



## Product application checklist

Please complete in BLOCK CAPITALS

# Compressed Air Equipment: Refrigerated air dryers with energy saving controls

Manufacturer/supplier name:	
ETL licence number (if applicable):	
Applicant's name:	
Telephone number:	
Product information	
Product name:	
Model number:	<b>('U'</b>

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 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 meet the 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 EU Pressure Equipment Directive PED 97/23/EC in respect of its design, manufacture and testing procedures (or is it CE marked)?
- 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 (i.e. 'self-tested')
  - 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')

Please refer to Section 2 of ECA Guidance Note 5 "ECA Testing Programme: Energy Technology List (ETL) Product 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 it registration number?	ts	
1.5	Where product testing has been witnessed by an independent body, what was the name of the witness? (Please include contact details).		
1.6	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)?		

2.	Product type No	Yes
2.1	Has your product performance been tested in accordance with ISO 7183:1986 at 100% load, 75% load and 50% load?	
2.2	What was the pressure drop corrected composite specific energy consumption (SEC) in kWh/m3/min, at each load?	
	a) 100%	
	Maximum allowable composite SEC 0.6	
	b) 75%	
	Maximum allowable composite SEC 0.48	
	c) 50%	
	Maximum allowable composite SEC 0.36	
	For more detailed information on the energy technology list (ETL) criteria visit http://etl.decc.gov.uk/etl/criteria/	

3.	Product features	No	Yes
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)

#### 4. 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 at https://etl.decc.gov.uk.

- 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 ECA Scheme). If the model names contain any 'wildcards' in respect of cosmetic variations please check with ECA 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 Energy Technology Product List (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 Section 4 of ECA Guidance Note 5 "ECA Testing Programme: Energy Technology List (ETL) Product Testing Framework" for further guidance on the submission of test results, and minimum information requirements.

- d. A Declaration of Conformity with EU Directives on product safety, including one of the following:
  - i) CE Marking Directives.
  - ii) EU Pressure Equipment Directive PED 97/23/EC.
- 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 Enhanced Capital Allowance Energy Technology List (ETL).

A copy of the terms and conditions can be found at <a href="https://www.gov.uk/guidance/energy-technology-list">https://www.gov.uk/guidance/energy-technology-list</a>

Signature: Date:

### For more information:

Web:

https://www.gov.uk/guidance/energy-technology-list

Phone: 0300 3300657

Email:

ECAQuestions@carbontrust.co.uk

Post:

Energy TL Coordinator, ICF, 6th floor, Watling House, 33 Cannon Street, London, EC4M 5SB

Whilst reasonable steps have been taken to ensure that the information contained within this publication is correct, the Carbon Trust, its agents, contractors and sub-contractors, and the Government give no warranty and make no representation as to its accuracy and accept no liability for any errors or omissions.

Any trademarks, service marks or logos used in this publication are the property of the Carbon Trust or Givernment. Nothing in this publication shall be construed as granting any licence or right to use or reproduce any of the trademarks, service marks, logos, copyright or any proprietary information in any way without the Carbon Trust's prior written permission. The Carbon Trust enforces infringements of its intellectual property rights to the full extent permitted by law.

The Carbon Trust is a company limited by guarantee and registered in England and Wales under Company Number 04190230 with its Registered Office at: 4th Floor, Dorset House, 27-45 Stamford Street, London SE1 9NT. The Enhanced Capital Allowance Scheme for energy saving equipment is run by the Carbon Trust on behalf of Government.

Published in the UK: June 2017.