

Underfloor HeatingFor every floor.
For every home.



Pre Commissioning checklist

Ground & Air Source Heat Pumps, Pre-commisioning & Final Commissioning Requirements





Heat Pump model	
Heat pump serial number(s)	Air Source Ground Source
Contractor/Installer	
MCS certificate number	Company name
Email	Phone number
Address & postcode	
End User	
Full name	Mobile number
Email	Phone number
Address & postcode	

- Section (A) checklist Must be completed by the Installer.
- Section (B) Checklist must be completed on final commissioning & setup by an OMNIE Engineer.



Installation checklist to be completed by the installer



The general checklist is intended as an aid for the installation, all items must be checked carefully for compliance. All sections on A1 - A32, where applicable should be completed prior to final commissioning request. Heat source (collector circuit/ground) **Concentration level % Inhibitor protection % Biocide protection %** N/A A1: Has the collector circuit been flushed and cleaned? Has the collector circuit been pressure tested, filled and vented in accordance with BS EN 805: 2000 Clause 11.3.3.4? **A3:** Is the loop filled with antifreeze solution? - Premix? A4: If antifreeze solution is not premix, inhibitor protection percentage **A5:** Biocide protection? State type and % A6: Are the collector circuit flow & return temperature differentials correct? A7: Has a return strainer been fitted to the heat pump collector circuit? A8: Have all the ground loop flow rates been balanced and set to design values? A9: Have Electrofusion joints been installed correctly and tested (Certificate on page 5)? A10: Has the ground manifold been installed according to manufacturer's specification? All: Have ground collectors been installed according to Omnie design, if applicable? Heating Circuit (Emitter Circuit) **A12:** Has the heating system been filled with frost protection antifreeze? Protection temperature? A13: Has the heating circuit been filled & pressure tested and vented in accordance with BS EN 14336: 2009 A14: Have the heat emitter's circulations been balanced? A15: Has a return strainer been fitted to the heat pump emitter circuit & is it clean? **A16:** DHW cylinder - Plate heat exchanger? or coil? Coil surface area? A17: Have all volume flows rates been checked, and are they OK?



A Installation checklist to be completed by the installer



Electrical	Υ
A18: Is the mains voltage checked within correct range?	
A19: Have the correct rating circuit breakers been fitted to all circuits?	
A20: Is the protective earth impedance within specification?	
A21: Rotary field direction clockwise? (3 Phase Only)	
A22: Have all electrical connections been checked for tightness?	
A23: Is the outdoor sensor mounted on a north or east facing wall?	
A24: Have all mechanical & electrical components been checked for operation?	
Heat Pump Installation	Υ
A25 Is there satisfactory access to the heat pump?	
A26 Have the correct rating circuit breakers been fitted to all circuits?	
A27: Is the heat pump protected from extreme weather i.e. High winds? (Air Source)	
A28: Is the heat pump installed in a weather proof area above the dew point? (Ground source)	
A29: Are the pipe/cable service ducts/channels closed and sealed?	
A30 Are pipes lagged to prevent heat loss?	
A31: Has the heating system been designed, installed to Omnie's recommendations, specifications, schematic and installation instructions?	



A Fusion welding - Pressure test certificate



Ground Source Only

Installed by	Signed	Date
Date	Sign (Block Letters)	
Site address	Witness signed	Date
OMNIE project reference no	Sign in (Block Letters)	

Please complete, sign and return to projects@omnie.co.uk to validate warranty.

Fitting type	Fitting number	Joint position	Temperature	Time of weld (sec)	Pass	Notes



Completion report & request for final commissioning



The operator of the system should be present during

All sections under (A) pages 2-6 have been completed

I, the undersigned, hereby request commissioning.

commissioning in order to ensure that proper instruction is

During commissioning, the heat pump system will be inspected to ensure that it is functioning properly. This ensures that all factory specifications have been checked

and that the system can operate reliably over an extended period and is mandatory for extension of the warranty services.

Sending the completion report is a request for a technician

authorized by the manufacturer to commission your heat pump.	Preferred date & time
Initial commissioning Repeat commissioning	
The site installation has been completed according to the installation instructions and all checks have been carried out & the necessary sections completed within this document. I request a date for the commissioning engineer to attend	Alternative date & time
site, commission the heat pump and register it on the AlphaWeb server. The completion report should be submitted 14 work days before the desired commissioning date. If there is a conflict with the date, you will be contacted.	
I/we hereby confirm that all preliminary work required for final commissioning has been carried out and completed. The system is ready for operation.	Name (Block Letters)
In the event that the heat pump system is not ready for operation and if installation work has to be performed by the commissioning technician during commissioning, this will involve charges to the contractor. If the heat pump system is not ready for operation, the commissioning technician can request a repeat commissioning, which will involve	Signature
additional costs. The contractor or an authorized representative must be	Date

received.

present during commissioning.

B Final commissioning & handover



All sections covered under (B) should be completed by the OMNIE Engineer or an experienced Engineer. Some of the sections are provided by the MCS installer as part of the handover requirements. Have you explained how the controls have been set to ensure that the system operating temperature is **B1**: no higher that Temperature Star Rating (TFSH) at the design external temperature? **B2:** Recorded the control settings (below)? Has the heat pump and other components of the system been commissioned according to the **B3**· manufactures instructions and the system design parameters? Has a label been attached to the system in accordance with MIS 3005? R4· Have you given the customer a handover pack? **B6:** State the issue number of MIS 3005 used? Have you informed the customer that they will receive an MCS installation certificate that they should keep with their handover pack? B8: Has the final copy/sign off documents being signed by client (MCS only)? **B9:** Are all system controls set upto design values? B10: Are all the emitter circuits flow & return temperature differences correct? B11: Does the installation conform to MCS Domestic RHI Metering Guidance? B12: What is the outcome of procedure A in the MCS Domestic RHI Metering Guidance? B13: Is the installation meter ready? If not please state why? **B14:** Have the requirements of MIS 3005 been met? Control settings **Flow Temperature** 01. **Return Temperature** 02. 03. 04. 05. 06. 07. 08.

09. 10.



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