

ECONOPLATE H SERIES

NEW Packaged Plate Heat
Exchanger Interface Units

Econoplate - Features and Benefits

- **Integral Pressure Differential Control**
- **Heating Return Temperature Control**
- **No Potential Leaks from Pipework** due to the UNIQUE Preformed Injection Moulded Backpanel (WRAS approved material)
- **Quick Installation** due to mounting bracket for pre-installation
- **Parameters Preset** in factory for Plug & Play
- **Compact Unit** so can fit in a small cupboard
- **Plug in Components** that allow easy Simplified Servicing
- **WRAS Approved Fill Device** – no fill hose to remove
- **Flow Limiter on Primary** to prevent heating start-up taking too much primary flow
- **Modbus and Opentherm Compatible**
- **Full Diagnostics** available for troubleshooting both pictorially and real time data
- **Store of last 10 errors** with the date and time of occurrence
- **2 year Manufacturers Warranty**



Econoplate - Operational Description

Heating Mode

When there is a heating demand and a signal is sent to the station, the primary valve will start to open and send primary either to the heating heat exchanger or to the heating circuit. The unit will gradually heat up the heating system and will then control it either on the heating flow, or on heating return temperature, as desired. The unit will continue to provide heating at the set temperature (flow or return) and will try to achieve the correct ΔT set by modulating the pump. Once the heating is satisfied and the signal is stopped, the unit will close the primary circuit and will go into standby.

Hot Water Mode

Hot water has priority and when the DHW flow sensor detects a flow rate of 1.9l/min or above the primary will open and send primary to the hot water exchanger. It will quickly get the hot water to temperature and control the hot water circuit to the desired temperature. There is available a pre-heat function to provide the hot water quicker where this is an issue. Once the flow rate drops below 1.9l/min on the hot water circuit, then the unit will switch off the primary circuit and will go into standby unless there is a heating demand in which case the heating function will (re)commence.



Technical Data - General

		H1U		H2U	H3U		H4U	
GENERAL DATA	Units	Indirect heating & DHWS		Heating only	Hot Water only		Direct Heating & DHWS	
		Twin 24-14	Twin 24-40	40-00	00-14	00-40	Single 24-14	Single 24-40
Maximum Pressure - District	Bar	10	10	10	10	10	6	6
Maximum Pressure - Heating	Bar	2.9	2.9	2.9	-	-	2.9	2.9
Maximum Pressure - Cold Feed/ Domestic Hot Water	Bar	10	10	10	10	10	10	10
Maximum Pressure - Differential	Bar	3	3	3	3	3	3	3
Maximum District Temperature	°C	85	85	85	85	85	85	85
Maximum District Flow Rate (for Δp 80kPa DHW)	L/min	19	29	-	19	29	19	29
Maximum District Flow Rate (for Δp 50kPa DHW)	L/min	15	23	-	15	23	15	23
Minimum Hot Water Flow Rate	L/min	1.9	1.9	-	1.9	1.9	1.9	1.9
Weight Empty - HIU + Backplate	kg	22+4	24+4	22+4	17+4	19+4	19+4	21+4
Dimensions H x W x D	mm	All 600x500x262						
Electrical Supply (AC)	V	All 230/50Hz						
Power Consumption	W	85	85	85	85	85	85	85

Temperature Ranges

Heating Temperatures - Low Mode	°C	30-45	30-45	30-45	-	-	30-45	30-45
Heating Temperatures - High Mode	°C	45-80	45-80	45-80	-	-	45-80	45-80
Hot Water Temperature	°C	40-60	40-60	-	40-60	40-60	40-60	40-60

Water Connections

District - Inlet & Outlet	mm	22	22	22	22	22	22	22
Heating System - Inlet & Outlet	mm	22	22	22	-	-	22	22
Cold Inlet/Outlet & Hot Water Outlet	mm	22	22	22	22	22	22	22

Technical Data - Applications

Econoplate Heat Interface Units are ideal for Central or District Heating Schemes and individual Properties requiring heating and or hot water such as Care Homes, Student Accommodation Blocks, Hotels and Properties with a smaller central Plant Room.



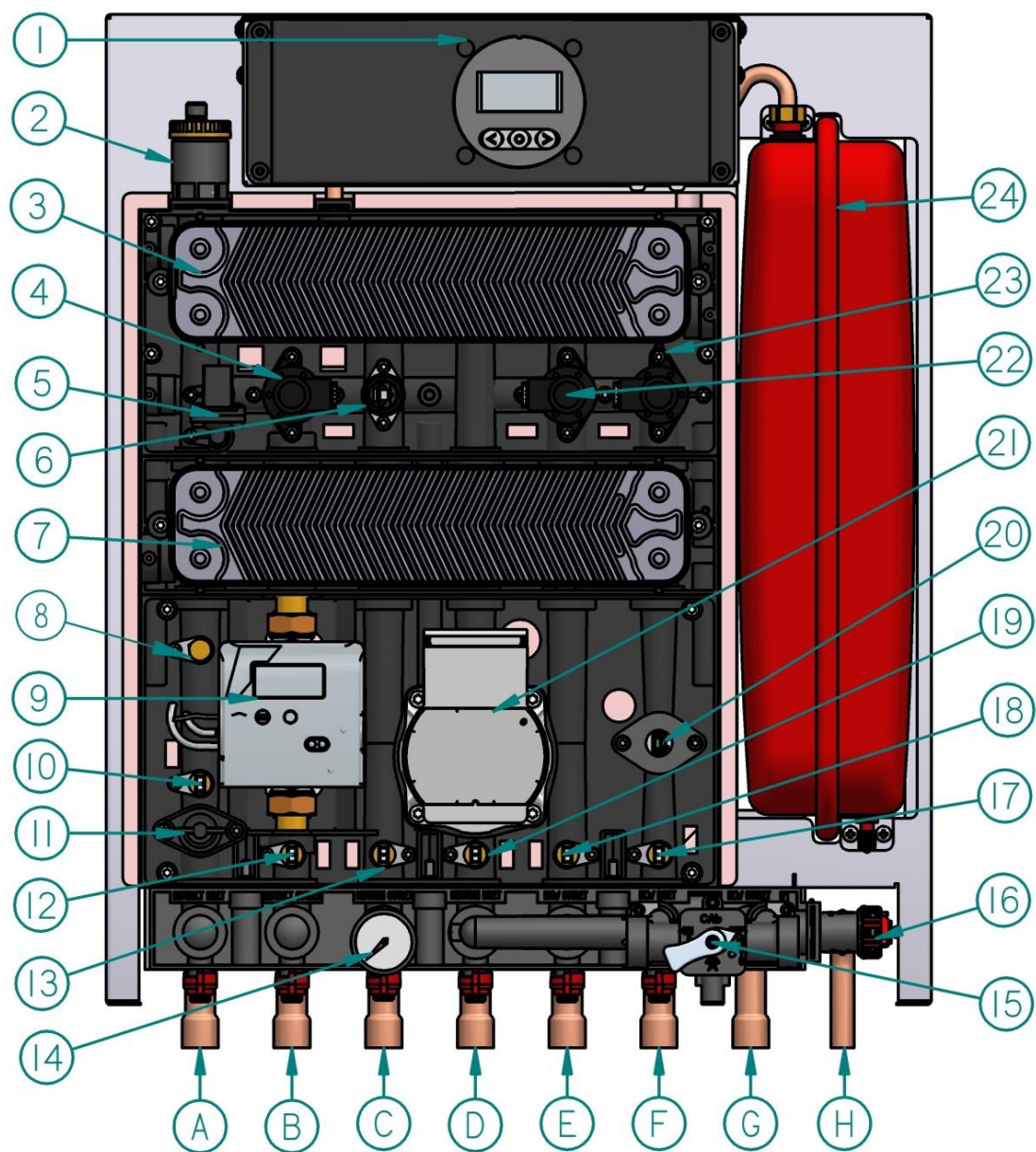
Technical Data - Heating Performance

Primary	Secondary	kW	Primary Flow (l/min)	Primary ΔP (kPa)	Max Secondary Flow (l/min)	Residual Pump Pressure (kPa)
Primary at 0.5 bar diff-24 plate						
85-70°C	80-60°C	25	25.5	50	18.5	50
85-72°C	80-65°C	22	25.5	50	21.6	32
85-74°C	80-70°C	17	21.8	34.2	24	20
70-49°C	60-40°C	33	23.3	41.1	24	20
70-51°C	60-45°C	25	18.7	27.7	24	20
70-53°C	60-50°C	17	13.9	14.7	24	20
60-35°C	45-30°C	25	14.3	14.9	24	20
60-37°C	45-35°C	17	10.5	7.5	24	20
60-40°C	45-40°C	8	6.1	2.6	24	20
Primary at 0.5 bar diff-40 plate						
85-70°C	80-60°C	28	23.5	50	20.2	50
85-72°C	80-65°C	24	23.5	50	23.2	35
85-74°C	80-70°C	19	23	43.3	28	10
70-49°C	60-40°C	38	23.5	50	27.25	12
70-51°C	60-45°C	29	20	36.4	28	10
70-53°C	60-50°C	19	15.4	20.5	28	10
60-35°C	45-30°C	29	15.7	23.3	28	10
60-37°C	45-35°C	19	11.8	13.3	28	10
60-40°C	45-40°C	10	7.1	4.5	28	10

Technical Data - DHW Performance

Primary	Secondary	kW	Primary Flow (l/min)	Primary ΔP (kPa)	Secondary Flow (l/min)	Secondary ΔP (kPa)
Primary at 0.5 bar diff-14 plate						
80-39°C	10-60°C	41.4	15	52	12.0	50.4
80-32°C	10-50°C	49.1	15	52	17.7	112
70-43°C	10-60°C	27.6	15	52	8.0	22.3
70-33°C	10-50°C	37.3	15	52	13.5	68
Primary at 0.5 bar diff-40 plate						
85-29°C	10-60°C	79.4	23	52	22.9	49.8
80-22°C	10-50°C	83.2	21	43	30	84.4
70-34°C	10-60°C	57.0	23	52	16.5	27.3
70-25°C	10-50°C	70.8	23	52	25.5	63

Components

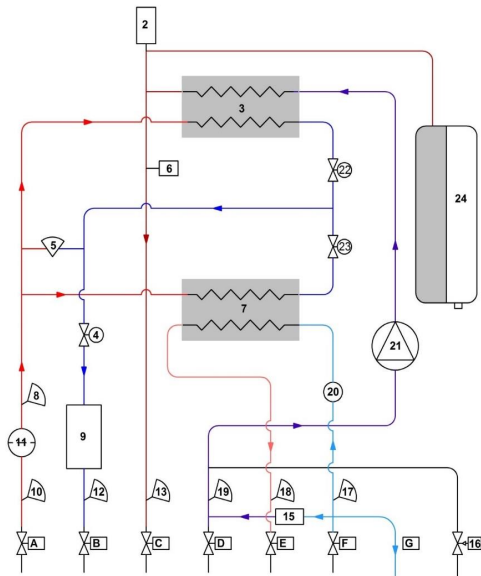


1	Control Box	13	Heating Flow Sensor
2	Automatic Air Vent	14	Heating Pressure Gauge
3	Heat Exchanger, Heating	15	Filling Device
4	Modulating Valve	16	3-bar Pressure Relief Valve
5	Differential Pressure Sensor	17	Domestic Cold Water Sensor
6	Pressure Sensor	18	Domestic Hot Water Sensor
7	Heat Exchanger, Domestic Water	19	Heating Return Sensor
8	Heat Meter Sensor (<i>HM version only</i>)	20	Hot Water Flow Switch
9	Heat Meter (<i>HM version only</i>)	21	Pump
10	District Inlet Sensor	22	Heating Regulation Valve
11	District Filter	23	Hot Water Regulation Valve
12	District Return Sensor	24	Expansion Tank

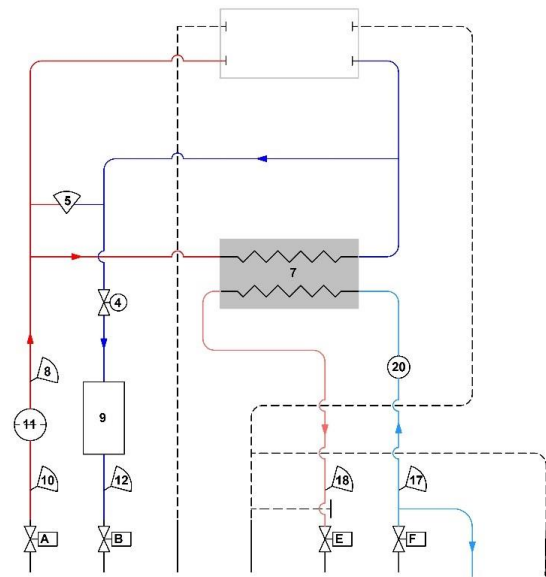
A	District Inlet	E	Hot Water Outlet
B	District Return	F	Cold Water Inlet
C	Heating Flow	G	Cold Water Outlet
D	Heating Return	H	Pressure Relief Valve Drain

Installation Schematic

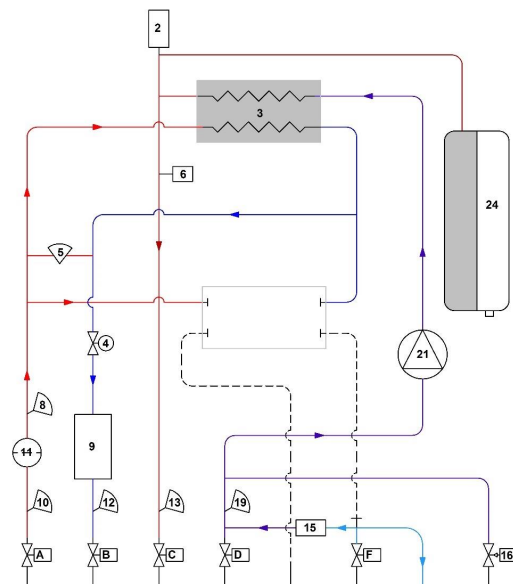
Twin Schematic



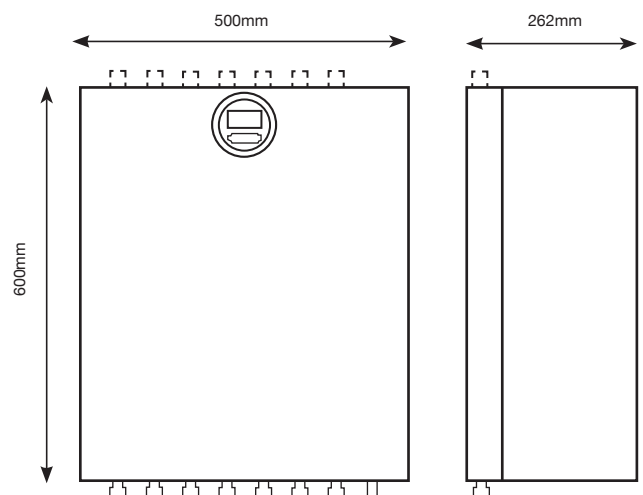
Hot Water Schematic



Heating only Schematic



Dimensions (mm)



For more information or to speak to one of our experts, contact us on any of the below

Stokvis Energy Systems,
34 Central Park Estate, Central Avenue, West Molesey, Surrey KT8 2QZ

T 020 8783 3050 **E** info@stokvisboilers.com **W** www.stokvisboilers.com