



**Instantaneous
Flow
Heaters**
with Digital
Controller

Leading the Field in **Innovative** Technology

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Our team at Ormandy Rycroft are dedicated to customer service and will advise you on the most efficient solution bespoke to your individual requirements.

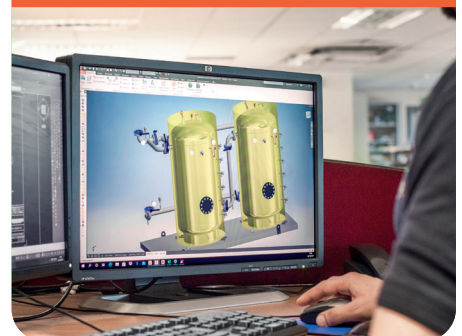
As a leading manufacturer of instantaneous water heaters and commercial heating & cooling solutions, we pride ourselves on our industry knowledge and the high standards and expertise you expect from an industry leader!

Consultation



Advice from our experienced Sales Team across the UK

Bespoke Design



Tailored Engineering Design Specification & Development

Every Industry



From HEVAC to Process, we cover all Industry Sectors

Manufacturing Excellence



Leading the field in Innovative Engineering Solutions

Aftercare



Reliable Commissioning, Maintenance and Servicing

Our technical knowledge is second to none and we take pride in nurturing and growing our relationship with customers through advice and support prior, during and after installation.

At Ormandy Rycroft, nothing is standard. From our service to you, to the quality control on our products, we aim to exceed your expectations at every stage of the process.

Our manufacturing facilities are world class and we are one of only a handful of companies who have the ability to manufacture both copper and copper lined vessels, as well as high specification stainless steel vessels for industries requiring a more specialised design for Process Solutions.

Whatever your heating and cooling needs are, you won't make a better start by making Ormandy Rycroft your first port of call.

2. The Instantaneous Flow Heater (IFH)

The “**Instantaneous Flow Heater**” has been created to be an integral part of the Ormandy Rycroft product range for “hot water solutions” particularly when using heat pumps.

The design of the IFH is such that it can boost temperatures in a single pass.
This can help on designs where :

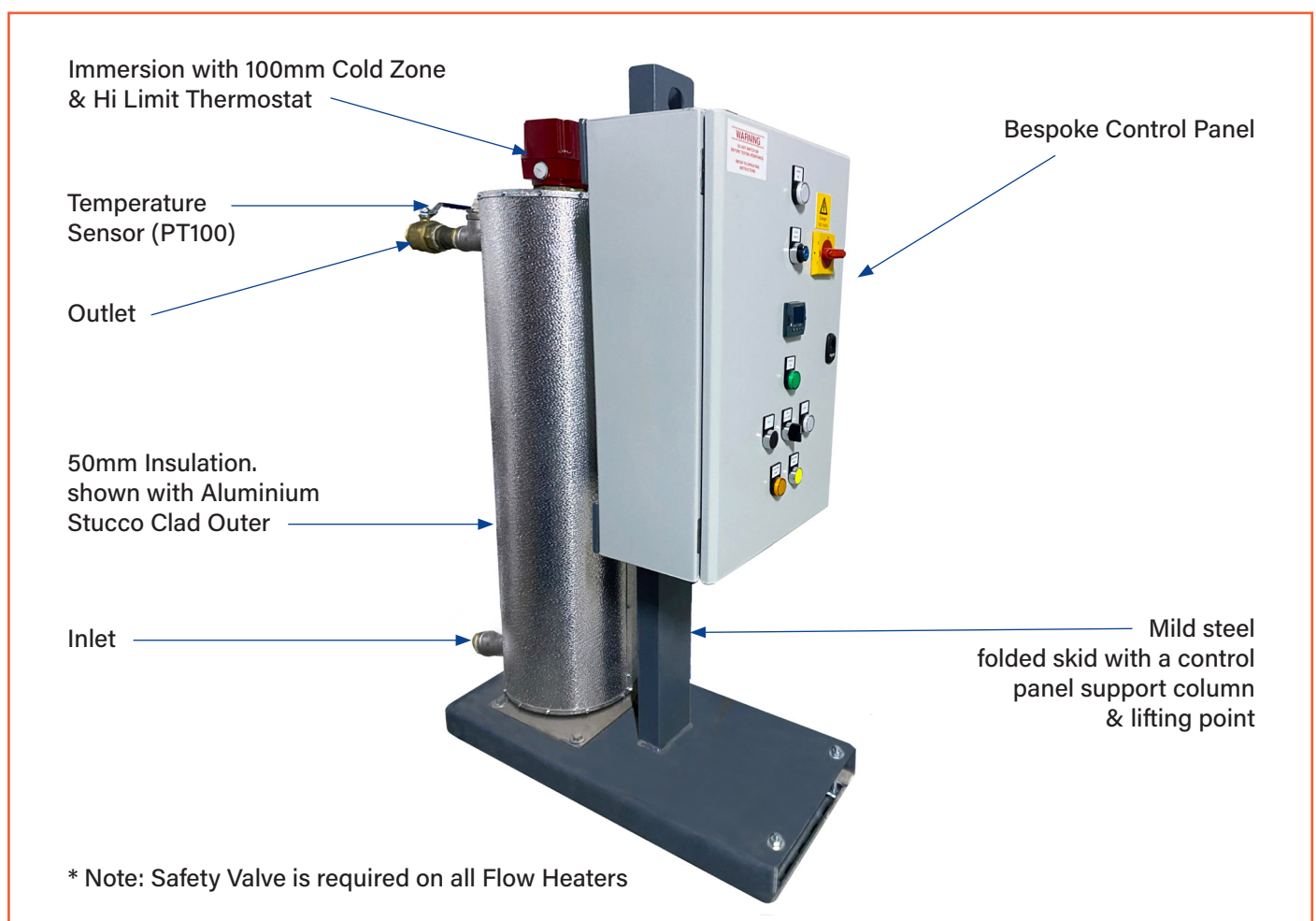
- The temperature coming off the DHW PHE has been reduced, e.g., due to the defrost cycle of heat pumps and needs a boost back to the stored temperature set point.
- The hot water demand exceeds the capability of the hot water unit and needs a boost
- The DHW secondary return needs to be negated to ensure that the heat pumps work efficiently and effectively.

The IFH Control Panel can be skid mounted with the IFH or it can be supplied loose so that it can be sited on a wall. The unit is very compact and can be supplied vertical or horizontal dependant on the requirements.

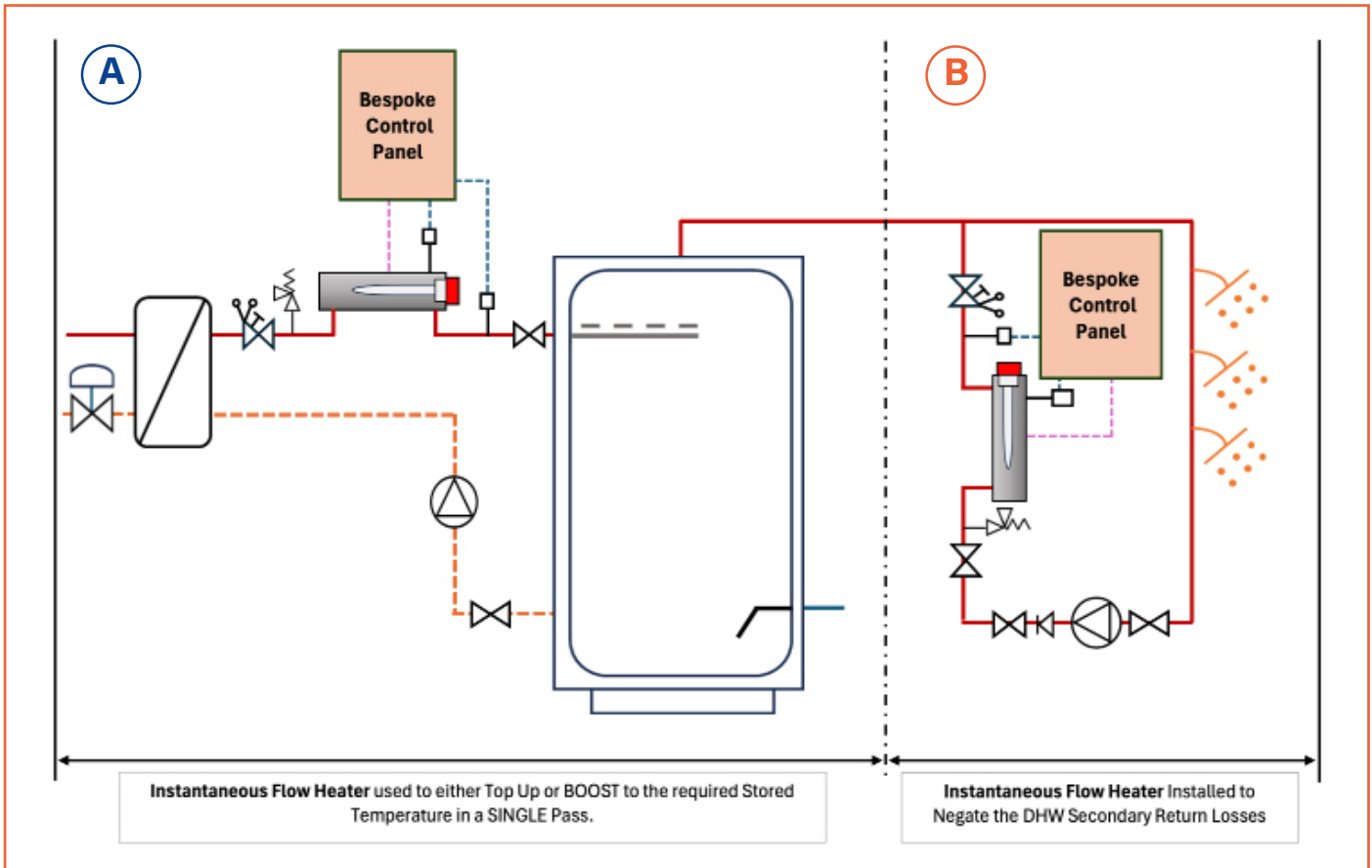
The IFH control panel has been designed to ensure the above is achieved and is fitted as standard with:

1. Pasteurisation cycles via programmable timeclock
2. Hard wired enable and fault connectivity to the BMS

Staged outputs are available on request to aid efficiency, when looking at varying: boost, pasteurisation and secondary loss temperatures.



3. Simplified Schematics



A

In this scenario, the IFH is being used to **“boost”** the temperature coming off the PHE due to:

- a) **The use of low temperature heat pumps** and needing to top up via electrical immersion.
- b) **The defrost cycle**, as in most instances during this cycle, the temperatures coming out of the heat pumps are reduced.
- c) **The peak demand** being greater than what the calorifier is designed to deliver.
- d) **The DHW secondary losses** and the need to negate them for the system to work effectively.

The **BENEFITS** of using an IFH compared to the traditional immersion are:

- 1. Recovery - Less duty is required from an IFH to heat the vessel when using low temperature heat pumps.
- 2. Single Pass Boost - Enables hot water packages to be able to continue to provide “semi-instantaneous hot water”.
- 3. Maintenance - Less down time as you don’t need to drain down or repressurise the main DHW vessel.

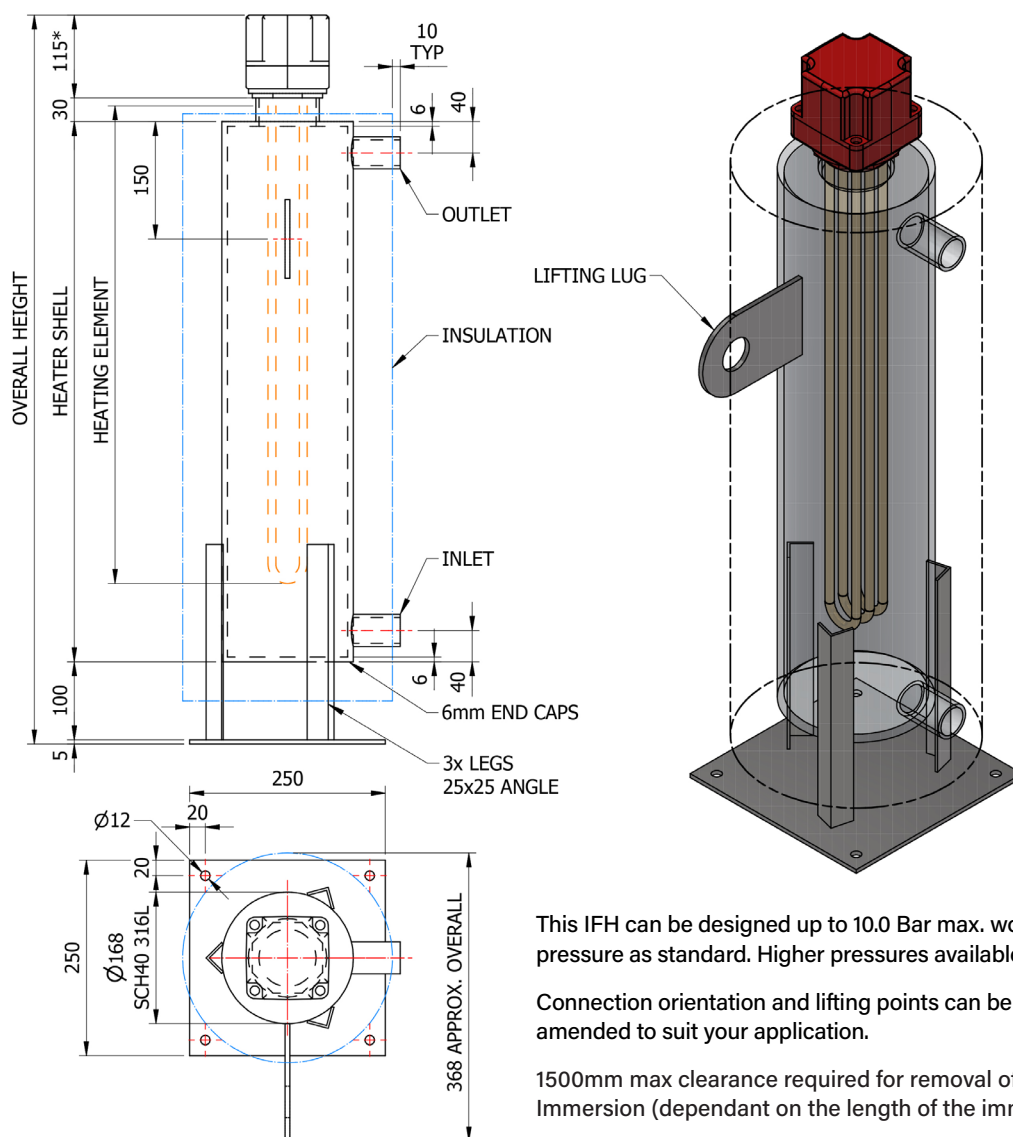
B

In this scenario, the IFH is being used to **“boost”** the DHW secondary return temperature back to the required secondary flow temperature. This is to negate the losses of the system “if” the DHW return “impacts” the performance of the system.

In both scenario’s the instantaneous flow heaters can be “staged”, dependant on the design requirements, to ensure the correct amount of duty is being used.



4. Sizes & Dimensions

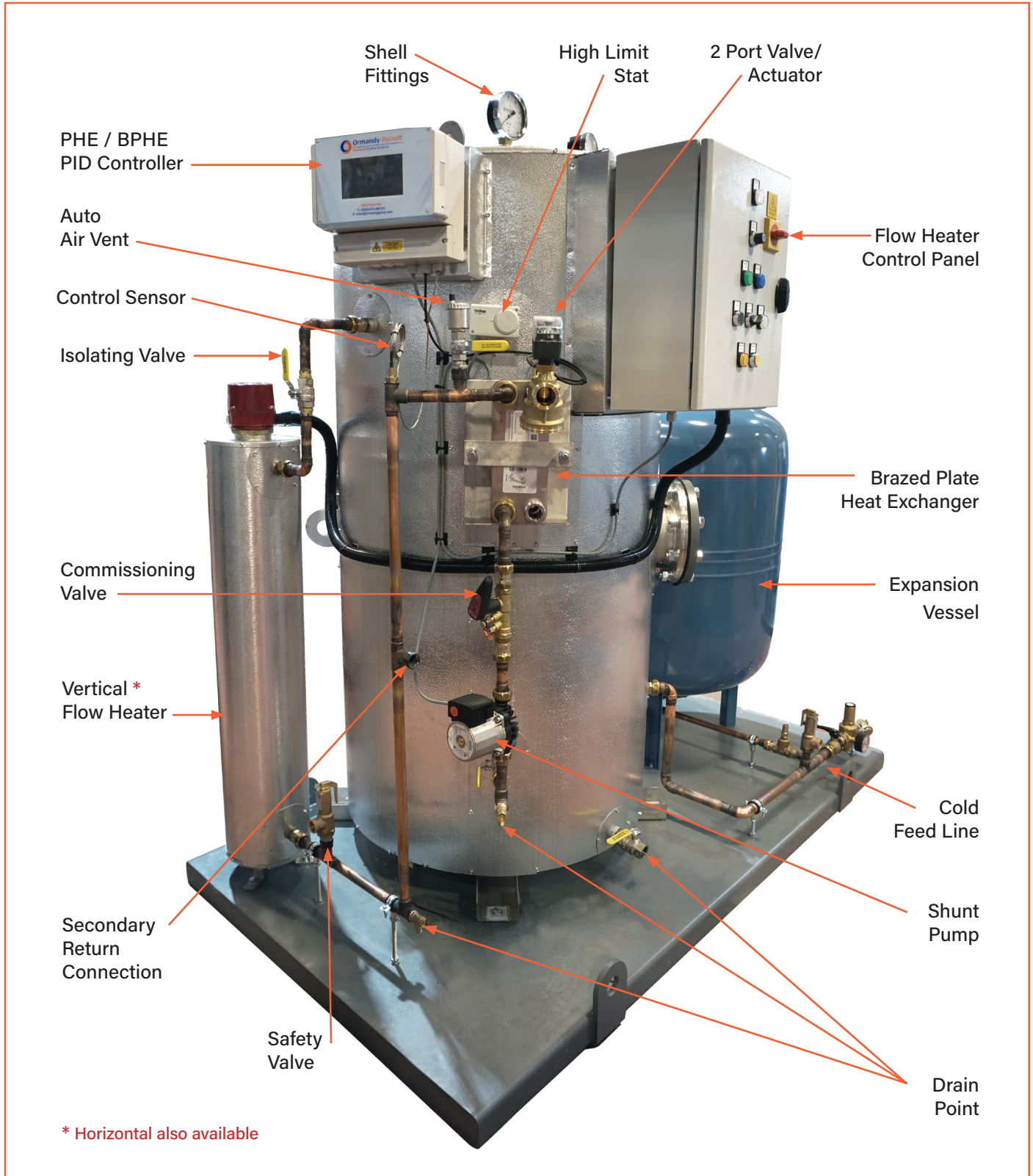


IFH Stand Alone						IFH Skid with Control Panel			
Duty (kW)	Overall H (mm)	Overall D (mm)	Base Plate (mm)	Phase	Est. Empty Weight (kg)	Height (mm)	Length (mm)	Width (mm)	Approx Overall Weight (kg)
3	700	268	250 x 250	1	35	750	750	Width of Panel 400-600	100
6	1090	268	250 x 250	1	45	1150	750		110
7.5	990	268	250 x 250	1	45	1150	750		110
9	1245	268	250 x 250	1	50	1300	750		115
12	1355	268	250 x 250	3	55	1400	750		120
15	1015	268	250 x 250	3	45	1070	750		110
18	1245	268	250 x 250	3	50	1300	750		115
24	1245	268	250 x 250	3	50	1300	750		115
30*	1050	268	250 x 250	3	55	1100	750		120
36*	1370	268	250 x 250	3	60	1315	750		125
48*	1395	268	250 x 250	3	80	1800	750		145
60*	1785	268	250 x 250	3	80	1835	750		145
* Heaters of 30kW and above are "FE" range with a DQ-Type mounting flange. Immersions with duties other than those shown above, can be manufactured on request.						* Based on 2/3 Stage panel			

5. Skid Packages

When working with low temperature primary sources, a good solution is to use Evoplate with an instantaneous flow heater. By using this method instead of using Immersions to heat up the stored water in the vessel, the flow heater can be installed inline after the BPHE, which heats up the water before getting to the vessel.

This enables the solution to give semi-instantaneous hot water, resulting in potentially lower duties than the standard immersion, whilst also reducing the stored volume, making it a more efficient and potentially compact system.



6. Optional Extras & Accessories

Shell Fittings



PTRV



Pressure Gauge



Temperature Gauge



Anti Vacuum Valve



Drain Assembly

Cold Feed Fittings



Pressure Reducing Valve



Strainer



Isolating Valve *



Single Check Valve *



Combined Valve

* On smaller applications, these are a combined valve.

Unvented Kit



Lockshield

Expansion Relief / Safety Valve



Standard Expansion Vessel

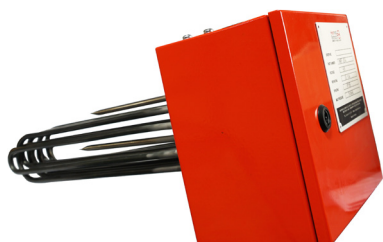


Flow Through Expansion Vessel



Immersion Heaters

Available in single or three phase 3kW - 60kW



Control Panel Info



Control Panel	Single Stage	2/3 stage
Height (mm)	600	600
Width (mm)	400	500/600
Depth (mm)	200	250
Weight (kg) Circa	35kg	40kg

Skid & Pipework

Carbon steel base plinth that houses the packaged BPHE/ buffer vessel, instantaneous low heater and expansion vessel with pipework pre-piped.



Spares & Service

Spares and annual servicing are available for all our vessels. Contact our service department for more details on:

spares@ormandygroup.com or
service@ormandygroup.com

Everything we make is “bespoke”, so we can adapt each package to suit the application if required.



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