Energy Technology List

Department for Energy Security & Net Zero

Product application checklist

Please complete in BLOCK CAPITALS

Cellar Cooling Equipment

Manufacturer/supplier name: .....

Applicant's name: .....

Telephone number: .....

Product information

Product name: .....

Model number: .....

Please complete each section of this form based on your product's characteristics. Incomplete or incorrect data could affect the processing of your product application.

Each product application should be made on a separate form unless a product's design characteristics are common to all the products. In this instance a single application can be made for multiple products.

1. Product testing and certification	No	Yes

Where type testing has been applied to demonstrate product performance please ensure that the information supplied is sufficient to demonstrate the performance of all the products for which applications are being made.

1.1 **Does your cellar cooling refrigeration system conform with the requirements of The Pressure Equipment (Safety) Regulations 2016 in respect of its design, manufacture and testing procedures?** ☐ ☐

Cellar cooling refrigeration equipment shall conform to The Pressure Equipment (Safety) Regulations 2016. Individual assemblies (e.g. condensing unit and evaporator) must have Declarations of Conformity or have an appropriate Conformity Assessment mark as appropriate for the Regulations. You must provide copies of relevant documentation.

1.2 **Has your system been tested using the calorimeter test methods defined in Annex A of BS EN 14511-3:2022?** ☐ ☐

A Seasonal Energy Performance Ratio (SEPR) shall be declared using the ETL calculation tool derived from BS EN 14825:2022

1.3 **How was the product(s) performance tested?** *(Please select one).*

a) Tested in the manufacturer's in-house laboratory, in accordance with a registered Quality Management System and a representative sample of the test data has been cross-checked and verified by an independent body (i.e. 'self-tested and verified or cross-checked by an independent body') ☐

b) Tested in a laboratory either in house or on-site, witnessed by an independent body (i.e. 'witnessed testing'). ☐

c) Tested by an independent laboratory (i.e. 'independent testing'). ☐

d) Representative model/s used. ☐

Please refer to the ETL Testing Framework for details of the requirements that must be satisfied for each of these product testing options.

1. Product testing and certification (continued)

No | Yes

1.4 **Where product testing has been done in accordance with a registered Quality Management System, what is its registration number?**

1.5 **Where a representative sample of the test data has been cross-checked and verified by an independent body:**

a) What is the name of the independent laboratory?

b) What is the laboratory's registration number (where accredited)?

1.6 **Where product testing has been witnessed by an independent body, what was the name of the witness?**
(Please include contact details).

1.7 **Where products have been tested by an independent laboratory:**

a) What is the name of the independent laboratory?

b) What is the laboratory's registration number (where accredited)?

1.8 **Is the application for:** *(Please select one).*

a) A single unique product – in this case go to 2.1. ☐

b) A range of products, which are variants of the same basic design. ☐

c) One or more additional models to a range of products already on the ETL. ☐

Products will only be considered to be variants of the same basic design, if they:

- *Use the same refrigerant as the representative model.*
- *Have the same compressor type (i.e. manufacturer, method of compression (e.g. reciprocating or scroll) and type of enclosure (e.g. hermetic or semi-hermetic)) as the representative model.*
- *Have the same sub-cooling arrangement as the representative model.*
- *Have the same number of evaporators.*
- *Fit within the same product category (e.g. are all split systems).*

1.9 **If representative testing has been used, what are the 'Representative models'?**

ETL Product ID number	Product name and model number

The representative models shall be selected by dividing the range of products into groups of models with similar design characteristics, and testing a model in the lowest quartile of predicted performance in each group. The performance of each model in the group shall be predicted using a validated mathematical model. As a minimum, at least two models shall be tested in each range of products.

2.	Product features	No	Yes
2.1	**Is your product a single split system.** *If Yes complete2.4 & 2.5, if no continue to 2.2.*	☐	☐
2.2	**Is your product a dual split system.** *If Yes complete 2.4 & 2.5, if no continue to 2.3.*	☐	☐
2.3	**Is your product a free cooling unit for cellar cooling?** *If Yes go to 2.6.*	☐	☐
2.4	**Does the product consist of two or three sub-assemblies that are designed to be connected on installation (ie, an evaporator, condenser and compressor)?** *Question relevant for single and dual split systems only.*	☐	☐
2.5	**Is the capacity of your cellar cooling refrigeration system between 2kW and 12kW?** *The cooling capacity shall be between 2 kW and 12kW at the standard rating conditions for cellar air temperature of 10°C and an ambient air temperature of 32°C.* *Question relevant for single and dual split systems only.*	☐	☐
2.6	**Does your free cooling unit meet the following criteria:**		
	a) Utilise a fan to draw in ambient air from outdoors to provide free cooling when the ambient temperature is sufficiently below the required indoor temperature.	☐	☐
	b) Incorporate a fan which meets the minimum energy efficiency requirements for fans driven by motors with an electric input power between 125 W and 10 kW as given in eco-design regulation (EU) No 327/2011.	☐	☐
	c) Include a damper which is designed to close when the free cooling unit is not in operation in order to prevent air leakage from outdoors into the cooled space.	☐	☐
	d) Incorporate an automatic control system which controls both the free cooling unit and cellar cooling equipment as follows:		
	- The free cooling unit is in operating mode when the outside ambient temperature is below a set temperature.	☐	☐
	- Air is circulated within the cooled space by using one or two fans of the cellar cooling unit evaporator when the free cooling unit is in operating mode, the remaining one or more evaporator fans being switched off.	☐	☐
	- The free cooling unit fan starts and draws ambient air into the cooled space when the temperature rises to a given setpoint and the outside ambient temperature is below the set temperature.	☐	☐
	- When the temperature of the cooled space reduces to the setpoint temperature minus the set temperature differential, the free cooling unit fan switches off.	☐	☐
	- If the outside temperature rises above the set temperature, the free air cooling system goes into standby mode and the cellar cooling equipment resumes normal operation.	☐	☐
	e) Have an appropriate Conformity Assessment mark.	☐	☐

3.	Performance and Requirements	
3.1	**For single and dual split systems:**	
	a) Please state products Coefficient of Performance (COP).	
	b) Please state the products Seasonal Energy Performance Ration (SEPR).	

4.	Product testing requirements	No	Yes
4.1	Does product testing use the calorimeter test method defined in Annex A of BS EN 14511-3:2022?	☐	☐
4.2	Is the COP calculated in accordance with the calculation provided in BSI PAS 57:2003?	☐	☐
4.3	Is the products performance tested to BS EN 14825:2022 “Air conditioners, liquid chilling packages and heat pumps, with electrically driven compressors, for space heating and cooling”?	☐	☐
4.4	Is the SEPR calculated using the ETL Cellar Cooling Equipment SEPR Calculation Tool in conjuction with BS EN 14825:2022, which is based upon four rating point measurements of COP (32, 25, 15 and 5°C ambient temperatures)?	☐	☐
4.5	Please state the refrigerant used in the testing and result declaration of the equipments COP/ SEPR.		

5. Summary of documents to be included

No	Yes

Please send ONE copy of each of the following documents:

If the relevant information in support of the questions above is contained within a larger document, please indicate the location of the relevant information. Note that all documentation submitted must directly refer to the model numbers for which you are making this application. Documentation should be added to your online application.

a) A technical sales brochure or leaflet for the product clearly summarising:

- i) The key features of the product (ideally including photographs of the product's exterior). ☐
- ii) The product's operation (i.e. in-built functionality) and intended applications (i.e. usage). ☐
- iii) Any product selection options (including optional extras, alternative configurations etc.). ☐

This documentation should contain sufficient detail to enable the assessor to confirm that the proposed entry on the Energy Technology List (ETL) is correct, and uniquely represents a single product of fixed design (as defined by the rules of the ETL). If the model names contain any 'wildcards' in respect of cosmetic variations please check with the ETL Team (info@etl.energysecurity.gov.uk) that this is permitted before submitting your application.

b) A technical specification for the product, including:

- i) Details of the model numbers covered (including individual features of each model). ☐
- ii) The product's design ratings (electrical, mechanical, thermal, flow rates, energy use etc.). ☐
- iii) A description of how to install the product including connection/wiring diagrams. Where the product must be assembled, configured and/or commissioned on site before use, please include instructions. ☐

This documentation should contain sufficient detail to enable the assessor to confirm that each product entry on the ETL has the design features specified in the eligibility criteria for that category of product. Please indicate on the checklist where information on specific design features is located in the documentation.

c) Evidence that the product meets the performance criteria, including:

- i) Test reports showing product performance at the standard rating/test conditions. ☐
- ii) Details of the test procedures/standards used to determine product performance. ☐
- iii) A declaration certifying the accuracy of the test reports and confirming that:
  - The test facilities used comply with the minimum specifications outlined in the test standard, and the required test conditions where applied during testing. ☐
  - All measurement equipment used in testing was calibrated by an accredited laboratory, or its calibration is otherwise traceable back to national standards. ☐
  - Appropriate quality assurance procedures have been used to verify or cross-check the accuracy and repeatability of the test procedures and test results. ☐
- iv) Where the test reports have not been prepared by an independent body, evidence that the accuracy of product performance data has been independently verified or cross-checked by an independent body. ☐
- v) Where representative testing has been used, please include details of selection method used, and evidence that the products covered by the representative model(s) are variants of the same basic design. ☐

Please refer to the ETL Testing Framework for further guidance on the submission of test results, and minimum information requirements.

d) A Declaration of Conformity with UK/EU Directives on product safety, including one of the following:

- i) The Pressure Equipment (Safety) Regulations 2016. ☐
- ii) Have an appropriate Conformity Assessment mark. ☐

e) Evidence that a quality assurance system/procedures is/are in place to:

- i) Control the specification, design, manufacturing and testing of the products. ☐

f) Signed application checklist. ☐

Please note that all product documentation provided must be written in, or translated into, English.

6. Declaration

I confirm that the information given above is correct to the best of my knowledge and that I have read and agree to the terms and conditions governing the management of the Energy Technology List.
A copy of the terms and conditions can be found **here**.

Signature: ..... Date: .....

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