



No

Yes

Product application checklist

Please complete in BLOCK CAPITALS

Air Blast Coolers

Manufacturer/supplier name:
ETL licence number (if applicable):
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

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

- 1.1 Does the product conform to the requirements of The Pressure Equipment (Safety) Regulations 2016 in respect of its design, manufacture and testing procedures?
- 1.2 Does the product's fan(s) comply with Ecodesign Regulation (EU) No 327/2011?
- 1.3 Does the product have an appropriate Conformity Assessment mark?

If so, to which directive?

- **1.4** Is the product a: (please select one)
 - a) Dry Cooler
 - b) Adiabatic Cooler
- **1.5** Is the product a: (please select one)
 - a) General air blast cooler
 - b) Packaged air blast cooler
- 1.6 Has the product's performance been tested to EN 1048:2014, using Method A or B as set out in the Criteria?

Dry Coolers & Adiabatic Coolers that are part of a package (i.e. Packaged Air Blast Coolers) do not need to meet a minimum EER performance threshold.

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1.	Product testing and certification (continued)	No	Yes			
1.7	How was the product(s) performance tested? (Please select one)					
	a) In-house testing - Self-certified					
	 b) Tested in the manufacturers in-house laboratory, in accordance with a registered Quality Management System (i.e. 'self-tested'). 					
	 c) Tested in a laboratory either in house or on-site, witnessed by an independent body (i.e. 'witnessed testing'). 					
	d) Tested by an independent laboratory (i.e. 'independent testing').					
	e) Representative model/s used					
	Further information regarding the first four routes can be found in on the ETL Testing Framework.					
1.8	Where product testing has been done in accordance with a registered Quality Management System, what is its registration number?					
1.9	Where product testing has been witnessed by an independent body, what was the name of the witness? (Please include contact details).					
1.10	Where products have been tested by an independent accredited laboratory:					
	a) What is the name of the independent accredited laboratory?					
	b) What is the laboratory's registration number (where accredited)?					
1.11	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) Model ranges when the number of variants for a single model is very high, due to the modular nature of the product.					

d) One or more additional models to a range of products already on the ETPL.

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

- Use air to liquid heat exchangers of the same constructional design.
- Have the same general arrangement of fans and heat exchangers.
- Are constructed from materials with same heat transfer characteristics.
- Have the same (+/- 5%) or better energy efficiency as the representative models.

Since model numbers are dependent on configuration, dimensions, number and type of fans, heat exchanger coil number and fin type, wild cards designated by '*' symbol can be used for representative models as long as the criteria listed above are met. For example, LF-PA2**T2*-080N06D, where the wild card is applied to number of fans per row, and orientation (horizontal or vertical).

1.	Product testing and certification (continued)	No	Yes		
1.13	If representative testing was used (option d in question 1.8) what are the 'representative models'?				
	ETL Product ID number Product name and model number or a list of all model codes for model range testing and verificat				
	Evidence supporting representative models, including a descri tan area to coil area ratios, dimensions and orientation shall b				
	Data from proprietary Air Blast Cooler sizing software (e.g. of the type used by the manufacturer for sales purposes) may be submitted as evidence for the performance of other models based on the variant, provided the manufacturer submits supporting information regarding the sizing software, to allow the ETL administrator to determine its suitability and effectiveness, including which variants/models have data from testing.				
2.	Product type	No	Yes		
2.1	Is the product sold as a stand-alone air blast cooler?				
	Air blast coolers that are sold as an integral part of a chiller ar sub-technology .	e covered by the Packaged Chiller			
2.2	Does the product incorporate:				
	a) A heat exchanger designed to cool water or other proces	s liquids?			
	b) A fan which forces air over the heat exchanger?				
	c) A series of control valves (or "by-pass mechanism") that around the pre-cooler in response to a control signal?	e-direct the water or other process liquid			
	 A controller that operates the by-pass mechanism and co temperature is higher than the water/process liquid inlet 				
	 e) Does product contain a variable speed fan(s) with appropriate the cooling fan as the cooling demand decreases, or as the 				
3.	Product performance	No	Yes		
3.1	If the product is a general air blast cooler, does the it have a greater than or equal to (≥) 90.0, at a 5K liquid temperature outlet liquid temperatures) and a 15K approach temperatur and outlet leaving water temperature) and when operating the datasheet)?	difference (i.e., difference between inlet and e difference (i.e. difference between inlet air			

Where EER = net cooling capacity (kW) / effective power input (kW).

This calculation must take account of the electricity used by both the fan(s) and the controller.

3.2 Please indicate the product's profile: (*Please select one*)

- a) Flat
- b) Vertical
- c) Vee
- d) Other

Yes

4. Summary of documents to be included

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 <u>online application</u>.

- 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 Product List (ETPL) is correct, and and that the supplied documentation can evidence the conformity of the products against the requirements the ETL eligibility criteria. If the model names contain any 'wildcards' in respect of cosmetic variations please check with ETL Questions 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 ETPL 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) Please ensure that this documentation includes details of:
 - i) The product's automatic control strategies, mechanisms, and configuration settings.
- d) 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 complied 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 representative testing has been used, please include:
 - Details of selection method used.
 - The heat exchanger test data or predictions using a validated mathematical model.
 - Evidence that the products covered by the representative model(s) are variants of the same basic design.
 - Evidence supporting representative models, including a description of the fan and heat exchanger configuration, fan area to coil area ratios, dimensions and orientation shall be provided
 - For model range testing and verification, evidence of the performance of products within the range. In the case of model ranges, the requirement that all variants have the same or better efficiency does not apply.
 - For model range testing and verification, a list of all model codes that are proposed to be covered by the listing, as well as a key describing how to interpret the code.
 - Data from proprietary Air Blast Cooler sizing software may be submitted as evidence for the performance of other models based on variants

Please note that summary test reports will only be accepted, where the accuracy of the test reports has been certified by a recognised independent body, or where two detailed test reports have been submitted per product range.

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

Yes

4. Summary of documents to be included (continued)

- e) A Declaration of Conformity with UK/EU Directives on product safety, including the following:
 - i) An appropriate Conformity Assessment mark.
 - ii) The Pressure Equipment (Safety) Regulations 2016.
 - iii) The Ecodesign Regulation (EU) No 327/2011
- f) Evidence that a quality assurance system/procedures is/are in place to:
 - i) Control the specification, design, manufacturing and testing of the products.

g) Signed application checklist.

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

5. 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 <u>here</u>.

Signature:

Date:

For more information:

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