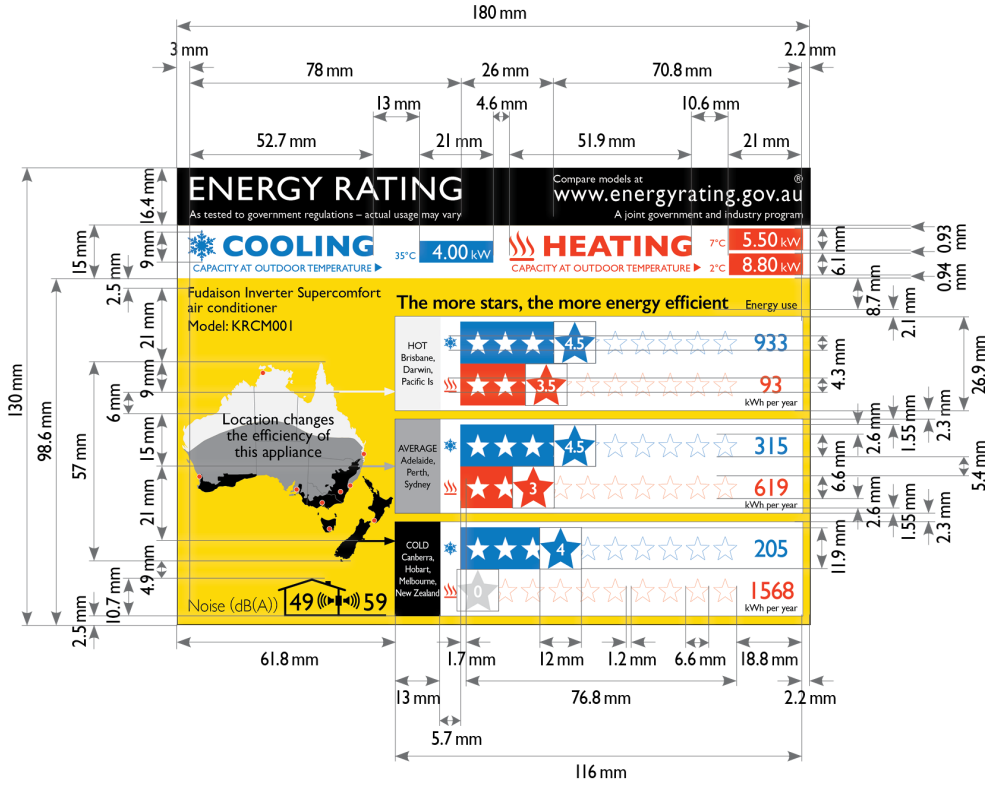
Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 11

Schedule 2A clause 28: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

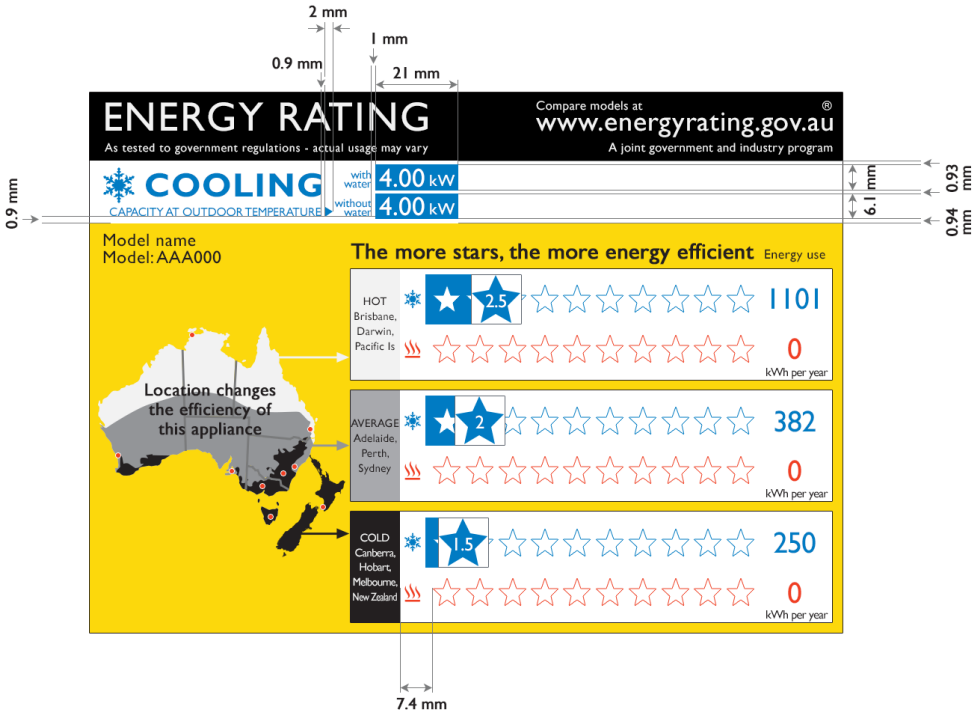
29 Physical layout requirements for label

(1) The objects and elements in an energy rating label must be laid out as shown in diagrams 14 to 17.

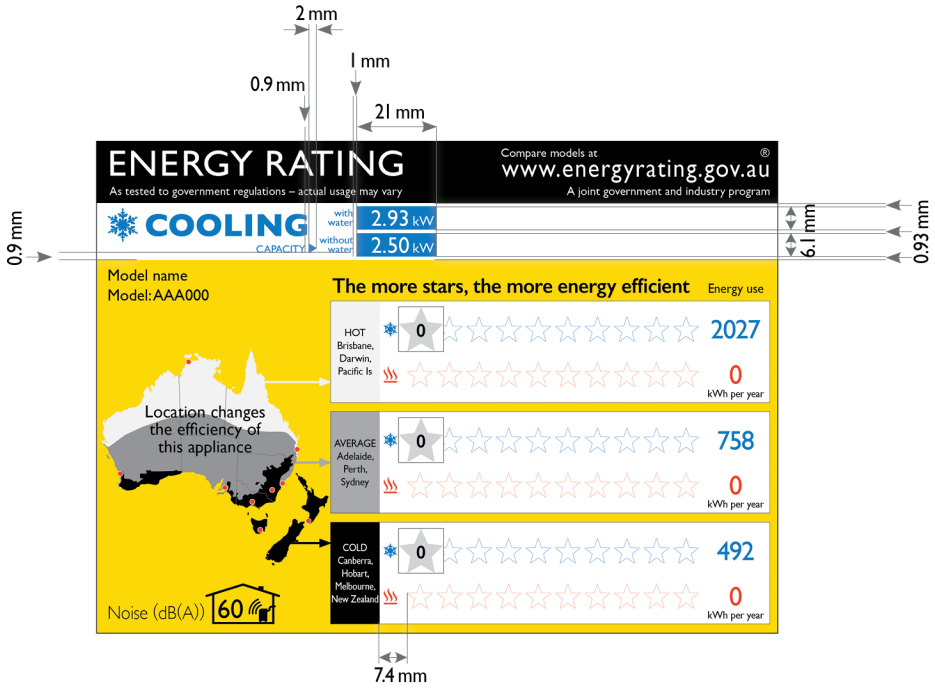
(2) *Diagram 14* (default requirements)



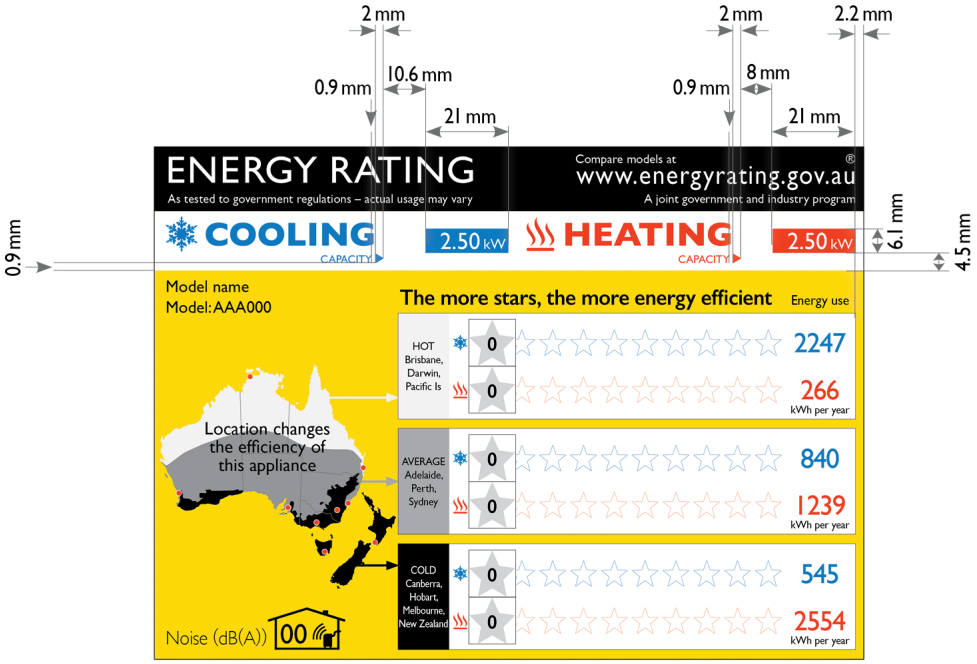
(3) *Diagram 15* (requirements for cooling capacity strip shown in diagram 2)



(4) *Diagram 16* (requirements for cooling capacity strip shown in diagram 4)



(5) *Diagram 17* (requirements for heating and cooling capacity strips shown in diagram 5)



Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 3 s 12

Schedule 2A clause 29: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Subpart 3—Format of energy rating icons

Schedule 2A Subpart 3: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

30 Interpretation

In this subpart,—

diagram 1 means the diagram shown in clause 32(3)

diagram 2 means the diagram shown in clause 36(5)

diagram 3 means the diagram shown in clause 36(6).

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 4 s 1

Schedule 2A clause 30: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

31 Meaning of certain details in diagrams

In a diagram in this subpart, numbers are illustrative only. The actual numbers for the energy rating icon for a particular product must be those specified in this subpart.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 4 s 2

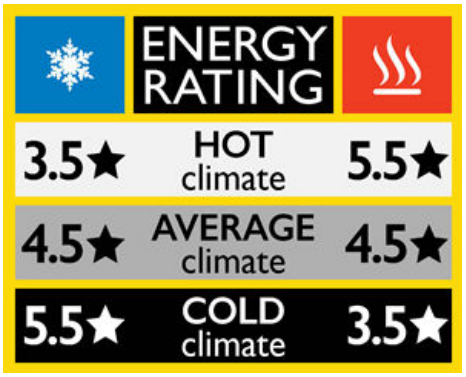
Schedule 2A clause 31: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

32 Elements of energy rating icon

(1) An energy rating icon must be in substantially the format shown in diagram 1.

(2) Subclause (1) is subject to clause 36.

(3) *Diagram 1*



Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 4 s 3

Schedule 2A clause 32: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

33 Colours for energy rating icon

The energy rating icon must use the colours in the elements in accordance with the following table:

Colour	For a printed label, the following Pantone colours	For a label that appears in digital media, the following RGB colours, or equivalent colours
Yellow	Pantone 116	252–217–11
Blue	Pantone 300	0–122–195
Red	Pantone Warm red	238–59–36
Light grey	Pantone Black 5%	242–242–242
Dark grey	Pantone Black 40%	177–179–179
Black	Pantone Black	0–0–0

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 4 s 4

Schedule 2A clause 33: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

34 Fonts for energy rating icon

(1) The entire icon must be in only 1 font, which may be any one of the following:

(a) Gill Sans:

(b) Humanist 521:

(c) Hammersmith.

(2) The text in an energy rating icon must be of the following weights and cases:

Element	Weight	Case
"ENERGY RATING"	regular	capital
Star ratings	semibold	–
"HOT", "AVERAGE", and "COLD"	semibold	capital
"climate"	regular	lower case

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 4 s 5

Schedule 2A clause 34: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

35 Size of energy rating icon

The relative proportions of the icon's dimensions and text must be as illustrated in clause 32.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 4 s 6

Schedule 2A clause 35: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

36 Content of energy rating icon

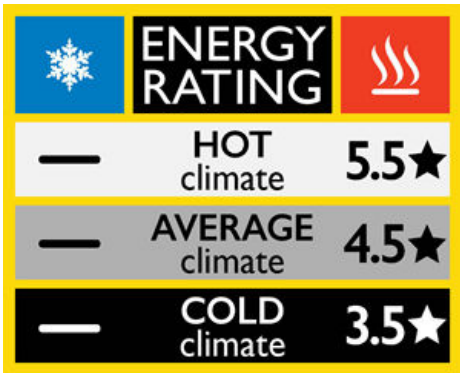
(1) An energy rating icon must list the cooling star ratings and heating star ratings for each of the climate zones, as illustrated in clause 32(3).

(2) Subclause (1) is subject to subclauses (3) and (4).

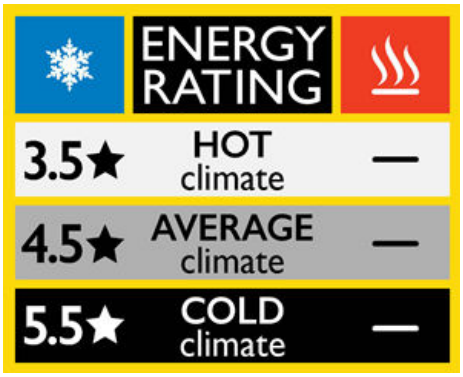
(3) If the product is heating-only, a dash must be included in the area where the cooling star rating would otherwise go (*see* diagram 2).

(4) If the product is cooling-only, a dash must be included in the area where the heating star rating would otherwise go (*see* diagram 3).

(5) *Diagram 2*



(6) *Diagram 3*



Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 4 s 7

Schedule 2A clause 36: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Part 4
Testing requirements

Schedule 2A Part 4: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

37 Conducting tests

This Part sets out requirements for conducting tests in relation to Parts 2 and 3 of this schedule.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 1

Schedule 2A clause 37: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

38 General

Rounding and significant figures

(1) Numbers must be rounded and recorded to 5 significant figures.

Use of circumvention devices

(2) Circumvention devices must not be used.

Solar-boosted air conditioners

(3) Solar-boosted air conditioners must be tested with any solar input minimised or disconnected, as far as possible.

Definitions

(4) In this clause,—

circumvention device means any control, control device, software, component, or part that alters the operating characteristics during any test procedure, resulting in measurements that are unrepresentative of the appliance's true characteristics that may occur during normal use under comparable conditions

solar-boosted air conditioner means an air conditioner that has provision for the input of energy from a solar source and can be configured to operate with little or no solar input.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 2

Schedule 2A clause 38: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

39 Test simulation software

Application of clause

(1) This clause applies to all tests conducted for the purposes of Part 2 of this schedule.

Restriction on use of test simulation software

(2) Test simulation software must not be used other than in accordance with this clause.

(3) Test simulation software must not be used for a product in product class 3, 4, 22, or 23.

(4) Test simulation software must not be used—

(a) to test average true power factor; or

(b) to conduct the tests referred to in clause 44(3) and (4) at H2 or H3 temperature conditions.

Use of test simulation software: product classes other than 3, 4, 22, and 23

(5) The Authority may authorise, in writing, a particular test simulation software package for products of a particular type if—

(a) the products are in product classes other than 3, 4, 22, or 23; and

(b) the Authority is satisfied that the software package has an accuracy equivalent to the relevant physical test standard for products of that type in those product classes.

(6) Test simulation software that has been so authorised may be used for—

(a) products that—

(i) have a rated standard cooling full capacity or, for heating-only products, a rated standard heating full capacity, of ≥ 30 kW; and

(ii) are of the same type as the product for which the software has been authorised; and

(iii) are in the product classes specified in the authorisation; or

(b) products that—

(i) have a rated standard cooling full capacity or, for heating-only products, a rated standard heating full capacity, of < 30 kW; and

(ii) are of the same type as the product for which the software has been authorised; and

(iii) are in the product classes specified in the authorisation, but that are not in product class 1 or 2; and

(iv) are of a model for which sales in New Zealand have been or will be less than 10 units in the financial year in which the prescribed form was submitted under regulation 4 or 6 (or, if regulation 4(3) or 6(3) applies, the model was registered in Australia), and each subsequent financial year.

Definitions

(7) In this clause,—

relevant physical test standard means,—

(a) for non-ducted air conditioners, AS/NZS 3823.1.1:2012; and

(b) for ducted air conditioners, AS/NZS 3823.1.2:2012; and

(c) for multi-split systems, AS/NZS 3823.1.4:2012

test simulation software means a computer-based software package that uses simplified measurements and other data to estimate relevant product performance without the need for a full, physical test.

(8) The following are **types** of product for the purposes of this clause:

(a) ducted split systems:

(b) non-ducted split systems:

(c) multi-split systems:

(d) ducted unitary systems:

(e) non-ducted unitary systems.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 3

Schedule 2A clause 39: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

40 Use of calorimeter and air enthalpy test methods

(1) This clause applies in relation to all tests undertaken for the purposes of Parts 2 and 3 of this schedule.

(2) This clause does not apply in relation to a simulation test that was conducted in accordance with clause 39.

(3) For a test of a kind indicated in the following table that is conducted in relation to a product indicated in the corresponding row of the table, the test method, or any of the test methods, indicated in the corresponding row must be used.

	Tests	Products	Indoor enthalpy test method	Calori-meter room test method	Shortened calorimeter room test spanning 3 complete defrost cycles
1	The following tests for the purposes of Part 3: (a) low-temperature heating capacity test (H2); and (b) extra-low-temperature heating capacity test (H3)	All products (whether single-phase or three-phase) other than products in product class 3 or 4	✓	✓	✓
2	Any test not covered by item 1	(a) products in product class 3 or 4 (whether single-phase or three-phase):		✓	
		(b) single-phase, non-ducted products in product class 1, 2, 5, 6, or 7, other than such products for which the prescribed form is submitted under regulation 4 or 6 (or, if regulation 4(3) or 6(3) applies, the model is registered in Australia) on the basis that a label will not be displayed at the time of supply or offer of supply:		✓	
		(c) single-phase, non-ducted products in product class 8, 9, 11, or 12, other than such products— (i) with a ceiling cassette as the indoor unit; or		✓	

Tests	Products		Indoor enthalpy test method	Calori-meter room test method	Shortened calorimeter room test spanning 3 complete defrost cycles
	(ii)	for which the prescribed form is submitted under regulation 4 or 6 (or, if regulation 4(3) or 6(3) applies, the model is registered in Australia) on the basis that a label will not be displayed at the time of supply or offer of supply:			
	(d)	any product not covered by paragraph (a), (b), or (c)	✓	✓	

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 4

Schedule 2A clause 40: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

41 Use of default test values in AS/NZS 3823.4.1:2014

For the purposes of the application of Part 3 of this schedule to a fixed-capacity product,—

(a) the default values of Table 1 of AS/NZS 3823.4.1:2014 may be used for the low-temperature cooling capacity test; or

(b) a physical test may be performed at those conditions.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 5

Schedule 2A clause 41: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

42 Rating variable-capacity products as fixed-capacity products

For the purposes of Part 3 of this schedule, a variable-capacity, two-stage-capacity, or multi-stage-capacity unit may be tested and rated as a fixed-capacity product in relation to Table 1 of AS/NZS 3823.4.1:2014 or AS/NZS 3823.4.2:2014.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 6

Schedule 2A clause 42: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

43 Degradation coefficient of AS/NZS 3823.4

For the purposes of Part 3 of this schedule, the value for the degradation coefficient (C_D) of Table 1 in both AS/NZS 3823.4.1:2014 and AS/NZS 3823.4.2:2014 may not be changed from the default value of 0.25.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 7

Schedule 2A clause 43: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

44 Seasonal rating tests

(1) This clause applies—

(a) to a product in a product class other than 3, 4, 22, and 23; and

(b) in relation to tests relating to a SEER rating that are conducted for the purposes of Part 3 of this schedule.

(2) An air conditioner that has a cooling capability must be tested to the required cooling test points identified in Table 1 in AS/NZS 3823.4.1:2014, as per its product type.

(3) Subclause (4) applies to an air conditioner that has—

(a) a heating capability; and

(b) for an air conditioner that also has a cooling capability, a rated standard cooling full capacity of < 30 kW; and

(c) for a heating-only product, a rated standard heating full capacity of < 30kW.

(4) The air conditioner must be tested to the required heating test points identified in Table 1 in AS/NZS 3823.4.2:2014, as per its product type.

(5) Subclause (6) applies to an air conditioner that has—

(a) a heating capability; and

(b) for an air conditioner that also has a cooling capability, a rated standard cooling full capacity of ≥ 30kW; and

(c) for a heating-only product, a rated standard heating full capacity of ≥ 30 kW.

(6) The air conditioner must—

(a) be tested to the required heating test points identified in Table 1 in AS/NZS 3823.4.2:2014, as per its product type; or

(b) be tested and rated as per the standard heating full capacity test.

(7) In the case of subclause (2), (4), or (6)(a), any of the optional tests under AS/NZS 3823.4.2:2014 at H3 conditions may also be performed.

(8) Subclause (2) is subject to clauses 41 to 43.

(9) Subclauses (3) and (6) are subject to clauses 42 and 43.

(10) In this clause, **product type** means fixed-capacity, two-stage-capacity, variable, or variable-capacity.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 8

Schedule 2A clause 44: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

45 Specific requirements for multi-split outdoor units

(1) This clause applies in relation to all tests undertaken for the purposes of Part 2 of this schedule.

(2) The test results for a multi-split outdoor unit must be based on a multi-split system, and the outdoor unit model must be tested using a representative combination of indoor units.

(3) The representative combination of indoor units must—

(a) consist of units that are readily available for possible check-testing purposes; and

(b) for a VRF type unit, not be less than the manufacturer's specified minimum number of indoor units; and

(c) for a fixed-head product, consist of a dedicated indoor unit for each refrigeration port on the outdoor unit; and

(d) be the same for all heating and cooling tests; and

(e) be configured with a remote control for each indoor unit (unless the controls are integral to the indoor unit); and

(f) be one for which the ratio of the following is equal to 1, or is as close as possible to 1 within the range of the manufacturer's specified connectable indoor units:

(i) the sum of the manufacturer's nominated rated capacities for the indoor units; and

(ii) the manufacturer's nominated rated capacity for the outdoor unit.

(4) The documentation of the test must also specify—

(a) the make and model number of each indoor unit; and

(b) the rated capacity for each indoor unit when used in the representative combination; and

(c) the configuration and test setup. Complete setup instructions including, but not limited to, piping lengths and layouts, capacity-fixing methods, refrigerant charge, and system specifications must be included. This may take the form of a printout from the manufacturer's sales selection software.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 10

Schedule 2A clause 45: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

46 Alternative test methods for VRF type multi-split outdoor units and products > 30 kW

(1) This clause applies in relation to all tests undertaken for the purposes of Part 2 of this schedule.

(2) This clause applies to—

(a) variable refrigerant flow (VRF) type multi-split outdoor units; and

(b) products that—

(i) are in a product class other than 3, 4, 22, or 23; and

(ii) have a rated standard cooling full capacity or, for heating-only products, a rated standard heating full capacity, of more than 30 kW.

(3) Tests for the purposes of Part 2 of this schedule may be undertaken according to the methods set out in the following:

(a) EN 14511:2018:

(b) a standard based on ISO 5151:2017 (non-ducted air conditioners, any VRF multi-split and fixed-head multi-split outdoor unit greater than 30 kW rated standard cooling full capacity or, for heating-only products, rated standard heating full capacity):

(c) a standard based on ISO 13253:2017 (ducted air conditioners):

(d) a standard based on ISO 15042:2017 (multi-split outdoor units):

(e) AHRI 1230:2010.

(4) Subclause (3) is subject to the other provisions of this clause and clause 40.

(5) Information set out in any of the following certificates may be relied on for the purposes of Part 2 of this schedule without further testing being conducted:

(a) an AHRI certificate, being a certified test certificate from the Air-Conditioning, Heating, & Refrigeration Institute:

(b) a Eurovent certificate, being a certified test certificate from the European Association of Air Handling and Refrigerating Equipment Manufacturers.

(6) Subclause (5) is subject to the other provisions of this clause.

(7) A standard or certificate mentioned in this clause may be relied on only in relation to testing at—

(a) an electrical supply voltage of 230 V single-phase or 400 V three-phase; and

(b) a frequency of 50 Hz; and

(c) the H1, H2, H3, or T1 temperature conditions.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 11

Schedule 2A clause 46: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

47 Specific requirements for unitary double-duct air conditioners

(1) This clause applies in relation to all tests undertaken for the purposes of Parts 2 and 3 of this schedule.

Specific requirements for wall-mounted unitary double-duct air conditioners

(2) Wall-mounted unitary double-duct air conditioners must be tested using the test procedures of AS/NZS 3823.1.1:2012. They must be installed on the wall of the test chamber as per the manufacturer's installation instructions.

Specific requirements for portable unitary double-duct air conditioners

(3) Portable unitary double-duct air conditioners must be tested using the general test procedures of AS/NZS 3823.1.1:2012. However, both the exhaust and inlet ducts must be installed as per Appendices A2.1 to A2.5 of AS/NZS 3823.1.5:2015.

(4) Portable unitary double-duct air conditioners that contain a condensate container must not have a test interrupted by a full condensate container triggering a cut-off switch. If necessary, condensate containers must be modified to drain away excess condensate into a larger container in the test chamber before the volume that activates the cut-off switch is reached.

(5) For a portable unitary double-duct air conditioner that contains a supplementary water tank,—

(a) the duration of the tank must be determined during the standard cooling full capacity test; and

(b) in determining this period,—

(i) the test setup and test conditions must be as per AS/NZS 3823.1.1:2012; but

(ii) the duration must be determined as per Appendix B of AS/NZS 3823.1.5:2015; and

(c) if the duration of the tank is ≥ 4 hours,—

(i) all tests may be performed using this feature as per the manufacturer's instructions; and

(ii) if tests are performed using the tank, any water added to the tank must be 27°C ± 1°C; and

(iii) if the product can operate both with and without the tank, the standard cooling full capacity must be determined both with and without the tank being used; and

(d) if the duration of the tank is < 4 hours, the tank must not be used when determining whether the product meets the MEPS level requirement of clause 6.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 12

Schedule 2A clause 47: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

48 Specific requirements for portable unitary single-duct unit air conditioners

(1) This clause applies in relation to all tests undertaken for the purposes of Parts 2 and 3 of this schedule.

(2) For a portable unitary single-duct air conditioner (product class 4) that contains a supplementary water tank,—

(a) if the duration of the tank is ≥ 4 hours,—

(i) all tests may be performed using this feature as per the manufacturer's instructions; and

(ii) if the product can operate both with and without the tank, the standard cooling full capacity must be determined both with and without the tank being used; and

(b) if the duration of the tank is < 4 hours, the tank must not be used when determining whether the product meets the MEPS level requirement of clause 6.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 13

Schedule 2A clause 48: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

49 Specific requirements for water-to-air air conditioners

(1) This clause applies for the purposes of Part 2 of this schedule.

(2) Water-to-air air conditioners (product classes 22 and 23) must be tested to the cooling and (if applicable) heating capacity tests of AS/NZS 3823.1.3:2005.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 14

Schedule 2A clause 49: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

50 Specific requirements for single-split outdoor units

(1) This clause applies in relation to all tests undertaken for the purposes of Part 2 of this schedule.

(2) A single-split outdoor unit must be tested using a representative indoor unit, which must—

(a) have the same type of indoor air distribution as the outdoor unit (that is, ducted or non-ducted); and

(b) be specified by make and model number and be readily available for possible check-testing purposes; and

(c) be the same for all cooling and heating tests; and

(d) be configured with a remote control, unless the controls are integral to the indoor unit.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) Schedule 2 s 15

Schedule 2A clause 50: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

51 Specific requirements for testing: average true power factor

(1) This clause applies in relation to tests undertaken for the purposes of this schedule.

(2) Air conditioners with a rated power input of ≤ 850 W must be tested using—

(a) a power input that does not exceed 1,000 VA; and

(b) an average true power factor ≥ 0.5.

(3) Air conditioners with a rated power input of > 850 W and a rated full capacity of ≤ 15 kW must be tested using an average true power factor ≥ 0.85.

(4) Air conditioners with a rated power input of > 850 W and a rated full capacity of > 15 kW and ≤ 20 kW must be tested using an average true power factor ≥ the following:

$$0.85 - [(\text{rated full capacity (kW)} - 15) \div 100]$$

(5) Air conditioners with a rated power input of > 850 W and a rated full capacity of > 20 kW must be tested using an average true power factor ≥ 0.80.

(6) In this clause,—

average true power factor, in relation to a product, means the average ratio of the kilowatt hours (kWh) divided by the kilovolt ampere hours (kVAh) of the power input to the product, as assessed over a period of 5 or more minutes of operation of the product during a physical standard cooling capacity test or physical standard heating capacity test, as applicable, at full load

rated full capacity means—

(a) rated standard cooling full capacity; or

(b) for a heating-only product, rated standard heating full capacity.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 40, Schedule 2 s 16

Schedule 2A clause 51: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Part 5
Interpretation

Schedule 2A Part 5: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

52 Interpretation: general

(1) In this schedule,—

air conditioner means a device that has the following characteristics (whether or not it has additional functions such as dehumidification, air purification, ventilation, heat recovery, sanitary water heating, or supplementary air heating by means of electric resistance heating):

(a) it is capable of cooling or heating, or both cooling and heating, a conditioned space using a vapour-compression cycle driven by an electric compressor; and

(b) it contains 1 or more condensers, 1 or more evaporators, and 1 or more fans; and

(c) it is designed for cooling or heating, or both cooling and heating, of a conditioned space primarily for human comfort

air-to-air has the meaning given in subclause (2)

annual coefficient of performance or **ACOP** has the meaning given in clause 5(1)

annual energy efficiency ratio or **AEER** has the meaning given in clause 5(1)

average true power factor has the meaning given in clause 51(6)

capacity means—

(a) total cooling capacity; or

(b) heating capacity

ceiling cassette means an indoor unit for a non-ducted single-split system whose—

(a) chassis is installed within the ceiling space; and

(b) fascia, panel, and grille assembly includes an air inlet and multiple outlets and is the only component visible from within the conditioned space

circumvention device has the meaning given in clause 38(4)

close-control air conditioner has the meaning given in clause 3(2)

coefficient of performance or **COP** has the meaning given in clause 5(1)

commercial SEER rating has the meaning given in clause 15

conditioned space means an enclosed space, room, or zone to which conditioned air is provided

cooling season total energy consumption means the amount of energy a product will use during a cooling season for a particular climate zone, as calculated in accordance with clause 13(1) or (4)

dehumidifier has the meaning given in clause 3(2)

ducted has the meaning given in subclause (3)(a)

duration, in relation to a supplementary water tank, means the period for which the tank can provide water before needing to be refilled

energy efficiency ratio or **EER** has the meaning given in clause 5(1)

energy label has the meaning given in clause 9

energy rating icon has the meaning given in clause 9

energy rating label has the meaning given in clause 9

evaporatively cooled condenser means a heat exchanger that condenses refrigerant vapour by rejecting heat to a water and air mixture, causing the water to evaporate and increase the enthalpy of air

extra-low-temperature heating capacity test has the meaning given in clause 57(1)

family of models has the meaning given in clause 59

fixed capacity has the meaning given in clause 54(a)

fixed-head has the meaning given in subclause (4)

ground-loop air conditioner has the meaning given in clause 3(2)

ground-water air conditioner has the meaning given in clause 3(2)

H1 has the meaning given in clause 55

H2 has the meaning given in clause 55

H3 has the meaning given in clause 55

heating capacity has the meaning given in clause 57(1)

heating extended-load operation has the same meaning as in clause 3.13 of AS/NZS 3823.4.2:2014

heating season total energy consumption means the amount of energy a product will use over a heating season for a particular climate zone as calculated in accordance with clause 13(2) or (4)

heating seasonal performance factor or **HSPF**, in relation to equipment, means the ratio of the total annual amount of heat, including make-up heat, that the equipment can add to the conditioned space when operated for heating in active mode to the total annual amount of energy consumed by the equipment during the same period, as calculated by the method set out in clause 6.1 of AS/NZS 3823.4.2:2014

liquid-chilling package has the meaning given in clause 3(2)

low-temperature cooling capacity test has the meaning given in clause 56(1)

low-temperature heating capacity test has the meaning given in clause 57(1)

low-temperature heating extended-load capacity has the meaning given in clause 57(1)

low-temperature heating full capacity has the meaning given in clause 57(1)

MEPS means minimum energy performance standard

MEPS level means a value specified as a MEPS level in the table in clause 2(1)

multi-split outdoor unit means a unit that—

(a) is the outdoor unit of a multi-split system; and

(b) contains the compressor, outdoor heat exchanger, fans, and refrigeration ports; and

(c) does not contain the indoor heat exchanger; and

(d) is designed to be connected to 2 or more individually controlled indoor units

multi-split system has the meaning given in subclause (5)

multi-stage capacity has the meaning given in clause 54(c)

non-ducted has the meaning given in subclause (3)(b)

portable has the meaning given in subclause (6)

product class means a numbered product class under clause 2

rated has the meaning given in clause 58(a)

relevant MEPS level has the meaning given in clause 4

relevant physical test standard has the meaning given in clause 39(7)

residential SEER rating has the meaning given in clause 15

SEER rating has the meaning given in clause 15

single-phase has the meaning given in subclause (7)

single-split outdoor unit means a unit that—

(a) is the outdoor unit of single-split system; and

(b) contains the compressor, outdoor heat exchanger, fans, and refrigeration ports; and

(c) does not contain the indoor heat exchanger; and

(d) is not designed to be connected to 2 or more individually controlled indoor units; and

(e) is supplied or offered for supply as a separate outdoor unit of a single-split system, rather than as part of a complete single-split system

single-split system has the meaning given in subclause (8)

solar-boosted air conditioner has the meaning given in clause 38(4)

split system means—

(a) a multi-split system; or

(b) a single-split system

spot cooler has the meaning given in clause 3(2)

standard cooling capacity test has the meaning given in clause 56(1)

standard cooling full capacity has the meaning given in clause 56(1)

standard cooling part-load capacity has the meaning given in clause 56(1)

standard heating capacity test has the meaning given in clause 57(1)

standard heating full capacity has the meaning given in clause 57(1)

standard heating part-load capacity has the meaning given in clause 57(1)

supplementary water tank means a tank designed as an integral part of the unit to contain external supplementary water that is fed to the evaporatively-cooled condenser

T1 has the meaning given in clause 55

test simulation software has the meaning given in clause 39(7)

tested, in relation to a value or amount, has the meaning given in clause 58(b)

three-phase has the meaning given in subclause (9)

total cooling capacity has the meaning given in clause 56(1)

total cooling seasonal performance factor or **TCSPF** means the ratio of the total annual amount of heat that the equipment can remove from the conditioned space to the total annual amount of energy consumed by the equipment, including the active and inactive energy consumption as calculated by the method set out in Annex B of AS/NZS 3823.4.1:2014

two-stage capacity has the meaning given in in clause 54(b)

unitary has the meaning given in subclause (10)

unitary double-duct air conditioner means a unitary, air-to-air air conditioner that—

(a) is designed to—

(i) be located wholly within the conditioned space; and

(ii) provide free delivery of conditioned air to the conditioned space; and

(b) draws air into the air conditioner from outside the conditioned space using one duct; and

(c) uses another duct to discharge that air back outside the conditioned space

unitary single-duct air conditioner—

(a) means a unitary, air-to-air air conditioner that—

(i) is designed to—

(A) be located wholly within the conditioned space; and

(B) provide free delivery of air to the conditioned space; and

(ii) draws air into the air conditioner from the conditioned space; and

(iii) uses a duct to discharge that air outside the conditioned space, whether or not the duct is supplied with the air conditioner; but

(b) does not include such a product that is designed so that it can be configured as a unitary double-duct air conditioner

variable capacity has the meaning given in clause 54(d)

variable refrigerant flow or **VRF** has the meaning given in subclause (11)

wall-mounted unitary double-duct air conditioner means a unitary double-duct air conditioner that is not portable

wall-mounted unitary single-duct air conditioner means a unitary single-duct air conditioner that is not portable

water-loop air conditioner means a water-to-air air conditioner that uses liquid circulating in a common piping loop functioning as a heat source or a heat sink

water-to-air has the meaning given in subclause (12).

(2) An air conditioner is **air-to-air** if it uses air as a—

(a) heat sink when in cooling mode; and

(b) heat source when in heating mode.

(3) An air conditioner is—

(a) **ducted** if it is designed primarily to provide ducted delivery of conditioned air to a conditioned space; and

(b) **non-ducted** if it is designed primarily to provide free delivery of conditioned air to a conditioned space.

(4) A multi-split system is of **fixed-head** type if—

(a) it has a single outdoor unit that has a dedicated set of refrigeration ports for each individual indoor unit; and

(b) the maximum number of indoor units that can be connected is limited by the number of dedicated ports on the outdoor unit.

(5) An air-to-air conditioner is a **multi-split system** if—

(a) it has separate indoor and outdoor units that are connected with refrigerant piping; and

(b) it has 2 or more indoor units, each of which can be individually controlled.

(6) An air conditioner is **portable** if it—

(a) is designed to be portable; and

(b) is supplied and offered for supply for portable applications only; and

(c) has the following features:

(i) a casing that encloses the entire air conditioner, including the back:

(ii) castors, wheels, or feet:

(iii) flexible ductwork that is—

(A) either supplied with the air conditioner or available as additional accessories, for adapting to various portable installation situations; and

(B) designed to temporarily fit, via specialised attachments, to a partially opened window or door:

(iv) a length of power cord with a mains plug; and

(d) does not have any of the following:

(i) permanent wall or window mounting brackets, either on the air conditioner, in the packaging, or as a separately supplied accessory:

(ii) available instructions that demonstrate how to fix the air conditioner (other than the ductwork) to a wall or window:

(iii) other accessories, such as pipes and flanges, designed to allow permanent wall or window mounting.

(7) A product is **single-phase** if all components that require an external power supply require only single-phase power.

(8) An air-to-air air conditioner is a **single-split system** if—

(a) it has separate indoor and outdoor units that are connected with refrigerant piping; and

(b) if it has 2 or more indoor units, the units cannot be individually controlled.

(9) A product is **three-phase** if at least one component requires an external three-phase power supply.

(10) An air conditioner is **unitary** if the evaporator, condenser, and associated refrigeration components (for example, the compressor) are contained within a single housing.

(11) A multi-split system is of **variable refrigerant flow** or **VRF** type if it has 1 or more outdoor units comprising a single refrigerant circuit, each of which has a set of refrigeration ports that services the network of indoor units through branch piping or distribution devices, or both.

(12) An air conditioner is **water-to-air** if it uses water or brine—

(a) as the heat sink when in cooling mode; and

(b) as the heat source when in heating mode.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 5

Schedule 2A clause 52: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

53 Interpretation: standards

In this schedule,—

AHRI 1230:2010 means Air-Conditioning, Heating, & Refrigeration Institute Standard 1230 Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment

AS/NZS 3823.1.1:2012 means Australian/New Zealand Standard 3823.1.1:2012 Performance of electrical appliances—Airconditioners and heat pumps. Part 1.1: Non-ducted airconditioners and heat pumps—Testing and rating for performance (ISO 5151:2010, MOD)

AS/NZS 3823.1.2:2012 means Australian/New Zealand Standard 3823.1.2:2012 Performance of electrical appliances—Airconditioners and heat pumps. Part 1.2: Ducted airconditioners and air-to-air heat pumps—Testing and rating for performance (ISO 13253:2011, MOD)

AS/NZS 3823.1.3:2005 means Australian/New Zealand Standard 3823.1.3:2005 Performance of electrical appliances—Airconditioners and heat pumps. Part 1.3: Water-source heat pumps—Water-to-air and brine-to-air heat pumps—Testing and rating of performance (ISO 13256-1, Ed. 01 (1998) MOD)

AS/NZS 3823.1.4:2012 means Australian/New Zealand Standard 3823.1.4:2012 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 3823.1.5:2015 means Australian/New Zealand Standard 3823.1.5:2015 Performance of electrical appliances—Air conditioners and heat pumps. Part 1.5: Non-ducted portable air-cooled air conditioners and air-to-air heat pumps having a single exhaust duct—Testing and rating for performance

AS/NZS 3823.4.1:2014 means Australian/New Zealand Standard 3823.4.1:2014 Performance of electrical appliances—Air conditioners and heat pumps. Part 4.1: Air-cooled air conditioners and air-to-air heat pumps—Testing and calculating methods for seasonal performance factors—Cooling seasonal performance factor (ISO 16358 1:2013, (MOD))

AS/NZS 3823.4.2:2014 means Australian/New Zealand Standard 3823.4.2:2014 Performance of electrical appliances—Air conditioners and heat pumps. Part 4.2: Air-cooled air conditioners and air-to-air heat pumps—Testing and calculating methods for seasonal performance factors—Heating seasonal performance factor (ISO 16358 2:2013, (MOD))

EN 12102-1:2017 means European Standard 12102-1:2017 Air conditioners, liquid chilling packages, heat pumps, process chillers and dehumidifiers with electrically driven compressors—Determination of the sound power level. Part 1: Air conditioners, liquid chilling packages, heat pumps for space heating and cooling, dehumidifiers and process chillers

EN 14511:2018 means European Standard 14511:2018 Air conditioners, liquid chilling packages and heat pumps for space heating and cooling and process chillers, with electrically driven compressors

ISO 5151:2017 means International Organization for Standardization Standard 5151:2017 Non-ducted air-conditioners and heat pumps—Testing and rating for performance

ISO 13253:2017 means International Organization for Standardization Standard 13253:2017 Ducted air conditioners and air-to-air heat pumps—Testing and rating for performance

ISO 15042:2017 means International Organization for Standardization Standard 15042:2017 Multiple split-system air-conditioners and air-to-air heat pumps—Testing and rating for performance.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 4

Schedule 2A clause 53: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

54 Meanings of fixed, two-stage, multi-stage, and variable capacity

In this schedule,—

(a) a product is of **fixed capacity** if it is unable to change its capacity:

(b) a product is of **two-stage capacity** if it can vary its capacity by 2 steps:

(c) a product is of **multi-stage capacity** if it can vary its capacity by 3 or 4 steps:

(d) a product is of **variable capacity** if it can vary its capacity by 5 or more steps.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 6

Schedule 2A clause 54: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

55 Meanings of H1, H2, H3, and T1

In this schedule,—

H1 means the following temperature conditions:

(a) 20°C dry-bulb and 15°C wet-bulb inside:

(b) 7°C dry-bulb and 6°C wet-bulb outside

H2 means the following temperature conditions:

(a) 20°C dry-bulb and 15°C wet-bulb inside:

(b) 2°C dry-bulb and 1°C wet-bulb outside

H3 means the following temperature conditions:

(a) 20°C dry-bulb and 15°C wet-bulb inside:

(b) −7°C dry-bulb and −8°C wet-bulb outside

T1 means the following temperature conditions:

(a) 27°C dry-bulb and 19°C wet-bulb inside:

(b) 35°C dry-bulb and 24°C wet-bulb outside.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 7

Schedule 2A clause 55: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

56 Meanings of total cooling capacity and related terms

(1) In this schedule,—

low-temperature cooling capacity test, in relation to an air conditioner, means the test for the air conditioner's total cooling capacity in accordance with the relevant test standard at—

(a) the outdoor dry-bulb temperature of 29°C, as defined in Table 1 of AS/NZS 3823.4.1:2014; and

(b) a particular load

standard cooling capacity test, in relation to a product, means the test for the product's total cooling capacity in accordance with the relevant test standard at—

(a) T1 temperature conditions; and

(b) a particular load

standard cooling full capacity, in relation to an air conditioner, means—

(a) the air conditioner's total cooling capacity when tested in accordance with the standard cooling capacity test at full load; or

(b) a rated value based on that amount

standard cooling part-load capacity, in relation to an air conditioner, means—

(a) the air conditioner's total cooling capacity when tested in accordance with the standard cooling capacity test at a particular part-load point; or

(b) a rated value based on that amount

total cooling capacity, in relation to an air conditioner, means the amount of sensible and latent heat that the air conditioner can remove from the condi-

tioned space at particular temperature conditions and at a particular load in a defined interval of time.

(2) In this clause, the following are **relevant test standards**:

(a) for a water-to-air air conditioner, clause 6.1 of AS/NZA 3823.1.3:2005:

(b) for a unitary single-duct air conditioner, clause 5.1 of AS/NZS 3823.1.5:2015:

(c) for a non-ducted air-to-air air conditioner (other than one covered by paragraph (b)), clause 5.1 of AS/NZS 3823.1.1:2012:

(d) for a ducted air-to-air air conditioner, clause 6.1 of AS/NZS 3823.1.2:2012:

(e) for a multi-split system, clause 6.1 of AS/NZS 3823.1.4:2012:

(f) if applicable, a standard referred to in clause 46.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 8

Schedule 2A clause 56: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

57 Meanings of heating capacity and related terms

(1) In this schedule,—

extra-low-temperature heating capacity test, in relation to a product, means the test for the product's heating capacity in accordance with the relevant test standard at—

(a) H3 temperature conditions; and

(b) a particular load

heating capacity, in relation to an air conditioner, means the amount of heat that the air conditioner can deliver to the conditioned space at particular temperature conditions and at a particular load in a defined interval of time

low-temperature heating capacity test, in relation to a product, means the test for the product's heating capacity in accordance with the relevant test standard at—

(a) H2 temperature conditions; and

(b) a particular load

low-temperature heating extended-load capacity, in relation to an air conditioner, means—

(a) the air conditioner's heating capacity when tested using the low-temperature heating capacity test at heating extended-load operation; or

(b) a rated value based on that amount

low-temperature heating full capacity, in relation to an air conditioner, means—

(a) the air conditioner's heating capacity when tested in accordance with the low-temperature heating capacity test at full load; or

(b) a rated value based on that amount

standard heating capacity test, in relation to a product, means the test for the product's heating capacity in accordance with the relevant test standard at—

(a) H1 temperature conditions; and

(b) a particular load

standard heating full capacity, in relation to an air conditioner, means—

(a) the air conditioner's heating capacity when tested using the standard heating capacity test at full load; or

(b) a rated value based on that amount

standard heating part-load capacity, in relation to an air conditioner, means—

(a) the air conditioner's heating capacity when tested using the standard heating capacity test at a specified part-load point; or

(b) a rated value based on that amount.

(2) In this clause, the following are **relevant test standards**:

(a) for a water-to-air air conditioner, clause 6.1 of AS/NZS 3823.1.3:2005:

(b) for a unitary single-duct air conditioner, clause 6.1 of AS/NZS 3823.1.5:2015:

(c) for a non-ducted air-to-air air conditioner (other than one covered by paragraph (b)), clause 6.1 of AS/NZS 3823.1.1:2012:

(d) for a ducted air-to-air air conditioner, clause 7.1 of AS/NZS 3823.1.2:2012:

(e) for a multi-split system, clause 7.1 of AS/NZS 3823.1.4:2012:

(f) if applicable, a standard referred to in clause 46.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 9

Schedule 2A clause 57: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

58 Meanings of rated and tested

In this schedule,—

(a) a **rated** value or amount is one that is claimed by the manufacturer and that—

(i) is based on a tested value or amount; and

(ii) in the case of a product's capacity, satisfies the following:

rated capacity ≤ (tested capacity ÷ 0.95)

(iii) in the case of a product's power input, satisfies the following:

rated power input ≥ (tested power input ÷ 1.05)

(iv) in the case of any other parameter, is calculated on the basis of rated capacities or power inputs that satisfy subparagraph (ii) or (iii), as appropriate; and

(b) a **tested** value or amount is one that is—

(i) determined in accordance with a physical or simulation test conducted in accordance with this schedule; or

(ii) calculated on the basis of values or amounts that have been determined in accordance with subparagraph (i).

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 10

Schedule 2A clause 58: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

59 Families of models

(1) For the purposes of clause 26, for a particular product class covered by this schedule, 2 or more models are in the same **family of models** if—

(a) they are members of a family that has been accepted by the Authority; and

(b) the requirements of this clause are satisfied in relation to the models and the family.

(2) For the purposes of subclause (1), the models must—

(a) be in the same product class; and

(b) have the same energy performance characteristics relevant to complying with Part 2, including, but not limited to,—

(i) electrical phase; and

(ii) average true power factor; and

(iii) rated power inputs; and

(iv) rated capacities; and

(c) have the same physical characteristics that are relevant to complying with Parts 2 and 3; and

(d) be included on a single test report that was prepared before the prescribed form for the models was submitted under regulation 4 or 6 (or, if regulation 4(3) or 6(3) applies, before the application was made for the models to be registered in Australia).

(3) For the purposes of subclause (1), a family must not contain more than 10 models.

Compare: Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019 (Aus) s 12

Schedule 2A clause 59: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 2B
Refrigerated cabinets

Schedules 1, 2

Schedule 2B: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Contents

Part 1
Product classes, MEPS, labelling standards, testing standards, and other requirements

Schedule 2B Part 1: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

1 Overview of schedule

(1) Part 1 of this schedule specifies—

(a) 15 product classes of refrigerated cabinet that are covered by this schedule (clause 2) and product classes that are not covered by this schedule (clause 3):

(b) minimum energy performance standards (**MEPS**) for each product class (clause 4):

(c) MEPS labelling standards for each product class (clause 5):

(d) testing standards for the purposes of the MEPS and the MEPS labelling standards (clauses 6 and 7):

(e) the meaning of terms used in this schedule (clauses 8 to 18):

(f) the method of calculating the energy efficiency index of refrigerated cabinets, which is required for the purposes of applying the MEPS and the MEPS labelling standards (clauses 19 and 20):

(g) the circumstances in which models in a product class are to be treated as a family of models (clause 21).

(2) This schedule specifies product classes, standards, and other matters by reference to various standards (for example, AS/NZS) and, in some cases, specifies modifications that apply to those standards for the purposes of this schedule.

Schedule 2B clause 1: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Product classes covered by schedule

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

2 Product classes of refrigerated cabinets covered by schedule

(1) The following table sets out the product classes of refrigerated cabinets that are covered by this schedule (and, for each product class, the coefficients M and N for the purpose of calculating reference annual energy consumption in accordance with clause 20):

Kind of product	Product class	Characteristics (code)	Coefficient M	Coefficient N
Integral, horizontal cabinets	1	RDC—chiller (IRH)	3.7	3.5
	2	RDC—freezer (IFH)	4.2	9.8
	3	RSC—chiller (SRH)	2.555	1790
	4	RSC—freezer (SFH)	5.84	2380
	5	Ice cream freezer cabinet (IFH-5)	1	0.009
	6	Scooping cabinet (GSC or ISC)	10.4	30.4
Integral, vertical RDCs (other than refrigerated drinks cabinets) and vertical RSCs	7	RDC—chiller (IRV)	9.1	9.1
	8	RDC—freezer (IFV)	1.6	19.1
	9	RSC—chiller (SRV)	1.643	609
	10	RSC—freezer (SFV)	4.928	1472
Refrigerated drinks cabinets	11	RDC—chiller (IRV-4)	0.69	5.97
Remote, horizontal RDCs	12	RDC—chiller (RRH)	3.7	3.5
	13	RDC—freezer (RFH)	4.2	9.8
Remote, vertical RDCs	14	RDC—chiller (RRV or RRV-2)	9.1	9.1
	15	RDC—freezer (RFV)	1.6	19.1

(2) In this clause, **integral, horizontal cabinets** means any of the following:

(a) RDCs that are integral and horizontal:

(b) RSCs that are horizontal:

(c) ice cream freezer cabinets:

(d) scooping cabinets.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 19

Schedule 2B clause 2: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

3 Product classes of refrigerated cabinets not covered by schedule

(1) The following are not covered by this schedule:

(a) refrigerated vending machines:

(b) cabinets that are designed for both food processing and storage, whether or not the cabinet includes an integral refrigerated storage section:

(c) refrigerated cabinets that have water-cooled condensers:

(d) any of the following, within the meaning of EN 16825:

(i) built-in cabinets (that is, refrigerated cabinets that are designed to be installed into a prepared recess in a wall or similar location and that require furniture finishing):

(ii) roll-in cabinets (that is, refrigerated cabinets that are designed to be loaded with trolleys with shelves which are designed to be introduced into the cabinet as trolleys with shelves):

(iii) pass-through cabinets (that is, refrigerated cabinets that are designed to be accessible from both sides):

(e) appliances that are intended for short-time or intermittent normal operation during the full day:

(f) RDCs that—

(i) are low-sales-volume, oversize, or both; and

(ii) have an indirect refrigeration system within the meaning of ISO 23953-2 (that is, refrigerated cabinets in which a secondary refrigerant circulating system is installed between a central refrigerating system and the cabinet):

(g) RSCs that are not light-duty, normal-duty, or heavy-duty.

(2) In this clause,—

refrigerated vending machine means a self-contained refrigerated cabinet that is designed to accept consumer payments or tokens to dispense pre-packed beverages or food (for example, in the form of cans, bottles, or food packets), and that stores products at between 0°C and +5°C

water-cooled condenser means a condenser that uses water as the cooling medium to condense hot refrigeration gas to liquid.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 20

Schedule 2B clause 3: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

MEPS standards

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

4 Minimum energy performance standard for refrigerated cabinets

A cabinet that belongs to a product class specified in the table below must have an energy efficiency index (**EEI**), calculated in accordance with clauses 19 and 20, that is less than the figure specified for that product class in the table.

Product class	EEI
Any of the following: (a) an RDC: (b) a scooping cabinet: (c) an ice cream freezer cabinet	130
A heavy-duty RSC	115
A light-duty or normal-duty RSC	95

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 23

Schedule 2B clause 4: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

MEPS labelling standards

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

5 Use of star ratings

If, at the time of supply, or offer of supply, of a product covered by this schedule, the energy efficiency of the product is described in terms of 1 or more stars, the number of stars must be calculated in accordance with the EEI of the product as specified in the following table:

EEI	Number of stars
100 ≤ EEI < 130	1
77 ≤ EEI < 100	2
60 ≤ EEI < 77	3
45 ≤ EEI < 60	4
35 ≤ EEI < 45	5
27 ≤ EEI < 35	6
21 ≤ EEI < 27	7
16 ≤ EEI < 21	8
12 ≤ EEI < 16	9
0 ≤ EEI < 12	10

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 29

Schedule 2B clause 5: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Testing standards

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

6 Testing requirements

(1) For the purposes of this schedule, all testing must be conducted in accordance with the relevant test standard.

(2) In this clause, **test standard** means,—

(a) for an RDC, ISO 23953-1 and ISO 23953-2:

(b) for an RSC,—

(i) when determining the energy consumption or energy efficiency index of a low-sales-volume RSC, ISO 23953-2:

(ii) for any other purpose, EN 16825:

(c) for an ice cream freezer cabinet, EN 16901:

(d) for a scooping cabinet, EN 16838.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 26

Schedule 2B clause 6: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

7 Additional testing requirements: integral, low-sales-volume RDCs that are not oversize and low-sales-volume RSCs

(1) This clause applies in relation to the following:

(a) an RDC that is low-sales-volume, integral, and not oversize:

(b) a low-sales-volume RSC.

(2) In addition to the testing that is required to determine the value of TEC_{actual} in accordance with clause 20(4), the total electrical energy consumption of the cabinet as a whole must be measured directly by testing in accordance with ISO 23953-2.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 27

Schedule 2B clause 7: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Interpretation

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

8 Interpretation: general

In this schedule,—

energy consumption or **E24h** has the meaning set out in clause 16

energy efficiency index or **EEI**, in relation to a refrigerated cabinet, means the amount calculated for the cabinet in accordance with clause 19

heavy-duty, in relation to an RSC, has the meaning set out in clause 15(1)

horizontal, in relation to an RDC or RSC, has the meaning set out in clause 13

ice cream freezer cabinet has the meaning set out in clause 12

integral has the meaning set out in clause 11

light-duty, in relation to an RSC, has the meaning set out in clause 15(1)

low-efficiency reference set has the meaning set out in clause 18(1)

low-sales-volume, in relation to an RDC or RSC, has the meaning set out in clause 17(a)

meets the requirements, in relation to an M-package temperature class, has the meaning set out in clause 14(2)

M-package temperature class has the meaning set out in clause 14(1)

net volume or $\mathbf{V_N}$, in relation to an ice-cream freezer cabinet or an RSC, means the net volume of the cabinet in litres, and is determined in accordance with,—

(a) for an ice cream freezer cabinet, Annex B of EN 16901; and

(b) for an RSC, clause 6.1 of EN 16825

normal-duty, in relation to an RSC, has the meaning set out in clause 15(1)

oversize, in relation to an RDC, has the meaning set out in clause 17(b)

parent model, in relation to a family of models, has the meaning set out in clause 21(2)

product class means a product class set out in clause 2

reference low-efficiency version has the meaning set out in clause 18(1)

refrigerated cabinet has the meaning set out in clause 10

refrigerated display cabinet or **RDC** has the meaning set out in clause 12

refrigerated drinks cabinet has the meaning set out in clause 12

refrigerated storage cabinet or **RSC** or has the meaning set out in clause 12

refrigerated vending machine has the meaning set out in clause 3(2)

relevant component has the meaning set out in clause 18(1)

remote has the meaning set out in clause 11

scooping cabinet has the meaning set out in clause 12

specific energy consumption has the meaning set out in clause 21(9)

test room climate class means a test room climate class set out in clause 27

test standard has the meaning set out in clause 6(2)

total display area or **TDA**, in relation to an RDC or a scooping cabinet, means the total display area of the cabinet in square metres, and is determined in accordance with,—

(a) for an RDC, Annex A of ISO 23953-2; and

(b) for a scooping cabinet, clause 6.2 of EN 16838

vertical, in relation to an RDC or RSC, has the meaning set out in clause 13

water-cooled condenser has the meaning set out in clause 3(2).

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 5

Schedule 2B clause 8: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

9 Interpretation: standards

In this schedule,—

EN 16825 means European Standard 16825:2016 Refrigerated storage cabinets and counters for professional use—Classification, requirements and test conditions, as varied in accordance with clause 23

EN 16838 means European Standard 16838:2016 Refrigerated display scooping cabinets for gelato—Classification, requirements and test conditions

EN 16901 means European Standard 16901:2016 Ice cream freezers—Classification, requirements and test conditions, as varied in accordance with clause 24

ISO 23953-1 means International Organization for Standardization Standard 23953-1:2015, Refrigerated display cabinets—Part 1: Vocabulary

ISO 23953-2 means International Organization for Standardization Standard 23953-2:2015, Refrigerated display cabinets—Part 2: Classification, requirements and test conditions—

(a) as varied in accordance with clause 22(1); and

(b) in relation to determining the energy consumption or energy efficiency index of a low-sales-volume RSC, as further varied in accordance with clause 22(2).

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 4

Schedule 2B clause 9: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

10 Meaning of refrigerated cabinet

In this schedule, **refrigerated cabinet** means a device that—

(a) consists of an insulated cabinet with an opening (whether or not the opening has a lid or a door); and

(b) is capable of attaining and maintaining a specified temperature within the insulated cabinet within a range that overlaps the range −18°C to +10°C; and

(c) is designed primarily for the storage, display, or storage and display, of chilled or frozen food.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 6

Schedule 2B clause 10: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

11 Meanings of integral and remote

In this schedule,—

(a) a refrigerated cabinet is **integral** if it is designed to have its condensing unit within, or directly attached to, the cabinet:

(b) a refrigerated cabinet is **remote** if it is not integral.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 7

Schedule 2B clause 11: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

12 Types of refrigerated cabinets

In this schedule,—

ice cream freezer cabinet means a refrigerated cabinet that—

(a) is designed for the storage and display of, and access by consumers to, pre-packaged frozen ice cream; and

(b) is integral; and

(c) can be accessed by opening a lid (whether solid or transparent); and

(d) has a net volume, when determined in accordance with Annex B of EN 16901, applied with all necessary modifications, as if the cabinet were covered by that standard, of no more than 500 litres; and

(e) has a ratio of net volume to total display area of greater than or equal to 0.35 m; and

(f) has static air cooling with a skin evaporator

refrigerated display cabinet or **RDC** means a refrigerated cabinet that—

(a) is designed for the storage and display of, and access by consumers to, chilled or frozen items contained in the cabinet in a retail environment; and

(b) is not—

(i) a scooping cabinet; or

(ii) an ice cream freezer cabinet

refrigerated drinks cabinet means a refrigerated display cabinet that—

(a) is designed for non-perishable drinks only; and

(b) is integral

refrigerated storage cabinet or **RSC** means a refrigerated cabinet that—

(a) is integral; and

(b) is not—

(i) an RDC; or

(ii) a scooping cabinet; or

(iii) an ice cream freezer cabinet

scooping cabinet means a refrigerated cabinet that—

(a) is designed for the storage, display, and scooping of frozen gelato or ice cream in containers; and

(b) is integral.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 8

Schedule 2B clause 12: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

13 Meanings of horizontal and vertical

(1) In this schedule,—

(a) an RDC is—

(i) **horizontal** if it has an access opening only in its uppermost horizontal surface (whether or not the access opening can be closed by a door or a lid); and

(ii) **vertical** otherwise:

(b) an RSC is—

(i) **horizontal** if it has an overall height, when determined in accordance with EN 16825, no greater than 1,050 mm; and

(ii) **vertical** otherwise.

(2) The definitions in subclause (1) do not apply for the purposes of clause 21(2).

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 9

Schedule 2B clause 13: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

14 Meaning of M-package temperature class

(1) In this schedule, **M-package temperature class** means a temperature class that is set out in,—

(a) for an RDC, an RSC, or a scooping cabinet, column 1 of the table in clause 26(1); and

(b) for an ice cream freezer cabinet, column 1 of the table in clause 26(2).

(2) In this schedule, a particular refrigerated cabinet **meets the requirements** of a particular M-package temperature class if, when the cabinet is tested in accordance with the relevant test standard and at a particular test room climate class, the requirements that are specified in clause 26 for that M-package temperature class and for that type of cabinet are satisfied.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 10

Schedule 2B clause 14: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

15 Meanings of light-duty, normal-duty, and heavy-duty

(1) In this schedule, an RSC is—

(a) **heavy-duty** if, when tested in accordance with clause 5.3.4 of EN 16825 and in ambient conditions corresponding to test room climate class 5, the RSC is capable of continuously meeting the requirements for the relevant M-package temperature class in all of its compartments:

(b) **light-duty** if—

(i) it is not heavy-duty or normal-duty; and

(ii) when tested in accordance with clause 5.3.4 of EN 16825 and in ambient conditions corresponding to test room climate class 3, the RSC is capable of continuously meeting the requirements for the relevant M-package temperature class in all of its compartments:

(c) **normal-duty** if—

(i) it is not heavy-duty; and

(ii) when tested in accordance with clause 5.3.4 of EN 16825 and in ambient conditions corresponding to test room climate class 4, the RSC is capable of continuously meeting the requirements for the relevant M-package temperature class in all of its compartments.

(2) In subclause (1), **relevant M-package temperature class** means,—

(a) for an RSC that is designed for storage of chilled food, M1 (*see* item 11 in clause 26(1)); and

(b) for an RSC that is designed for storage of frozen food, L1 (*see* item 6 in clause 26(1)).

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 11

Schedule 2B clause 15: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

16 Meanings of energy consumption and E24h

(1) In this schedule, **energy consumption** or **E24h**, in relation to a refrigerated cabinet, means the energy consumption of the cabinet over a 24-hour period, in kWh per 24 hours, and is equal to the amount determined in accordance with the following table:

Item	For:	the energy consumption is equal to the amount:	as determined in accordance with:	at test room climate class:
1	an RDC	TEC	clauses 5 and 6 of ISO 23953-2	3
2	an ice cream freezer cabinet	TEC	clauses 6 and 7 of EN 16901	4
3	a scooping cabinet	TEC	clauses 6 and 7 of EN 16838	4
4	a light-duty RSC, other than one covered by item 5	E24h	clauses 5, 6, and 7 of EN 16825	3

Item	For:	the energy consumption is equal to the amount:	as determined in accordance with:	at test room climate class:
5	an RSC that is— (a) light-duty; and (b) low-sales-volume	TEC	clauses D.4.2 and D.4.3 of ISO 23953-2	3
6	a normal-duty or heavy-duty RSC, other than one covered by item 7	E24h	clauses 5, 6, and 7 of EN 16825	4
7	an RSC that is— (a) normal-duty or heavy-duty; and (b) low-sales-volume	TEC	clauses D.4.2 and D.4.3 of ISO 23953-2	4

(2) *See* clauses 25 to 27 for requirements relating to M-package temperature class that a product must meet when the product's energy consumption is determined in accordance with this clause.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 12

Schedule 2B clause 16: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

17 Meaning of low-sales-volume and oversize

In this schedule,—

(a) an RDC or an RSC is **low-sales-volume** at a particular date if,—

(i) for an RDC or an RSC of a model that belongs to a family of models, no more than 25 units of the models that belong to the family of models are sold in New Zealand in the calendar year that includes that date; or

(ii) for an RDC or an RSC of a model that does not belong to a family of models, no more than 10 units of the model are sold in New Zealand in the calendar year that includes that date:

(b) an RDC is **oversize** if, because of its size, there is no testing laboratory—

(i) in which the RDC is able to be tested in accordance with ISO 23953-2; and

(ii) that has been approved by the National Association of Testing Authorities, Australia or by International Accreditation New Zealand.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 13

Schedule 2B clause 17: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

18 Meanings of reference low-efficiency version and relevant component

(1) In this schedule,—

reference low-efficiency version, in relation to an RDC or RSC, means a hypothetical version of the cabinet in which the set of relevant components is replaced by a set of components (the **low-efficiency reference set**)—

(a) each of which is of a kind listed in column 2 of the table in subclause (2); and

(b) that collectively perform the same function as the components that are replaced

relevant component, in relation to a particular RDC or RSC, means any component of the cabinet that is of a kind listed in column 1 of the table in subclause (2).

(2) The relevant components and the low-efficiency reference sets are:

Column 1	Column 2
Kinds of relevant components	**Kinds of low-efficiency reference set components**
Fan motors	A shaded pole fan motor with an efficiency of 35% or lower
Lighting	Fluorescent lamps with B2 ballasts
Anti-condensation heaters	An uncontrolled anti-condensation heater
Pan heaters	An uncontrolled pan heater
Defrost heaters	A defrost heater that is controlled by a timer

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 22

Schedule 2B clause 18: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Calculation of energy efficiency index

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

19 Calculation of energy efficiency index

The energy efficiency index of a refrigerated cabinet is calculated in accordance with the following formula:

$$EEI = (AEC \div RAEC) \times 100$$

where—

AEC is the refrigerated cabinet's annual energy consumption, in kWh per year, and is calculated in accordance with clause 20

RAEC is the refrigerated cabinet's reference annual energy consumption, in kWh per year, and is calculated in accordance with clause 20.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 24

Schedule 2B clause 19: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

20 Calculation of annual energy consumption and reference annual energy consumption

(1) The following table applies for the purpose of the variables AEC and RAEC in clause 19:

Item	For:	AEC is given by	RAEC is given by
1	an RDC, other than one covered by item 5 or item 6	E24h × 365	(M + (N × TDA)) × 365
2	a scooping cabinet	E24h × 365	(M + (N × TDA)) × 365
3	an ice cream freezer cabinet	E24h × 365	(M + (N × V_N)) × 365
4	an RSC, other than one covered by item 7	E24h × af × 365	(M × V_N) + N
5	an RDC that is— (a) remote; and (b) either or both of the following: (i) low-sales-volume: (ii) oversize	(DEC_{actual} + REC_{actual}) × af × 365	($DEC_{reference}$ + REC_{actual}) × 365
6	an RDC that is— (a) integral; and (b) either or both of the following: (i) low-sales-volume; (ii) oversize	TEC_{actual} × af × 365	$TEC_{reference}$ × 365
7	a low-sales-volume RSC	TEC_{actual} × af × 365	$TEC_{reference}$ × 365

Definitions: items 1 to 4 (RDCs, scooping cabinets, ice cream freezer cabinets and RSCs)

(2) For items 1 to 4 of the table in subclause (1),—

af is the adjustment factor for item 4, and is equal to,—

(a) for a light-duty RSC that is a chiller, 1.2; and

(b) for a light-duty RSC that is a freezer, 1.1; and

(c) for a normal-duty or heavy-duty RSC, 1

E24h is the energy consumption of the cabinet in kWh per 24 hours (*see* clause 16)

M is the coefficient for the cabinet's product class, as specified in clause 2

N is the coefficient for the cabinet's product class, as specified in clause 2

TDA is the total display area of the cabinet, in square metres (*see* clause 8)

V_N is the net volume of the cabinet in litres (*see* clause 8).

Definitions: item 5 (low-sales-volume or oversize RDCs that are remote)

(3) For item 5 of the table in subclause (1),—

af is the adjustment factor, and is equal to 1.1304

DEC_{actual} is the electrical energy consumption of the cabinet, as calculated in accordance with Formula D.3 of Annex D of ISO 23953-2 on the basis of amounts for the relevant components of the cabinet that are,—

(a) if the cabinet is low-sales-volume but not oversize,—

(i) measured in accordance with Part D.3 of Annex D of ISO 23953-2 (the **relevant provisions**); or

(ii) if, for a particular component, measurement is not reasonably practicable, calculated in accordance with the relevant provisions; and

(b) if the cabinet is oversize (whether or not it is also low-sales-volume), calculated in accordance with the relevant provisions

$DEC_{reference}$ is the hypothetical electrical energy consumption of a reference low-efficiency version of the cabinet, as calculated in accordance with clause D.3.4.1 of Annex D of ISO 23953-2 on the basis of amounts, for the components in the low-efficiency reference set, that are calculated in accordance with Part D.3 of Annex D of ISO 23953-2

REC_{actual} is the electrical energy consumption of a refrigeration system that can be used to operate the refrigerated cabinet, and is equal to the amount REC_{RC} as determined in accordance with Formula 9 in ISO 23953-2.

Definitions: items 6 and 7 (low-sales-volume or oversize RDCs that are integral, low-sales-volume RSCs)

(4) For items 6 and 7 of the table in subclause (1),—

af is the adjustment factor for items 6 and 7, and is equal to,—

(a) for item 6, 1.1304; and

(b) for item 7,—

(i) for a heavy-duty RSC, 1.15; and

(ii) for a light-duty or normal-duty RSC, 1.1875

TEC_{actual} is the total daily electrical energy consumption of the cabinet (including the condensing unit energy consumption), as calculated in accordance with Formula D.14 of Annex D in ISO 23953-2 on the basis of amounts for the relevant components of the cabinet that are,—

(a) for an RDC that is low-sales-volume but not oversize,—

(i) measured in accordance with clauses D.4.2 and D.4.3 of Annex D of ISO 23953-2 (the **relevant provisions**); or

(ii) if, for a particular component, measurement is not reasonably practicable, calculated in accordance with the relevant provisions; and

(b) for an RDC that is oversize (whether or not it is also low-sales-volume), calculated in accordance with the relevant provisions; and

(c) for an RSC,—

(i) measured in accordance with the relevant provisions; or

(ii) if, for a particular component, measurement is not reasonably practicable, calculated in accordance with the relevant provisions

$TEC_{reference}$ is the hypothetical total daily electrical energy consumption of a reference low-efficiency version of the cabinet, as calculated in accordance with clauses D.4.2 and D.4.3 of Annex D of ISO 23953-2 on the basis of,—

(a) in relation to the condensing unit, the value of CEC, as used in Formula D.14, that was used for the calculation of the amount TEC_{actual}; and

(b) for other elements of the calculation, amounts, for the components in the low-efficiency reference set, that are calculated in accordance with clause D.4.2 of Annex D of ISO 23953-2.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 25

Schedule 2B clause 20: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Families of models

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

21 Families of models

(1) For a particular product class covered by this schedule, 2 or more models are in the same family of models if—

(a) they are members of a family that has been accepted by the Authority; and

(b) the requirements of this clause are satisfied in relation to the models and the family.

(2) There must be a single model (the **parent model**) for each family that,—

(a) when compared with the other models in the family,—

(i) has the highest, or the equal-highest, specific energy consumption (*see* subclause (9)); and

(ii) meets the requirements of the coldest, or the equal-coldest, M-package temperature class when tested in accordance with the relevant test standard; and

(iii) has the largest, or the equal-largest, vertical or horizontal opening; and

(iv) has the greatest, or the equal-greatest, horizontal distance between the front and the rear of the cabinet; and

(b) is included on a test report that was prepared before the prescribed form was submitted to the Authority for any model that is a member of the family.

Family model requirements

(3) Each model in the family must—

(a) be in the same product class as the parent model; and

(b) meet the requirements of—

(i) the same M-package temperature class as the parent model; or

(ii) a warmer M-package temperature class than the parent model.

Additional requirements if parent model an RDC

(4) If the parent model is an RDC, each model in the family must have—

(a) the same characteristics as the parent model in relation to—

(i) whether it is open or closed; and

(ii) whether it is oversize; and

(b) either—

(i) a total display area that is the same as that of the parent model; or

(ii) the same ratio of cabinet length to total display area as that of the parent model, if the family consists of models that are remote and of modular construction, and some or all of them are of different lengths.

Additional requirements if parent model an RSC

(5) If the parent model is an RSC, each model in the family must have the same characteristics as the parent model in relation to—

(a) net volume:

(b) duty classification (light-duty, normal-duty, or heavy-duty).

Additional requirements if parent model an ice cream freezer cabinet

(6) If the parent model is an ice cream freezer cabinet, each model in the family must have the same characteristics as the parent model in relation to—

(a) net volume:

(b) total display area.

Additional requirements if parent model a scooping cabinet

(7) If the parent model is a scooping cabinet, each model in the family must have the same total display area as the parent model.

Number of models in family

(8) A family must not contain more than 25 models.

Specific energy consumption

(9) For the purposes of subclause (2)(a)(i), the **specific energy consumption** of a refrigerated cabinet is equal to,—

(a) for an RDC, the amount SEC in kWh per 24 hours per m^2 as calculated in accordance with clause 5.3.6.3.5 of ISO 23953-2; and

(b) for an RSC, the amount SEC in kWh per 24 hours per m^3 as calculated in accordance with subclause (10); and

(c) for a scooping cabinet, the amount SEC in kWh per 24 hours per m^2 as calculated in accordance with clause 6.3.7.3.5 of EN 16838; and

(d) for an ice cream freezer cabinet, the amount SEC in kWh per 24 hours per m^3 as calculated in accordance with clause 6.3.6.6.4 of EN 16901.

(10) In subclause (9)(b), for an RSC, the amount SEC is given by following formula:

$$\text{SEC} = \text{energy consumption} \div \text{net volume}$$

where—

energy consumption is the cabinet's energy consumption in kWh per 24 hours (*see* clause 16)

net volume is the cabinet's net volume in cubic metres (*see* clause 8).

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 15

Schedule 2B clause 21: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Part 2
Variations to standards and related matters

Schedule 2B Part 2: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Variations to standards

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

22 Variations that relate to ISO 23953-2

(1) The following table sets out the variations that relate to ISO 23953-2 for the purposes of the definition of that standard in clause 9:

Item	The following provision of ISO 23953-2:	is taken to be varied by:
1	clause 4.1.6	inserting, before the Note to the clause: "Remote temperature monitoring is permitted."
2	paragraph (b) of clause 5.3.2.3.2	replacing "chilled vertical cabinets" with "open cabinets"

Item	The following provision of ISO 23953-2:	is taken to be varied by:
3	paragraph (d) of clause 5.3.2.3.2	deleting “frozen”
4	clause 5.3.2.3.2	inserting, after paragraph (d): “(e) The loading height for closed cabinets shall equal half height loading of test packages.”
5	description of Figure 27	replacing “frozen” with “closed”
6	clause 5.3.2.7.1	inserting, after paragraph (b) of the clause: “Automatic lighting function switches are permitted. Should a cabinet have no automatic lighting control function fitted, the lights are to be operated continuously for the duration of the test.”
7	clause 5.3.3.2	replacing the clause with: “5.3.3.2 Closed refrigerated cabinets (a) The test for closed refrigerated cabinets shall always be carried out on the complete cabinet, regardless of the number of doors or lids. Each door or lid shall be opened six times per hour. Doors that are used for service, cleaning or loading of the cabinet only shall not be opened during this test. Where more than one door or lid pertains to the cabinet under test, the sequence in which the doors and lids are opened shall be staggered, ie, in the case of two doors: door 1 at 0 min, door 2 at 5 min, door 1 at 10 min, door 2 at 15 min, etc. Hinged lids and doors shall be opened beyond an angle of 60°. Sliding glass doors or lids shall be opened beyond 80 % of the maximum area which can be opened. The door or lid shall be opened for a total of 6 s. During this opening period, the doors or lids shall be kept open beyond the minimum required opening for 4 s. Prior to the start of the 12-h period of door opening, each door or lid shall be opened once for 3 min. Where a cabinet is provided with more than one door or lid, each door or lid shall be opened once for 3 min consecutively. Within the test period, the doors or lids shall be opened cyclically for 12 h within 24 h. The 12-h cycle of door or lid opening shall start at the beginning of the test period. (b) If the refrigerated cabinet is fitted with a lighting system, this shall be switched on 1 h before starting the opening cycle. During the test, lighting pertaining to the cabinet shall be lit continuously and anti-sweat heaters shall run for the duration of the test period unless controlled by a time-clock, smart sensor or similar automatic device. Where a cabinet is fitted with an automated lighting control, the tests shall be conducted using the pre-set lighting regime. (c) In all test conditions, maximum energy consumption and minimum efficiency should be determined as worst case.”

(2) For the purposes of items 5 and 7 of the table in clause 16(1), and of clauses 7(2) and 20(4) (to the extent that they apply to low-sales-volume RSCs), ISO 23953-2 applies as if, in addition to the variations specified in subclause (1),—

(a) references in that standard to Commercial Refrigerated Display Cabinets were references to low-sales-volume RSCs:

(b) for normal-duty or heavy-duty RSCs, tests were required to be undertaken at test room climate class 4.

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) Schedule 3 s 1

Schedule 2B clause 22: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

23 Variations that relate to EN 16825

The following table sets out the variations that relate to EN 16825 for the purposes of the definition of that standard in clause 9:

Item	The following provision of EN 16825:	is taken to be varied by:
1	clause 4.2.3	deleting the clause
2	clause 5.3.2.4	adding, at the end of the clause: "Alternative test packages as specified in clause 5.3.1.6 of ISO23953-2:2015 are permitted."
3	clause 5.3.5	deleting the clause
4	clause 6.4.4	deleting the clause

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) Schedule 3 s 2

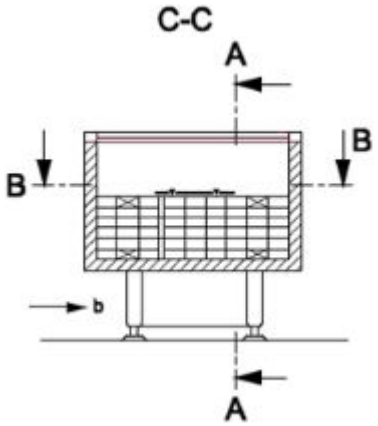
Schedule 2B clause 23: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

24 Variations that relate to EN 16901

The following table sets out the variations that relate to EN 16901 for the purposes of the definition of that standard in clause 9:

Item	The following provision of EN 16901:	is taken to be varied by:
1	Figure	replacing cross-section C-C with the following:

Item	The following provision of EN 16901:	is taken to be varied by:



Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) Schedule 3 s 3

Schedule 2B clause 24: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

M-package temperature class

Heading: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

25 Requirements relating to M-package temperature class

Application of clause

(1) This clause—

(a) applies in place of any requirement relating to M-package temperature class that is contained in a test standard specified in the table in clause 16(1); but

(b) does not apply in relation to an RDC that is oversize.

Requirements relating to M-package temperature class

(2) The type of product specified in column 1 of the following table must meet the requirements of a M-package temperature class specified in column 2, when tested in accordance with the provision in column 3 at the test room climate class specified in column 4.

	Column 1	Column 2	Column 3	Column 4
Item	Type of product:	M-package temperature classes	Tested in accordance with	Test room climate class
1	An RDC other than a refrigerated drinks cabinet	M0, M, M1, M2, H1, H2, L1, L2, L3	clause 5.3.3 of ISO 23953-2	3
2	A refrigerated drinks cabinet	M2	clause 5.3.3 of ISO 23953-2	3

Item	Column 1 Type of product:	Column 2 M-package temperature classes	Column 3 Tested in accordance with	Column 4 Test room climate class
3	A normal-duty or heavy-duty RSC	M1, L1	clause 5.3.4 of EN 16825	4
4	A light-duty RSC	M1, L1	clause 5.3.4 of EN 16825	3
5	An ice cream freezer cabinet	C1, C2	Annex F of EN 16901	4
6	A scooping cabinet	G1, G2, G3, L1, L2, L3	clause 6.3.4 of EN 16838	3 or 4

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) s 32

Schedule 2B clause 25: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

26 M-package temperature classes

M-package temperature classes—RDCs, RSCs, and scooping cabinets

(1) For RDCs, RSCs, and scooping cabinets, the M-package temperature classes referred to in clause 25, and the corresponding requirements, are set out in the following table:

Item	Column 1 M-package temperature class	Column 2 Highest temperature (°C), *θah*, of warmest M-package colder than or equal to	Column 3 Lowest temperature (°C), *θb*, of coldest M-package warmer than or equal to	Column 4 Highest minimum temperature (°C), *θal*, of all M-package colder than or equal to
1	G1	−10	−14	–
2	G2	−10	−16	–
3	G3	−10	−18	–
4	H1	+10	+1	–
5	H2	+10	−1	–
6	L1	−15	–	−18
7	L2	−12	–	−18
8	L3	−12	–	−15
9	M0	+4	−1	–
10	M	+6	−1	–
11	M1	+5	−1	–
12	M2	+7	−1	–

M-package temperature classes—ice cream freezer cabinets

(2) For ice cream freezer cabinets, the M-package temperature classes referred to in clause 25, and the corresponding requirements, are set out in the following table:

Item	Column 1 M-package temperature class	Column 2 Warmest M-package colder or equal to in all tests except lid opening test (°C)	Column 3 Warmest M-package maximum temperature rise allowed (K)
1	C1	−18.0	2.0
2	C2	−7.0	2.0

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) Schedule 4

Schedule 2B clause 26: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

27 Test room climate classes

For the purposes of clause 25, the test room climate classes are set out in the following table:

Test room climate class	Dry bulb temperature (°C)	Relative humidity	Dew point (°C)	Water vapour mass in dry air (g/kg)
3	25	60	16.7	12.0
4	30	55	20.0	14.8
5	40	40	23.9	18.8

Compare: Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019 (Aust) Schedule 5

Schedule 2B clause 27: inserted, on 1 July 2021, by regulation 17 of the Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305).

Schedule 3
Quantity form

r 12(1)(b)

I am importing (*or* manufacturing) a model in a quantity of [*number*] items or less.

Name and business details

Name of person making this declaration:

Name of company:

Business address:

Suburb/town:

Supplier contact:

Position/title:

Phone:

Fax:

Email:

Description of model

Brand name:

Model name:

Model number or family number:

Country of manufacture:

Serial numbers of items for which exemption is being claimed:

Declaration

I declare that the details stated above are true and correct.

Signature of declarant:

[*Date*]

Marie Shroff,
Clerk of the Executive Council.

Issued under the authority of the Legislation Act 2012.
Date of notification in *Gazette*: 7 February 2002.

Reprints notes

1 General

This is a reprint of the Energy Efficiency (Energy Using Products) Regulations 2002 that incorporates all the amendments to those regulations as at the date of the last amendment to them.

2 Legal status

Reprints are presumed to correctly state, as at the date of the reprint, the law enacted by the principal enactment and by any amendments to that enactment. Section 18 of the Legislation Act 2012 provides that this reprint, published in electronic form, has the status of an official version under section 17 of that Act. A printed version of the reprint produced directly from this official electronic version also has official status.

3 Editorial and format changes

Editorial and format changes to reprints are made using the powers under sections 24 to 26 of the Legislation Act 2012. See also http://www.pco.parliament.govt.nz/editorial-conventions/.

4 Amendments incorporated in this reprint

Energy Efficiency (Energy Using Products) Amendment Regulations 2020 (LI 2020/305)

Standards and Accreditation Act 2015 (2015 No 91): section 45(2)

Energy Efficiency (Energy Using Products) Amendment Regulations (No 2) 2013 (SR 2013/394)

Holidays (Full Recognition of Waitangi Day and ANZAC Day) Amendment Act 2013 (2013 No 19): section 8

Energy Efficiency (Energy Using Products) Amendment Regulations 2013 (SR 2013/28)

Energy Efficiency (Energy Using Products) Amendment Regulations 2012 (SR 2012/249)

Criminal Procedure Act 2011 (2011 No 81): section 413

Energy Efficiency (Energy Using Products) Amendment Regulations 2011 (SR 2011/129)

Energy Efficiency (Energy Using Products) Amendment Regulations 2006 (SR 2006/149)

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