SAMSUNG

Air Source Heat Pump

Handover and Maintenance Log Book

Samsung HTQ
VHTQ1.0823

SAMSUNG

Who are Samsung?

Samsung is an internationally recognised brand, manufacturing some of the most popular products on the market. Samsung's range of products can be found in many locations. Samsung offers reliable products with their slogan 'Together for Tomorrow' highlighting innovation. Samsung Electronics introduced its first air conditioning unit in 1974. Since then, they have continued to develop a wide range of products, including heat pumps. Each Samsung heat pump has been created with maximum energy efficiency as a priority.

In a addition to having a high energy output, the Samsung heat pumps also feature a sleek design with minimal noise output. The Samsung heat pumps are manufactured using high-quality, durable materials so that your heat pump lasts despite being outdoors.

The HTQ is a fully integrated Samsung Heat Pump system that is designed to provide all year-round comfort. It provides stable high temperature heating at all outdoor conditions with minimum noise. Its stylish dark grey colour means that it seamlessly complements the styling of many modern buildings. its compact design also has a low profile, so it can fit in neatly below a window.

Samsung Warranty Registration

Samsung offer a 2-year standard warranty on all air source heat pumps they manufacture. To gain access to the extended 7 year warranty, the heat pump must be installed by a Certified Samsung Partner that has attended the appropriate training course.

The Samsung extended warranty is registered to the address of installation, not the installer or supplier.

Your unit is not automatically registered for warranty your installer must register the heat pump with Samsung directly in order for you to gain access to the extended 7-year warranty. Once this has been completed, you the homeowner, will be contacted directly by Samsung and provided with a warranty certificate.

In order for you to maintain your extended warranty you will need to have a maintenance agreement in place for the full term of the extended warranty. This agreement must cover annually visit to ensure your warranty does not become void.

Warranty Registration Procedure:

1. Complete installation & Commissioning
2. Request registration with Samsung
3. Provide Commissioning & Maintenance documents
4. Samsung Internal approval
5. Homeowner Customer is welcomed & contacted

How the controller should look whilst running in normal operating mode

This is what the controller looks like when the unit is running in Heating mode:

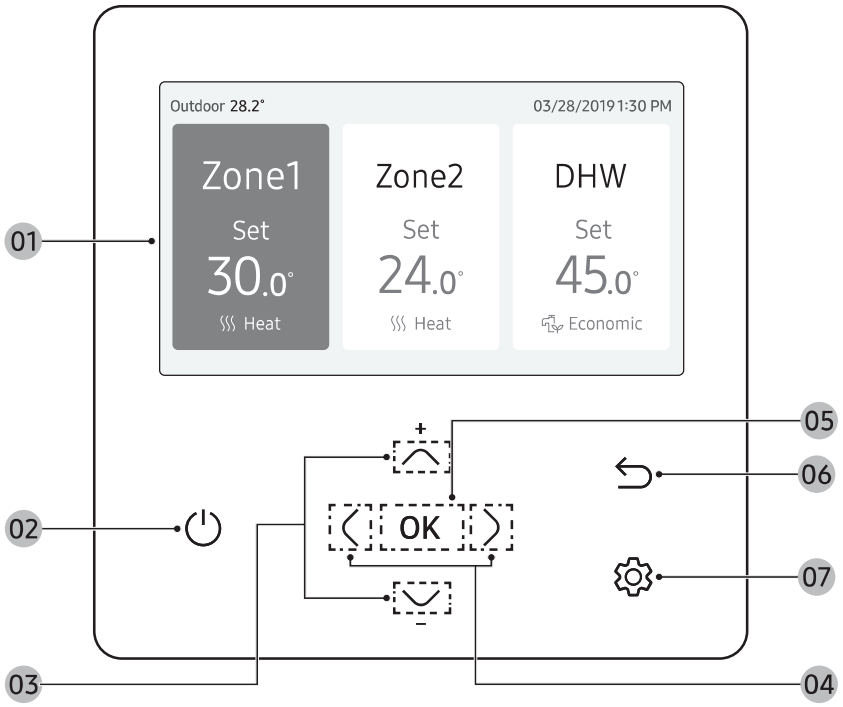
This is what the controller looks like when the unit is running in Hot Water mode:

How the controller should look when a fault occurs

This is what the controller looks like when the unit goes into a fault.

If this happens, take a photo of the controller as a reference and call your engineer, who will be able to assist you further.

The Interface at a glance



Location	Function
1	Operation status display - Displays the operation/function settings and statuses.
2	Operation On/Off button (LED display) - Turns the Air to Water Heat Pump power On/Off
3	Up/Down button - Moves between items vertically or changes the set temperature.
4	Left/Right button - Moves between items horizontally or changes the item value.
5	OK button - Saves your new settings.
6	Save & Return button - Saves your new settings and returns to the previous step.
7	Option button - Selects the detailed setting function.

Please Note

- The operation mode display on the remote controller changes depending on the selected language.
- Some functions may not be available, depending on the product specifications.
- You can see the operation status on the LED display.
  ON: Operating
  Blinking: An error occurred
  OFF: Turns off

Energy Usage and Running Costs

Your Samsung EHS heat pump will use more energy during the winter months when the ambient air temperature is cooler. Don't be alarmed if you see these winter months accounting for a large percentage of your annual heating bill, as illustrated in the chart to the right, the system will use much less energy during the warmer months.

You should make a note of your running costs each month from the electricity meter, they are around the same size as a circuit breaker and look like the below image.

Month	% Energy used / month
January	19%
February	17%
March	12%
April	7%
May	4%
June	2%
July	1%
August	1%
September	4%
October	6%
November	12%
December	15%

Each month, make a note of the date, time, each electric meter reading, and the reading of electric meter for the whole house. You may also wish to take a photo of the house meter.

Date	Time	Electric Meter 1 (kWh)	Electric Meter 2 (kWh)	Electric Meter for the whole house (kWh)

This next section is for maintance of your Samsung Heat Pump System and is for your installers use only!

The Samsung heat pump should be maintained at least once a year to comply with warranty terms and conditions.

You should expect your maintenance engineer to complete the following procedures and record commissioning data with every annual maintenance. Please store these maintenance records somewhere safe, as you may need them if you have a warranty claim. See the back of this handover booklet for your maintenance records.

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Samsung are now insisting that all installer companies are registered before they can get the 7 year warranty. To do this one engineer has to attend Samsung's online training. Every warranty will be checked by Samsung to make sure it been installed by an accredited company.

You can now register for the Samsung Extended 7 year parts and labour contribution warranty, the warranty will start from the date of delivery to site. This warranty covers the Samsung components only. The warranty does not cover radiators, cylinders, UFH, valves, pumps etc. In the event of a warranty claim we will credit the maintenance engineer a labour allowance for works completed, details are on the certificate.

YOU MUST submit photos of the outdoor unit serial number from the left hand side of the outdoor unit and the serial number inside the Samsung control box on the bottom right

Once this is done a certificate and a maintenance book will be emailed to the installer, the homeowner will need a copy of this certificate, and proof of maintenance. Samsung may ask for this when a warranty claim is made.

Installation Details

Your Name	
Your email address	
Outdoor model number	
Outdoor serial number	

You will find this on the side of the heat pump

Indoor unit model number	
Date delivered	/ /
Name of Homeowner	
End user email address	

This is where the warranty certificate will be sent by Samsung

Installation address	
Post code	

Installation Details

Company name	
Engineers name	
Office telephone number	
Is this your first Samsung install?	☐ YES / NO ☐
Date delivered	/ /
Will you or your company be maintaining the Unit?	☐ YES / NO ☐

If No, Freedom Heat Pumps will advise of an engineer who can do this

Install Photos

Please take at least 6 photos showing the outdoor unit, control box and cylinder cupboard.

Please include a photo of the outdoor unit serial number (right hand side of the unit) and a photo of the Indoor unit (mim) serial number, to the right of the PCB inside the box.

Maintenance procedure

Stop the unit, clean the water filters, shut the valve, undo the back pull the strainer out, clean it and then put it back in.

Test the concentration of the Anti-freeze (glycol) in the system using a Glycol tester the level should be 25%. If you don't have a glycol tester a glycol tester / refractometer can be bought from your heat pump supplier or online.

You need to test the operation of the unit against the hot water cylinder. So first we need to draw off 50litres of water, run a couple of taps for 5-10 minutes. The unit should start up automatically in hot water mode, if it doesn't, press the right arrow on the controller and press the power button to turn on DHW mode. In 3-4 minutes the heat pump will start heating the cylinder. If you go to the operation status screen, you will see "DHW Tank" lit up in blue.

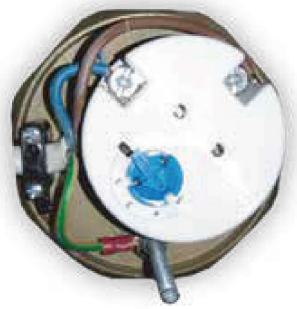
The heat pump should be able to achieve 50 C cylinder temperature without using the immersion heater.

Check the outdoor unit for damage & debris, the coil needs washing. We recommend you use an approved air conditioning/heat pump cleaning chemical, your distributor will stock this. Instructions are given on the bottle. You also need to clean and polish the outside casing.

Refill the system if necessary pressure should not exceed 3 Bar

Hot Water Cylinder

Check electrical connections & sensor is above the immersion and at least 100mm into the tank and the overheat thermostat is set to 70°C. On a Telford cylinder set the stat to 5.



If you want to test the cylinder quickly, press the rigth arrow to highlight the DHW section of the screen and press OK, then press OK again and it should give you options for economic, standard power and forced, scroll down to forced, press ok.

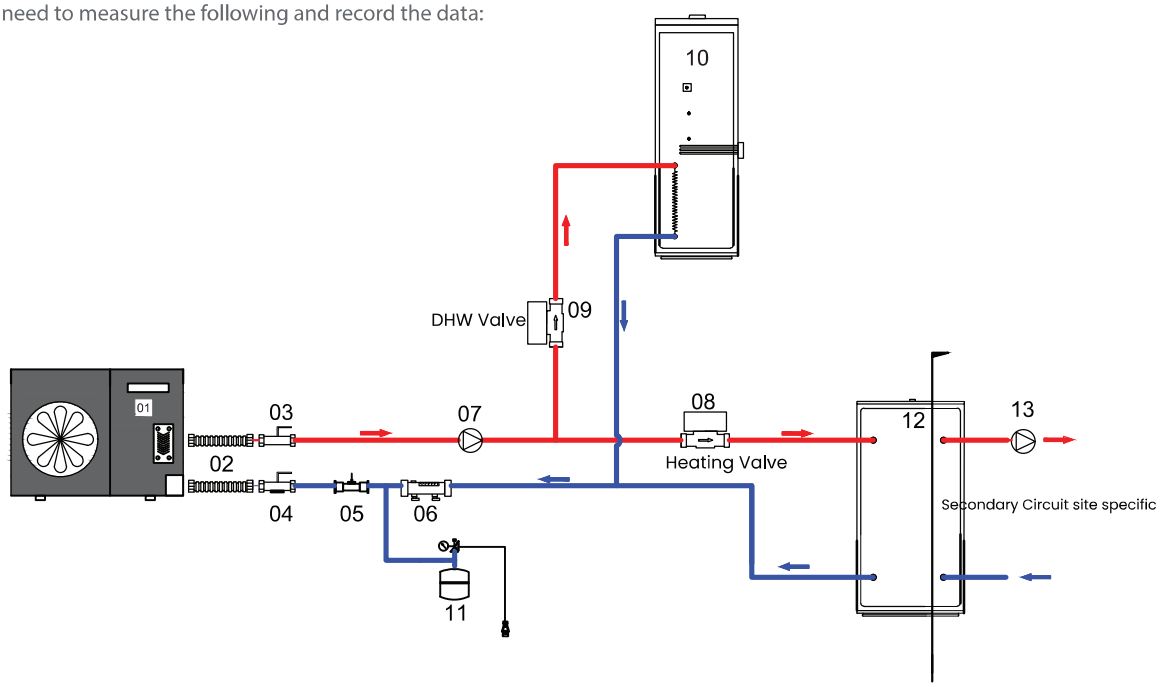
You should also check the immersion heater is operating correctly, meter out and/or check that when power on it is drawing 12-13Amps.

With the unit running flat out, measure the temperature of the air as it enters the coil and the temperature of the air in the garden. They should be the same. Check cold air is not recirculating.

Heating Mode Commissioning Data

What type of system do you have?	☐ Pre-plumbed / Separate Cylinder ☐
Is there a Header, Buffer or Heat Exchanger installed?	

You need to measure the following and record the data:



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Return temp at Heat Pump		Flow rate Measure from the controller	
Flow temp into header / plate		Air temp at the back of the unit	
Return from header / plate		Ambient air temp Measure from the garden	
Flow temp out of header / plate to heating			

Hot Water Mode Commissioning Data

You must be running the heat pump in hot water mode for this section

Hot water cylinder model No.		Water flow temp at cylinder Measure with pipe thermometer	
Cylinder water temp at start-up Measure from the remote controller		Water return temp at cylinder Measure with pipe thermometer	
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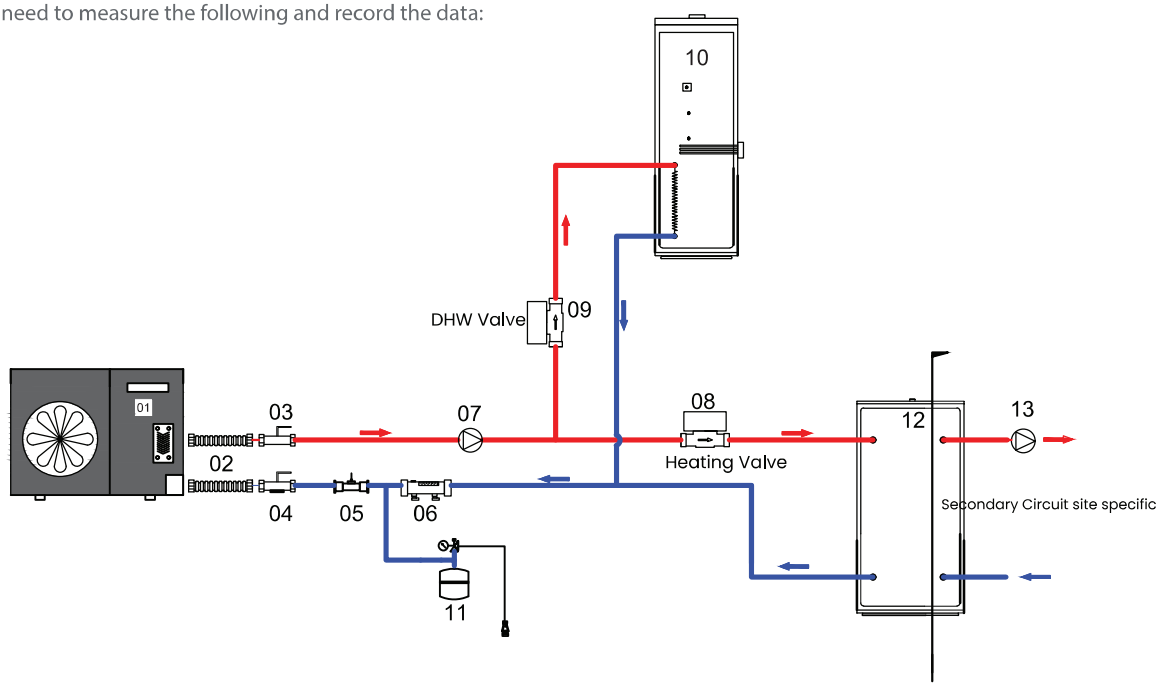

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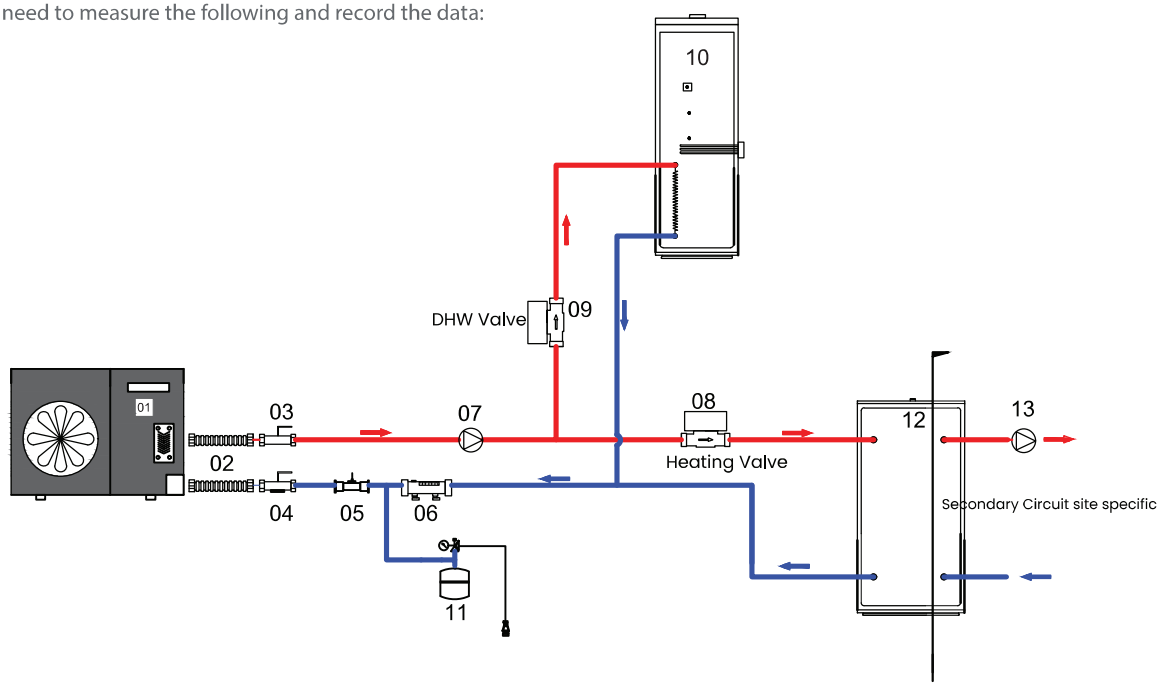

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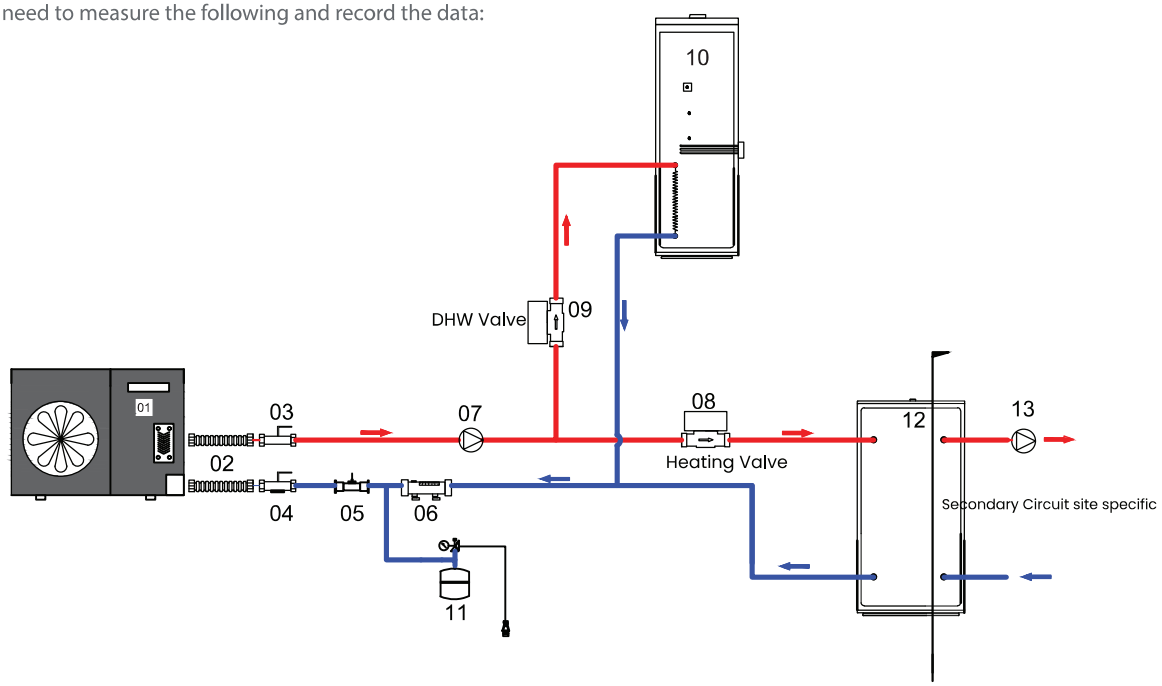

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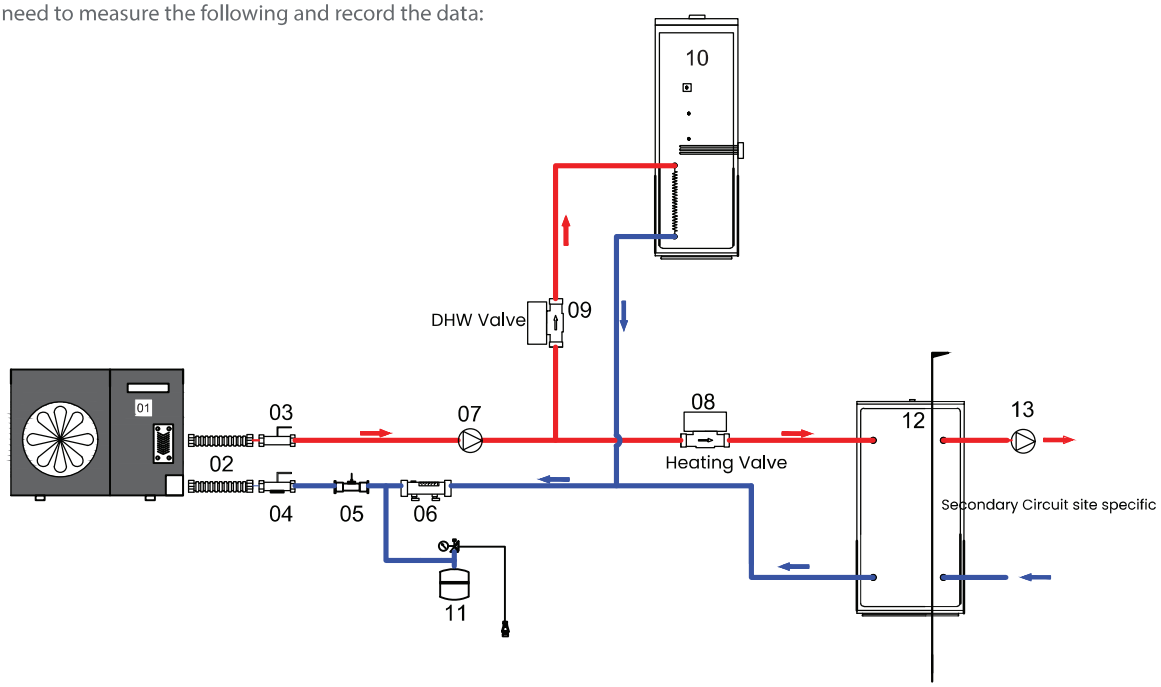

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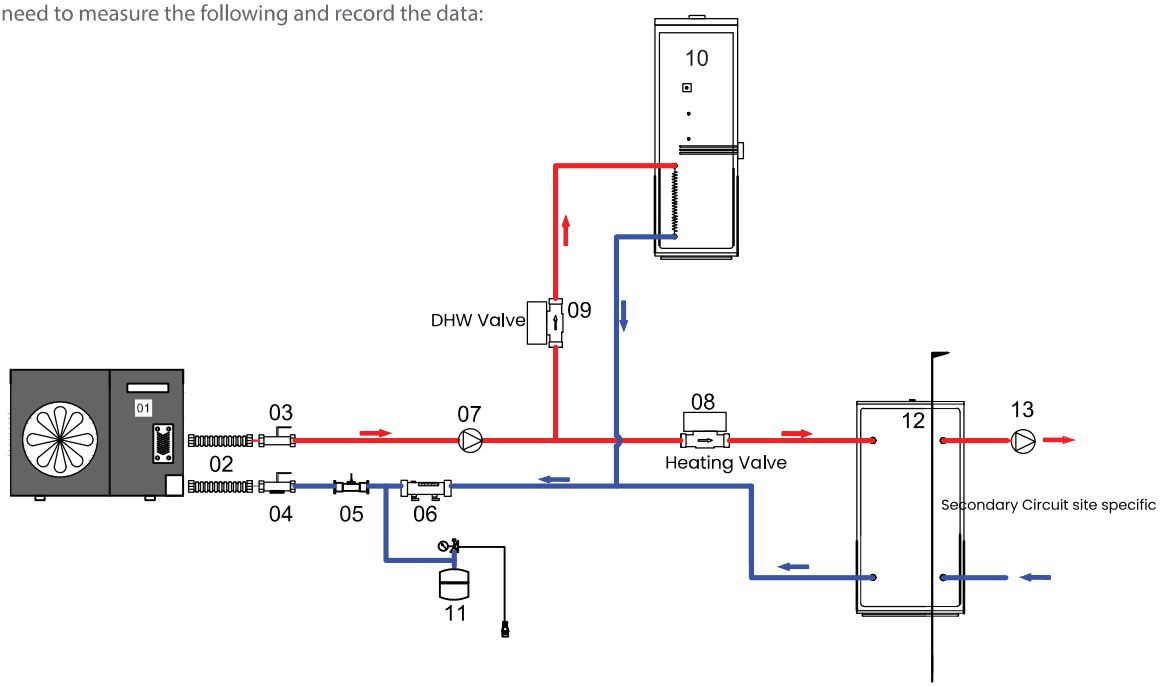

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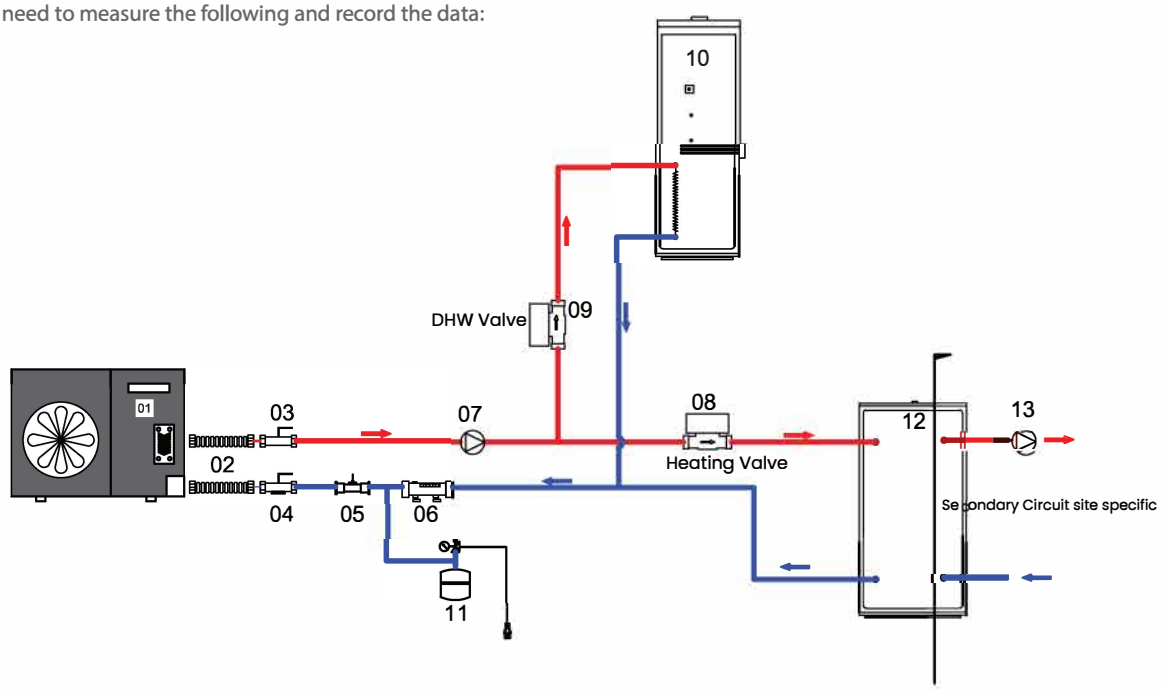

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Contacting an Installer:

If your installer offers a servicing and maintenace pack we strongly advise to keep your heat pump maintained. This must be done once per year in order for you warranty to be valid.

Installers Full Name:

Company Name:

Phone Number:

Email Address:

If your installer does not offer a service and maintenance package please find a local installer who will. You can find a list of installers Via the Freedom Heat Pump website www.freedomhp.co.uk. Visit the homeowner page and there you can search via postal code to find an installer local to you.