

## Product application checklist

Please complete in BLOCK CAPITALS

### Motors and Drives: Line operated AC motors

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 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 Has the product been tested in accordance with a low uncertainty method according to Table 2 (Induction Machines) of BS EN 60034-2-1:2007 OR method 2-1-1B according to Table 2 (Induction Machines - preferred testing methods) of BS EN 60034-2-1:2014 "Rotating electrical machines – Part 2-1: Standard methods for determining losses and efficiency from tests (excluding machines for traction vehicles)"?**

**1.2 Is the product 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')
- 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 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.*

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

.....

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

.....

<b>1.</b>	<b>Product testing and certification (continued)</b>	<b>No</b>	<b>Yes</b>
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**1.6 Where products have been tested by an independent laboratory:**

a) What is the name of the independent laboratory?

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

.....

**1.7 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 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 two models must be tested in each range of products and in each location (i.e laboratory or factory) used for product testing*

<b>2.</b>	<b>Product type</b>	<b>No</b>	<b>Yes</b>
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**2.1 Is the product a totally enclosed, three-phase, single speed, line operated ac motor?**

**2.2 How many poles does the product have?**

- a) 2
- b) 4
- c) 6
- d) 8

**2.3 What is the product's rating in kW?**

.....

**2.4 What is the product's frame size/number?**

.....

<b>3.</b>	<b>Product features</b>	<b>No</b>	<b>Yes</b>
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**3.1 Does the product have:**

- a) A maximum rated operating voltage less than or equal to 1,000 Volts ac
- b) A 'Duty type S1 – Continuous running duty' rated power output that is greater than or equal to 0.75kW and less than or equal to 400kW as defined in Section 4.2.1 of BS EN 60034-1: 2010.
- c) A built in cooling fan that uses a cooling method that is classified as "IC 410", "IC 411" or "IC 418" according to BS EN 60034-6:1994

**3.2 Is the product rated at 50 Hz in accordance with BS EN 60034-1:2010 (or IEC 60034-1: 2010)?**

**3.3 Does the product's power rating match one of the entries in the primary or secondary series defined in Table 7 of IEC 60072-1: 1991-02 (sixth edition), "Dimensions and output series for rotating electrical machines – Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1080"?**

**4. Product performance****No** **Yes****4.1 Does the product meet the relevant performance thresholds set out in the table below?***Table 1 Performance thresholds for line operated AC motors*

Rated Power Output (kW)	% Efficiency at full load			
	2 Pole	4 Pole	6 Pole	8 Pole
0.75	>= 80.7	>= 82.5	>= 78.9	>= 75.0
1.1	>= 82.7	>= 84.1	>= 81.0	>= 77.7
1.5	>= 84.2	>= 85.3	>= 82.5	>= 79.7
2.2	>= 85.9	>= 86.7	>= 84.3	>= 81.9
3	>= 87.1	>= 87.7	>= 85.6	>= 83.5
4	>= 88.1	>= 88.6	>= 86.8	>= 84.8
5.5	>= 89.2	>= 89.6	>= 88.0	>= 86.2
7.5	>= 91.7	>= 92.6	>= 91.3	>= 89.3
11	>= 92.6	>= 93.3	>= 92.3	>= 90.4
15	>= 93.3	>= 93.9	>= 92.9	>= 91.2
18.5	>= 93.7	>= 94.2	>= 93.4	>= 91.7
22	>= 94.0	>= 94.5	>= 93.7	>= 92.1
30	>= 94.5	>= 94.9	>= 94.2	>= 92.7
37	>= 94.8	>= 95.2	>= 94.5	>= 93.1
45	>= 95.0	>= 95.4	>= 94.8	>= 93.4
55	>= 95.3	>= 95.7	>= 95.1	>= 93.7
75	>= 95.6	>= 96.0	>= 95.4	>= 94.2
90	>= 95.8	>= 96.1	>= 95.6	>= 94.4
110	>= 96.0	>= 96.3	>= 95.8	>= 94.7
132	>= 96.2	>= 96.4	>= 96.0	>= 94.9
160	>= 96.3	>= 96.6	>= 96.2	>= 95.1
200	>= 96.5	>= 96.7	>= 96.3	>= 95.4
250	>= 96.5	>= 96.7	>= 96.5	>= 95.4
280	>= 96.5	>= 96.7	>= 96.6	>= 95.4
315	>= 96.5	>= 96.7	>= 96.6	>= 95.4
355	>= 96.5	>= 96.7	>= 96.6	>= 95.4
375	>= 96.5	>= 96.7	>= 96.6	>= 95.4
400	>= 96.5	>= 96.7	>= 96.6	>= 95.4

">=" means "greater than or equal to"

Please note that if the product's specific rated power output is not shown in Table 1 then the performance threshold is determined by interpolation in accordance with the method set out in Section 5.4.5 of BS EN 60034-30-1: 2014.

For the avoidance of doubt test data should be presented to 1 decimal place. As an example, a 4 pole, single speed motor with a rated power output of 45.0 kW and an efficiency at full load of 95.3% would be deemed to be a fail.

## 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 at <https://www.gov.uk/energy-technology-list>.

- 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 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.

*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 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:
- i) CE Marking Directives.
- 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 Enhanced Capital Allowance Energy Technology List (ETL).  
A copy of the terms and conditions can be found at <https://www.gov.uk/guidance/energy-technology-list>

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

### For more information:

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