

GREENHOUSE AND ENERGY MINIMUM STANDARDS (GEMS) PRODUCT REGISTRATION APPLICATION QUESTIONS

AIR CONDITIONERS

NEW ZEALAND

Per [SEER Non Multi-Split ≤65kW] (Air Conditioners up to 65kW) 2019

SEER Non-Multi Split Air Conditioners Up to, and including, 65kW

June 2020

This form is designed for applicants' internal use only, not for submitting applications to the GEMS Regulator.

All applications for product registration must be submitted to the Regulator via the online registration database located at <https://reg.energyrating.gov.au>.

The Regulator cannot accept any applications in hard copy.

Note that this form may be updated from time to time to reflect changes to the registration database and it is the applicant's responsibility to ensure they are using the latest version.

Any question with an asterisk (*) next to it is mandatory.

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VERSION CONTROL

| Revision Date | Version | Summary of Changes |
|-------------------|---------|--|
| 5 June 2020 | 1.1 | Updated “Declaration for Demand Response Capability” and branding. |
| 1 October 2019 | 1.0 | Document finalised. |
| 23 September 2019 | 0.1 | Initial document created. |

MODELS AND MANUFACTURER

Product Model Information

Fill in one of the two boxes below, depending on if the product being registered is a single model or a family of models.

For a single-split system registration, enter either:

1. the designated model number for the system as a whole; OR
2. if the system does not have a designated model number, enter the model number as "outdoor unit model number/indoor unit model number"

FOR SINGLE MODELS

Model Number:* _____ Brand:* _____

FOR FAMILY OF MODELS

What is the family name of the models covered by this application?*

Please provide details for each model covered by this registration:

Note: There is a limit of 10 model number(s) for the determination: [SEER Non Multi-Split <=65kW] (Air Conditioners up to 65kW) 2019.

#1

Model Number:* _____

Brand:* _____

#2

Model Number:* _____

Brand:* _____

#3

Model Number:* _____

Brand:* _____

#4

Model Number:* _____

Brand:* _____

#5

Model Number:* _____

Brand:* _____

#6

Model Number:* _____

Brand:* _____

#7

Model Number:* _____

Brand:* _____

#8

Model Number:* _____

Brand:* _____

#9

Model Number:* _____

Brand:* _____

#10

Model Number:* _____

Brand:* _____

Manufacturing Information

Tick if the product is manufactured in-house

Please provide the following information on the manufacturer if the product is not manufactured in-house. Additional fields are included if there are more than one manufacturer for this product.

Manufacturer Name:* _____

Manufacturer ABN or Company Number:* _____

Name of Contact Person:* _____

Company Phone:* _____ Company Fax: _____

Company Email:* _____ Company Website: _____

Street Address:* _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

Is the postal address the same as the street address?*

Yes
 No

If you have ticked No, please complete the postal address fields below:

Postal Address: _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

Second Manufacturer

If applicable, who is the second manufacturer?

Manufacturer Name:* _____

Manufacturer ABN or Company Number:* _____

Name of Contact Person:* _____

Company Phone:* _____ Company Fax: _____

Company Email:* _____ Company Website: _____

Street Address:* _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

Is the postal address the same as the street address?*

Yes
 No

If you have ticked No, please complete the postal address fields below:

Postal Address: _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

Third Manufacturer

If applicable, who is the third manufacturer?

Manufacturer Name:* _____

Manufacturer ABN or Company Number:* _____

Name of Contact Person:* _____

Company Phone:* _____ Company Fax: _____

Company Email:* _____ Company Website: _____

Street Address:* _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

Is the postal address the same as the street address?* Yes No

If you have ticked No, please complete the postal address fields below:

Postal Address: _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

In what country/countries is this product manufactured?*

Sale Information

In what country/countries will this product be sold?* (please tick one or both, if required) Australia New Zealand

When will this product be (or when was this product) first available for purchase?* (please specify exact date) _____

LABS & TEST REPORTS

Is a test report provided?*

- Yes – a test report is provided (please ensure test report is provided with this form)
 No – no test report provided, but a summary report is provided

What test standard was used?* (please tick one)

- | | |
|---|---|
| <input type="checkbox"/> Simulation | <input type="checkbox"/> International or Regional Standard |
| <input type="checkbox"/> AHRI Certification | <input type="checkbox"/> AS/NZS 3823.1.1:2012 |
| <input type="checkbox"/> Eurovent Certification | <input type="checkbox"/> AS/NZS 3823.1.2:2012 |

If you ticked 'International or Regional Standard' please answer the following question:

Please specify the international or regional standard:

Which laboratory performed the testing?* - please provide name of laboratory, type of lab (independent or own lab), and street and/or postal address.

Please provide details for each test report, if multiple test reports are provided.

Test Report Number:* _____

Report Signatory:* _____

Test Date:* _____

Test Unit Serial Number: * _____

Comments regarding the product, the test procedure or test results that should be taken into account when assessing the product for compliance:

APPLICATION DETAILS

To which MEPS level do you declare compliance: (please tick one)

MEPS 2019

Is this a split system? (please tick one)

Yes No

If you indicated that this is a split system, please answer the question below:

Is this registration for an outdoor unit only?*

Yes
 No

If you indicated that this is a split system, and that this registration is for an outdoor unit only, please answer the question below:

Does this combination of indoor/outdoor units comply with Schedule 2, section 15 of the Determination?*

Yes
 No

Indoor air distribution:* (please tick one)

Ducted Non-ducted

Is the indoor unit a cassette?*(please tick one)

Yes No

(only required to be answered for "MEPS Only" applications)

For non-residential single-phase, non-ducted units in Product Classes 1-12 that you intend to supply without an energy rating label, do you confirm that the product will not be supplied, or offered for supply, at a GEMS retail premises?*

Yes
 No

(only required to be answered for "MEPS Only" applications)

Does this unit have a rated total cooling capacity (or rated heating capacity for a heating only unit) of greater than 30 kW?*

Yes
 No

Are you seeking to use test simulation software in lieu of physical testing in accordance with Section 3 of Schedule 2 of the Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kw) Determination 2019?*

Yes
 No

Note: Your test simulation software must be authorised by the GEMS Regulator before it may be used for this purpose.

(only required to be answered for "MEPS Only" applications)

Power supply:* (please tick one)

Single-phase Three-phase

If this is a split system, please provide details for each model

| |
|---|
| Brand name:* _____ Model number (system name):* _____ Indoor unit model number:* _____ Outdoor unit model number:* _____ |
| Brand name:* _____ Model number (system name):* _____ Indoor unit model number:* _____ Outdoor unit model number:* _____ |
| Brand name:* _____ Model number (system name):* _____ Indoor unit model number:* _____ Outdoor unit model number:* _____ |
| Brand name:* _____ Model number (system name):* _____ Indoor unit model number:* _____ Outdoor unit model number:* _____ |
| Brand name:* _____ Model number (system name):* _____ Indoor unit model number:* _____ Outdoor unit model number:* _____ |
| Brand name:* _____ Model number (system name):* _____ Indoor unit model number:* _____ Outdoor unit model number:* _____ |

APPLIANCE DETAILS

Air conditioner type:* (please tick one) Cooling only Reverse cycle Heating only

Refrigerant:* (please tick one)

- | | | | | | |
|-----------------------------------|---------------------------------------|------------------------------------|--|-------------------------------|--------------------------------|
| <input type="checkbox"/> R152A | <input type="checkbox"/> R114 | <input type="checkbox"/> R502 | <input type="checkbox"/> R134 | <input type="checkbox"/> R32 | <input type="checkbox"/> R123 |
| <input type="checkbox"/> R124 | <input type="checkbox"/> R22 | <input type="checkbox"/> R143A | <input type="checkbox"/> R407 (A or C) | <input type="checkbox"/> R290 | <input type="checkbox"/> R410A |
| <input type="checkbox"/> R3212560 | <input type="checkbox"/> R507 | <input type="checkbox"/> R14312555 | <input type="checkbox"/> R404 | <input type="checkbox"/> R125 | <input type="checkbox"/> R404A |
| <input type="checkbox"/> R407C | <input type="checkbox"/> Other: _____ | | | | |

Type:* (please tick one)

- | | | | |
|--|---|---|-----------------------------------|
| <input type="checkbox"/> Window/wall | <input type="checkbox"/> Single split system | <input type="checkbox"/> Double/triple split system | <input type="checkbox"/> Packaged |
| <input type="checkbox"/> Outdoor unit only | <input type="checkbox"/> Unitary double duct – wall mounted | <input type="checkbox"/> Unitary double duct - portable | |

If your model is a non-ducted system, please answer the following question:

- | | | |
|--|--|--|
| Non-ducted split system indoor unit mounting:* | <input type="checkbox"/> Wall-hung | <input type="checkbox"/> Cassette |
| | <input type="checkbox"/> Under ceiling | <input type="checkbox"/> Floor/Ceiling |
| | <input type="checkbox"/> Floor mounted | |

Heat source (heating):* (please tick one) Air

Heat source (cooling):* (please tick one) Air

Does this product use any form of solar boosting as defined in the Determination?*

Yes
 No

Does the air conditioner contain a circumvention device that alters the operation during an energy test but that is not normally activated during normal use?*

Yes
 No

Does this air conditioner have variable output capacity as per AS/NZS 3823.4?*

Yes
 No

If you ticked yes, please answer the following question:

How is variable output contained? (as per AS/NZS 3823.4) (please tick one)

Two-stage Multi-stage (i.e. varied by 3 or 4 steps) Variable (i.e. varied by 5 or more steps)

If you ticked 'Variable', please answer the following question:

Type of variable output compressor: (please tick one)

- Inverter Digital scroll Other: _____

Would you like to rate this air conditioner as a fixed speed product as per AS/NZS 3823.4? Yes
 No

If you selected 'unitary double duct – portable' under Type, please answer the following question:

Does this air conditioner have a supplementary water tank and use a supplementary water evaporation feature that meets the requirements of AS/NZS 3823.1.5:2015, Appendix B?*

Yes
 No

If you ticked yes to the previous question, please answer the following questions:

How long does the water tank last for rating purposes?* _____ minutes

Does the air conditioner turn off once the supplementary water tank is empty?*

Yes
 No

If you ticked 'Reverse cycle' or 'Heating only' under Air Conditioner Type, and you have declared that your unit has a rated cooling capacity and/or rated heating capacity of greater than 30kW please answer the following question:

Are you only providing H1 test results for the heating tests (i.e. no HSPF test results)?*

Yes
 No

TEST RESULTS

Test room type for the H2/H3 heating test: (please tick one)

- Enthalpy test room Shortened calorimeter room test (3 complete defrost cycles)
 Calorimeter test (6 hours or 6 complete defrost cycles) Not applicable

Test type for other test points:* (please tick one)

- Calorimeter Enthalpy test room Simulation test Certification

If you ticked 'Simulation test' or 'Certification', please answer the following question:

Note: Your test simulation software must be authorised by the GEMS Regulator before it may be used for this purpose.

Simulation Test Software / Certification Program name: _____

Please provide the following details about each test unit:

Test unit #1

Serial number (indoor):* _____

Serial number (outdoor):* _____
(if relevant)

Test date:* _____

Test unit #2

Serial number (indoor):* _____

Serial number (outdoor):* _____
(if relevant)

Test date:* _____

Test unit #3

Serial number (indoor):* _____

Serial number (outdoor):* _____
(if relevant)

Test date:* _____

Test unit #4
Serial number (indoor):* _____
Serial number (outdoor):* _____
(if relevant)
Test date:* _____

Test unit #5
Serial number (indoor):* _____
Serial number (outdoor):* _____
(if relevant)
Test date:* _____

Average tested voltage of indoor unit:* _____ V

Average tested voltage of outdoor unit:* _____ V
(only required to be completed if model is a split system)

Tested frequency of indoor unit:* _____ Hz

Tested frequency of outdoor unit:* _____ Hz
(only required to be completed if model is a split system)

COOLING TEST RESULTS

Cooling power at Standard Cooling Capacity (T1):

Rated effective power input:* _____ W

Tested cooling power input:* _____ W

Total cooling capacity at Standard Cooling Capacity (T1):

Rated total cooling capacity:* _____ W

Tested total cooling capacity:* _____ W

You only need to complete this question if the model is a portable double duct and there is a supplementary water tank.

Cooling power at Standard Cooling Capacity (T1) (With Supplementary Water):

Rated effective power input:* _____ W

Tested cooling power input:* _____ W

You only need to complete this question if the model is a portable double duct and there is a supplementary water tank.

Total cooling capacity at Standard Cooling Capacity (T1) (With Supplementary Water):

Rated total cooling capacity:* _____ W

Tested total cooling capacity:* _____ W

Half capacity at the Standard Cooling Capacity test (T1):

Do you have tested values for the half capacity test at the standard cooling capacity test conditions (T1)?

Yes
 No

If you ticked 'Yes' please answer the following questions:

Rated effective power input:* _____ W

Tested effective power input:* _____ W

Rated total cooling capacity:* _____ W

Tested total cooling capacity:* _____ W

Minimum capacity at the Standard Cooling Capacity test (T1):

Do you have tested values for the minimum capacity at the standard cooling capacity test conditions (T1)?

Yes
 No

If you ticked 'Yes' please answer the following questions:

Rated effective power input:* _____ W

Tested effective power input:* _____ W

Rated total cooling capacity:* _____ W

Tested total cooling capacity:* _____ W

Full capacity at the low temperature test:

Do you have tested values for full capacity at the low temperature cooling capacity test conditions?

Yes
 No

If you ticked 'Yes' please answer the following questions:

Rated effective power input:* _____ W

Tested effective power input:* _____ W

Rated total cooling capacity:* _____ W

Tested total cooling capacity:* _____ W

Half capacity at the low temperature test:

Do you have tested values for half capacity at the low temperature cooling capacity test conditions?

Yes
 No

If you ticked 'Yes' please answer the following questions:

Rated effective power input:* _____ W

Tested effective power input:* _____ W

Rated total cooling capacity:* _____ W

Tested total cooling capacity:* _____ W

Minimum cooling capacity at the low temperature test:

Rated effective power input:* _____ W

Tested effective power input:* _____ W

Rated total cooling capacity:* _____ W

Tested total cooling capacity:* _____ W

Does this air conditioner rely on part load compliance to meet the cooling MEPS?*

Yes
 No

If you ticked 'Yes' to the question above, please answer the following questions:

Will you use the half capacity test to meet MEPS?*

Yes
 No

If you ticked 'No' to the question above, please answer the following questions:

Indicate the percentage of rated capacity used to verify MEPS:* _____ %

Tested cooling power input used to verify MEPS compliance:* _____ W

Indicate method of obtaining this part load capacity:* _____

Does the air-cooled condenser evaporate the condensate?*

Yes
 No

Indicate fan and any other settings for determination of rated capacity:*

Air flow rate:* _____ m³/s
(only required to be completed if it is a 'ducted' model)

Was the unit tested with an air filter fitted?*
(only required to be completed if this is a 'ducted' model)

Yes
 No

Static pressure:* _____ Pa
(only required to be completed if it is a 'ducted' model)

Indicate method of obtaining fixed output on air conditioners with variable output capacity:* *(only required to be completed for models with variable output capacity)*

Average true power factor for the cooling test:* _____

HEATING TEST RESULTS

Does this model incorporate electric resistance heating?*

Yes
 No

Heating power at standard heating capacity (H1):
Rated effective power input:* _____ W
Tested heating power input:* _____ W

Heating capacity at standard heating capacity (H1):
Rated total heating capacity:* _____ W
Tested heating capacity:* _____ W

Half capacity at standard heating capacity test conditions (H1):
Rated effective power input:* _____ W
Tested heating power input:* _____ W
Rated total heating capacity:* _____ W
Tested heating capacity:* _____ W

Minimum capacity at the standard heating capacity test conditions (T1):
Do you have tested values for the minimum capacity at the standard heating capacity test conditions (T1)? Yes No
If you ticked 'Yes', please answer the following questions:
Rated effective power input:* _____ W
Tested heating power input:* _____ W
Rated total heating capacity:* _____ W
Tested heating capacity:* _____ W

Extended capacity at low temperature heating capacity test conditions (H2)
Is this air conditioner capable of heating at extended-load operation for the low temperature heating capacity test (H2)?* Yes No
If you ticked 'Yes', please answer the following questions:
Rated effective power input:* _____ W
Tested heating power input:* _____ W
Rated total heating capacity:* _____ W
Tested heating capacity:* _____ W

You only need to complete this question if you responded 'yes' to the previous question.

Full capacity at low temperature heating capacity test conditions (H2)

Do you have tested values for full capacity at the low temperature heating capacity test conditions (H1)? Yes No

If you ticked 'Yes', please answer the following questions:

Rated effective power input:* _____ W

Tested heating power input:* _____ W

Rated total heating capacity:* _____ W

Tested heating capacity:* _____ W

Half capacity at low temperature heating capacity test conditions (H2)

Do you have tested values for half capacity at the low temperature heating capacity test conditions (H1)? Yes No

If you ticked 'Yes', please answer the following questions:

Rated effective power input:* _____ W

Tested heating power input:* _____ W

Rated total heating capacity:* _____ W

Tested heating capacity:* _____ W

Minimum capacity at low temperature heating capacity test conditions (H2)

Do you have tested values for minimum capacity at the low temperature heating capacity test conditions (H2)? Yes No

If you ticked 'Yes', please answer the following questions:

Rated effective power input:* _____ W

Tested heating power input:* _____ W

Rated total heating capacity:* _____ W

Tested heating capacity:* _____ W

Extended capacity at extra-low temperature heating capacity test conditions (H3)

Do you have tested values for full capacity at the extra-low temperature heating capacity test conditions (H3)?* Yes No

If you ticked 'Yes', please answer the following questions:

Rated effective power input:* _____ W

Tested heating power input:* _____ W

Rated total heating capacity:* _____ W
Tested heating capacity:* _____ W

Full capacity at extra-low temperature heating capacity test conditions (H3):

Do you have tested values for full capacity at the extra-low temperature heating capacity test conditions (H3)? Yes No

If you ticked 'Yes', please answer the following questions:

Rated effective power input:* _____ W
Tested heating power input:* _____ W
Rated total heating capacity:* _____ W
Tested heating capacity:* _____ W

Half capacity at extra-low temperature heating capacity test conditions (H3)

Do you have tested values for half capacity at the extra-low temperature heating capacity test conditions (H3)? Yes No

If you ticked 'Yes', please answer the following questions:

Rated effective power input:* _____ W
Tested heating power input:* _____ W
Rated total heating capacity:* _____ W
Tested heating capacity:* _____ W

Does this air conditioner rely on part load compliance to meet the heating MEPS?* Yes No

If you ticked 'Yes' to the question above, please answer the following questions:

Will you use the half capacity H1 test to meet MEPS?* Yes No

If you ticked 'No' to the question above, please answer the following questions:

Indicate the percentage of rated capacity used to verify MEPS:* _____ %

Tested heating power input used to verify MEPS compliance:* _____ W

Indicate method of obtaining this part load capacity:*

Indicate fan and any other settings for determination of rated capacity:*

Air flow rate:* _____ m³/s
(only required to be completed if it is a 'ducted' model)

Static pressure:* _____ Pa
(only required to be completed if it is a 'ducted' model)

Indicate method of obtaining fixed output on air conditioners with variable output capacities: (only required to be completed for models with variable output capacity)

Average true power factor for the heating test:* _____

RESULTS AT RATED CAPACITY

Inactive energy use at 5 Degrees Celsius:* _____ W

Inactive energy use at 10 Degrees Celsius:* _____ W

Inactive energy use at 15 Degrees Celsius:* _____ W

Inactive energy use at 20 Degrees Celsius:* _____ W

What sound test standard are you using?*

(only required to be completed if the model has a rated total cooling and/or heating capacity less than 30kW)

- EN 12102:2013
 EN 12102-1:2017

Indoor Sound Power Level:* _____ dB(A)

(Only required to be completed if the model is non-ducted and has a rated total cooling and/or heating capacity less than 30kW)

Outdoor Sound Power Level:* _____ dB(A)

(Only required to be completed if the model is a split system ducted model and has a rated total cooling and/or heating capacity less than 30kW)

DECLARATION FOR DEMAND RESPONSE CAPABILITY

Does the model have a demand response capability?

- Yes
 No

If you ticked yes, please answer the following question:

Which standard does the equipment meet?

- Unknown
 AS/NZS 4755.3.1:2012
 AS/NZS 4755.3.1:2014

MEPS COMPLIANCE

Does this product meet all of the required minimum performance standards?*

- Yes
 No