



The Certification Mark for Onsite
Sustainable Energy Technologies

Microgeneration Certification Scheme: MCS 010

Product Certification Scheme Requirements: Generic Factory
Production Control and Product Quality Requirements
Issue 2.0

This standard has been approved by the Standards Management Group of the Microgeneration Certification Scheme.

REVISION OF MICROGENERATION CERTIFICATION STANDARDS

Microgeneration Standards will be revised by issue of revised editions or amendments. Details will be posted on the website at www.microgenerationcertification.org

Technical or other changes which affect the requirements for the approval or certification of the product or service will result in a new issue. Minor or administrative changes (e.g. corrections of spelling and typographical errors, changes to address and copyright details, the addition of notes for clarification etc.) may be made as amendments.

The issue number will be given in decimal format with the integer part giving the issue number and the fractional part giving the number of amendments (e.g. Issue 3.2 indicates that the document is at Issue 3 with 2 amendments).

Users of this Standard should ensure that they possess the latest issue and all amendments.

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1 FOREWORD

2 The following document MCS 010 Issue 2.0 is a major update to Issue 1.5. It is available
3 for reference from the date of publication 23/11/2018. MCS Product Certificate Holders
4 of microgeneration products certificated in accordance with any of the MCS product
5 standards may commence working in accordance with this update from 23/11/2018. All
6 MCS Product Certificate Holders of microgeneration products certificated in accordance
7 with any of the MCS product standards shall comply with this update from 23/02/2019.

8 1. INTRODUCTION

9 Factory Production Control (FPC) is used to ensure that MCS Certificated Products meet
10 and continue to meet the appropriate standards. This document applies to the MCS
11 Product Certificate Holder.

13 2. SCOPE

14 This document defines the requirements for FPC systems which are assessed as part of
15 the product certification process for the Microgeneration Certification Scheme (the
16 Scheme).

18 3. DEFINITIONS

Certification Body	A Body that is accredited in accordance with ISO / IEC 17065 conformity assessment by UKAS or an equivalent (i.e. a member of the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) and undertakes the assessment of microgeneration products against the requirements of this Scheme.
Applicant	The legal entity applying to the Certification Body for the MCS certification of microgeneration product(s).
MCS Product Certificate Holder	This definition also applies to applicants who wish to have products certified under MCS. The legal entity named or to be included in the MCS product certificate that has responsibility for certification and its maintenance.

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MCS Certificated Product(s)	A product in relation to which the MCS Approval process with a licensed MCS Certification Body has been completed successfully.
Manufacturing Contact	The named individual at each manufacturing site with responsibilities and authority that includes ensuring that processes needed for the quality management system are established, implemented and maintained.
Nominee	A named individual of the MCS Product Certificate Holder who is the primary contact between the MCS Product Certificate Holder and the Certification Body.

19

20 **3.1 Responsibilities of the MCS Product Certificate Holder**

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22 MCS Product Certificate Holders are responsible for ensuring that all the requirements
 23 for the certification are met. Ultimate responsibility for compliance lies with the MCS
 24 Certificate Holder although they may need to involve various parties in the MCS
 25 certification process. The MCS scheme does not prescribe the type of organisation
 26 which may hold an MCS Product Certificate. Possibilities include but are not limited to:
 27 product manufacturer, product designers, product branders.

28

29 **4. THE ASSESSMENT PROCESS**

30 **4.1 Initial Assessment**

31 All assessments shall start with an opening meeting to review the assessment
 32 requirements, to identify any Health and Safety issues and to establish any equipment
 33 that will be required. Assessors check all aspects of the FPC process as required. Any
 34 items which are found to be non-conforming with the requirements shall result in a non-
 35 conformity report being raised. Non-conformity reports, together with details of the
 36 proposed corrective actions (and where necessary objective evidence), shall be returned
 37 for review within 45 days of the visit date.

38

39 MCS requirements for each technology type may contain additional FPC requirements
 40 but as a minimum, the requirements as detailed in Table 1 of this document shall be

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41 assessed to confirm they are in place and operating at each relevant site. The relevant
42 site(s) shall be determined by the Certification Body.

43

44 At the end of an assessment or surveillance visit, a closing meeting shall be held to
45 confirm the scope of assessment and identify any non-conformities. Following an initial
46 assessment, the assessor makes a recommendation either that the FPC requirements
47 have been met subject to addressing any non-conformities within 45 days or that a full or
48 partial re-assessment be conducted.

49 4.2 Maintenance of Certification / Surveillance

50 MCS certification is maintained and held in force through surveillance assessment visits
51 and satisfactory completion of agreed product audit testing or product assessment
52 where necessary. Surveillance assessments are conducted as for 5.1 (above) to confirm
53 that the FPC system for the MCS certificated product continues to meet the
54 requirements:

55

- 56 • Where non-conformities are raised, evidence to close these shall be provided
57 within 30 days.
- 58 • Where a major non-conformity is raised a re-assessment shall be conducted
59 (outside of the normal frequency of assessments) within 12 weeks to check the
60 corrective action.
- 61 • Where a major non-conformity is not adequately rectified, the associated
62 certification may be suspended by the relevant Certification Body.

63

64 The surveillance assessment for each relevant site shall be conducted at regular
65 intervals (usually annual). This should take place during a time period that is between 3
66 months prior to and 3 months beyond the assessment due date i.e. on the anniversary
67 date of the certification. Under certain circumstances, at the discretion of the Certification
68 Body, additional assessments may be conducted outside of the normal frequency of
69 assessments.

70

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71 5. REVISION OF MICROGENERATION CERTIFICATION SCHEME
72 (MCS) REQUIREMENTS

73

74 Microgeneration Certification Scheme (MCS) scheme requirements will be revised by
75 issue of revised editions or amendments. Details will be posted on our website at
76 www.microgenerationcertification.org

77

78 Technical or other changes which affect the requirements for the approval or certification
79 of the product or service will result in a new issue. Minor or administrative changes (e.g.
80 corrections of spelling and typographical errors, changes to address and copyright
81 details, the addition of notes for clarification etc.) may be made as amendments.

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APPENDIX A- TABLE 1

Clause	Activity	Requirements
1.	Review of details of contacts, locations and responsibility	<p>At each manufacturing location there shall be a person or persons (Manufacturing Contact) with authority over and responsibility for:</p> <ul style="list-style-type: none"> a) ensuring that the quality management system conforms to the requirements of this MCS document; b) ensuring that the processes are delivering their intended outputs; c) reporting on the performance of the quality management system and on opportunities for improvement, in particular, to top management; d) ensuring that the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented. <p>There shall be two identified contact persons (Nominees) for the MCS Product Certificate Holder. A Manufacturing Contact may also be a Nominee.</p> <p>The Nominee shall facilitate contact between the Certification Body and the Manufacturing Contact at each manufacturing location.</p>

2.	Review of Quality Management System / Quality Plan	There shall be an appropriate Quality Management System in place which includes a Quality Plan for the MCS Certificated Product.
3.	Resolutions of non-conformities	Non-conformities identified during previous FPC assessments shall have been resolved within the time frames specified within this MCS document.
4	Internal Review	There shall be regular (at least quarterly) meetings to review the effect of each of the FPC procedures and deal with any problems in the system. There shall be records of these meetings, corrective actions and their implementation.

5.	Document Control	<p>There shall be a defined document control system/procedure which shall include for all controlled documents:</p> <ul style="list-style-type: none"> • Having on each page its unique identity, the page number and the number of pages. • Being approved by a person with the necessary authority, for issue to all locations where they are to be used. • Removal from all points of issues/use of all superseded/obsolete documents. <p>There shall be a documented mechanism for ensuring that the appropriate, generally the most recent, issues of all relevant national and international standards are available as required.</p> <p><i>Note: Documented procedures are acceptable in electronic form.</i></p>
6.	Customer requirements and contracts	<p>There shall be records of tenders, orders and contracts. Furthermore, there shall be a contract review system which considers the following:</p> <ul style="list-style-type: none"> • Resource • Capability • Contract requirements • Contract amendments

7.	Purchasing	<p>There shall be a documented mechanism for recording suppliers of designs, components and materials (including packaging).</p> <p>The records shall include supplier; identity, addresses and contact details and details of components and materials supplied.</p> <p>There shall be a master list of suppliers. Additionally, there shall be a documented mechanism for adding and removing suppliers from the master list including definition of any required checks on the sustainability of suppliers, e.g. financial liquidity, technical capability, etc.</p>
8.	Review of Product Specification	<p>There shall be a documented mechanism for recording the specification of MCS Certificated Products.</p> <p>There shall be a documented mechanism for ensuring that all changes to this specification are communicated to the relevant MCS Certification Body in a timely manner.</p>
9.	Production Control	<p>All MCS Certificated Products shall be uniquely identified such as to enable verification of their status as an MCS certificated model.</p> <p>This shall include means to establish the date and location of production so that the relationship to the MCS Certification of the products can be ascertained.</p>

10.	Inspection and in process testing	<p>There shall be procedures in place for carrying out inspection and in-process testing under controlled conditions which include:</p> <p>Incoming inspection - All components and materials are checked to ensure that the correct component /material has been supplied and the quantities are correct. Any critical measurements should be identified and inspection records exist including a statement of acceptance or rejection of components/materials and the basis for this decision.</p> <p>In Process and Final Inspection – MCS Certificated Products shall be inspected in process and at final inspection to ensure that the requirements of the standards or specifications are met. Products subjected to testing, in accordance with MCS 011, shall have been subjected to this process.</p> <p>Records shall be kept of the results of incoming, in process, final inspections and in-process testing.</p>
11.	Action on Non-conforming material	<p>There shall be documented procedures for identification of non-conforming materials and components (including packaging), their removal from the production line(s) for MCS Certificated Products and their storage such that their unintended use is prevented.</p> <p>The procedures shall identify the actions necessary for the non-conforming material to be scrapped, re-worked or re-graded including labelling and authorisation requirements.</p>

12.	Equipment	<p>There shall be suitable equipment for factory production control, inspection and testing measurements. This equipment shall be suitably calibrated and labelled to indicate its calibration status.</p> <p>A record shall be kept of this equipment. Each record shall include a description of the equipment (e.g. a manometer), a unique reference code (e.g. serial number), scale and frequency of checking/calibration along with suitable objective evidence to demonstrate that the equipment is capable of the accuracy which is required for the specified measurements.</p>
13.	Storage, handling, packaging and transportation	<p>Storage, handling, packaging, and transportation of the MCS Certificated Product and component parts shall be carried out under controlled conditions to prevent damage or deterioration.</p>
14.	Certification Marks	<p>The MCS Approved mark shall be used in accordance with the MCS Brand Guidelines. The guidelines are available on the MCS website www.microgenerationcertification.org</p>
15.	Records	<p>There shall be records held of production and inspection which shall be regularly examined (at least weekly) by a person of suitable authority.</p> <p>There shall be a mechanism for recording the date of each examination and who it was undertaken by.</p> <p>These records shall be maintained, subsequent to their examination, for a minimum of two years or as per EU regulatory requirements whichever is longer.</p>

16.	Complaints	There shall be a system for managing complaints and there shall be a log /register of any complaints received and the corrective and preventative actions taken to satisfy the complaint, and where necessary the complainant. All complaints must be dealt with in a timely and effective manner.
17.	Corrective / Preventive action	There shall be effective procedures for corrective and preventive actions.
18.	Training and competence	<p>All persons involved in the production of an MCS Certificated Product shall be appropriately trained for all of the relevant activities which they carry out.</p> <p>There shall be a training record for each of these persons. Training records shall include details of the activities and the training. Training records shall identify the training authority and be signed by both the subject of the record and the training authority.</p>
19.	Audit testing	<p>As directed by the Certification Body or as required by the scheme or as detailed in the relevant MCS documents, the MCS Product Certificate Holder shall provide samples of the MCS Certificated Product for audit testing. Samples shall be taken from recent or current production. All products so selected shall be delivered to the Certification Body or the nominated testing laboratory.</p> <p>In the case of brand licence products, selection of samples for audit testing may be made in the factory.</p>

AMENDMENTS ISSUED SINCE PUBLICATION

DOCUMENT NO.	AMENDMENT DETAILS	DATE
1.1	'UK' removed from scheme name; 'Department of Trade and Industry' MCS mark replaced by 'BERR' MCS mark	11/01/2008
1.2	Revision details added	25/02/2008
1.3	Gemserv details added as Licensee. Document reformatted to reflect brand update. References to BERR updated to DECC, MCS logo updated accordingly. Website and email addresses updated to reflect new name.	01/12/2008
1.4	Quality review	10/01/2009
1.5	MCS Mark Updated	25/02/2009
2.0	Addition of Foreword, Scope and Definitions. Clarification of Responsibilities of the MCS Product Certificate Holder. Additional information on the Factory Production Control (FPC) system requirements.	23/11/2018

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