Thermal Products Ltd

ThermaFlow 'E'

STANDARD RANGE

There is a ThermaFlow 'E ' to suit most requirements.
The ThermaFlow 'E' uses primary water at 82˚C to heat secondary water 10 to 60˚C.
The ThermaFlow 'E' range;

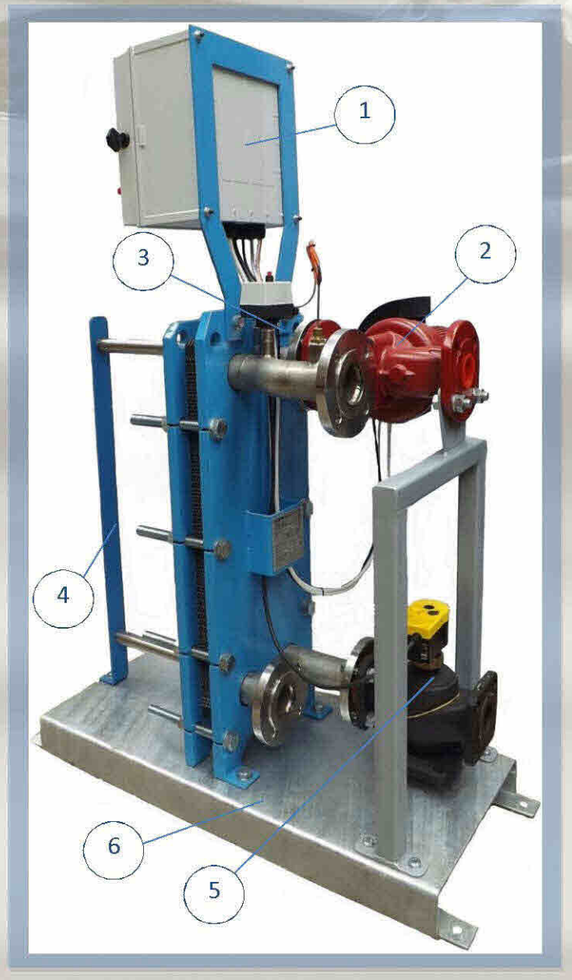
Kw Rating	Primary Flowrate (L/S)	Secondary Flowrate (L/S)
35	0.17	0.17
60	0.29	0.29
90	0.43	0.43
120	0.57	0.57
140	0.67	0.67
210	0.84	0.84
265	1.00	1.00
320	1.27	1.27
365	1.53	1.53
420	1.75	1.75
475	2.01	2.01
530	2.27	2.27
600	2.54	2.54
700	2.87	2.87
800	3.35	3.35
900	3.83	3.83
1000	4.31	4.31
1200	4.78	4.78
1400	5.74	5.74

Primary Connections: The ThermaFlow 'E' is designed for connection to a primary low loss header. However, if you have separate flow and return headers, don't worry. The low loss header effect can be easily created in the primary pipework – our sales office can advised on this.

Primary Flowrates: The heat exchanger is very effective at extracting heat from the primary water. Primary flowrate and return temperature are consequently much lower than might be expected for the heat output. This has the added benefit of keeping valve and pipe-work sizes small and may also be an advantage if the heat source is a condensing boiler. For a standard range item please ensure that the flow-rate in the boiler low loss header is adequate to achieve the specified boiler return temperature.

Sizing and Selection: Our experienced sales and technical team have been giving advice on the sizing and selection of plate heat exchanger packages, for over twenty years. Please contact our sales office for more information or advice on any of our products and one of our advisors will be pleased to help you.

The ThermaFlow E range is the latest generation of GMS's highly successful plate heat exchanger packages. The main application of the ThermaFlow E is instantaneous generation of DHW using LTHW primary, with or without a secondary buffer tank.
At the heart of the package is the highly effective ThermaFlex gasketed plate heat exchanger. Primary water is driven through the heat exchanger by a new, highly efficient type of primary pump. These pumps are glandless for low maintenance, and powered by the latest high efficiency motors. They automatically modulate speed to match demand, so saving energy and improving control. If there is no demand, so saving energy and improving control. If there is no demand and the control valve is closed, the pump stops completely.
Each primary pump is EUP compliant and A rated for energy consumption, meeting the requirements of UK Building Regulations and the new EUP legislation.
At GMS we are committed to reducing the impact of our products and processes on the natural environment. The highly efficient ThermaFlow E range embodies this commitment.



COMPONENTS

1. **Control Panel** – *supplied with volt free contacts for own use and has power lights indicating pump trip.*
2. **Primary circulating pumps,** *can be single or duplex, they modulate pump speed based on demand turn the pump on/off depending on flow.*
3. **Control and high limit thermostats.**
4. *Heat Exchanger* **hanging rails –** *making maintenance simple.*
5. **Control Valve –** *supplied with and electric actuator others available on requested.*
6. **Base –** *Compact, galvanised, complete with fixing points.*

STORAGE OPTION

GMS offer a storage option where the ThermaFlow E is packaged with a storage cylinder. This type of package is now called a ThermaPac 'E', which can include; unvented kit (Expansion vessel, safety valve, expansion relief valve, cold feed isolating valve, cold feed non return valve, pressure reducing valve, thermometers and pressure gauges), ThermaFlow 'E' package with secondary pump and storage vessel. All these items can be packaged and positioned on a compact steel base. All storage option units are custom made and can be designed to suit access requirements and/or maintenance requirements.

"Water is our Hot Topic"

Component Specification:

1. *Primary Control Valve: 2 port plug and seat type primary control valve with a modulating actuator. This arrangement (which differs from the 3 port and 4 port valves in earlier ThermaFlows) make the best of the benefits of the variable speed primary pump.*

2. *Control Panel: With digital temperature controller, pump monitoring and volt free contacts for pump fault and high temperature fault. The new control panel has a single "running" light to show the unit is operational. Also the panel was a "fault" light for each pump. Terminals have been included in the panel for a separate, optional 24V ac High Limit valve, which can be supplied by GMS if required or for others to fit and wire at site.*

Control Panel

3. *Surplus pump head: The primary pump generates more head than is needed to drive water through the heat exchanger and control valve. This "Surplus Head" is available to draw water through the installers' connections to a low loss primary header.*

4. *Duplex Primary Pump Option: Each pump head is rated for 100% of the duty. The duty pump is changed automatically on a regular basis for even wear. If one pump develops a fault the other takes over and the control panel gives a visual and volt free contact warning.*

Contacting GMS
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