

Ground to Water & Water to Water Heat Pump Commissioning Checklist & Service Record

It is a requirement that the heat pump be installed and commissioned to the manufacturers' instructions. The warranty must be registered with the manufacturer and in accordance with their terms and conditions.

The system shall be serviced in line with the manufacturers' recommendations annually and must be carried out by a competent person. The details should be recorded in the manufacturers Service Record. Where the manufacturer does not provide a Service Record, then the details should be recorded in this Service Record.

Failure to comply with the manufacturers' servicing instructions and requirements could invalidate the warranty. This does not affect the customer's statutory rights.

This Commissioning Checklist is to be completed in full by the competent person who commissioned the system as a means of demonstrating compliance with the appropriate Building Regulations.

Disclaimer: While the information in this document been compiled in good faith, no warranty is given or should be implied for its use and the Heat Pump Association hereby disclaims any liability that may arise from its use to the fullest extent permitted under applicable law.

General Information					
Customer Name					
Installation Address and postcode					
Company Name					
Company Address					
Company Telephone					
Commissioning Engineer Name			Commissioning Date		
MCS Company Registration No. (if applicable)					
F-Gas certification number (Refrigerant Split HP only)					
G3 Certification number (if applicable)					
DNO notified and approved		<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Installation complies with Building Regulations		<input type="checkbox"/> Yes		Building Regs Notification Number (if applicable)	
Incoming mains water quality checked as per manufacturer instructions			<input type="checkbox"/> Yes		<input type="checkbox"/> No*
System Schematic reference number (optional)					
System Design					
Property Design Heat Loss		(kW)			
Outdoor Design Temperature		(°C)			
Design flow temp at Outdoor Design Temp		(°C)			
Heating Delta T		(K)			
Have heat emitters been sized to meet the design heat loss		<input type="checkbox"/> Yes <input type="checkbox"/> No*		Do all emitters heat-up evenly with similar dT across flow return <input type="checkbox"/> Yes	
Heat Pump System Type					
System function type – HEATING		<input type="checkbox"/> Heat Pump only		OR <input type="checkbox"/> Hybrid (fossil fuel boiler)	
System function type – DHW		<input type="checkbox"/> Heat Pump only		OR <input type="checkbox"/> Hybrid (fossil fuel boiler)	
Heat Pump Unit Information					
Heat Pump Manufacturer				Model No	
Heat Pump Type (source type)		Ground <input type="checkbox"/> Water <input type="checkbox"/>		Serial No	
Refrigerant Type				Refrigerant weight (total) kgs	
Product MCS Certificate No. (if applicable)					
Pipework Insulated [Note A]		<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Minimum clearances around unit provided		<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Anti-Vibration Installed		<input type="checkbox"/> Yes		<input type="checkbox"/> No	
Isolation Valves (Flow & Return) Installed		<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Which of the following protective devices are installed on the circuit serving the compressor?		<input type="checkbox"/> MCB		<input type="checkbox"/> RCD <input type="checkbox"/> RCBO	
Device rating (Amps)					
Device Type (e.g. Type B)					
Isolator(s) fitted		<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
DHW Cylinder Information					
Cylinder Manufacturer				Model No	
Cylinder Type (unvented, vented, thermal store, etc.)				Serial No	
Storage volume		(litres)		Stored DWH set temperature (°C)	
DHW Time & Temp control provided [Note A]		<input type="checkbox"/> Yes		G3 Certificate complete (unvented) <input type="checkbox"/> Yes	
Legionella protection cycle		Temperature: (°C)		Frequency: <input type="checkbox"/> daily <input type="checkbox"/> weekly	

Heating Control Information				
Maximum Heating Flow Temperature Set	(°C)			
Heat Pump Circuit Flow Rate	(l/min)			
Weather Compensation or Internal Temperature Control provided [Note A]	<input type="checkbox"/> Weather Compensation <input type="checkbox"/> Internal Temperature Control			
Weather compensation settings	Min flow temperature:	(°C)	Outdoor ambient temperature:	(°C)
	Max flow temperature:	(°C)	Outdoor ambient temperature:	(°C)
Timer or Programmer provided [Note A]	<input type="checkbox"/> Yes			
For hybrid systems, a single master control has been fitted and commissioned	<input type="checkbox"/> Yes			
Heating System Information				
Electric Back-up heater (where installed)	(kW)	Bi-valent switch-on temperature	(°C)	
System Balanced	<input type="checkbox"/> Yes <input type="checkbox"/> No*			
Auto Bypass Fitted	<input type="checkbox"/> Yes <input type="checkbox"/> No*	Hydraulic Separation	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
Heating Expansion Vessel Fitted	<input type="checkbox"/> Yes <input type="checkbox"/> No*	Charge	(bar)	
Buffer vessel 4-pipe fitted (where needed)	<input type="checkbox"/> Yes <input type="checkbox"/> No*	If Yes, state volume	(litres)	
Volumiser 2-pipe (where needed)	<input type="checkbox"/> Yes <input type="checkbox"/> No*	If Yes, state volume	(litres)	
System Flushed & Cleansed as BS7593	<input type="checkbox"/> Yes <input type="checkbox"/> No*			
System purged of air as BS 7593	<input type="checkbox"/> Yes			
System Water Quality Regime	<input type="checkbox"/> Inhibitor (as BS 7593) State Inhibitor Brand:			
	<input type="checkbox"/> Other State Corrosion Protection Method (e.g. VDI 2035):			
Microbiological growth protection for systems <60C	<input type="checkbox"/> No*			
	<input type="checkbox"/> Biocide (as per BS 7593) – State Brand:			
	<input type="checkbox"/> Other (as per BS 7593) – State method:			
In-line filter fitted (as per BS7593)	<input type="checkbox"/> Magnetic Type OR <input type="checkbox"/> Other Type	Brand:		
Strainer fitted (as per manf. instructions)	<input type="checkbox"/> Mesh Type OR <input type="checkbox"/> Other type	Brand:		
Minimum System Water Volume for heat pump operation when system controls are closed	Min required by HP manf.	(litres)	Minimum is met: <input type="checkbox"/> Yes	
Hybrid Systems fossil fuel type (where applicable)	Gas <input type="checkbox"/>	Oil <input type="checkbox"/>	LPG <input type="checkbox"/>	Electric boiler <input type="checkbox"/> Other <input type="checkbox"/>
Only complete ONE section – Closed Loop OR Open Loop				
Closed Loop Collector				
Collector Type	Horizontal <input type="checkbox"/>	Vertical <input type="checkbox"/>	Water Closed Loop <input type="checkbox"/>	
Active Collector Loop Length	(m)	Spacing	(m)	
No of Bore Holes		Depth	(m)	
Collector Flushed, Cleansed, Purged as per manufacturer's instructions.	<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Collector Pressure Tested as BS EN 805	<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
System Filtration as per manufacturer's instructions	<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Collector Loops Balanced	<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Total Collector Flow Rate	(l/min)			
Fluid type (tick all that apply)	<input type="checkbox"/> Antifreeze <input type="checkbox"/> Inhibitor <input type="checkbox"/> Biocide			
Open Loop Collector				
Open Loop Type	<input type="checkbox"/> Well <input type="checkbox"/> River <input type="checkbox"/> Lake <input type="checkbox"/> Other (specify):			
Abstraction Licence if over 20 cubic meters (m³)	<input type="checkbox"/> Yes	Reference number & expiry date		
Water Flow Rate Open Side	(l/min)			
Thermal Transfer Fluid Flow Rate	(l/min)			
Collector Flushed and Cleansed as BS EN 805	<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Intake Filter Installed on Open Side	<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Filter on heat pump evaporator side?	<input type="checkbox"/> Yes		<input type="checkbox"/> No*	
Fluid type (tick all that apply)	<input type="checkbox"/> Antifreeze <input type="checkbox"/> Inhibitor <input type="checkbox"/> Biocide			

Thermal Transfer Fluid Antifreeze Level		(°C)	Brand:				
Thermal Transfer Fluid Temp after 1hr	Incoming		(°C)	Outgoing		(°C)	
Declaration							
Installer Signature				Print Name			
<i>I confirm the installation complies with all relevant, current building, electrical, water and F-gas regulations, and the manufacturer's instructions and the end user has been given all relevant paperwork and knowledge to operate it</i>							
Customer Signature				Print Name			
<i>I confirm the equipment has been demonstrated, I understand how to operate it, and I have received all relevant paperwork.</i>							
Additional Notes							
Note [A]. See guidance provided in the Approved Document Part L. “Building work must meet all relevant requirements of the Building Regulations. Complying with the guidance in the approved documents (AD) does not guarantee that building work complies with the requirements of the regulations – the approved documents cannot cover all circumstances. Those responsible for building work must consider whether following the guidance in the approved documents is likely to meet the requirements in the particular circumstances of their case. There may be other ways to comply with the requirements than those described in an approved document. If those responsible for meeting the requirements prefer to meet a requirement in some other way than described in an approved document, they should seek to agree this with the relevant building control body at an early stage.”							
Note: If answered No to any of the * highlighted questions, please add reason(s)							

Declaration

I confirm the installation complies with all relevant, current building, electrical, water and F-gas regulations, and the manufacturer's instructions and the end user has been given all relevant paperwork and knowledge to operate it

I confirm the equipment has been demonstrated, I understand how to operate it, and I have received all relevant paperwork.

Note [A]. See guidance provided in the Approved Document Part L. “Building work must meet all relevant requirements of the Building Regulations. Complying with the guidance in the approved documents (AD) does not guarantee that building work complies with the requirements of the regulations – the approved documents cannot cover all circumstances. Those responsible for building work must consider whether following the guidance in the approved documents is likely to meet the requirements in the particular circumstances of their case. There may be other ways to comply with the requirements than those described in an approved document. If those responsible for meeting the requirements prefer to meet a requirement in some other way than described in an approved document, they should seek to agree this with the relevant building control body at an early stage.”

SERVICE RECORD

It is recommended that your heating system is regularly serviced and maintained, in line with manufacturers’ instructions, and that the appropriate service record is completed.

Service 1:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	
Service 3:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	
Service 5:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	
Service 7:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	
Service 9:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	

Service 2:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	
Service 4:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	
Service 6:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	
Service 8:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	
Service 10:			
Engineer Name			
Engineer Company			
Contact no.			
Comments:			
Signed		Date	