

CE

BRIT THERM

HEATING PUMPS

Installation & Operating Instructions



**Please read these instructions
carefully before installation**

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General Information

These instructions guide you through the installation and operation of this **BritTherm™** circulation pump. The **UPS2A Domestic** is a high efficiency circulator which is perfectly suited to operate in:

- Single zone heating systems
- Multi zone heating systems
- Underfloor heating systems

The pump incorporates a permanent magnet motor with differential pressure control which enables its performance to be aligned with actual system demand.

It has a connection size of **1½"**, a maximum head of **6 meters** and a port to port distance of **130mm** making it perfect for domestic applications.

Pump Liquid

BritTherm™ pumps require clean, thin, non-aggressive liquids to operate correctly and prevent damage to their internal components.

The liquids used must not contain any solid particles, fibres or mineral oil.

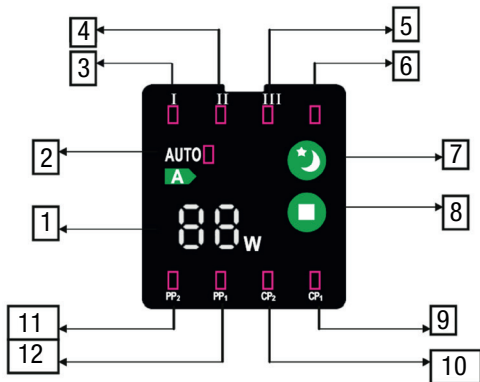
Liquids running through circulation pumps used on heating systems must comply with the accepted standards of quality especially in domestic applications.

Liquids that do not comply will void the warranty offered with the circulation pump.

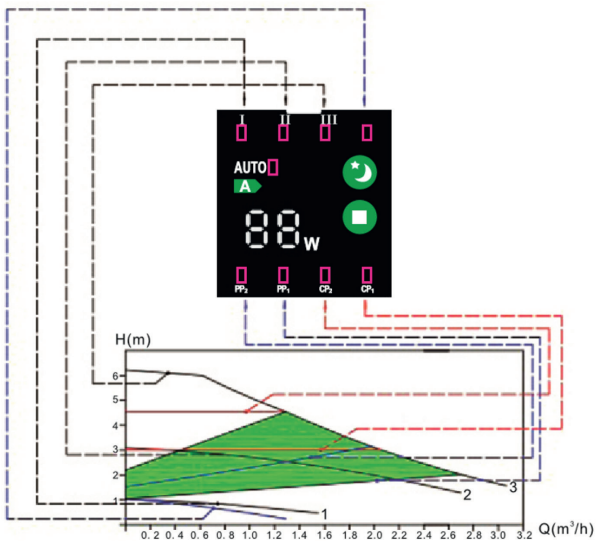
Control Panel

A diagram of the control panel can be found on the next page, here's what each of the numbers represent:

1. Screen showing actual working power
2. Light field indicating AUTO mode
3. Lowest manual speed option
4. Middle manual speed option
5. Highest manual speed option
6. Light field indicating NIGHT mode
7. Button for selecting NIGHT mode
8. Button for selecting each pump setting
9. CP1: Min. constant pressure curve
10. CP2: Max. constant pressure curve
11. PP1: Min. proportion pressure curve
12. PP2: Max. proportion pressure curve



Pressure Curve



Operating Modes

I - (Minimum) the pump runs at a constant fixed speed and therefore on a constant curve.

II - (Medium) the pump runs at a constant fixed speed and therefore on a constant curve.

III - (Maximum) the pump runs at a constant fixed speed and therefore on a constant curve.

*Quick venting of the pump can be achieved using speed III for a short period.

AUTO - the power rises and falls in line with the system flow rate.

*Ex - factory setting.



- (Night Mode) the pump reduces power automatically, after 2 hours it drops to its minimum level (5-10 Watts).

*After 7 hours the pump reverts to its original setting.

PP1 - (Proportional Pressure 1) the duty point moves up/down on the lowest proportional pressure curve. Head pressure is then reduced and increased at falling and rising heating demand respectively.

PP2 - (Proportional Pressure 2) the duty point moves up/down on the highest proportional pressure curve. Head pressure is then reduced and increased at falling and rising heating demand respectively.

CP1 - (Constant Pressure 1) the duty point of the pump moves out or in the constant pressure curve depending on heating demand. Head pressure remains constant irrespective of heating demand.

CP2 - (Constant Pressure 2) the duty point of the pump moves out or in the constant pressure curve depending on heating demand. Head pressure remains constant irrespective of heating demand.

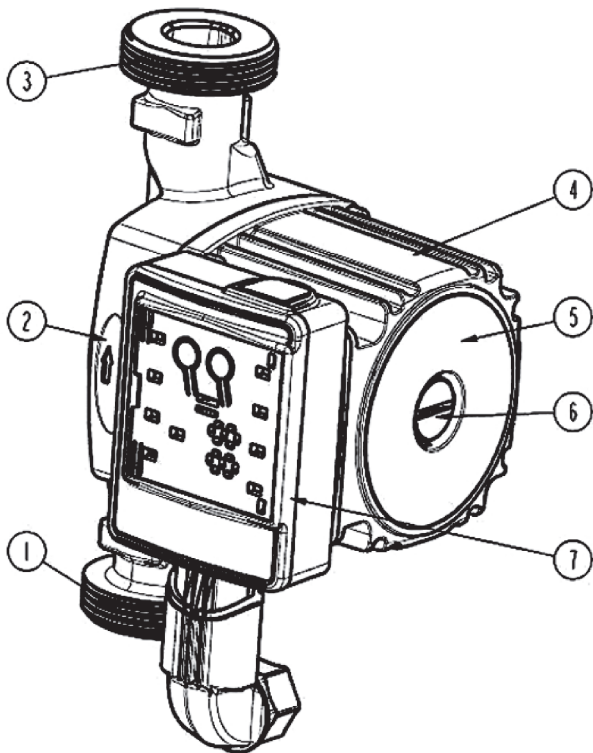
Fault Finding



Before starting any work on the pump please ensure the electricity supply is turned off and cannot be accidentally switched back on at any time.

Fault	Control Panel	Cause	Remedy
Pump doesn't run at all	Light is off	A) One fuse is blown B) The current/voltage operated circuit breaker has tripped out C) The pump is defective	Replace fuse Cut in the circuit break Replace pump
	Only shows power	A) Failure of electricity supply, might be too low	Check the supply falls within the specified range
Noise in the system	Lights on for power and pump setting	A) Air in system	Vent the system
		B) Flow is too high	Reduce the suction head
Noise in the pump	Lights on for power and pump setting	A) Air in pump	Let the pump run, it vents itself over time
		B) Inlet pressure is too low	Increase the inlet pressure. Check the air volume in the expansion tank if installed
Insufficient	Lights on for power and pump setting	A) Pump performance is too low	Increase the suction head

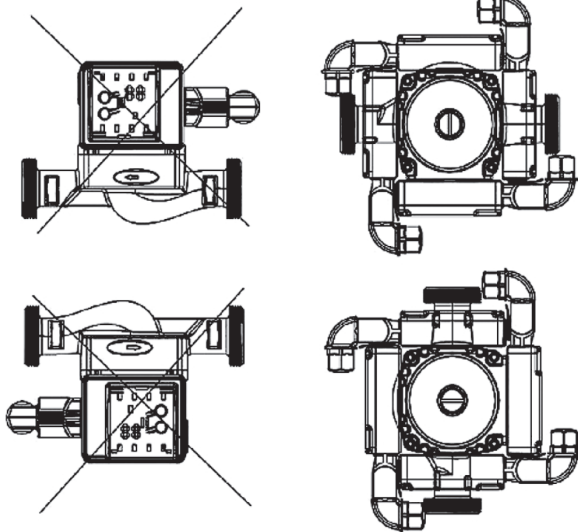
Pump Diagram



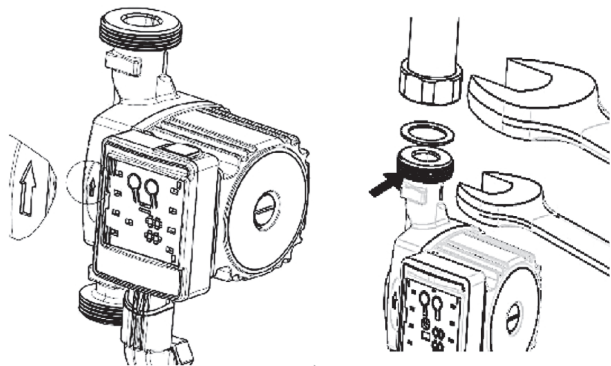
- 1. Suction Joint
- 2. Condensate Outlet
- 3. Pump Housing
- 4. Motor Housing

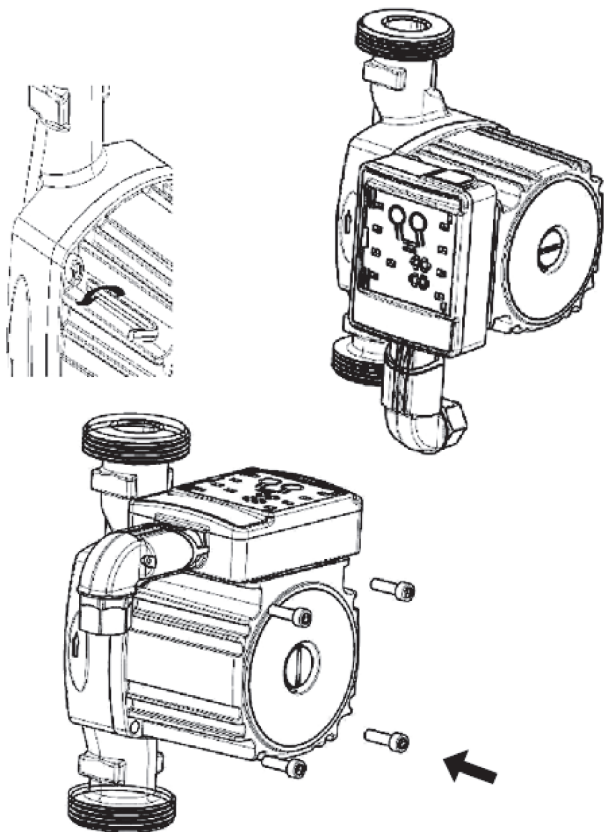
- 5. Label
- 6. Ventilation
- 7. Control Panel

Installation



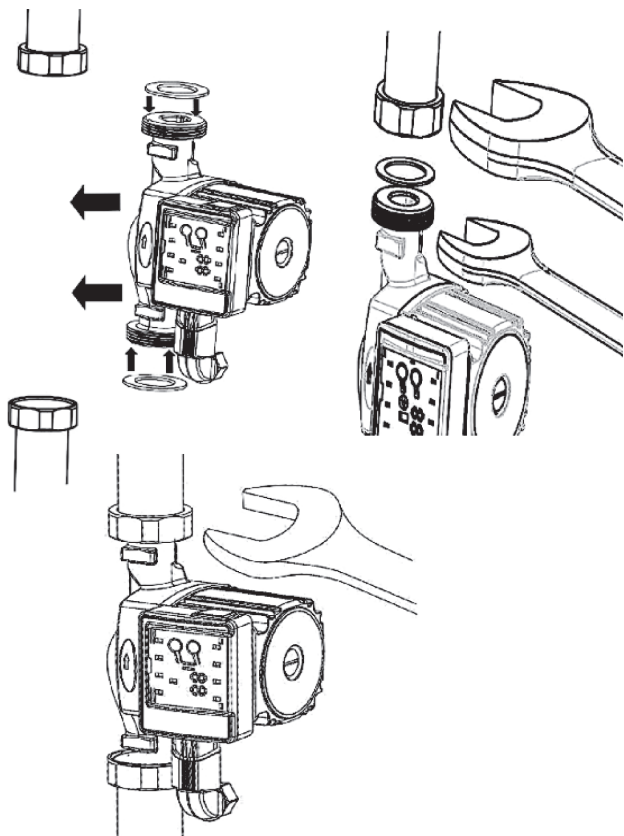
Attention: Ensure the pump is installed with the motor shaft in the horizontal position.





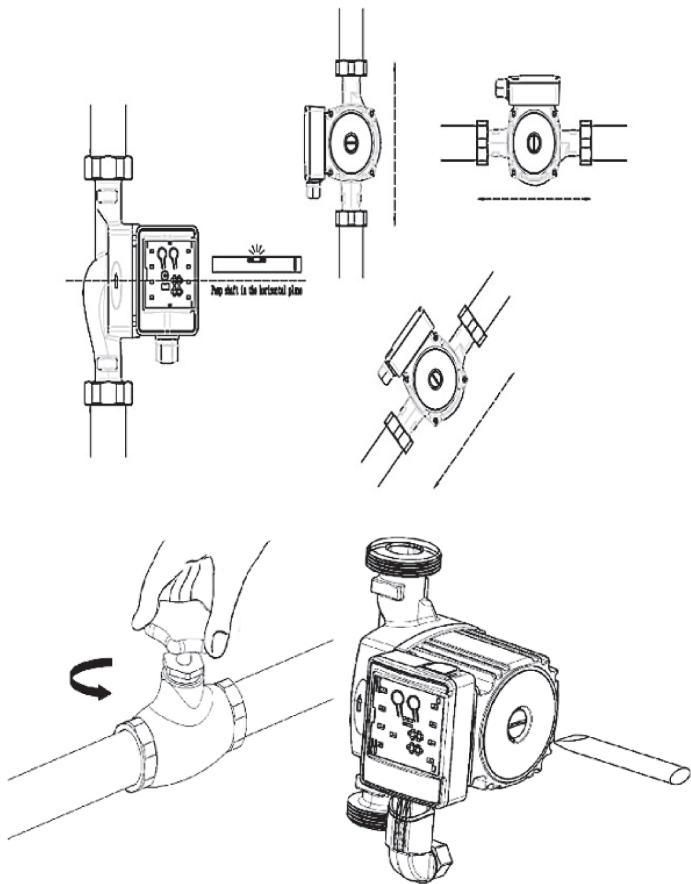
The pump liquid may be scalding hot and under high pressure. Before removing head screws the system either requires draining, or the pump needs to be isolated.

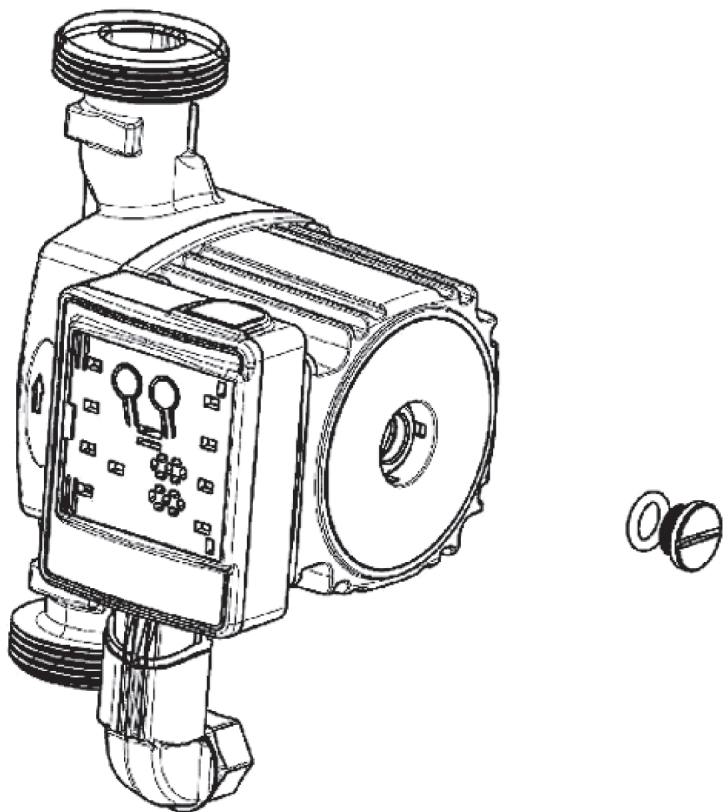
Gaskets



Attention: Fit the two gaskets when the pump is mounted correctly between the flow and return pipes.

Venting





The pump liquid may be scalding hot and under high pressure so proceed with caution when venting the pump.

Guarantee Registration

This pump is covered against manufacturing malfunction by a 6 year guarantee on a diminishing terms basis.

The guarantee is only valid if the pump has been installed correctly, the system is maintained adequately, and the guarantee is registered within 30 days of purchase.

The pump is covered for a **free of charge replacement** should malfunction occur within the first **3 years** from the date of sale.

After 3 years and up to **6 years** the pump will be replaced at a cost of **50% of the original purchase price**.

To register please email the following details to
guarantees@brittherm.co.uk

- Date of purchase
- Address where pump is fitted
- Name of supplier
- Supplier invoice number

Please retain your purchase invoice as it may be required in the event of a guarantee claim.

To make a claim please contact BritTherm by phone on:

0208 904 4832