

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

AIR CONDITIONERS

NEW ZEALAND

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

SEER 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 Capacity” 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 multi-split registrations, enter the model number of the outdoor unit.

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 Multi-Split <=65kW] (Air Conditioners up to 65kW) 2019.

#1

Model Number:* _____

Brand:* _____

#6

Model Number:* _____

Brand:* _____

#2

Model Number:* _____

Brand:* _____

#7

Model Number:* _____

Brand:* _____

#3

Model Number:* _____

Brand:* _____

#8

Model Number:* _____

Brand:* _____

#4

Model Number:* _____

Brand:* _____

#9

Model Number:* _____

Brand:* _____

#5

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)

- Simulation
 AHRI Certification
 Eurovent Certification
 International or Regional Standard
 AS/NZS 3823.1.4:2012

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

Indoor air distribution:* (please tick one) Ducted Non-ducted Both

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

Multi-split type:* (please tick one) Multiple split – Fixed head Multiple split – VRF

If you indicated that the unit does not have a rated total cooling capacity or rated heating capacity (for a heating only unit) greater than 30kW, and you selected 'Multiple split-Fixed head' as the type, please answer the following question:

Are you seeking an exemption from physical testing of a Fixed head unit with a rated total cooling capacity of <30 kW where the Australian sales of that model will be less than 10 units per financial year?* Yes
 No

Power supply:* (please tick one) Single-phase Three-phase

Outdoor multi-split models

Model name/number:* _____
Model name/number:* _____
Model name/number:* _____
Model name/number:* _____
Model name/number:* _____

Indoor multi-split models

<p>Model name/number:* _____</p> <p>Mounting Type:* (please tick one) <input type="checkbox"/> Wall hung <input type="checkbox"/> Under ceiling <input type="checkbox"/> Floor mounted <input type="checkbox"/> Cassette <input type="checkbox"/> Floor/ceiling <input type="checkbox"/> Ducted <input type="checkbox"/> Other: _____</p> <p>Quantity:* _____</p> <p>Individual rated cooling capacity as part of this combination:* _____</p>
<p>Model name/number:* _____</p> <p>Mounting Type:* (please tick one) <input type="checkbox"/> Wall hung <input type="checkbox"/> Under ceiling <input type="checkbox"/> Floor mounted <input type="checkbox"/> Cassette <input type="checkbox"/> Floor/ceiling <input type="checkbox"/> Ducted <input type="checkbox"/> Other: _____</p> <p>Quantity:* _____</p> <p>Individual rated cooling capacity as part of this combination:* _____</p>
<p>Model name/number:* _____</p> <p>Mounting Type:* (please tick one) <input type="checkbox"/> Wall hung <input type="checkbox"/> Under ceiling <input type="checkbox"/> Floor mounted <input type="checkbox"/> Cassette <input type="checkbox"/> Floor/ceiling <input type="checkbox"/> Ducted <input type="checkbox"/> Other: _____</p> <p>Quantity:* _____</p> <p>Individual rated cooling capacity as part of this combination:* _____</p>
<p>Model name/number:* _____</p> <p>Mounting Type:* (please tick one) <input type="checkbox"/> Wall hung <input type="checkbox"/> Under ceiling <input type="checkbox"/> Floor mounted <input type="checkbox"/> Cassette <input type="checkbox"/> Floor/ceiling <input type="checkbox"/> Ducted <input type="checkbox"/> Other: _____</p> <p>Quantity:* _____</p> <p>Individual rated cooling capacity as part of this combination:* _____</p>
<p>Model name/number:* _____</p> <p>Mounting Type:* (please tick one) <input type="checkbox"/> Wall hung <input type="checkbox"/> Under ceiling <input type="checkbox"/> Floor mounted <input type="checkbox"/> Cassette <input type="checkbox"/> Floor/ceiling <input type="checkbox"/> Ducted <input type="checkbox"/> Other: _____</p> <p>Quantity:* _____</p> <p>Individual rated cooling capacity as part of this combination:* _____</p>

Does this combination of indoor units comply with the Determination?*

- Yes
- No

APPLIANCE DETAILS

Air conditioner type:* (please tick one)

Cooling only

Reverse cycle

Heating only

Refrigerant:* (please tick one)

R152A

R114

R502

R134

R32

R123

R124

R22

R143A

R407 (A or C)

R290

R410A

R3212560

R507

R14312555

R404

R125

R404A

R407C

Other: _____

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 to variable output capacity, 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 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

Please attach a test plan showing test unit configuration and piping configuration and lengths to this document.*

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

- | | |
|--|--|
| <input type="checkbox"/> Enthalpy test room | <input type="checkbox"/> Shortened calorimeter room test (3 complete defrost cycles) |
| <input type="checkbox"/> Calorimeter test (6 hours or 6 complete defrost cycles) | <input type="checkbox"/> Not applicable |

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

- | | | | |
|--------------------------------------|---|--|--|
| <input type="checkbox"/> Calorimeter | <input type="checkbox"/> Enthalpy test room | <input type="checkbox"/> Simulation test | <input type="checkbox"/> Certification |
|--------------------------------------|---|--|--|

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

NOTE: The GEMS Regulator must authorise the use of any simulation software prior to it being used for this purpose.

Simulation Test Software / Certification Program name: _____

Average tested voltage of indoor units:* _____ V

Average tested voltage of outdoor unit:* _____ V

Tested frequency of indoor units:* _____ Hz

Tested frequency of outdoor unit:* _____ Hz

COOLING TEST RESULTS

You only need to complete this section if your air conditioner is 'cooling only' or 'reverse cycle'.

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

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:

Do you have tested values for minimum 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

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:*

Was the unit tested with an air filter fitted?*

Yes
 No

(Only required to be completed if you ticked 'ducted' or 'both' for Indoor Air Distribution on the Appliance Details page)

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

You only need to complete this section if your air conditioner is 'heating only' or 'reverse cycle'.

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 (H1):

Do you have tested values for the minimum capacity at the standard 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

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

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 (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

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 (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

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 extended 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:*

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

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