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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 up to 65kW) Determination 2019

Water Source Air Conditioners Up to, and including, 65kW

February 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.

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VERSION CONTROL

Revision Date	Version	Summary of Changes
28 January 2022	1.4	“Exemption” fields added. Accessibility improved.
11 January 2021	1.3	Accessibility improved.
4 June 2020	1.2	Updated “Declaration for Demand Response Capability” and branding.
3 February 2020	1.1	Removed DoEE logo for MoG changes – no change to content.
20 September 2019	1.0	Document finalised.
14 May 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 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 up to 65kW) Determination 2019.

<u>#1</u> Model Number:* _____ Brand:* _____	<u>#2</u> Model Number:* _____ Brand:* _____
<u>#3</u> Model Number:* _____ Brand:* _____	<u>#4</u> Model Number:* _____ Brand:* _____
<u>#5</u> Model Number:* _____ Brand:* _____	<u>#6</u> Model Number:* _____ Brand:* _____
<u>#7</u> Model Number:* _____ Brand:* _____	<u>#8</u> Model Number:* _____ Brand:* _____
<u>#9</u> Model Number:* _____ Brand:* _____	<u>#10</u> 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:* _____

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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 is provided, but a summary report is provided (please ensure summary report is provided with this form)

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

- AS/NZS 3823.1.3:2005

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

Is this a split system?*

Yes
 No

If this is a split system, please provide the following information for each model:

<p><u>Model #1</u></p> <p>Brand Name:* _____ Model Number (system name):* _____</p> <p>Indoor unit model number:* _____</p> <p>Outdoor unit model number:* _____</p>
<p><u>Model #2</u></p> <p>Brand Name:* _____ Model Number (system name):* _____</p> <p>Indoor unit model number:* _____</p> <p>Outdoor unit model number:* _____</p>
<p><u>Model #3</u></p> <p>Brand Name:* _____ Model Number (system name):* _____</p> <p>Indoor unit model number:* _____</p> <p>Outdoor unit model number:* _____</p>
<p><u>Model #4</u></p> <p>Brand Name:* _____ Model Number (system name):* _____</p> <p>Indoor unit model number:* _____</p> <p>Outdoor unit model number:* _____</p>
<p><u>Model #5</u></p> <p>Brand Name:* _____ Model Number (system name):* _____</p> <p>Indoor unit model number:* _____</p> <p>Outdoor unit model number:* _____</p>

APPLIANCE DETAILS

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

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

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: _____ | | | | | |

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

Type:* (please tick one) Single split system Double/triple split system Packaged

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

Non-ducted split system indoor unit mounting:

Wall-hung Under ceiling Floor mounted Cassette

Floor/Ceiling

Heat source (heating):* (please tick one) Cooling tower (reversible) Water loop
(Only required to be completed if it is a 'heating only' or 'reverse cycle' model)

Heat sink (cooling):* (please tick one) Cooling tower (reversible) Water loop
(Only required to be completed if it is a 'cooling only' or 'reverse cycle' model)

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: _____

TEST RESULTS

Test room – indoor type used:* (please tick one) Calorimeter Enthalpy test room

Test room – outdoor type used:* (please tick one) Calorimeter Enthalpy test room
 Water loop equipment None

Please provide the following details for each test unit:

Test unit #1

Serial number (indoor):* _____

Serial number (outdoor):* _____
(Only required to be completed if your model is a split system model)

Test date:* _____

Test unit #2

Serial number (indoor):* _____

Serial number (outdoor):* _____
(Only required to be completed if your model is a split system model)

Test date:* _____

Test unit #3

Serial number (indoor):* _____

Serial number (outdoor):* _____
(Only required to be completed if your model is a split system model)

Test date:* _____

Test unit #4

Serial number (indoor):* _____

Serial number (outdoor):* _____
(Only required to be completed if your model is a split system model)

Test date:* _____

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<p><u>Test unit #5</u></p> <p>Serial number (indoor):* _____</p> <p>Serial number (outdoor):* _____ <i>(Only required to be completed if your model is a split system model)</i></p> <p>Test date:* _____</p>

Average tested voltage of indoor unit:* _____ V

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

Tested frequency of indoor unit:* _____ Hz

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

COOLING TEST RESULTS

This section only applies if the unit is 'cooling only' or 'reverse cycle'.

<u>Cooling power</u>
Rated effective power input:* _____ W
Tested cooling power input:* _____ W

<u>Total cooling capacity:</u>
Rated total cooling capacity:* _____ W
Tested total cooling capacity:* _____ W

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?* Yes No
(only required to be completed if this 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 capacity:*

(only required to be completed if this model has variable output capacity)

Average true power factor for the cooling test:* _____

HEATING TEST RESULTS

This section only applies if the unit is 'heating only' or 'reverse cycle'.

Does this model incorporate electric resistance heating?*

Yes
 No

<u>Heating power:</u>	
Rated effective power input:*	_____ W
Tested heating power input:*	_____ W

<u>Heating capacity:</u>	
Rated total heating capacity:*	_____ W
Tested heating capacity:*	_____ W

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 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

PART-LOAD COMPLIANCE

Are you relying on part-load compliance to meet MEPS?*

Yes
 No

If you ticked yes, please answer the following questions:

For what mode do you want to declare part-load compliance?*(Please tick one)

Heating only Cooling only Both heating and cooling

Has a test report been supplied at the percentage of rated capacity used to verify MEPS?*

Yes No

If you ticked 'cooling only' or 'both heating and cooling' for mode of operation, please answer the following questions:

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

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

Indicate method of obtaining fixed output on air conditioners with variable output capacity:*

If you ticked 'heating only' or 'both heating and cooling' for mode of operation, please answer the following questions:

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

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

Indicate method of obtaining fixed output on air conditioners with variable output capacity:*

DECLARATION OF 50% CAPACITY PERFORMANCE

Are you providing 50% Capacity Performance?*

Yes
 No

If you ticked yes, please answer the following questions:

For what mode do you want to declare 50% capacity?*(Please tick one)

Heating only Cooling only Both heating and cooling

Have you supplied a test report for part load operation as part of this application?*

Yes No

If you ticked 'cooling only' or 'both heating and cooling' for mode of operation, please answer the following questions:

Tested cooling power input:*

Tested total cooling capacity:*

Indicate method of obtaining fixed output on air conditioners with variable output capacity:*

If you ticked 'heating only' or 'both heating and cooling' for mode of operation, please answer the following questions:

Tested heating power input:*

Tested total heating capacity:*

Indicate method of obtaining fixed output on air conditioners with variable output capacity:*

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