

# ARCHERGAS<sup>®</sup>

## Installation & Operating Instructions



Read these instructions  
carefully before installation



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## General Information & Operating Conditions

The following instructions guide you through the installation and operation of the Archergas® ST15, DHW15 & LIGHT25 Circulators. These are modulating semi-automatic pumps that enable the user to set them based on system demand/application parameters.

The ST15 has a standard 1 ½" connection size and a standard 130mm port to port distance, producing a maximum head of just over 6 metres which is perfect for domestic heating systems with either radiators or underfloor heating.

The DHW15 has a standard 1 ½" connection size and a standard 130mm port to port distance, producing a maximum head of just over 6 metres and manufactured using 304 stainless steel which is perfect for domestic hot water systems, it is also often referred to as a 'Bronze Pump' despite stainless steel being a better material for domestic hot water applications.

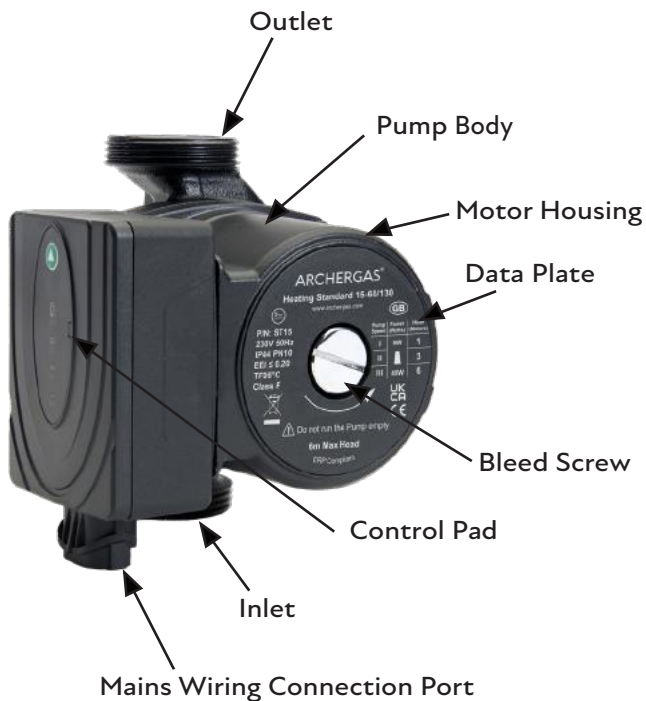
The LIGHT25 has a standard 1 ½" connection size and a 180mm port to port distance, producing a maximum head of just over 8 metres which is perfect for larger domestic/light commercial heating systems with radiators.

All Archergas® 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.

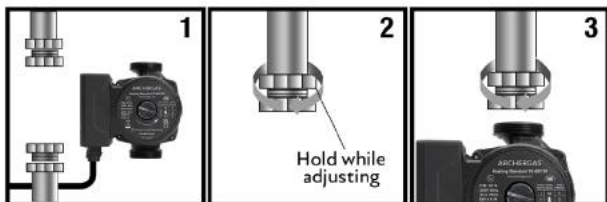
Liquids running through pumps used on heating systems must comply with the accepted standards of quality especially in domestic applications.

Liquids that do not comply will automatically void the 5 year guarantee offered with all Archergas® circulators. Please also ensure a qualified, competent engineer carries out the installation and maintenance of all Archergas® products in all cases.

## Pump Diagram



## Installation



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

## Installation Instructions

Only install the pump after all soldering work has been completed and, if necessary, the pipe system has been flushed through

Install the pump in a readily accessible place for easy inspection and dismantling. The direction of flow is indicated on the pump body

Install gate valves (1 ½") both upstream and downstream to enable easy replacement and fit washers (supplied)

Carry out safety checks to ensure the electrical supply is off

Before connecting the appliance, make sure that the supply voltage marked on the rating plate corresponds with your mains supply voltage

Insert the wiring through the wire feed and connect to the push fit terminals Live, Neutral and Earth

Fill and vent, ensure the pump is fully vented before turning on as it must not be run dry

## 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

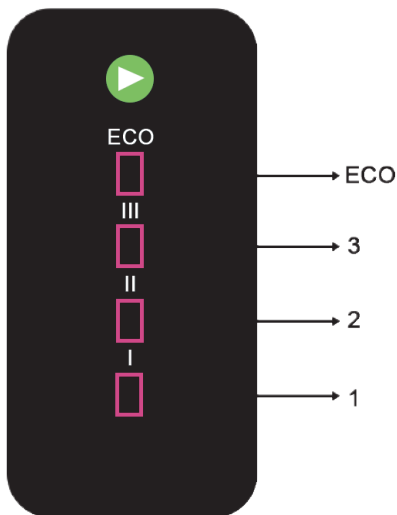
\*Quick venting of the Pump can be achieved using speed III for a short period

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

\*ECO mode is the default factory setting

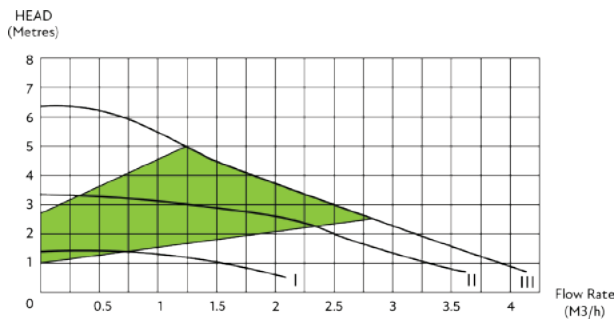
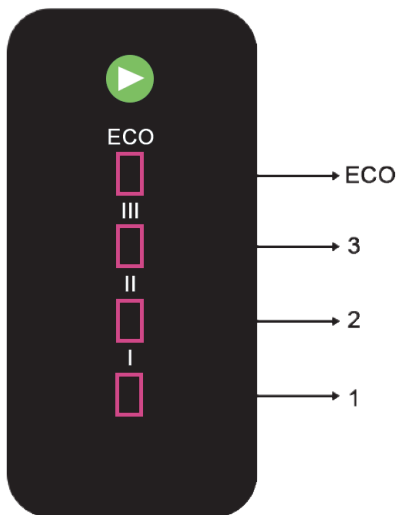


## Control Panel



1. Lowest manual speed option (1m head)
2. Middle manual speed option (3m head)
3. Highest manual speed option (6m head)
4. ECO mode (modulating/variable speed)

## Pressure Loss Curve



# Fault Finding



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

## Fault

### Pump doesn't run

#### Cause

#### Remedy

A) Blown fuse

Replace fuse

B) Inadequately connected power supply

Check electrical connection

C) Pump is defective

Replace pump

D) Impurity in the system

Disconnect and clean

E) Bearing has blocked pump from running

Run at high speed for a for a short period or loosen the rotor at the end of the shaft with a screwdriver

## Fault

### Pump doesn't run (continued)

#### Cause

A) Air in the system

B) Pump speed too high

#### Remedy

Vent the system

Reduce the speed

## Fault

### Noise in the pump

#### Cause

A) Air in the pump

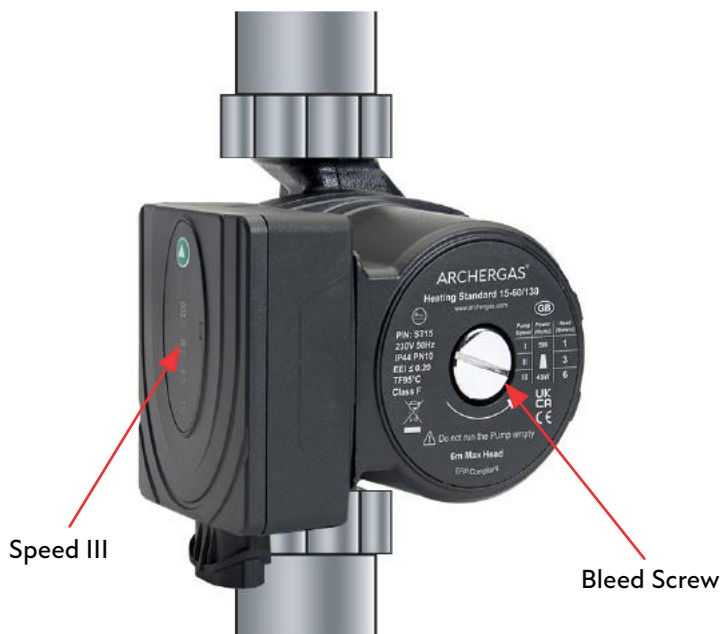
B) Inlet pressure too low

#### Remedy

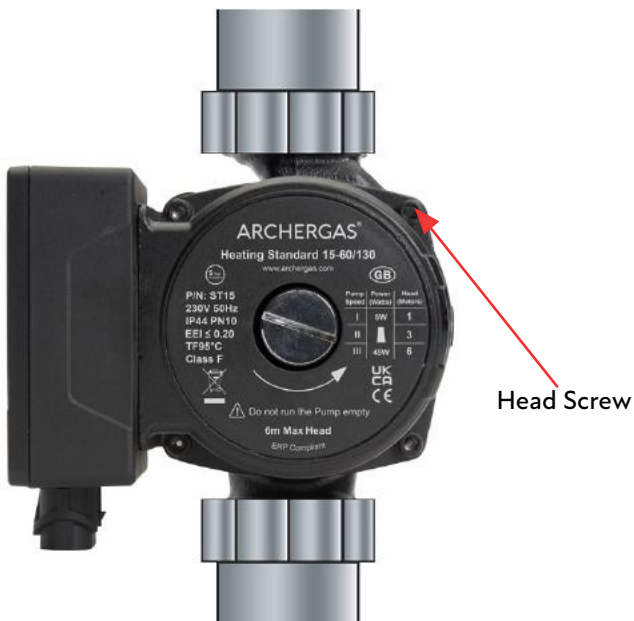
Let the pump run, it vents itself over time

Increase the inlet pressure

## Maintenance & Repair



Attention: Ensure the pump is fully vented before first time operation



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

## Guarantees

Archergas® circulators no longer require the registration of guarantees and are all covered against manufacturing malfunction by a 5 year replacement guarantee. Validity is dependent on correct installation and maintenance, adequate system maintenance and the use of sediment free liquid.

To submit a guarantee claim please email the details of the fault with an image, contact details and installation address to [sales@archergas.com](mailto:sales@archergas.com) and our technical sales team will respond.

Although we reserve the right to request further information such as liquid samples we will always endeavour to provide a solution as quickly as possible. Once a guarantee claim is accepted we offer a free of charge replacement unit. Archergas Limited is not liable and will not accept liability for installation costs.

Thank you for choosing an Archergas® Circulator.



\*Instructions apply to ST15, DHW15 & LIGHT25

\*The benchmark for the most efficient circulators is  $EEL \leq 0.20$

