

# ARCHERGAS<sup>®</sup>

## Installation & Operating Instructions



Read these instructions carefully before installation



3007255



676108



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## General Information & Operating Conditions

The following instructions guide you through the installation and operation of the Archergas® PRO15 & COMPACT15 Heating Circulators. These are intelligent pulse width modulating pumps that enable the user to set them based on system demand/application parameters.

The **PRO15** 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 **COMPACT15** has a standard 1 ½” connection size and a standard 130mm port to port distance, producing a maximum head of just over 7 metres which is perfect for domestic heating systems with either radiators or underfloor heating, as well as boilers and heat pumps.

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.

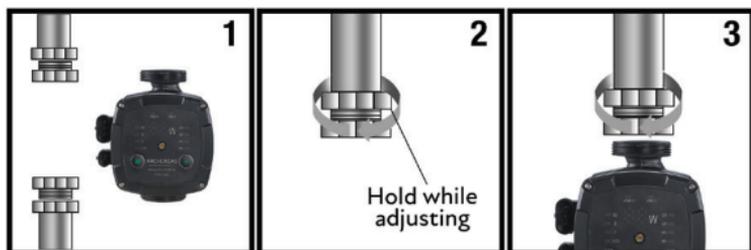
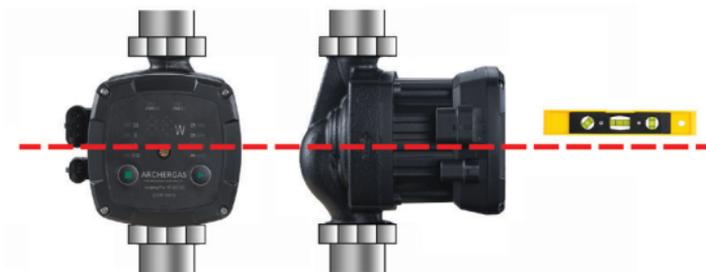
Liquids running through pumps used on heating systems must comply with the accepted standards of quality especially in domestic applications.

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



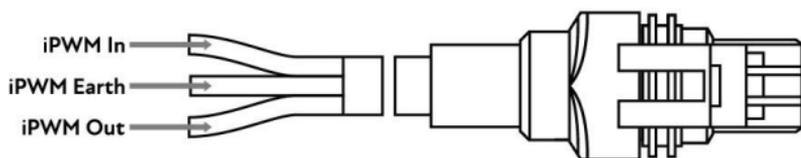
Attention: Ensure the pump is installed with the motor shaft in the horizontal position

# No Water Leaking Dry Environment Installation





## iPWM Cable Wire



## 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)

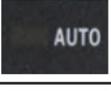
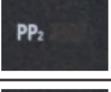
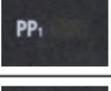
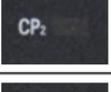
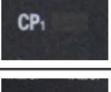
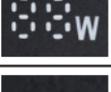
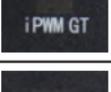
Carry out safety checks to ensure the electrical supply is off

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

	Normal Speed 3	Maximum Fixed Speed
	Normal Speed 2	Medium Fixed Speed
	Normal Speed 1	Minimum Fixed Speed
	Automatic Mode	Modulating/Variable Speed
	Maximum Proportional Pressure	Maximum Proportional Ratio (higher flow = higher head)
	Maximum Proportional Pressure	Minimum Proportional Ratio (higher flow = higher head)
	Maximum Constant Pressure	Maximum Constant Pressure (constant head regardless of flow)
	Maximum Constant Pressure	Minimum Constant Pressure (constant head regardless of flow)
	Mains Power Indicator Light	Displays Electricity Usage (watts)
	iPWM GT	iPWM GT Mode
	iPWM ST	iPWM ST Mode

## Control Panel



iPWM Switch Button

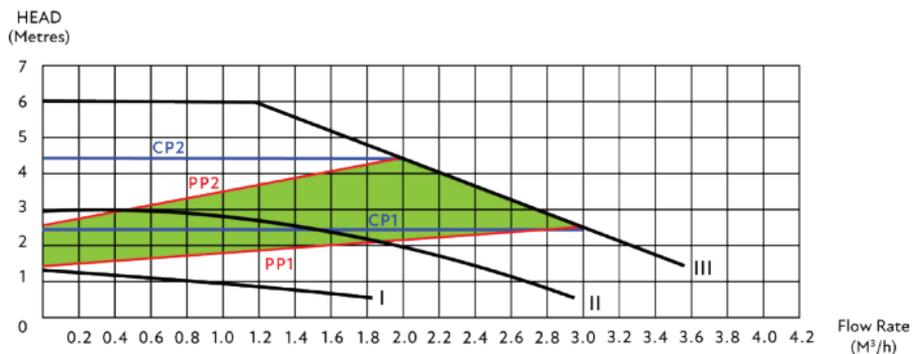


Normal Mode Switch Button

Short press to switch between  
iPWM GT and iPWM ST

Short press to switch the  
normal modes in turn

# 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 PRO15 & COMPACT15

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

