



Australian Government

GEMS Regulator

GREENHOUSE & ENERGY  
**MINIMUM  
STANDARDS  
REGULATOR**

## **ENERGY RATING PRODUCT REGISTRATION SYSTEM PRODUCT APPLICATION QUESTIONS**

### **AIR CONDITIONERS**

### **AUSTRALIA**

### **Per Greenhouse and Energy Minimum Standards (Air Conditioners above 65kW) Determination 2022**

### **SEER Multi-Split Air Conditioners Above 65kW**

**March 2022**

This form is designed for applicants' internal use only, not for submitting applications to the Australian or New Zealand Regulator.

All applications for product registration must be submitted to the appropriate Regulator via the Energy Rating Product Registration System located at <https://reg.energyrating.gov.au>.

The Regulators cannot accept any applications in hard copy.

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

Any question with a red asterisk (\*) next to it is mandatory.

## CONTENTS

|   |           |
|---|-----------|
| <b>VERSION CONTROL</b> .....                            | <b>2</b>  |
| <b>MODELS AND MANUFACTURER</b> .....                    | <b>3</b>  |
| Product Model Information .....                         | 3         |
| Manufacturing Information.....                          | 4         |
| Sale Information.....                                   | 6         |
| <b>LABS &amp; TEST REPORTS</b> .....                    | <b>7</b>  |
| <b>EXEMPTION</b> .....                                  | <b>8</b>  |
| <b>APPLICATION DETAILS</b> .....                        | <b>9</b>  |
| <b>APPLIANCE DETAILS</b> .....                          | <b>11</b> |
| <b>TEST RESULTS</b> .....                               | <b>12</b> |
| <b>COOLING TEST RESULTS</b> .....                       | <b>13</b> |
| <b>HEATING TEST RESULTS</b> .....                       | <b>16</b> |
| <b>RESULTS AT RATED CAPACITY</b> .....                  | <b>20</b> |
| <b>DECLARATION FOR DEMAND RESPONSE CAPABILITY</b> ..... | <b>20</b> |
| <b>MEPS COMPLIANCE</b> .....                            | <b>20</b> |

## VERSION CONTROL

| Revision Date   | Version | Summary of Changes                           |
|-----------------|---------|--|
| 4 March 2022    | 2.0     | New determination. Added “Exemption” fields. |
| 11 January 2021 | 1.0     | Document finalised.                          |
| 5 January 2021  | 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, if it is a family of models:

*Note: There is a limit of 10 model number(s) for the determination: Greenhouse and Energy Minimum Standards (Air Conditioners above 65kW) Determination 2022.*

|   |  |
|---|--|
| <p><b>#1</b><br/>Model Number:* _____<br/>Brand:* _____</p> | <p><b>#2</b><br/>Model Number:* _____<br/>Brand:* _____</p>  |
| <p><b>#3</b><br/>Model Number:* _____<br/>Brand:* _____</p> | <p><b>#4</b><br/>Model Number:* _____<br/>Brand:* _____</p>  |
| <p><b>#5</b><br/>Model Number:* _____<br/>Brand:* _____</p> | <p><b>#6</b><br/>Model Number:* _____<br/>Brand:* _____</p>  |
| <p><b>#7</b><br/>Model Number:* _____<br/>Brand:* _____</p> | <p><b>#8</b><br/>Model Number:* _____<br/>Brand:* _____</p>  |
| <p><b>#9</b><br/>Model Number:* _____<br/>Brand:* _____</p> | <p><b>#10</b><br/>Model Number:* _____<br/>Brand:* _____</p> |

## 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:\* \_\_\_\_\_

OFFICIAL: SENSITIVE

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

*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:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**EXEMPTION**

Has an exemption from MEPS performance for this model been granted by the GEMS Regulator? (please tick one)  Yes  No

*If you ticked yes, please answer the question below:*

Did your exemption approval letter exempt your registration from payment? (please tick one)  Yes  No

*Please attach the approval letter to this form so it can be uploaded into the system.\**



**APPLICATION DETAILS**

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

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

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:* | _____ |

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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<br/><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<br/><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<br/><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<br/><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<br/><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



**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)

- Enthalpy test room
- Calorimeter test (6 hours or 6 complete defrost cycles)
- Shortened calorimeter room test (3 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: 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'.

|   |         |
|---|---------|
| <u>Cooling power at Standard Cooling Capacity (T1):</u> |         |
| Rated effective power input:*                           | _____ W |
| Tested cooling power input:*                            | _____ W |

|  |         |
|--|---------|
| <u>Total cooling capacity at Standard Cooling Capacity (T1):</u> |         |
| Rated sensible cooling capacity:*                                | _____ W |
| Rated dehumidifying effect:*                                     | _____ W |
| Tested total cooling capacity:*                                  | _____ W |

|   |  |
|---|--|
| <u>Half capacity at the Standard Cooling Capacity test (T1):</u>  |  |
| Do you have tested values for the half capacity test at the standard cooling capacity test conditions (T1)? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <i><u>If you ticked 'Yes' please answer the following questions:</u></i>                                    |  |
| Rated effective power input:*   | _____ W  |
| Tested effective power input:*  | _____ W  |
| Rated total cooling capacity:*  | _____ W  |
| Tested total cooling capacity:*   | _____ W  |

|   |  |
|---|--|
| <u>Minimum capacity at the Standard Cooling Capacity test (T1):</u>                                       |  |
| Do you have tested values for the minimum capacity at the standard cooling capacity test conditions (T1)? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <i><u>If you ticked 'Yes' please answer the following questions:</u></i>                                  |  |
| Rated effective power input:*   | _____ W  |
| Tested effective power input:*  | _____ W  |
| Rated total cooling capacity:*  | _____ W  |
| Tested total cooling capacity:*   | _____ W  |

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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 question:*

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

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*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 total heating capacity:\* \_\_\_\_\_ W



Extended capacity at low temperature heating capacity test conditions (H2)  Yes  No

Is this air conditioner capable of heating at extended-load operation for the low temperature heating capacity test (H2)?

*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)  Yes  No

Do you have tested values for full capacity at the low temperature heating capacity test conditions (H2)?

*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)  Yes  No

Do you have tested values for half capacity at the low temperature heating capacity test conditions (H2)?

*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)  Yes  No

Do you have tested values for minimum capacity at the low temperature heating capacity test conditions (H2)?

*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)

Yes  No

Do you have tested values for extended capacity at the extra-low temperature heating capacity test conditions (H3)?

*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)

Yes  No

Do you have tested values for full capacity at the extra-low temperature heating capacity test conditions (H3)?

*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)

Yes  No

Do you have tested values for half capacity at the extra-low temperature heating capacity test conditions (H3)?

*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 question:*

Will you use the half capacity H1 test to meet MEPS?\*

Yes  No

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*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 to demand response capability, 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