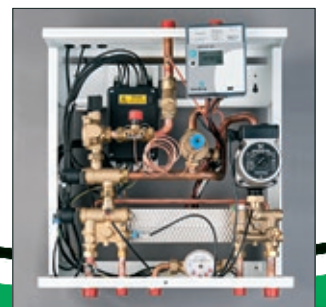
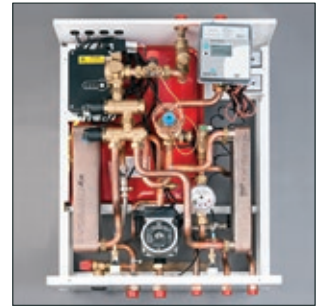


STOKVIS

ENERGY SYSTEMS



STOKVIS ECONOPLATE H SERIES
PACKAGED PLATE HEAT EXCHANGER INTERFACE UNITS

ECONOPLATE H SERIES

With a continuous drive to maximize efficiency, improve comfort whilst simplifying installations and maintaining a good health and safety ethic, one of the latest additions to the Stokvis Econoplate range is the H Series Econoplate Interface Unit.

The H Series Econoplates are designed to provide the interface between a central or district heating scheme and individual properties, requiring heating and or hot water. For provision of services for these individual dwellings the Econoplate H Series requires a low temperature primary heat source (maximum 85°C) from a district scheme or smaller central plant room.

At the heart of each unit are the stainless steel, brazed Plate Heat Exchanger(s) which are packaged with the necessary equipment to control your heating and or instantaneous hot water requirements. All components are mounted within a smart epoxy coated enclosure.

There are 3 basic configurations –

Econoplate H2 units separate the district or communal heating system from the dwelling and provide **indirect heating and hot water** separated via 2 plate heat exchangers. (Twin Plate)

Econoplate H1 units have **direct heating** where the district water circulates around the dwelling and **indirect hot water** via a plate heat exchanger (Single Plate)

Econoplate H1 units can also be provided for **indirect heating only**, with separation of district mains from the dwelling, again with a single plate heat exchanger.

This option would be used when either there is no hot water requirement or hot water is to be provided by an indirect cylinder or other means. (Single Plate)



Standard Component List for Econoplate H1 & H2 units

- 1) Electronic control box
- 2) Brazed stainless steel plate heat exchanger (2 on H2 units)
- 3) Diverter valve
- 4) Control valve
- 5) Heating pump
- 6) Sensors
- 7) DHW flow sensor
- 8) Solenoid valve
- 9) Temperature gauge (only on H2 units)
- 10) Pressure gauge (only on H2 units)
- 11) Strainer
- 12) Heating safety valve (only on H2 units)
- 13) Expansion vessel (only on H2 units)
- 14) Filling Loop (only on H2 units)
- 15) Safety Klixon

Optional Items

- 1) Easy Remote - room thermostat, DHW programmer and time clock.
- 2) Differential pressure valve
- 3) Isolating valves
- 4) Heat meter
- 5) Water meter



Econoplate H1 and H2 Operational Description.

Heating Mode

When there is a heating demand, the solenoid valve opens and allows full flow of the district supply which then goes through a modulating control valve. The diverter valve will send the district supply to the heating plate heat exchanger on H2 units or direct to the heating circuit on H1 units.

A temperature sensor is fitted at the outlet to the dwelling, which measures the heating flow temperature. The electronics will ramp up the flow temperature over a period of 3 minutes and will then aim to keep the flow temperature at the desired setting whilst there is a heating demand. When the heating cycle finishes, the solenoid valve will close, and the pump will stop.

Hot Water Mode

Hot water has priority and when the DHWS sensor detects water flow above 2.6l/m, the unit switches into hot water mode. The solenoid valve opens and allows full flow of the district supply which then goes through the modulating control valve. The diverter valve will send the district supply to the hot water heat exchanger.

On the secondary side of the heat exchanger a temperature sensor is fitted to measure the hot water flow temperature.

The electronics will control the flow of district supply in order to provide hot water at the set temperature. There is an addition preheat function available to speed up hot water production.

When the hot water flow falls below 2.4l/m, the unit will switch out of hot water mode. The solenoid valve will close and the unit will then return to heating mode if required.

Features and Benefits

- Compact - Fits within a cupboard or kitchen area
- No multiple gas supply - Reduced risk within apartment blocks is achieved
- No Flues - Unsightly terminals and flue plumbing is eliminated
- Cylinder space not required - More storage/usable space in dwelling
- Rapid/Accurate response through plate heat exchanger and control technology - Energy efficient and comfortable heating and hot water temperatures achieved.
- Renewable energy implemented easier in central/communal plant room - Solar/Biomass/Heat Pumps.
- Central Boiler House - A single annual gas safety inspection which is restricted to the plant room
- Central Boiler House - Reduction in maintenance costs due to reduced boilers to service.
- Can be installed facing into landlord areas - Less disruption to dwellings during maintenance.
- Meter reading and energy billing can be carried out remotely from a central location - This can be very attractive to councils and those with a large portfolio of buildings.



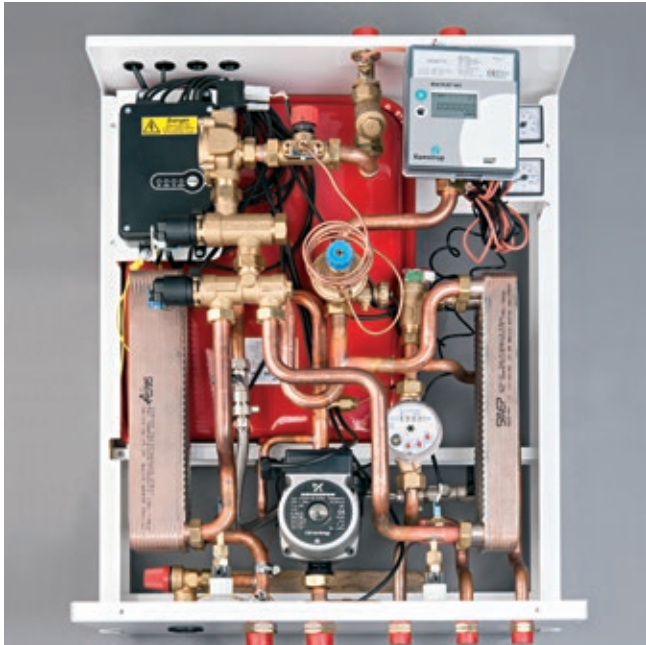
ECONOPLATE H1

Direct heating, Indirect hot water - model pictured includes options.

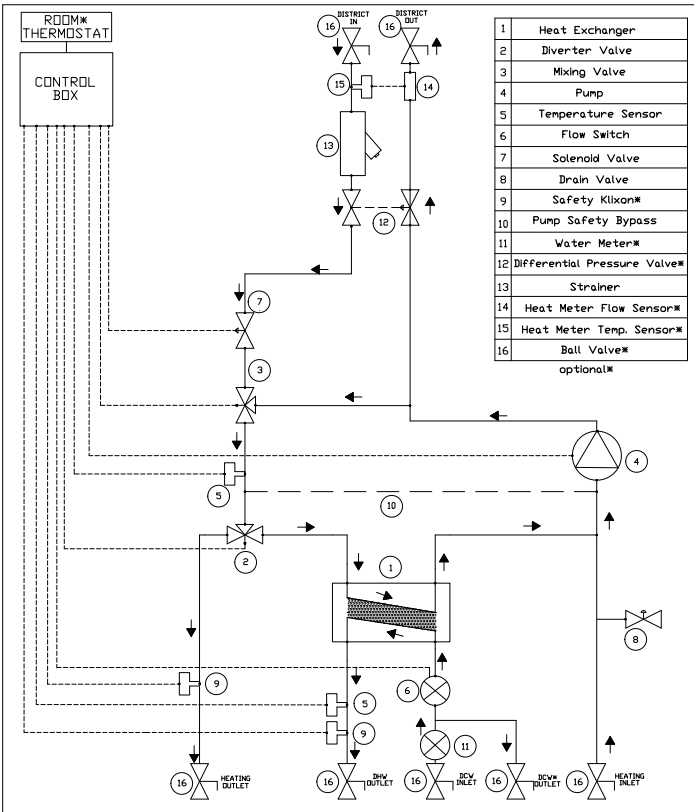


ECONOPLATE H2

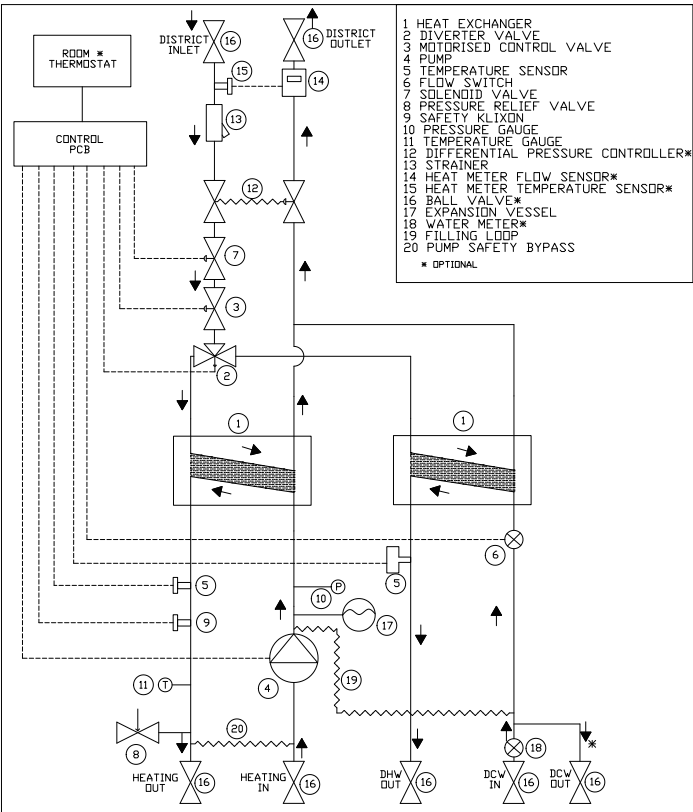
Indirect heating and hot water - model pictured includes options.



ECONOPLATE H1 SCHEMATIC



ECONOPLATE H2 SCHEMATIC



The above schematics include Standard and Optional Equipment, the lists detailing both Standard and Optional items are detailed earlier in the brochure.

ECONOPLATE H SERIES PERFORMANCE CHART

GENERAL DATA		ECONOPLATE H SERIES MODEL REFERENCE					
		DIRECT HEATING, INDIRECT DHWS			INDIRECT HEATING AND DHWS		
	Units	H1-0/14	H1-0/24	H1-0/40	H2-24/14	H2-24/24	H2-24/40
Maximum Pressure - District	Bar	6			6		
Maximum Pressure - Heating	Bar	6			3		
Maximum Pressure - Cold Feed/Domestic Hot Water	Bar	10					
Maximum District Temperature	°C	85					
Maximum District Flow Rate	l/min	18					
Weight Empty	kg	21			32		
Dimensions HxWxD	mm	547x494x232			682x514x262		
Electrical Supply		230V/50Hz AC					
Power Consumption	W	105			105		
TEMPERATURE RANGES							
Heating Temperatures - Low Mode	°C	30-45					
Heating Temperatures - High Mode	°C	60-80					
Hot Water Temperatures	°C	40-60					
WATER CONNECTIONS							
District - Inlet & Outlet	BSP male	3/4"					
Heating System - Inlet & Outlet	BSP male	3/4"					
Cold Inlet/Outlet & Hot Water Outlet	BSP male	1/2"					
HEATING PERFORMANCE							
Heat Output @ ΔT11K & 18 l/m Flow	kW	14			-		
Heat Output @ ΔT15K & 18 l/m Flow	kW	18			-		
Heat Output @ ΔT20K & 18 l/m Flow	kW	25			-		
Note for H1 units: The district flow rate is equal to the heating flow rate as this is a direct circuit							
Heat Output @ ΔT11K Heating Circuit	kW	-			21		
Heat Output @ ΔT15K Heating Circuit	kW	-			24		
Heat Output @ ΔT20K Heating Circuit	kW	-			27		
Note for H2 models: The output is based on a district flow rate of 18 l/min @ 85°C and a heating flow temperature of 75°C							
XS Head from Integral Pump @ ΔT11K	kPa	16			16		
XS Head from Integral Pump @ ΔT15K	kPa	16			28		
XS Head from Integral Pump @ ΔT20K	kPa	16			34		
Note for H1 units: XS head assumes a balanced supply with no additional head from the district at the Econoplate							
HOT WATER PERFORMANCE							
Nominal Hot Water Output @ 10-50°C	l/min	14					
	kW	39					
District Flow Rate Required @ 80°C	l/min	11.7	10.11	9.36	11.7	10.11	9.36
District Flow Rate Required @ 70°C	l/min	16.76	13.45	11.98	16.76	13.45	11.98
Maximum Hot Water Output @ 10-50°C	l/min	18					
	kW	50					
District Flow Rate Required @ 80°C	l/min	16.11	13.54	12.36	16.11	13.54	12.36

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STOKVIS INDUSTRIAL BOILERS (INTERNATIONAL) LIMITED
Unit 34 Central Park Estate, 34 Central Avenue,
West Molesey, Surrey KT8 2QZ
TELEPHONE 020 8783 3050 • FACSIMILE 020 8783 3051
Email: info@stokvisboilers.com • Website: <http://www.stokvisboilers.com>