



The [MCS \(Microgeneration Certification Scheme\)](#) certifies microgeneration technologies used to produce electricity and heat from renewable sources. It is designed to provide a level of protection and assurance to consumers as well as a sign of quality.

As it promotes good practice and quality the MCS is also linked to financial incentives with installations having to meet the requirements of this scheme to access these incentives.

There are different MCS schemes depending on the renewable technology, each laying down certain requirements including information that needs to be presented to the customer before an order is placed.

For heat pumps the requirements are laid down in MIS3005. This document has just undergone a major rewrite and has become a lot more prescriptive in its requirements to ensure clients can make informed decisions and are protected.

In order to meet this revised document a lot more work is required to be done before the order is placed, this includes provision of a standard Performance Estimate (based on the properties EPC) as well as a detailed [ground array](#) design.

Traditionally Kensa has used sizing methods that have allowed us to provide clients with all the information required and have resulted in correctly sized heat pumps for the application. This process has been generally quick and has resulted in thousands of satisfied clients. Unfortunately as Kensa now have to provide further information for a MCS approved installation and hence access to any financial grants the process, the sales process has had to change.

The following indicates the information now required to meet the MCS requirements under Kensa's umbrella scheme and hence a MCS compliant installation accessing any eligible grants.

**Without any of the information an installation cannot be classed as MCS compliant.**



### Quoting

Kensa can provide an initial quote to gauge the client's interest. This is based on drawings and initial details provided and uses the same processes Kensa has successfully previously employed to size heat pumps. Please note this is not a MCS compliant quote.

To produce a MCS compliant quote in addition to the above, a Performance Estimate (created from an EPC) is required as well as a heat emitter schedule (including type of floor coverings and pipe spacing if [under-floor heating](#) is installed, size and number of [radiators](#), etc).

As well as these, an indication of the ground type in the area where the ground arrays are to be installed is required. Within in the UK this is usually limited to sand or clay and is either classed as wet or dry. Once this and the EPC is provided, Kensa can produce a MCS compliant quotation and confirm the equipment and prices to the installer/client.

Once the order has been received, room by room heat losses are required to be carried out to BS EN 12831 and any changes to the performance of the heat pump triggers a new Performance Template and if required a variation to contract.

### Ordering

It is important that the sub-contractor no-fee contract and end user no-fee contract are completed and returned by the installer. Blank copies are included with the order forms or are available on request. Part of this contract is the workmanship warranty which needs to be provided to the client for two years following the installation.

### Installation

Upon installation, Kensa guidelines need to be followed and it is important that:

1. A dimensioned map of the ground array installation is drawn and returned to Kensa with all service pipes marked where known.
2. A suitable purge pump is used (i.e. a Clarke SPE1200SS Purge Pump)
3. The ground arrays are pressure tested to BS805 Section 11.3.3.4 and the results noted (details are within the Kensa manual). A pressure test certificate or a declaration is required to confirm that this has been carried out.
4. Two random antifreeze samples are taken and either tested on site with appropriate equipment or returned to Kensa for testing.
5. A signed radiator schedule (provided with the quote) or details of the emitter and floor coverings are returned to Kensa
6. The relevant qualifications of the installer are forwarded to Kensa, i.e. Part P certification and G3 certification.
7. The contract value of the installation ideally broken down into labour and materials is forwarded to Kensa. This is so the workmanship warranty from the installer to the client

can be underwritten by an insurance scheme and is a requirement of MCS/RECC. Kensa will forward details of this to the client.

### **Commissioning**

Upon receipt of all the correct paperwork and samples as outlined above, and following a successful commissioning in conjunction with a Kensa commissioning engineer, a MCS compliance certificate will be generated and we will request that an MCS certificate is generated by MCS. Once we have received it, Kensa will forward this to the client or installer as requested. This certificate can then be used to gain access to any available grants .

### **Summary of requirements from the installer for an installation to fall under the Kensa MCS Umbrella.(Including but not limited to):**

1. The installer is competent. To install a Kensa heat pump this generally means the installer is Gas Safe or Oftec approved, however other measures of competency can be applicable. Part P and G3 certificates need to be forwarded to Kensa.
2. Room by Room heat losses to BS EN12831 are provided/ordered from Kensa with a heating emitter schedule. (The method outlined in the Domestic Heating Design Guide or CIBSE is also acceptable). Floor coverings in each room for underfloor is also required.
3. Indication of the type of ground that the ground arrays are being installed in. This is generally Clay or Sand and either wet or dry.
4. No-fee sub contract forms are completed for the project, one for the installer and one for the client and returned to Kensa.
5. A two year workmanship warranty is provided by the installer to the client.
6. The contract valve (labour and materials) is provided in order that insurance can be arranged to back up the workmanship warranty of the installer.
7. Kensa's installation guidelines are followed and only Kensa supplied equipment (or equipment approved by Kensa) is used.
8. Notification to the DNO that a heat pump and any electrical ancillary equipment is to be fitted at the installation address.
9. A dimensioned sketch of the ground array installation is returned to Kensa, marking any services within the area.
10. A suitable purge pump is used (i.e. a Clarke SPE1200SS Purge Pump).
11. The ground arrays are pressure tested to BS805 Section 11.3.3.4 and the results noted (details are within the Kensa manual). A pressure test certificate or a declaration is required to confirm that this has been carried out.
12. Two random antifreeze samples are taken and either tested on site with appropriate equipment or returned to Kensa for testing.
13. If a heat meter is fitted photos of the nameplate and a copy of the calibration certificate is forwarded to Kensa.



14. At all times in dealing with the client the Renewable Energy Consumer Code (RECC) is followed.
15. Building Regs have been informed of any notifiable work including G3 and Part P requirements. A copy of the certificate is forwarded to Kensa.
16. Confirmation that a copy of the quote (excluding costs if required) has been forwarded to the end user.
17. Photos and video of before and after installation.
18. An as plumbed schematic of the system is provided.

Once all the above points are satisfied the installation can be logged under Kensa's MCS accreditation and a MCS certification from MCS can be issued.