



Greenhouse and Energy Minimum Standards (Air Conditioners above 65kW) Determination 2019

I, [Minister responsible], make the following determination.

Dated

Exposure Draft

29 July 2019

DRAFT ONLY—NOT FOR SIGNATURE

[Minister responsible]

Exposure Draft

29 July 2019

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Part 1—Preliminary

1 Name

This instrument is the *Greenhouse and Energy Minimum Standards (Air Conditioners above 65kW) Determination 2019*.

2 Commencement

This Determination commences and comes into force on 1 April 2021.

3 Authority

This Determination is made under section 23 of the *Greenhouse and Energy Minimum Standards Act 2012*.

4 Interpretation

(1) Subject to this section, an expression used in this Determination has the same meaning as in the Air Conditioners up to 65kW Determination.

(2) In this Determination:

Air Conditioners up to 65kW Determination means the *Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019*.

product class—see section 9.

(3) For the purposes of this section, a reference to “this Determination” in the following provisions of the Air Conditioners up to 65kW Determination:

- (a) the definition of “tested” in section 10;
- (b) the definition of “energy label” in section 26;

is taken to be a reference to this Determination.

Note: Several other words and expressions used in this Determination have the meaning given by section 5 of the Act. For example:

- category A product;
- covered by;
- family of models;
- GEMS;
- GEMS labelling requirements;
- GEMS level requirements;
- model;
- product classes.

5 Applicable definitions and applicable versions of standards and documents incorporated into standards

Applicable definitions of terms or phrases

(1) If there is inconsistency in the definitions of words or expressions, words or expressions will be interpreted in the following order of priority to the extent of any inconsistency:

- (a) the Act;
- (b) this Determination;
- (c) a standard referred to in this Determination or in the Air Conditioners up to 65kW Determination, or another standard referred to in such a standard.

Applicable version of documents incorporated into standards

- (2) For the purposes of this Determination, the applicable version of any:
 - (a) standard; or
 - (b) other document that:
 - (i) is referred to in a standard under the heading “Referenced Documents” or under an equivalent heading; and
 - (ii) must be applied to give effect to this Determination or a standard referred to in this Determination or in the Air Conditioners up to 65kW Determination;
- is the version of the standard or other document that existed at 25 March 2019.

Note 1: For example, clause 5.1 of AS/NZS 3823.4.1:2014 requires that the accuracy of all test instrumentation used for tests are those defined in AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012 and AS/NZS 3823.1.4:2012. The applicable versions of AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012 and AS/NZS 3823.1.4:2012 are the versions that existed at 25 March 2019.

Note 2: 25 March 2019 is the date the Air Conditioners up to 65kW Determination was made.

6 Families of models

- (1) For section 28 of the Act, for a particular product class covered by this Determination, two or more models are in the same family of models if:
 - (a) they are members of a family that has been declared to the GEMS Regulator; and
 - (b) the requirements of this section are satisfied in relation to the models and the family.
- (2) For subsection (1), the models must:
 - (a) be in the same product class; and
 - (b) have the same energy performance characteristics relevant to complying with Part 3 and Part 5, 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 Part 3, Part 4 and Part 5; and
 - (d) be included on a single test report which was prepared prior to the application for registration for the model being made under section 41 of the Act.
- (3) For subsection (1), a family must not contain more than 10 models.

7 Product category

For section 29 of the Act, the products covered by this Determination are category A products.

Part 2—Products covered by Determination

8 Purpose of Part

For subsections 23(1) and (2) of the Act, this Part specifies:

- (a) one or more classes of products that are covered by this Determination; and
- (b) one or more classes of products that are not covered by this Determination.

9 Classes of products that are covered by this Determination

A numbered *product class* set out in Schedule 1 is a class of products covered by this Determination.

Note 1: The product classes are numbered 24 to 27. The numbering of the product classes follows on consecutively from the numbering of the product classes in the Air Conditioners up to 65kW Determination.

Note 2: The products covered by this Determination are air-to-air single-phase and three-phase:

- air conditioners; and
- multi-split outdoor units (whether or not supplied or offered for supply as part of a multi-split system); and
- single-split outdoor units;

that have a rated standard cooling full capacity, or for heating only products, a rated standard heating full capacity, of more than 65kW.

Air conditioners that have a rated standard cooling full capacity, or for heating only products, a rated standard heating full capacity, of 65kW or less are covered by the Air Conditioners up to 65kW Determination.

Note 3: The products covered by this Determination are ones that are designed primarily for human comfort. However, this Determination covers such products irrespective of the context in which they are used. For example, this Determination applies to such products designed primarily for human comfort even if they are used in a close control context.

10 Classes of products that are not covered by this Determination

This Determination does not cover the following:

- (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) water-to-air air conditioners;
- (e) dehumidifiers;
- (f) air conditioners powered by mains electricity specifically designed and sold only for installation in end-use mobile applications, such as caravans, mobile homes, camper vans, boats and rail cars;
- (g) air conditioners powered by mains electricity specifically designed and sold only for installation in specialised high temperature industrial applications, such as crane cabins used over blast furnaces;
- (h) 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.

- Note 1: Regarding paragraphs (a) and (b), some products excluded from the application of this Determination are subject to the application of other GEMS determinations.
- Note 2: Regarding paragraph (c), air conditioners of the vapour compression type that have an enhancement or option to assist the operating energy efficiency (for example, solar-boosted air conditioners) are not excluded from this Determination.
- Note 3: Regarding paragraph (f), units for end-use mobile applications listed at paragraph (f) are air conditioners that have been designed to cater for the expected vibrations, repetitive bumping and shock and other rough use conditions of the intended mobile application, and have design specifications and test evidence of complying with Australian/New Zealand Standard or IEC Standard requirements under such conditions.
- Note 4: Regarding paragraph (f), units installed in portable buildings are included in the application of this Determination.

Part 3—GEMS level requirements

11 Purpose of Part

For paragraph 24(1)(a) of the Act, this Part specifies GEMS level requirements in accordance with section 25 of the Act for the product classes covered by this Determination.

12 GEMS level requirements (MEPS levels)

Note: For a reverse cycle air conditioner, the product must meet the requirements of this section for both heating and cooling.

A product covered by this Determination must comply with whichever of the following provisions of the Air Conditioners up to 65kW Determination are applicable:

- (a) for a product that is not of variable capacity:
 - (i) if the product is capable of cooling—subsection 22(2); and
 - (ii) if the product is capable of heating—subsection 22(3);
- (b) for a product that is of variable capacity:
 - (i) if the product is capable of cooling—subsection 23(2); and
 - (ii) if the product is capable of heating—subsection 23(3);

as if the references to the “relevant MEPS level” in those subsections were to the amounts specified for the product class in Schedule 1 to this Determination.

13 Testing requirements

For paragraph 25(b) of the Act, testing requirements for the purposes of this Part are set out in Schedule 2 to the Air Conditioners up to 65kW Determination, subject to the modifications set out in Schedule 2 to this Determination.

Part 4—GEMS labelling requirements

14 Purpose of Part

For paragraph 24(1)(b) of the Act, this Part specifies GEMS labelling requirements in accordance with section 26 of the Act for the product classes covered by this Determination.

Note: This Part:

- applies only in relation to retail supplies and offers of retail supply; and
- does not apply in relation to wholesale supplies or offers of wholesale supply.

15 Advertising material—references to SEER ratings

Section 34 of the Air Conditioners up to 65kW Determination applies in relation to a product covered by this Determination.

16 Impact of replacement determination

A GEMS labelling requirement of this Determination (the *revoked requirement*) is taken to be complied with if:

- (a) this Determination is revoked in accordance with paragraph 35(1)(a) of the Act; and
- (b) another GEMS determination (the *replacement determination*) is made in accordance with paragraph 35(1)(b) of the Act; and
- (c) a transitional GEMS labelling requirement (the *replacement requirement*) of the replacement determination provides that, if the replacement requirement is complied with, the revoked requirement is taken to be complied with.

17 Testing requirements

For paragraph 26(1)(c) of the Act, testing requirements for the purposes of this Part are set out in Schedule 2 to the Air Conditioners up to 65kW Determination, subject to the modifications set out in Schedule 2 to this Determination.

Part 5—Other requirements

18 Purpose of Part

For subsection 24(2) of the Act, this Part specifies other requirements in accordance with section 27 of the Act for product classes covered by this Determination.

19 Product performance—average true power factor

Section 40 of the Air Conditioners up to 65kW Determination applies in relation to a product covered by this Determination.

20 Information to be provided at time of registration

Paragraphs (a) and (b) of section 41 of the Air Conditioners up to 65kW Determination apply in relation to a product covered by this Determination.

21 Testing requirements

For paragraph 27(1)(e) of the Act, testing requirements for the purposes of this Part are set out in Schedule 2 to the Air Conditioners up to 65kW Determination, subject to the modifications set out in Schedule 2 to this Determination.

Schedule 1—Product classes and minimum energy performance standards

Note: See section 9 and section 12.

- (1) For section 9 of this Determination, a numbered *product class* identified in the following table consists of products that:
 - (a) are the kind of product indicated; and
 - (b) have the characteristics indicated; and
 - (c) have a value of *R* in the indicated range; and
 - (d) are not excluded by section 10 of this Determination.
- (2) For this Schedule, *R* is:
 - (a) the rated standard cooling full capacity; or
 - (b) for heating-only products—the rated standard heating full capacity.
- (3) For the purposes of determining the relevant product class, the amount *R* must be rounded to the nearest 0.1kW.

Note 1: In the case of reverse cycle products, the relevant Minimum Energy Performance Standards (MEPS) for heating and cooling are both based on the product's rated standard cooling full capacity (even if the product's rated standard heating full capacity is different from its standard cooling full capacity).

Note 2: The numbering of the product classes follows on consecutively from the numbering of the product classes in the Air Conditioners up to 65kW Determination.

Kind of product	Product class	Characteristics	Value of <i>R</i>	MEPS value
Air-to-air unitary air conditioners	24	Ducted or non-ducted	65kW < <i>R</i>	2.90
Air-to-air single-split systems	25	Ducted or non-ducted	65kW < <i>R</i>	2.90
Air-to-air single-split outdoor units (not supplied or offered for supply as part of a single-split system)	26	Whether supplied or offered for supply to create a ducted or a non-ducted system	65kW < <i>R</i>	2.90
Air-to-air multi-split outdoor units (whether or not supplied or offered for supply as part of a multi-split system)	27		65kW < <i>R</i>	2.90

Schedule 2—Modification of testing requirement provisions

Note: See sections 13, 17 and 21.

1 Modification of testing requirement provisions of the Air Conditioners up to 65kW Determination

Schedule 2 to the Air Conditioners up to 65kW Determination applies in relation to this Determination as if:

- (a) that Schedule referred to relevant Parts of this Determination rather to Parts of the Air Conditioners up to 65kW Determination; and
- (b) subsection 4(3) provided instead that any of the following test methods may be used:
 - (i) an indoor enthalpy test method;
 - (ii) a calorimeter room test method;
 - (iii) for a H2 or H3 heating test—a shortened calorimeter room test spanning 3 complete defrost cycles; and
- (c) section 9 were omitted; and
- (d) the note following the heading to section 10 referred to product class 26 instead of product classes 18 to 21; and
- (e) the note following subsection 10(3) were omitted; and
- (f) paragraph 15(2)(a) were omitted.