

## WE KNOW HEATING

Heat IQ have a wide range of quality heating system components from boilers through to consumables. High quality solutions for all you heating requirements.

Check out our wide range of central heating products including these exceptional floor heat source and control options

[www.heatiq.co.nz](http://www.heatiq.co.nz)



**IQ Eco + Logic**

Advanced high performance inverter heat pumps all the features and competitively priced.



**Beretta Mynute X**

Gas Central Heating plus **24.1 L** per minute of on demand domestic hot water .



**IQ Wifi**

Feature rich and user friendly smart phone controls (no additional hub required)

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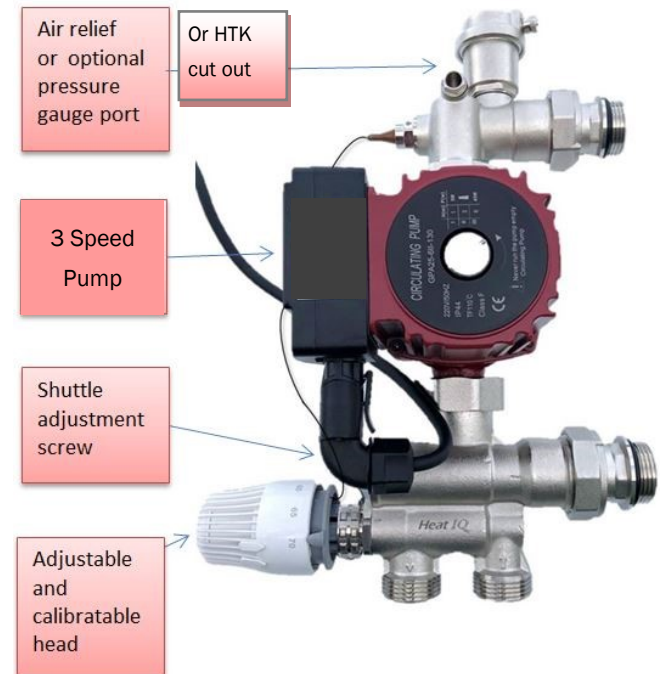
### HEAT IQ

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## VARIABLE SPEED PUMP STATION

Installation and use



# IQ VARIABLE SPEED PUMP STATION

## Please read before installing

This IQ pump station is intended for use with manifold rails with up to 13 ports fitted with flow setters . In typical installation each loop should not exceed 110M and the total length of all circuits from this pump station should not exceed 1100m. Though not essential, loops of a similar length will give best performance .

The IQ 3 speed pump fitted allows setting to suit the attached system requirements

## Installing your manifold

In some systems there will be a pump on the appliance or primary flow supplying this manifold. In some cases You may need to install a differential bypass valve in the system before the manifold.

The inserted differential bypass rate can be adjusted to prevent issues caused by excess push from the primary appliance pump. Take care to ensure this bypass valve is suitably set for the system. You can order a differential bypass valve HIQ 304 from heat IQ We also have Hydraulic separators.

For Oil boilers we also recommend the use of the optional High temp switch to cut out the pump as secondary system protection. This can be ordered as HIQ HTK

## Commissioning

To initially commission the manifold, open run and vent one circuit at a time turning off each vented circuit before moving to the next . Once each circuit is vented re open all the circuits “ this will avoid issues of air moving from loop to loop rather than fully venting.

## FLOW RATE SETTING

A CAD designed system will recommended flow rate settings for each loop. If you don't have this then a general rule of thumb will be to set the loops with between 1 and 2 liters per minute, the higher rate being typically being applied to the longest loops . If a design gives a flow rate below 0.75 raise it increase these circuits to 1.0



## FLOW TEMPERATURE

A designed system will have a specified flow temperature, this will usually be between 34 and 44 degrees as a maximum. Temperatures higher than 48 degrees can put expansion stress on pipework which can lead to failure and floor damage

A thermostatic head is used to limit input temperature by operating the shuttle valve to induce blending of the flow with return water from the floor. The Thermo-head is adjustable and Calibratable. **There is also a shuttle bypass , (adjustment screw ) this allows an element of blending . In HP systems this should be at 0 in high temperature systems it should be open - Typically to between 1-3 to prevent potential overheat**

Most oil boiler manufactures do not recommend direct connection to floor systems. This is due to the wide flow and return temperature differential and a potential for extremely limited flow rates across the oil boilers heat exchanger. We recommend Hydraulic separation to mitigate the above or preferably a buffer tank with differential temperature control for even greater boiler efficiency in Oil boiler systems.

All electrical control boxes and wiring centers should be installed above the rail away from any potential water ingress in the event of a leak .

**For energy efficiency Heat IQ recommended.** multiple control zones with programmable floor and air sensing thermostatic control.

Bathrooms and En-suites should be independently controlled to allow for off season use.

## Important

**Your system should be protected with an approved heating system inhibitor.**

**Never allow children to have access to this pump station or manifold.**

**A lockable cabinet is required for Safety**

**If a leak is identified contact your service agent or installer immediately.**

**Please Leave this with the manifold**

Installed by	date	Inhibitor type and dose
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*Thankyou for choosing a Heat IQ product*