

**GUIDANCE NOTES
FOR SUBMISSIONS TO
UK GOVERNMENT'S
PRODUCT
CHARACTERISTICS
DATABASE

(MICRO CHP ONLY)**

Summary

1. Submission Pack Version Number

The Guidance Notes are routinely updated to reflect changes to the submission process. The submission pack provides means for manual submission of data. You will find comprehensive guidance notes and instructions.

The Submission Pack is available on the Product Characteristics Database website (www.sedbuk.com or www.boilers.org.uk). You should ensure that the version you are using correlates with that available at the website prior to making a submission. GASTEC at CRE may not accept submissions made using old versions of the Submission Pack.

As an aid to those submitting data for validation the following tables identify the latest version number and indicate the changes made.

Submission Pack Revision Table

Version Number	Issue Date	Amendment details
1.0	July 2009	N.A.
2.0	October 2010	Updates resulting from SAP 2009

(Note: Current version number details are shown in bold for clarity)

2. General Points about the Product Characteristics Database

- The database is intended for domestic micro-CHPs only, and there is a cut-off at 70kW. No modulating or “on/off” micro-CHPs will be accepted where the power output is greater than 70kW. Range rated micro-CHPs may have an upper limit in excess of 70kW provided that the lower limit is below 70kW.
- The database is kept up to date on a monthly cycle with deadlines for data submission as shown in the following table:-

Programme for micro-CHP efficiency data submission	
Completed data entries required by:-	For database update on:-
15 calendar days before last working day of each month	Last working day of each month
Note: Entries may be submitted at any time, but cannot be guaranteed for inclusion after the 15 day deadline	

- Independent certification of efficiency test results is required as explained in SAP 2005 and section 1.1 of these submission notes.
- All entries in the database are subject to technical audit.
- Product names in the database must be unique, and it is not possible to have two entries with the same conjunction of brand name, model name and qualifier and fuel type. The way in which product names are validated has changed; photographs are now required to help in this process (please see section 1.2 for more details).
- You are required to submit an actual example of a data plate for each micro-CHP submitted.
- If any product on the database becomes obsolete (i.e. goes out of production) you must inform us. The data will continue to be held for SAP assessor’s use.

Because precise identification of your products is a vital part of the SAP procedure (and the Home Information Packs), we urge you to pay particular attention to the naming of your product. If a SAP assessor/home inspector is unable to identify your micro-CHP beyond doubt, he will simply assign a default value, which will always be lower than can be achieved through testing. This may not present your product in its best light. We appreciate that in the domestic micro-CHP industry it is commonplace to sell virtually identical products under a range of different trademarks/brand names or other identifiers sometimes specified by bulk purchasers; usually known as ‘Badged Products’. We



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draw your attention to the section in the guidance notes calling for a separate entry for each of these products. In order to enable you to validate such information without repeating the entire data entry process, you will find a simple form [Appendix 2], which helps us to cross reference to the original model.

We have attempted to make the process of gathering and validating your micro-CHP efficiency data as easy as possible in order to make the database as accurate and useful as possible. Our quality control procedures have been designed to question any data which do not conform to the government's high standards, but we will work hard to ensure that minor misunderstandings and difficulties are resolved as quickly as possible to the satisfaction of all interested parties.

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Micro-CHPs in the Product Characteristics Database [PCDB]

1. Introduction

The primary purpose of the Product Characteristics Database is to support the UK Government's Standard Assessment Procedure (SAP) for energy rating of dwellings by providing reliable data on the efficiency and other relevant characteristics of a range of heating products. This document is concerned with data submission for Micro-cogeneration, also known as micro-CHP.

Micro-CHP is the process of heating water and generating electricity simultaneously, on a sufficiently small scale to suit a single dwelling.

For entries in the database it is GaC's role to verify that the efficiency test data submitted have been produced or accepted by an appropriately qualified laboratory (an accredited test house subject to European standards for quality control and operations) according to the Publicly Available Specification PAS 67.

Whilst we are happy to be the company selected to check the compliance of this information and compile it into a useable Internet format, the ultimate resolution of queries is the responsibility of BRE as the Government's operating agent.

Subsets of data extracted from the definitive database will be published in two forms; one for SAP Assessors as a computer-readable file, and the second as publicly available product information – all on an Internet web site (www.sedbuk.com). The published data will be updated at monthly intervals.

Manufacturers may continue to submit further data on new products at any time. GaC will deal with these applications within an agreed time target, and will also investigate and correct any errors reported.

When micro-CHP's published on the database go out of production, GaC should be notified so that the entry can be updated. The data will still be held so that SAP assessors can make reference to it as required.

You should be aware that once data relating to a particular micro-CHP has been published, any modifications to that product which may affect its seasonal efficiency rating must be submitted in the form of a clearly identifiable "new" entry complete with a modified model identity. Product names in the database must be unique, and it is not possible to have two entries with the same conjunction of brand name, model name and qualifier and fuel type. This is to enable a SAP assessor to differentiate between the modified and un-modified products in the marketplace.

1.1 ANNUAL ENERGY PERFORMANCE DATA

The purpose of the database with respect to micro-CHP's is to hold Annual Energy Performance data for domestic micro-CHP's fuelled by natural gas, LPG, oil or solid fuels. Although the database will contain other descriptive and technical details as well, all entries must include Annual Performance data (intermediate results) as generated by suitable test laboratories in accordance with PAS 67. This data will be used to calculate a seasonal performance index. You may submit data that can be used to calculate the seasonal performance index based upon both SAP 2005 and SAP 2009 requirements.

Validity and accuracy of the data within the database are paramount. Careful scrutiny of the data submitted by manufacturers is essential. To avoid any doubt or misunderstanding as to the accuracy or validity of any of your Annual Performance data (intermediate results), a declaration form is available [Appendix 4] which **must** be completed and signed by an authorised signatory from whichever Laboratory carried out the Annual Performance Method required to satisfy PAS 67. At the time of writing no formal protocols (e.g. Notified Bodies/ Approved Test Laboratories etc) are in place regarding micro-CHP testing. Until further notice results will only be accepted from laboratories accredited to ISO 17025 working in suitable disciplines (e.g. boiler testing).

It should be noted that in certain cases we are required to seek additional clarification of submitted

results (e.g. where very high efficiency results have been reported). We would be required to seek further explanation of the methods used to produce this data. In such circumstances we would expect to see confirmation that the test laboratory has carried out sufficient checking of measurements and calculations to ensure consistency of results.

The database also provides a field to hold the energy efficiency class, expected to be defined later in a European Council directive for energy labelling. This field is to be left blank until the European labelling scheme has been defined.

1.2 PRODUCT IDENTIFICATION

It is essential that descriptions obtained from the database allow a SAP assessor or home inspector to identify an installed micro-CHP reliably. Assessors and inspectors are not heating experts, and will examine only the information on micro-CHPs that is readily visible to the householder. The route to micro-CHP identification should be viewed as follows: -

1. The product must have a unique description (i.e. distinct from any other product entered, or about to be entered, in the database). The description is made up of Brand Name, Model Name and Qualifier and Fuel type.
2. It must be possible for the SAP assessor or home inspector to identify the specific product from readily visible information.
3. Readily visible information is considered to be markings/labels on the outer case that can be seen. In addition markings/labels that can be read by means of a user moveable panel. A user moveable panel is considered to be one that may be hinged (e.g. flap or door) or a panel that can be removed without the use of tools and is intended to be used by the householder.
4. In order to demonstrate that product information is readily visible photographs will need to be supplied clearly demonstrating how the unique product description can be derived as described in 3 above. No submissions will be accepted where this evidence cannot be supplied.
5. In the case of a micro-CHP that may be converted from one gas type to another in situ (e.g. NG to LPG) it is not necessary for the fuel type to be clearly visible. It is considered possible for the SAP assessor/home inspector to determine the fuel type by other means.

The process by which a product description is verified is given in Appendix 3.

It should be noted that where a unique product description cannot be demonstrated (normally by means of photographs) an entry to the database will be denied.

2 Help and Advice on Supplying Micro-CHP Efficiency Data

2.1 How do I make a submission to the Database?

Submissions to the database are made using the forms contained within this guide. In addition to these forms you will also need to supply the results evidence from the testing laboratory. In order to calculate the Annual Performance Index a number of excel spreadsheet are available which the testing laboratory must use to provide the test results in accordance with PAS 67. These are:

1. PAS67 APM rev 4e v3.21 11-05-2010 (SAP 2005 PSR ½-1-/1½-4).xls.
This is for all applications under SAP 2005, unless the applicant requests the higher range alternative (see (2)).
2. PAS67 APM rev 4e v3.21 11-05-2010 (SAP 2005 PSR 1-3-6-10).xls
This is for all applications under SAP 2005 where the applicant prefers to be assessed with the higher plant ratios. Such requests will have to be approved by the UK Government.
3. PAS67 APM rev 4e v5.03 01-06-2010 (SAP 2009).xls
This is for all applications under SAP 2009.

Please note that the above versions are subject to change. Please contact Gastec at CRE Ltd to check you are using the current version.

As well as the basic product data you will need to provide there are a number of accompanying forms and pieces of evidence you will also need to supply. To help clarify what this is a table is presented below listing the forms you will need in various submission scenarios. Although this cannot be guaranteed to be exhaustive in all cases it should cover most.

Micro-CHP Submission Scenarios and Forms/Evidence required

Forms/Evidence required	Micro-CHP submission scenario		
	Micro-CHP tested on fuel it burns	Badged micro-CHP	LPG micro-CHP supported by NG efficiency data
Manual Data Entry Form (1&2)	✓	✓	✓
Badged Micro-CHP Form (3)	N.A.	✓	N.A.
Product Identification Photographs (4)	✓	✓	✓
Data plate	✓	✓	✓
Intermediate Results Spreadsheet	✓	✓	✓
Micro-CHP PAS 67 compliant results declaration (5)	✓	✓	✓

Note: Numbers in brackets indicate the Appendix number where the appropriate form or further information can be found.

For each micro-CHP submitted there must be the accompanying paperwork as indicated in the above matrix. As a further aid a submission checklist is provided in Appendix 6.

It is important that all forms requiring signature (apart from the Testing Laboratory Declarations) be signed by the Technical Director of the submitting company.

2.2 Completing the Forms

A set of manual data entry forms is included from Appendix 1 onwards – please photocopy as many as you need for all of your product data. One complete set of forms should be completed for each micro-CHP.

Please take great care when writing in each of the boxes. Special care is needed when recording results from any testing body. Please note that the test data must be substantiated with appropriate copies of test reports/data and declarations (see Appendix 5). Failure to provide this evidence will prevent your product from receiving its full listing in the database. **Each form contains a signature**

box for the Technical Director or the equivalent person in your organisation to affirm the quality of the information supplied. Please note that you are also required to send an example of the data plate for each micro-CHP submitted.

The data entry form has been designed with subsequent data input in mind. Below are some explanatory notes to help you fulfil the Government's requirements.

SUBMISSION NOTES FOR SAP 2005 ENTRIES

NB MANDATORY ENTRIES FOR MICRO-CHPS ARE PRINTED IN BOLD

There is a requirement for consistency in naming (a) your Company (b) the brand and (c) the actual models submitted. We will be making amendments as and when required to both categories and you should pay particular attention to that when checking your confirmation reports.

Entry 1 Original Name [up to 50 characters]

This is the name of the micro-CHP manufacturer or company responsible for the micro-CHP in the UK at the time the micro-CHP was manufactured – as it appears on the micro-CHP casing and/or the owners' instruction leaflets. **Please omit punctuation marks and spaces between initials.** Once we have confirmed a manufacturer name this format will be used for all future micro-CHP entries appearing under that name.

Entry 2 Current Name [up to 50 characters]

This is the current name of the Manufacturer or Company responsible for this micro-CHP in the UK. This may be different to the original name – if not mark "as above".

NB If the same micro-CHP model is sold under more than one Manufacturer's name, then you should complete the Micro-CHP Identity Form in Appendix 3 giving the other identities so that separate entries can be included on the database.

Entry 3 Address [up to 365 characters in total]

This format is as recommended in BS7666: Part 3 Section 2 Table 1 – hence the terminology. If your company does not have a UK address, then please try to match the format as closely as possible.

- Secondary addressable object name [e.g. Design Division] - up to 60 characters
- Primary addressable object name [e.g. Big House] - up to 60 characters
- Designated Street name - up to 100 characters
- Locality name [if appropriate] - up to 35 characters
- Town/city name - up to 30 characters
- Administrative area name [e.g. County] - up to 30 characters
- Postcode - up to 20 characters
- Country – if not UK - up to 30 characters

Entry 4 Telephone number [up to 25 characters]

Entry 5 Website address [up to 75 characters]

This is the actual home website address for the manufacturer [in the usual www.****.co.uk or .com configuration]. It will be used to provide a hotlink from each micro-CHP record to the specific manufacturer's website.

Entry 6 Brand Name [up to 50 characters]

This is the name of the product brand. It is anticipated that this name will reflect the manufacturer name. It is intended that this field be used for the brand instead of including it in the Model Name (e.g. model name: ACME 123 would be Brand Name: ACME; Model Name 123).

Entry 7 Model Name [up to 50 characters]

This should be the name as it appears on the micro-CHP casing or leaflet of owners' instructions. For micro-CHPs that comply with EN483, or other appropriate European Norms, this should be "the trade name of the appliance" shown on the data plate, as specified in EN483 or other relevant standard.

NB As highlighted in Entry 2's notes, separate entries are required for each model if the same micro-CHP is sold under more than one model or brand name.

Entry 8 Model qualifier [up to 30 characters]:-

This is for recording any special qualifier to the model name, which may have been used to discriminate between different versions of the same model.

Entry 9 Micro-CHP Package ID [up to 40 characters]

This is the micro-CHP identifier which, when used in conjunction with the manufacturer's name, is unique for the model and all other characteristics affecting efficiency. Where known, this provides an effective short cut for identification. If not known, please leave blank.

Entry 10 First year of manufacture if known [up to 4 characters]

If you do not know, give your best estimate of the year or just leave blank.

Entry 11 Final year of manufacture [up to 8 characters]

Enter "current" if the model is still in production. If the model is no longer produced, but you do not know the final year of manufacture, then either enter your best estimate of the year or simply enter "obsolete".

Entry 12 Fuel [1 digit]

Fuel	Code	Notes
Gas	1	"Gas" means natural gas (mains gas) only
LPG	2	"LPG" means butane or propane
Oil	4	"Oil" means kerosene, or gas oil only
House Coal	11	
Smokeless Fuel	12	
Anthracite Nuts	13	
Anthracite Grains	14	
Wood Logs	20	
Wood Chips	21	
Wood Pellets	23	

NB If the same micro-CHP may be used for more than one type of fuel, then a separate entry is required for each fuel type.

Entry 13 Main Type [1 digit]

Definition	Entry code	Notes
Main micro CHP Type		Not used at this time

Entry 14 Condensing [1 digit]

Definition	Entry code	Notes
Non-condensing	1	As defined in SAP (2005) (see notes in Appendix 5) - Non-condensing means condensation is not expected [by design] within the micro-CHP.
Condensing	2	As defined in SAP (2005) (see notes in Appendix 5) - Condensing means a micro-CHP designed to make use of the latent heat in the combustion products by condensing water vapour within the appliance. The micro-CHP must allow the condensate to leave the heat exchanger in liquid form by way of a condensate drain.

Entry 15 Flue Type [1 digit]

Definition	Entry code	Notes
Open	1	Open flued: The micro-CHP will take its combustion air from the room, and discharge outside of the room
Room-Sealed	2	Room sealed: The micro-CHP air supply and point of discharge of the flue system are outside of the room in which the micro-CHP is installed.
Either	3	Where a micro-CHP can operate with both an open or room-sealed flue and the data plate makes no distinction.

Entry 16 DHW Service [1 digit]

Definition	Entry code	Notes
Unknown	0	
No DHW	1	The micro-CHP package is not intended to provide domestic hot water and has been tested accordingly as confirmed by test certificate.
DHW	2	The micro-CHP package is intended to provide domestic hot water and has been tested accordingly as confirmed by test certificate

Entry 17 Separate DHW Store [1 digit]

Definition	Entry code	Notes
Unknown/N.A.	0	
Internal DHW Store	1	Storage vessel for domestic hot water contained within the micro-CHP package. This must be confirmed by the test laboratory (e.g. on certificate)
Separate DHW Store	2	Storage vessel for domestic hot water separate to the micro-CHP package. This must be confirmed by the test laboratory (e.g. on certificate)

Entry 18 Separate Circulator [1 digit]

Definition	Entry code	Notes
Unknown	0	
Internal Circulator	1	Water circulator for the emission system contained within the micro-CHP package. This must be confirmed by the test laboratory.
Separate Circulator	2	Water circulator for the emission system separate to the micro-CHP package. This must be confirmed by the test laboratory.

Entry 19 Output Power to Water (bottom of range)

[number of up to 7 characters - e.g. nnn.nnn]

For a micro-CHP with a single rated output, this figure should be the nominal output power (to water) of the micro-CHP in kW. (Note: If the micro-CHP is modulating then this power **MUST** be the same as the Micro-CHP Power (top of range) as recorded in Entry 16)

For range rated micro-CHP this should be the minimum output power of the range declared by the manufacturer.

Entry 20 Output Power to Water (top of range)

[number of up to 7 characters - e.g. nnn.nnn]

For a single output micro-CHP this figure should be the nominal output power (to water) of the micro-CHP in kW i.e. the same as Entry 15.

For range rated micro-CHP this should be the maximum output power of the range declared by the manufacturer.

Micro-CHPs with heat outputs greater than 70kW are not permitted on the database.

Entry 21 Date

Date that form is submitted.

Entry 22-24 Name, Position & Signature of Person completing form

It should be noted that this form must be signed by the Technical Director or equivalent of the company making the submission. If someone other than the Technical Director signs the forms it is a requirement that suitable documentary evidence of the authority of the signatory is provided.

SUBMISSION NOTES FOR SAP 2009 ENTRIES

NB MANDATORY ENTRIES FOR MICRO-CHPS ARE PRINTED IN BOLD

There is a requirement for consistency in naming (a) your Company (b) the brand and (c) the actual models submitted. We will be making amendments as and when required to both categories and you should pay particular attention to that when checking your confirmation reports.

Entry 1 Original Name [up to 50 characters]

This is the name of the micro-CHP manufacturer or company responsible for the micro-CHP in the UK at the time the micro-CHP was manufactured – as it appears on the micro-CHP casing and/or the owners' instruction leaflets. **Please omit punctuation marks and spaces between initials.** Once we have confirmed a manufacturer name this format will be used for all future micro-CHP entries appearing under that name.

Entry 2 Current Name [up to 50 characters]

This is the current name of the Manufacturer or Company responsible for this micro-CHP in the UK. This may be different to the original name – if not mark "as above".

NB If the same micro-CHP model is sold under more than one Manufacturer's name, then you should complete the Micro-CHP Identity Form in Appendix 3 giving the other identities so that separate entries can be included on the database.

Entry 3 Address [up to 365 characters in total]

This format is as recommended in BS7666: Part 3 Section 2 Table 1 – hence the terminology. If your company does not have a UK address, then please try to match the format as closely as possible.

- Secondary addressable object name [e.g. Design Division] - up to 60 characters
- Primary addressable object name [e.g. Big House] - up to 60 characters
- Designated Street name - up to 100 characters
- Locality name [if appropriate] - up to 35 characters
- Town/city name - up to 30 characters
- Administrative area name [e.g. County] - up to 30 characters
- Postcode - up to 20 characters
- Country – if not UK - up to 30 characters

Entry 4 Telephone number [up to 25 characters]

Entry 5 Website address [up to 75 characters]

This is the actual home website address for the manufacturer [in the usual www.****.co.uk or .com configuration]. It will be used to provide a hotlink from each micro-CHP record to the specific manufacturer's website.

Entry 6 Brand Name [up to 50 characters]

This is the name of the product brand. It is anticipated that this name will reflect the manufacturer name. It is intended that this field be used for the brand instead of including it in the Model Name (e.g. model name: ACME 123 would be Brand Name: ACME; Model Name 123).

Entry 7 Model Name [up to 50 characters]

This should be the name as it appears on the micro-CHP casing or leaflet of owners' instructions. For micro-CHPs that comply with EN483, or other appropriate European Norms, this should be "the trade name of the appliance" shown on the data plate, as specified in EN483 or other relevant standard.

NB As highlighted in Entry 2's notes, separate entries are required for each model if the same micro-CHP is sold under more than one model or brand name.

Entry 8 Model qualifier [up to 30 characters]:-

This is for recording any special qualifier to the model name, which may have been used to discriminate between different versions of the same model.

Entry 9 First year of manufacture if known [up to 4 characters]

If you do not know, give your best estimate of the year or just leave blank.

Entry 10 Final year of manufacture [up to 8 characters]

Enter "current" if the model is still in production. If the model is no longer produced, but you do not know the final year of manufacture, then either enter your best estimate of the year or simply enter "obsolete".

Entry 11 Fuel [1 digit]

Fuel	Code	Notes
Gas	1	"Gas" means natural gas (mains gas) only
LPG	2	"LPG" means butane or propane
Oil	4	"Oil" means kerosene, or gas oil only
House Coal	11	
Smokeless Fuel	12	
Anthracite Nuts	13	
Anthracite Grains	14	
Wood Logs	20	
Wood Chips	21	
Wood Pellets	23	

NB If the same micro-CHP may be used for more than one type of fuel, then a separate entry is required for each fuel type.

Entry 12 Condensing [1 digit]

Definition	Entry code	Notes
Non-condensing	1	As defined in SAP (2005) (see notes in Appendix 5) - Non-condensing means condensation is not expected [by design] within the micro-CHP.
Condensing	2	As defined in SAP (2005) (see notes in Appendix 5) - Condensing means a micro-CHP designed to make use of the latent heat in the combustion products by condensing water vapour within the appliance. The micro-CHP must allow the condensate to leave the heat exchanger in liquid form by way of a condensate drain.

Entry 13 Flue Type [1 digit]

Definition	Entry code	Notes
Open	1	Open flued: The micro-CHP will take its combustion air from the room, and discharge outside of the room
Room-Sealed	2	Room sealed: The micro-CHP air supply and point of discharge of the flue system are outside of the room in which the micro-CHP is installed.
Either	3	Where a micro-CHP can operate with both an open or room-sealed flue and the data plate makes no distinction.

Entry 14 Service Provision [1 digit]

Definition	Entry code	Notes
Unknown	0	
Space & Water Heating all Year	1	The micro-CHP package is intended to provide space & water heating all year.
Space & Water Heating during heating season only	2	The micro-CHP package is intended to provide space & water heating during the heating season only.
Space Heating	3	The micro-CHP package is intended to provide space heating only.
Water Heating	4	The micro-CHP package is intended to provide water heating only.

Entry 15 HW Vessel [1 digit]

Definition	Entry code	Notes
Integral	1	The micro-CHP package has an integral hot water storage vessel. This must be confirmed by the test laboratory (e.g. on certificate).
Separate Cylinder	2	Storage vessel for domestic hot water separate to the micro-CHP package. This must be confirmed by the test laboratory (e.g. on certificate).
None	3	The micro-CHP package has no hot water storage vessel. This must be confirmed by the test laboratory (e.g. on certificate).

Entry 16 Water Heating Efficiency (sch.2) [up to 4 digits]

This is the water heating efficiency from number 2 test schedule as defined in EN 13203-2 (% gross). This will be blank if service provision [Entry 14] is 3.

Please note that this figure must be supported by suitable evidence from an ISO 17025 accredited laboratory.

Entry 17 Net Specific Electricity Consumed (HW sch.2) [up to 5 digits e.g. nn.nnn]

This is the specific energy consumed (negative if generated) during water heating efficiency test number 2 schedule (kWh_e per kWh_h) [Entry 16]. This will be blank if service provision [Entry 14] is 3.

Please note that this figure must be supported by suitable evidence from an ISO 17025 accredited laboratory.

Entry 18 Water Heating Efficiency (sch.3) [up to 4 digits]

This is the water heating efficiency from number 3 test schedule as defined in EN 13203-2 (% gross). This will be blank if service provision [Entry 14] is 3.

Please note that this figure must be supported by suitable evidence from an ISO 17025 accredited laboratory.

Entry 19 Net Specific Electricity Consumed (HW sch.3) [up to 5 digits e.g. nn.nnn]

This is the specific energy consumed (negative if generated) during water heating efficiency test number 3 schedule (kWh_e per kWh_h) [Entry 18]. This will be blank if service provision [Entry 14] is 3.

Please note that this figure must be supported by suitable evidence from an ISO 17025 accredited laboratory.

Entry 20 Heating Duration [2 digit of “V”]

Definition	Entry code	Notes
Continuous	24	The micro-CHP package is intended to provide continuous heating.
16 hours/day	16	The micro-CHP package is intended to provide heating for 16 hours a day.
9 hours/week & 24 hours/weekend	11	The micro-CHP package is intended to provide heating for 9 hours in the week & 24 hours at the weekend.
Variable	V	The micro-CHP package is intended to provide heating only as per code 11 but switches to 16 or 24 hours on colder days.

Entry 21 Separate Circulator [1 digit]

Definition	Entry code	Notes
Unknown	0	
Internal Circulator	1	Water circulator for the emission system contained within the micro-CHP package. This must be confirmed by the test laboratory.
Separate Circulator	2	Water circulator for the emission system separate to the micro-CHP package. This must be confirmed by the test laboratory.

Entry 22 Output Power to Water (bottom of range)

[number of up to 7 characters - e.g. nnn.nnn]

For a micro-CHP with a single rated output, this figure should be the nominal output power (to water) of the micro-CHP in kW. (Note: If the micro-CHP is modulating then this power **MUST** be the same as the Micro-CHP Power (top of range) as recorded in Entry 16)

For range rated micro-CHP this should be the minimum output power of the range declared by the manufacturer.

Entry 23 Output Power to Water (top of range)

[number of up to 7 characters - e.g. nnn.nnn]

For a single output micro-CHP this figure should be the nominal output power (to water) of the micro-CHP in kW i.e. the same as Entry 15.

For range rated micro-CHP this should be the maximum output power of the range declared by the manufacturer.

Micro-CHPs with heat outputs greater than 70kW are not permitted on the database.

Entry 24 Date

Date that form is submitted.

Entry 25-27 Name, Position & Signature of Person completing form

It should be noted that this form must be signed by the Technical Director or equivalent of the company making the submission. If someone other than the Technical Director signs the forms it is a requirement that suitable documentary evidence of the authority of the signatory is provided.

Appendix 1

Manual Data Entry

Form for SAP 2005

**[one to be completed for each micro-CHP
model submitted]**

PRODUCT CHARACTERISTICS DATABASE

Micro CHP Data Entry and Declaration Form (SAP 2005)

(One to be completed for each micro-CHP type you wish to appear on the Micro-CHP Efficiency Database – please photocopy as many forms as you require.)

Entry No	Entry Title	Entry Value										
1.	Original Name											
2.	Current Name											
3.	Address											
	Second addressable object name											
	Primary addressable object name											
	Designated Street name											
	Locality name											
	Town/City name											
	Administrative area name											
	Postcode											
	Country (if not UK)											
4.	Telephone No											
5.	Manufacturer's Website Address											
6.	Brand Name											
7.	Model Name											
8.	Model Qualifier											
9.	Micro CHP Package ID											
10.	First Year of Manufacture											
11.	Final Year of Manufacture											
12.	Fuel	1	2	4	11	12	13	14	20	21	23	
13.	Main Type											
14.	Condensing	1					2					
15.	Flue Type	1			2				3			
16.	DHW Service	0			1				2			
17.	Separate DHW Store	0			1				2			
18.	Separate Circulator	0			1				2			
19.	Output Power to water (Bottom-of-range)						kW					
20.	Output Power to water (Top-of-range)						kW					

Entry No	Entry Title	Entry Value					
THIS SHADED SECTION MUST BE COMPLETED FOR ALL SUBMISSIONS							
Product Identification (please circle)*		1a	1b	1c	2d	2e	2f
21.	Date of Submission						
22.	Name of Submitter						
23.	Position of Submitter						
24.	Signature of Submitter						

NOTES

*

Please identify how product is identified (refer to Appendix 3 for criteria) and circle those combinations that apply

By signing this form I also declare that all the other information included in my returns are correct and that I am the Technical Director (or equivalent).

Appendix 2

Manual Data Entry

Form for SAP 2009

**[one to be completed for each micro-CHP
model submitted]**

PRODUCT CHARACTERISTICS DATABASE

Micro CHP Data Entry and Declaration Form (SAP 2009)

(One to be completed for each micro-CHP type you wish to appear on the Micro-CHP Efficiency Database – please photocopy as many forms as you require.)

Entry No	Entry Title	Entry Value										
1.	Original Name											
2.	Current Name											
3.	Address											
	Second addressable object name											
	Primary addressable object name											
	Designated Street name											
	Locality name											
	Town/City name											
	Administrative area name											
	Postcode											
	Country (if not UK)											
4.	Telephone No											
5.	Manufacturer's Website Address											
6.	Brand Name											
7.	Model Name											
8.	Model Qualifier											
9.	First Year of Manufacture											
10.	Final Year of Manufacture											
11.	Fuel	1	2	4	11	12	13	14	20	21	23	
12.	Condensing	1					2					
13.	Flue Type	1			2			3				
14.	Service Provision	0	1	2	3	4						
15.	HW Vessel	1			3			4				
16.	Water Heating Efficiency (sch.2)											%
17.	Net Specific Electricity Consumed (HW sch.2)											kWh _e per kWh _h
18.	Water Heating Efficiency (sch.3)											%
19.	Net Specific Electricity Consumed (HW sch.3)											kWh _e per kWh _h
20.	Heating Duration	24			16			11			V	

Entry No	Entry Title	Entry Value					
		21.	Separate Circulator	0	1	2	
22.	Output Power to water (Bottom-of-range)						kW
23.	Output Power to water (Top-of-range)						kW
THIS SHADED SECTION MUST BE COMPLETED FOR ALL SUBMISSIONS							
Product Identification (please circle)*		1a	1b	1c	2d	2e	2f
24.	Date of Submission						
25.	Name of Submitter						
26.	Position of Submitter						
27.	Signature of Submitter						

NOTES

*

Please identify how product is identified (refer to Appendix 3 for criteria) and circle those combinations that apply

By signing this form I also declare that all the other information included in my returns are correct and that I am the Technical Director (or equivalent).

Appendix 3

Badged Micro-CHP Form

**[one to be completed for each badged
micro-CHP submitted & *signed by*
Technical Director or equivalent]**

***[Please note that an actual data plate for
each model submitted is required]***

PRODUCT CHARACTERISTICS DATABASE

“Badged” Micro-CHP Form

(Please photocopy as many as you require)

Declaration of Similarity for “Badged” Products		
This form confirms that the micro-CHP (termed the “Badged model”) is the same in all material respects (excluding cover) including thermal performance as a micro-CHP (termed the “Master model”) for which a BED Certificate is available from a Notified Body		
Name of “Master Brand”	Name of “Master Model”	“Master Model” Qualifier.
Name of “Badged Brand”	Name of “Badged Model”	“Badged Model” Qualifier.
Badged Model Micro-CHP Power	Lowest rating (kW)	Highest rating (kW)
Are the two micro-CHPs currently made in the same factory?		YES
		NO
If NO, or if the “Master Model” is out of production please enclose details of any QA system that is in place to ensure product quality and similarity.		
I hereby confirm that the “Badged Model” listed above has the same thermal performance as the “Master Model”.		
Signature		Date
Name (Please print)		Position

Appendix 4

Product Identification Route

[Please note that an actual data plate for each model submitted is required]

Route to Product Identification

As described in section 1.2 it is essential that SAP assessors can readily identify micro-CHPs. To this end a mechanism has been devised to assist in the confirmation that a micro-CHP can be easily identified.

Firstly the means of identifying the micro-CHP needs to be established. It is anticipated that the following sets of circumstances may apply to most micro-CHP products:-

1. What product information is shown on the micro-CHP case? Is it:
 - a) Full brand and model name and qualifier, giving unique description of this product
 - b) Partial brand and name information
 - c) No brand and name information
2. What product information is visible (by means of a moveable or removable panel) and accessible (without the use of tools) to the householder? Is it:
 - d) Full brand and model name and qualifier, giving unique description of this product
 - e) Partial brand and name information which together with 1b gives unique description of this product
 - f) No brand and name information, or insufficient to provide a unique description

“Unique” means distinct from any other product entered, or about to be entered, in the database.

In order to meet unique description requirements applications can only be accepted in the following circumstances:

1a OR 1b + 2d or 1b + 2e OR 1c + 2d

In any of the above cases photograph(s) should be provided to demonstrate that the product description can be verified by these routes.

In all other circumstances (i.e., 1b + 2f, or 1c + 2f) applications will be refused, as it will be considered that in such cases the SAP assessor or Home Inspector will not be able to readily identify the product.

Appendix 5

Testing Body PAS 67 Declaration Form

**[to be completed in addition to
copies of actual
technical report sheets]**

Results Table 7 — PAS 67 Test Declaration	
Manufacturer's name:	
Unique package identifier:	
<p>Test Laboratory Declaration:</p> <p>The contents of Results Tables 2, 3, 4, 5 and 6 are a true representation of the thermal and electrical performance as measured in accordance with PAS 67.</p> <p>The signals used to control the micro-cogeneration package (e.g. from a room thermostat, cylinder thermostat, programmer) are as representative as possible of those expected to occur in a typical installation. Particular care has been taken with regard to the time constants of any proportional, integral or differential controls such that on/off periods and levels of modulation witnessed during the tests are broadly in accordance with expected behaviour in real locations whilst meeting the required test criteria.</p>	
Signed	Date
Name	Position
Name of test laboratory	
Address of test laboratory	Address where tests carried out
Date when test started:	Date when test completed:
<p>Manufacturer's Declaration:</p> <p>The package tested was not modified either before or during the test program.</p> <p>The signals used to control the micro-cogeneration package (e.g. from a room thermostat, cylinder thermostat, programmer) are as representative as possible of those expected to occur in a typical installation. Particular care has been taken with regard to the time constants of any proportional, integral or differential controls such that on/off periods and levels of modulation witnessed during the tests are broadly in accordance with expected behaviour in real locations whilst meeting the required test criteria.</p>	
Signed	Date
Name	Position

Appendix 6

Submission Check List

Micro-CHP Data Submission Check-list

For each micro-CHP model you submit, please check that you have included all relevant data and supporting evidence as follows:-

Form or method of data submission	Where you can find it	✓
Manual Data Entry and Declaration Form	Appendix 1	
Micro-CHP Identity Form - your declaration of similarity for “Badged” products	Appendix 2	
An actual example of the micro-CHP data plate (i.e. the plate or label fixed to the appliance)	In your product’s technical file	
Photographic Evidence of micro-CHP identification (i.e. photos clearly showing how the product is uniquely identified by the SAP assessor or Home Inspector – making clear whether they are visible [on the case or via accessible control panel])	See Appendix 3	
Evidence of the Annual Performance Data (intermediate results) provided by a suitable test laboratory in accordance with PAS 67. This must be provided as a an authenticated Excel spreadsheet accompanied by suitable test certificate/declaration.	In your product’s technical file	
A signed declaration of results from the Test Laboratory which carried out the tests	Appendix 4	
<i>Please Note: The working language of the database is English – submissions from International Notified Bodies should include translations into English</i>		

Note: Those items that are mandatory requirements for each micro-CHP application are highlighted in bold print