



No

Yes

Product application checklist

Please complete in BLOCK CAPITALS

Refrigerated Air Dryers with Energy Saving Controls

anufacturer/supplier name:
L licence number (if applicable):
oplicant's name:
lephone number:
roduct information
oduct name:
odel 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 used to demonstrate product performance please ensure that the information supplied is sufficient to demonstrate the performance of all products for which applications are being made.

- 1.1 Does the product have a dew point rating of less than or equal to (≤) +3°C i.e., Class 4 specifications for moisture removal in BS ISO 8573-1:2010, "Table 2 Compressed air purity classes for humidity and liquid water"?
- 1.2 Does the product conform to the requirements of The Pressure Equipment (Safety) Regulations 2016 in respect of its design, manufacture and testing procedures (or does it have an appropriate Conformity Assessment mark)?
- **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 testing

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

Product testing and certification (continued)	No	ľ			
Where product testing has been done in accordance with a registered Quality Management System, what is its registration number?					
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)?					
Where product testing has been witnessed by an independent body, what was the name of the witness? (Please include contact details).					
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)?					
If representative testing has been used, what are the 'representative models'?					
ETL Product ID number Product name and model number					
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The representative models must be selected by dividing the range of products into groups of models with similar o	lesin	ın			

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

2.	Product type	No	Yes
2.1	Has your product performance been tested in accordance with BS ISO 7183:2007 at 100% load?		

2.2 What was the pressure drop corrected composite specific energy consumption (SEC) in kWh/m3/min, at 100% load?

Eligible products shall not exceed the limits, set out in the performance criteria in the Table 1.1 in the criteria, for pressure drop corrected composite specific energy consumption (SEC) at 100% load (i.e. rated air flow). SEC data should be presented to 2 decimal places.

No

Yes

3. Product features

- 3.1 Is your product fitted with an automatic energy saving controller?
- **3.2** Does the controller reduce the power consumed by your product as the airflow and/or air inlet temperature reduces?
- 3.3 Can the controller modulate the operation of the product between 20% and 100% load, in response to changes in flow rate and/or temperature?
- 3.4 What control system does your product incorporate?
 - a) Hot gas bypass Does the product rely upon a simple hot gas bypass valve to regulate the refrigeration capacity?
 - b) Chilled mass with temperature switch Does the product simply switch the refrigeration compressor on at a pre-set temperature and switch the refrigeration compressor off at a pre-set temperature?
 - c) Compressor speed/load control Does the control system adjust the speed of the refrigeration compressor or otherwise unload the refrigeration compressor?
 - d) Digital pulse capacity control Does the product incorporate an electronic control that effectively reduces the load upon the refrigeration compressor in response to changes in duty?
 - e) Other (please describe)

No

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 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 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) Evidence that the products 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.

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 and per laboratory used.

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

- d) A Declaration of Conformity with Directives on product safety, including one of the following:
 - i) An appropriate Conformity Assessment mark.
 - ii) The Pressure Equipment (Safety) Regulations 2016.
- 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.

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:

Web: etl.energysecurity.gov.uk

Phone: +44 20 3096 4800

Email: info@etl.energysecurity.gov.uk

Post:

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