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Australian Government
GEMS Regulator

GREENHOUSE & ENERGY
**MINIMUM
STANDARDS
REGULATOR**

ENERGY RATING PRODUCT REGISTRATION SYSTEM PRODUCT APPLICATION QUESTIONS

CHILLERS

AUSTRALIA

Per Greenhouse and Energy Minimum Standards (Liquid-chilling packages using the vapour compression cycle) Determination 2012

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.

CONTENTS

VERSION CONTROL	2
MODELS AND MANUFACTURER	3
Product Model Information	3
Manufacturing Information.....	4
Sale Information.....	6
LABS & TEST REPORTS	7
EXEMPTION	8
APPLICATION DETAILS	9
CERTIFICATION	10
PART CERTIFICATION	10
DECLARED EFFICIENCIES	11
TEST REPORT DETAILS	11
EVAPORATOR	12
CONDENSER	13
COMPRESSOR	14
PERFORMANCE	15

VERSION CONTROL

Revision Date	Version	Summary of Changes
31 January 2022	1.2	“Exemption” fields added. Accessibility improved. Branding updated.
3 February 2020	1.1	Removed DoEE logo for MoG changes – no change to content.
23 March 2017	1.0	Document finalised.
28 February 2017	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.

<p><u>FOR SINGLE MODELS</u></p> <p>Model Number:* _____ Brand:* _____</p>

<p><u>FOR FAMILY OF MODELS</u></p> <p>What is the family name of the models covered by this application?*</p> <p>_____</p>
--

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 (Liquid-chilling packages using the vapour compression cycle) Determination 2012.

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

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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?*

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How can the date of manufacture be determined from permanent markings on the appliance?* - Please tick accordingly and if required, provide further information

From a date permanently marked on the rating plate in a non-encrypted format

Provide an example of the date format:

From a date permanently marked on the rating plate in an encrypted format

Describe how the date of manufacture can be determined from the markings on the appliance:

From another form of permanent marking on the product

Describe how the date of manufacture can be determined from the markings on the appliance:

No date mark

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)

If you ticked yes, please answer the questions below:

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

AS/NZS 4776.1.1:2008

AS/NZS 4776.1.2:2008

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:* _____

No – certification from AHRI or EUROVENT is provided (please ensure AHRI or EUROVENT certificate is provided with this form)

No - no test report available but registration details containing test relevant to this product provided

If you ticked 'no test report available, but registration details provided', please answer the question below:

Registration number of the unit whose test forms the basis of this application:*

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 product being registered at standard rating conditions?* Yes No

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

Leaving evaporator liquid temperature:* _____ °C

Leaving condenser liquid temperature:* _____ °C

Registration type:* (please tick one)

- Products certified by AHRI or Eurovent (Clause 6.2.1)
- Products from a range part of which is certified by AHRI or Eurovent (Clause 6.2.2(a))
- Products from a range none of which is certified by AHRI or Eurovent (Clause 6.2.2(b))

Condenser type:* (please tick one) Air-cooled Water-cooled

Cooling capacity for MEPS registration:* _____ KW

CERTIFICATION

You only need to complete this section if you ticked 'products certified by AHRI or Eurovent' as a registration type under Application Details.

Which certified program was used?* (please tick one) AHRI Eurovent

Certification or registration number:* _____

Online certification details webpage: _____

Please attach to this paperwork:

- A copy of the certificate*
- Selection output of the certified performance*

Documents attached

PART CERTIFICATION

You only need to complete this section if you ticked 'products from a range part of which is certified by AHRI or Eurovent' as a registration type under Application Details.

Is part of the range of the liquid-chilling package certified?* Yes No

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

Nominate the certified range (model, capacity, Hz, etc):*

Is this liquid-chilling package manufactured in the same facility as the certified range?*

- Yes
 No

Which certified program was used?* (please tick one) AHRI Eurovent

Certification or registration number:* _____

Online certification details webpage: _____

Please attach to this paperwork:

- A copy of the certificate*

Certificate attached

DECLARED EFFICIENCIES

COP:* _____ kW/kW

IPLV:* _____ kW/kW

Does the product meet required COP?* Yes No

Does the product meet required IPLV?* Yes No

TEST REPORT DETAILS

You only need to complete this section if you provided a test report.

Refrigerant type:* (please tick one)

- | | | | | | |
|-------------------------------|------------------------------------|--------------------------------|-------------------------------|--------------------------------|----------------------------------|
| <input type="checkbox"/> R114 | <input type="checkbox"/> R22 | <input type="checkbox"/> R502 | <input type="checkbox"/> R134 | <input type="checkbox"/> R32 | <input type="checkbox"/> R123 |
| <input type="checkbox"/> R124 | <input type="checkbox"/> R143A | <input type="checkbox"/> R152A | <input type="checkbox"/> R290 | <input type="checkbox"/> R410A | <input type="checkbox"/> R312560 |
| <input type="checkbox"/> R507 | <input type="checkbox"/> R14312555 | <input type="checkbox"/> R404 | <input type="checkbox"/> R407 | | |

Refrigerant charge:* _____ kg

Ambient temperature:* _____ °C

EVAPORATOR

You only need to complete this section if you provided a test report.

Entering water temperature

Design:* _____ °C Test target:* _____ °C Test result:* _____ °C

Leaving water temperature

Design:* _____ °C Test target:* _____ °C Test result:* _____ °C

Water flow rate

Design:* _____ L/s Test target:* _____ L/s Test result:* _____ L/s

Water pressure drop

Design:* _____ kPa Test target:* _____ kPa Test result:* _____ kPa

Fouling factor

Design:* _____ m².k/kW Test target:* _____ m².k/kW Test result:* _____ m².k/Kw

CONDENSER

You only need to complete this section if you provided a test report.

Entering water temperature

Design:* _____ °C Test target:* _____ °C Test result:* _____ °C

Leaving water temperature

Design:* _____ °C Test target:* _____ °C Test result:* _____ °C

Water flow rate

Design:* _____ L/s Test target:* _____ L/s Test result:* _____ L/s

Water pressure drop

Design:* _____ kPa Test target:* _____ kPa Test result:* _____ kPa

Fouling factor

Design:* _____ m².k/kW Test target:* _____ m².k/kW Test result:* _____ m².k/kW

COMPRESSOR

You only need to complete this section if you provided a test report.

Input power

Design:* _____ kW Test target:* _____ kW Test result:* _____ kW

Frequency

Design:* _____ Hz Test target:* _____ Hz Test result:* _____ Hz

Voltage average

Design:* _____ V Test target:* _____ V Test result:* _____ V

Average current

Design:* _____ A Test target:* _____ A Test result:* _____ A

PERFORMANCE

You only need to complete this section if you provided a test report.

Cooling capacity

Design:* _____ kW Test target:* _____ kW Test result:* _____ kW

Total input power

Design:* _____ kW Test target:* _____ kW Test result:* _____ kW

COP

Design:* _____ Test target:* _____ Test result:* _____

Heat balance

Test result:* _____

Test capacity

Design:* _____ % Test result:* _____ %

Design capacity

Design:* _____ Test target:* _____ Test result:* _____

Tested COP

Design:* _____ % Test target:* _____ Test result:* _____

Design COP

Design:* _____ Test target:* _____ Test result:* _____