STOKVIS ENERGY SYSTEMS

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CERTIFICATION MARK

ECONOPLATES

The Ultimate Range of Packaged Plate Heat Exchangers

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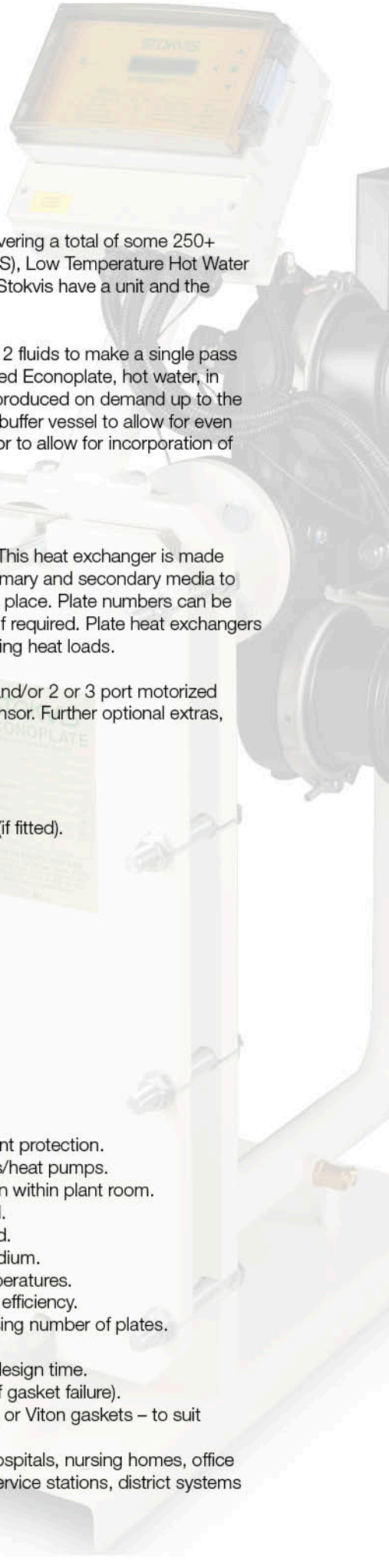
Econoplate Packaged Plate Heat Exchangers



Stokvis Econoplate packaged plate heat exchangers are available in various configurations covering a total of some 250+ models fulfilling a tremendous variety of applications. From Domestic Hot Water Service (DHWS), Low Temperature Hot Water (LTHW) Heating, Steam-to-Water, Swimming Pool heating or even complex Process Heating, Stokvis have a unit and the expertise to satisfy your demands.

Econoplate units are designed to transfer heat from one medium to another, only requiring the 2 fluids to make a single pass through the heat exchanger. For domestic hot water service applications with a suitably selected Econoplate, hot water, in many cases, can be provided instantaneously, without the need for storage. The hot water is produced on demand up to the maximum rated output of the unit. If necessary, Econoplate units can be coupled to a Stokvis buffer vessel to allow for even greater hot water demands, as well as to satisfy specific site requirements such as low head, or to allow for incorporation of immersion heater back up.

The principle is simple, well proven and extremely cost effective.

All Econoplate units are built around an epoxy coated chassis containing the heat exchanger. This heat exchanger is made up of a number of gasketed stainless steel heat transfer plates which form the channels for primary and secondary media to flow through, making a single pass in opposing directions, enabling the heat exchange to take place. Plate numbers can be increased at a later date, up to the chassis limit, enabling the output capacity to be increased if required. Plate heat exchangers have low water content and low thermal inertia making them ideal for use in systems with varying heat loads.

Econoplate units are supplied packaged with, if required, primary pump (single or twin-head) and/or 2 or 3 port motorized control valve fitted to the primary circuit, purpose built controls and secondary temperature sensor. Further optional extras, accessories and unvented kits are available – see later.

The standard control panel package includes (not E0B)

- PID output to modulate control valve.
- Pump mode selection including twin-head pump duty share and auto-changeover (if fitted).
- LCD digital display.
- Functional indication.
- Primary pump fault indication.
- Adjustable high and low temperature alarms.
- Common volt-free temperature alarm and indication.
- Selectable high temperature lockout modes.
- Internal “clock” 7-day time control.
- External “clock” BMS time control circuit.
- External interlock circuit.
- Fuses.
- Full menu driven interrogation of parameters and operating modes.

Features and Benefits

- Various applications – hot water service, heating, process, pressure breaks and plant protection.
- Various primary heat sources – LTHW, MTHW, steam, thermal stores/CHP/biomass/heat pumps.
- Compact size – restricted access to plant rooms overcome and easier incorporation within plant room.
- Fully matched pump(s), control valve and controls – design time and costs reduced.
- Fully assembled package – onsite assembly and installation time and costs reduced.
- Fast response to variable loads – gives close temperature control of secondary medium.
- Higher temperature drop – smaller pump(s), pipes and valve, and lower return temperatures.
- Low water content – less water to treat, reduced legionella risk and greater system efficiency.
- Easily removable plates – ease of maintenance or duty can be increased by increasing number of plates.
- Turbulent flow and even heat distribution – less fouling and scale formation.
- Comprehensive safety devices and unvented kits available – reduces consultant’s design time.
- Double heat exchanger plate gaskets – prevents cross contamination (as a result of gasket failure).
- Various plate and gasket materials – stainless steel or titanium plates, EPDM, NBR, or Viton gaskets – to suit numerous applications.
- Suits many industrial and commercial applications – hotels, schools, universities, hospitals, nursing homes, office Blocks, apartment blocks, stadiums, leisure centres, swimming pools, motorway service stations, district systems and many more.

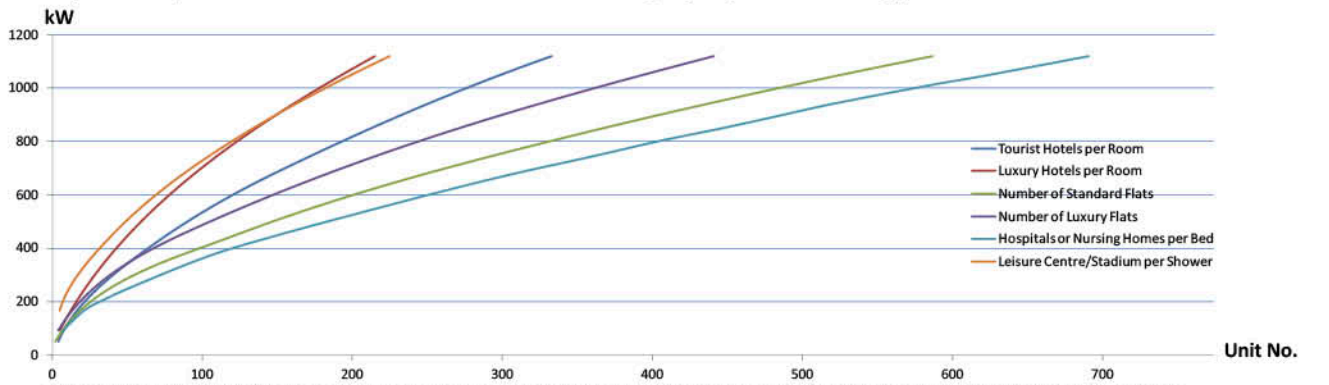
Econoplate Series Selector

Econoplate Series		Econoplate C3i C3Ai100 C3Ai300 C3Ci		Econoplate E3i E3Ai100 E3Ai300 E3Ci		Econoplate i2 i2A i2B i2C		Econoplate i2 i2A i2B i2C		Econoplate E2(SW) E2A(SW) E2B(SW) E2C(SW)	
Design Criteria	Primary Fluid & Temperature	Water Condensing Boiler 70°C		Water LTHW Boiler 80°C		Water Condensing Boiler 70°C		Water LTHW Boiler 80°C		Steam Steam Generator 140°C	
	Secondary Fluid & Temperature	Water DHWS 10-60°C		Water DHWS 10-60°C		Water DHWS 10-60°C		Water DHWS 10-60°C		Water DHWS 10-60°C LTHW 71-82°C	
Performance	Heat Transfer Duty Range	50-765kW		51-1120kW		50-765kW		51-1120kW		DHWS 50-1000kW LTHW 50-700kW	
	Secondary Flow Rate	0.24-3.66l/s		0.24-5.36l/s		0.24-3.66l/s		0.24-5.36l/s		DHWS 0.24-4.78l/s LTHW 1.08-15.08l/s	
Maximum Operating Criteria	Primary Operating Temperature	110°C		110°C (optional up to 140°C)		110°C		110°C		140°C	
	Primary Operating Pressure	10.0barg		10.0barg		10.0barg		10.0barg		2.6barg	
	Secondary Operating Pressure	6.0barg		6.0barg		6.0barg		6.0barg		6.0barg	
Connections	Primary Inlet Connection	C3Ai100	DN40	E3Ai100	DN40	i2A	DN40	i2A	DN40	E2A(SW)	DN15-DN40
		C3Ai300	DN40	E3Ai300	DN40	i2B	DN40	i2B	DN40	E2B(SW)	DN25-DN40
		C3Ci	DN50	E3Ci	DN50	i2C	DN50	i2C	DN50	E2C(SW)	DN32-DN65
	Primary Outlet Connection	C3Ai100	1½"	E3Ai100	1½"	i2A	1½"	i2A	1½"	E2A(SW)	1½"
		C3Ai300	1½"	E3Ai300	1½"	i2B	1½"	i2B	1½"	E2B(SW)	1½"
		C3Ci	2"	E3Ci	2"	i2C	2"	i2C	2"	E2C(SW)	2"
	Secondary Inlet/Outlet Connection	C3Ai100	1½"	E3Ai100	1½"	i2A	1½"	i2A	1½"	E2A(SW)	1½"
		C3Ai300	2"	E3Ai300	2"	i2B	2"	i2B	2"	E2B(SW)	2"
		C3Ci	2"	E3Ci	2"	i2C	2"	i2C	2"	E2C(SW)	2-2½"
	Secondary HWS Return Connection (+0R)	C3Ai100	1"	E3Ai100	1"	i2A	1"	i2A	1"	E2A(SW)	1"
		C3Ai300	1"	E3Ai300	1"	i2B	1"	i2B	1"	E2B(SW)	1¼"
		C3Ci	1¼"	E3Ci	1¼"	i2C	1¼"	i2C	1¼"	E2C(SW)	1¼"
Components	Primary Circulating Pump	Grundfos MAGNA3		Grundfos MAGNA3		Grundfos MAGNA3		Grundfos MAGNA3		N/A	
	Primary Control Valve	3-Port		3-Port		2-Port		2-Port		2-Port	
Dimensions (LxWxH) (mm)		C3Ai100 C3Ai300	710x480x1110	E3Ai100 E3Ai300	710x480x1110	i2A i2B	600x480x1110	i2A i2B	600x480x1110	E2A(SW) E2B(SW)	500x250x1210
		C3Ci	865x537x1165	E3Ci	865x537x1165	i2C	700x537x1165	i2C	700x537x1165	E2C(SW)	600x330x1265

Other Models/Variants:

- Bare Plate Gasketed Heat Exchangers – excluding pump(s), valves, controls etc.
- Low Temperature Primary to Hot Water Service Secondary – E2(LTHWS), E4Ai & E4Bi.
- Low Temperature Primary to Low Temperature Secondary – E2(LTLT) & E3(LTLT).
- Low Temperature Primary to Swimming Pool Secondary – E0B, E4PAi, E4PBi & E3PCi.
- Medium Temperature Primary to Hot Water Service Secondary – E2(MTHWS) & E3(MTHWS).
- Medium Temperature Primary to Low Temperature Secondary – E2(MTLT) & E3(MTLT).
- Specials – different temperatures, pressures, pumps, controls and materials – on application.

A Graphical Representation of Hot Water Service Loadings (kW) for Various Applications



This graph uses diversity factors and is for indication purposes; it should not be used exclusively to ascertain hot water demand. A full assessment should be undertaken to meet actual site requirements.

- For simultaneous operation of outlets calculate separately.
- "Tourist Hotel" assumes a room with one shower and one wash hand basin.
- "Standard Flats" are classed as having one sink, one wash hand basin and one shower.
- Standard fittings are assumed in all cases.
- "Luxury Hotel" assumes a room with one bath or one shower and one wash hand basin.
- "Luxury Flats" are classed as having one sink, two wash hand basins and one bath.
- For applications, kW duties, temperatures and pressure drops not listed, please contact Stokvis for a sizing/selection.

Econoplate C3i – C3Ai100/C3Ai300/C3Ci

- Designed to be fed from an LTHW primary system operating with a lower supply temperature of 70°C, to suit condensing boilers.
- Water-to-Water.
- 3-Port fully modulating fast-acting control valve.
- Electronically controlled variable speed primary circulating pump having additional 6kPa head available to overcome external pipe losses.
- Model variants:
  - Simplex single-head primary pump.
  - Duplex twin-head primary pump (option).
  - +1R secondary HWS recirc. pump (option).
  - +1T secondary HWS transfer pump (option).
  - AKF additional 2-port valve (option).

Performance – C3Ai100

Econoplate Model		C3Ai 106	C3Ai 108	C3Ai 110	C3Ai 112	C3Ai 114	C3Ai 116	C3Ai 118	C3Ai 120	C3Ai 122	C3Ai 124	C3Ai 126
Heat Load Required / Max. Duty	kW	50	79	109	133	157	180	201	222	240	259	276
Secondary Flow Rate 10-60°C	l/s	0.24	0.38	0.51	0.64	0.75	0.86	0.96	1.06	1.15	1.24	1.32
	m³/h	0.9	1.4	1.8	2.3	2.7	3.1	3.5	3.8	4.1	4.5	4.8
Secondary Pressure Drop at Peak Output	kPa	20	22	23	23	22	22	21	20	20	19	19
Primary Flow Rate at 70°C	l/s	0.73	0.96	1.22	1.39	1.56	1.72	1.86	2.00	2.10	2.23	2.30
	m³/h	2.6	3.5	4.4	5.0	5.6	6.2	6.7	7.2	7.6	8.0	8.3
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6

Performance – C3Ai300

Econoplate Model		C3Ai 324	C3Ai 326	C3Ai 328	C3Ai 330	C3Ai 332	C3Ai 334	C3Ai 336	C3Ai 338	C3Ai 340	C3Ai 342	C3Ai 344	C3Ai 346
Heat Load Required / Max. Duty	kW	287	308	325	339	356	372	389	402	415	430	441	452
Secondary Flow Rate 10-60°C	l/s	1.37	1.47	1.56	1.62	1.70	1.78	1.86	1.92	1.99	2.06	2.11	2.16
	m³/h	4.9	5.3	5.6	5.8	6.1	6.4	6.7	6.9	7.2	7.4	7.6	7.8
Secondary Pressure Drop at Peak Output	kPa	22	22	21	20	20	19	19	18	18	17	17	17
Primary Flow Rate at 70°C	l/s	2.62	2.76	2.84	2.90	2.99	3.10	3.20	3.25	3.28	3.36	3.40	3.45
	m³/h	9.4	9.9	10.2	10.4	10.8	11.2	11.5	11.7	11.8	12.1	12.2	12.4
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6	6

Performance – C3Ci

Econoplate Model		C3Ci 22	C3Ci 26	C3Ci 30	C3Ci 34	C3Ci 38	C3Ci 42	C3Ci 46	C3Ci 50	C3Ci 54	C3Ci 58	C3Ci 62	C3Ci 66	C3Ci 70	C3Ci 74
Heat Load Required / Max. Duty	kW	350	409	450	493	542	572	603	632	660	688	703	725	745	765
Secondary Flow Rate 10-60°C	l/s	1.67	1.96	2.15	2.36	2.59	2.74	2.89	3.02	3.16	3.29	3.36	3.47	3.57	3.66
	m³/h	6.0	7.1	7.7	8.5	9.3	9.9	10.4	10.9	11.4	11.8	12.1	12.5	12.9	13.2
Secondary Pressure Drop at Peak Output	kPa	14	13	12	11	11	10	9	9	9	8	8	8	7	7
Primary Flow Rate at 70°C	l/s	4.00	4.45	4.65	4.89	5.30	5.42	5.50	5.65	5.75	5.90	5.93	6.00	6.05	6.10
	m³/h	14.4	16.0	16.7	17.6	19.1	19.5	19.8	20.3	20.7	21.2	21.3	21.6	21.8	22.0
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Econoplate E3i – E3Ai100/E3Ai300/E3Ci

- Designed to be fed from an LTHW primary system operating with a supply temperature between 80°C & 110°C (optional up to 140°C).
- Water-to-Water.
- 3-Port fully modulating fast-acting control valve.
- Electronically controlled variable speed primary circulating pump having additional 6kPa head available to overcome external pipe losses.
- Model variants:
  - Simplex single-head primary pump.
  - Duplex twin-head primary pump (option).
  - +1R secondary HWS recirc. pump (option).
  - +1T secondary HWS transfer pump (option).
  - AKF additional 2-port valve (option).

Performance – E3Ai100

Econoplate Model		E3Ai 105	E3Ai 107	E3Ai 109	E3Ai 111	E3Ai 113	E3Ai 115	E3Ai 117	E3Ai 119	E3Ai 121	E3Ai 123	E3Ai 125	E3Ai 127	E3Ai 129
Heat Load Required / Max. Duty	kW	51	91	132	167	208	241	272	301	330	354	380	397	416
Secondary Flow Rate 10-60°C	l/s	0.24	0.44	0.63	0.80	0.99	1.15	1.30	1.44	1.58	1.69	1.82	1.90	1.99
	m³/h	0.9	1.6	2.3	2.9	3.6	4.1	4.7	5.2	5.7	6.1	6.6	6.8	7.2
Secondary Pressure Drop at Peak Output	kPa	21	28	32	33	35	35	35	35	35	34	33	31	29
Primary Flow Rate at 80°C	l/s	0.48	0.71	0.96	1.14	1.38	1.56	1.72	1.85	1.99	2.10	2.21	2.26	2.33
	m³/h	1.7	2.6	3.5	4.1	5.0	5.6	6.2	6.7	7.2	7.6	8.0	8.1	8.4
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6	6	6

Performance – E3Ai300

Econoplate Model		E3Ai 321	E3Ai 323	E3Ai 325	E3Ai 327	E3Ai 329	E3Ai 331	E3Ai 333	E3Ai 335	E3Ai 337	E3Ai 339	E3Ai 341	E3Ai 343	E3Ai 345
Heat Load Required / Max. Duty	kW	360	395	430	456	478	502	523	542	563	581	600	619	632
Secondary Flow Rate 10-60°C	l/s	1.72	1.89	2.06	2.18	2.29	2.40	2.50	2.59	2.70	2.78	2.87	2.96	3.02
	m³/h	6.2	6.8	7.4	7.8	8.2	8.6	9.0	9.3	9.7	10.0	10.3	10.7	10.9
Secondary Pressure Drop at Peak Output	kPa	40	40	40	39	38	36	35	34	33	32	31	30	30
Primary Flow Rate at 80°C	l/s	2.28	2.47	2.67	2.77	2.85	2.95	3.05	3.10	3.17	3.23	3.30	3.39	3.42
	m³/h	8.2	8.9	9.6	10.0	10.3	10.6	11.0	11.2	11.4	11.6	11.9	12.2	12.3
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6	6	6

Performance – E3Ci

Econoplate Model		E3Ci 22	E3Ci 26	E3Ci 30	E3Ci 34	E3Ci 38	E3Ci 42	E3Ci 46	E3Ci 50	E3Ci 54	E3Ci 58	E3Ci 62	E3Ci 66	E3Ci 70	E3Ci 74
Heat Load Required / Max. Duty	kW	517	600	678	740	802	849	892	943	988	1015	1045	1078	1099	1120
Secondary Flow Rate 10-60°C	l/s	2.47	2.87	3.24	3.54	3.84	4.06	4.27	4.51	4.73	4.86	5.00	5.16	5.26	5.36
	m³/h	8.9	10.3	11.7	12.7	13.8	14.6	15.4	16.2	17.0	17.5	18.0	18.6	18.9	19.3
Secondary Pressure Drop at Peak Output	kPa	23	22	21	20	19	18	17	16	16	15	14	13	12	12
Primary Flow Rate at 80°C	l/s	3.79	4.24	4.65	4.90	5.18	5.35	5.47	5.70	5.86	5.90	6.00	6.10	6.15	6.18
	m³/h	13.6	15.3	16.7	17.6	18.6	19.3	19.7	20.5	21.1	21.2	21.6	22.0	22.1	22.2
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Econoplate i2 – i2A/i2B/i2C

- Designed to be fed from an LTHW primary system operating with a supply temperature between 70°C & 110°C.
- Water-to-Water.
- 2-Port fully modulating fast-acting control valve.
- Electronically controlled variable speed primary circulating pump having additional 6kPa head available to overcome external pipe losses.
- Model variants:
  - Simplex single-head primary pump.
  - Duplex twin-head primary pump (option).
  - +1T secondary HWS transfer pump (option).
  - AKF additional 2-port valve (option).

Performance – i2A

Econoplate Model		i2A 6	i2A 8	i2A 10	i2A 12	i2A 14	i2A 16	i2A 18	i2A 20	i2A 22	i2A 24	i2A 26
Heat Load Required / Max. Duty	kW	50	79	109	133	157	180	201	222	240	259	276
Secondary Flow Rate 10-60°C	l/s	0.24	0.38	0.51	0.64	0.75	0.86	0.96	1.06	1.15	1.24	1.32
	m³/h	0.9	1.4	1.8	2.3	2.7	3.1	3.5	3.8	4.1	4.5	4.8
Secondary Pressure Drop at Peak Output	kPa	20	22	23	23	22	22	21	20	20	19	19
Primary Flow Rate at 70°C	l/s	0.73	0.96	1.22	1.39	1.56	1.72	1.86	2.00	2.10	2.23	2.30
	m³/h	2.6	3.5	4.4	5.0	5.6	6.2	6.7	7.2	7.6	8.0	8.3
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6

Performance – i2B

Econoplate Model		i2B 24	i2B 26	i2B 28	i2B 30	i2B 32	i2B 34	i2B 36	i2B 38	i2B 40	i2B 42	i2B 44	i2B 46
Heat Load Required / Max. Duty	kW	287	308	325	339	356	372	389	402	415	430	441	452
Secondary Flow Rate 10-60°C	l/s	1.37	1.47	1.56	1.62	1.70	1.78	1.86	1.92	1.99	2.06	2.11	2.16
	m³/h	4.9	5.3	5.6	5.8	6.1	6.4	6.7	6.9	7.2	7.4	7.6	7.8
Secondary Pressure Drop at Peak Output	kPa	22	22	21	20	20	19	19	18	18	17	17	17
Primary Flow Rate at 70°C	l/s	2.62	2.76	2.84	2.90	2.99	3.10	3.20	3.25	3.28	3.36	3.40	3.45
	m³/h	9.4	9.9	10.2	10.4	10.8	11.2	11.5	11.7	11.8	12.1	12.2	12.4
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6	6

Performance – i2C

Econoplate Model		i2C 22	i2C 26	i2C 30	i2C 34	i2C 38	i2C 42	i2C 46	i2C 50	i2C 54	i2C 58	i2C 62	i2C 66	i2C 70	i2C 74
Heat Load Required / Max. Duty	kW	350	409	450	493	542	572	603	632	660	688	703	725	745	765
Secondary Flow Rate 10-60°C	l/s	1.67	1.96	2.15	2.36	2.59	2.74	2.89	3.02	3.16	3.29	3.36	3.47	3.57	3.66
	m³/h	6.0	7.1	7.7	8.5	9.3	9.9	10.4	10.9	11.4	11.8	12.1	12.5	12.9	13.2
Secondary Pressure Drop at Peak Output	kPa	14	13	12	11	11	10	9	9	9	8	8	8	7	7
Primary Flow Rate at 70°C	l/s	4.00	4.45	4.65	4.89	5.30	5.42	5.50	5.65	5.75	5.90	5.93	6.00	6.05	6.10
	m³/h	14.4	16.0	16.7	17.6	19.1	19.5	19.8	20.3	20.7	21.2	21.3	21.6	21.8	22.0
Primary Min. Head Available	kPa	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Econoplate E2(SW) – E2A(SW)/E2B(SW)/E2C(SW)

- Designed to be fed from a steam primary system operating with a supply temperature up to 140°C (2.6barg).
- Steam-to-Water – applications for DHWS & LTHW.
- 2-Port fully modulating fast-acting control valve.
- Model variants:
  - Single valve – modulating actuator.
  - Single valve – dual-function actuator – modulating + spring close (option).
  - Double valve – 1x modulating actuator and 1x spring close actuator (option).
  - +1R secondary HWS recirc. pump (option).
  - +1T secondary HWS transfer pump (option).

Performance – E2(SW) – DHWS (Domestic Hot Water Service)

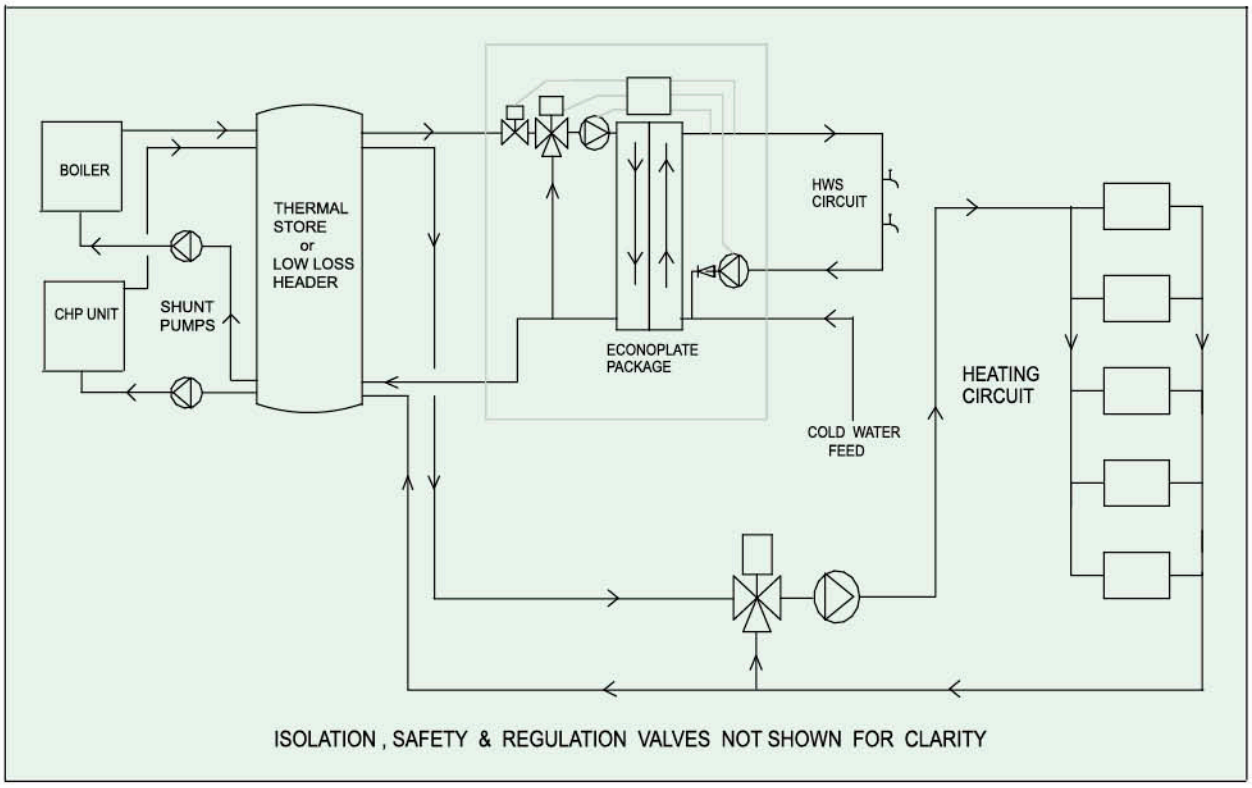
Econoplate Model		E2A (SW) 5	E2A (SW) 9	E2A (SW) 13	E2A (SW) 15	E2A (SW) 19	E2A (SW) 23	E2A (SW) 25	E2B (SW) 27	E2B (SW) 31	E2C (SW) 18L	E2C (SW) 22L	E2C (SW) 26L	E2C (SW) 28L	E2C (SW) 32L	E2C (SW) 36L
Heat Load Required / Max. Duty	kW	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000
Secondary Flow Rate 10-60°C	l/s	0.24	0.48	0.72	0.96	1.20	1.44	1.67	1.91	2.15	2.39	2.87	3.34	3.83	4.31	4.79
	m³/h	0.9	1.7	2.6	3.5	4.3	5.2	6.0	6.9	7.7	8.6	10.3	12.0	13.8	15.5	17.2
Secondary Pressure Drop at Peak Output	kPa	20	20	20	25	24	23	27	29	28	7	8	8	8	9	9
Primary Steam Flow Rate at 140°C	kg/s	0.023	0.046	0.069	0.092	0.114	0.137	0.160	0.183	0.206	0.229	0.275	0.320	0.366	0.412	0.458
Primary Steam Pressure Drop Single Valve	kPa	71	88	83	132	97	117	158	112	123	97	60	74	97	128	65
Primary Steam Pressure Drop Double Valve	kPa	98	137	125	110	144	192	129	162	197	75	102	141	132	94	114

Performance – E2(SW) – LTHW (Low Temperature Hot Water) Heating

Econoplate Model		E2A (SW) 7L	E2A (SW) 13L	E2B (SW) 19L	E2B (SW) 25L	E2B (SW) 33L	E2C (SW) 24L	E2C (SW) 30L	E2C (SW) 34L	E2C (SW) 38L	E2C (SW) 44L	E2C (SW) 48L	E2C (SW) 54L	E2C (SW) 60L	E2C (SW) 66L
Heat Load Required / Max. Duty	kW	50	100	150	200	250	300	350	400	450	500	550	600	650	700
Secondary Flow Rate 71-82°C	l/s	1.08	2.17	3.25	4.34	5.42	6.50	7.59	8.67	9.76	10.84	11.93	13.01	14.09	15.08
	m³/h	3.9	7.8	11.7	15.6	19.5	23.4	27.3	31.2	35.1	39.0	42.9	46.8	50.7	54.3
Secondary Pressure Drop at Peak Output	kPa	23	24	26	28	30	30	28	30	30	30	30	30	30	30
Primary Steam Flow Rate at 140°C	kg/s	0.023	0.046	0.069	0.092	0.114	0.137	0.160	0.183	0.206	0.229	0.252	0.275	0.298	0.320
Primary Steam Pressure Drop Single Valve	kPa	29	47	42	82	46	69	105	49	63	82	107	43	50	59
Primary Steam Pressure Drop Double Valve	kPa	57	99	86	58	95	168	157	102	143	58	71	87	105	130

Installation Schematic

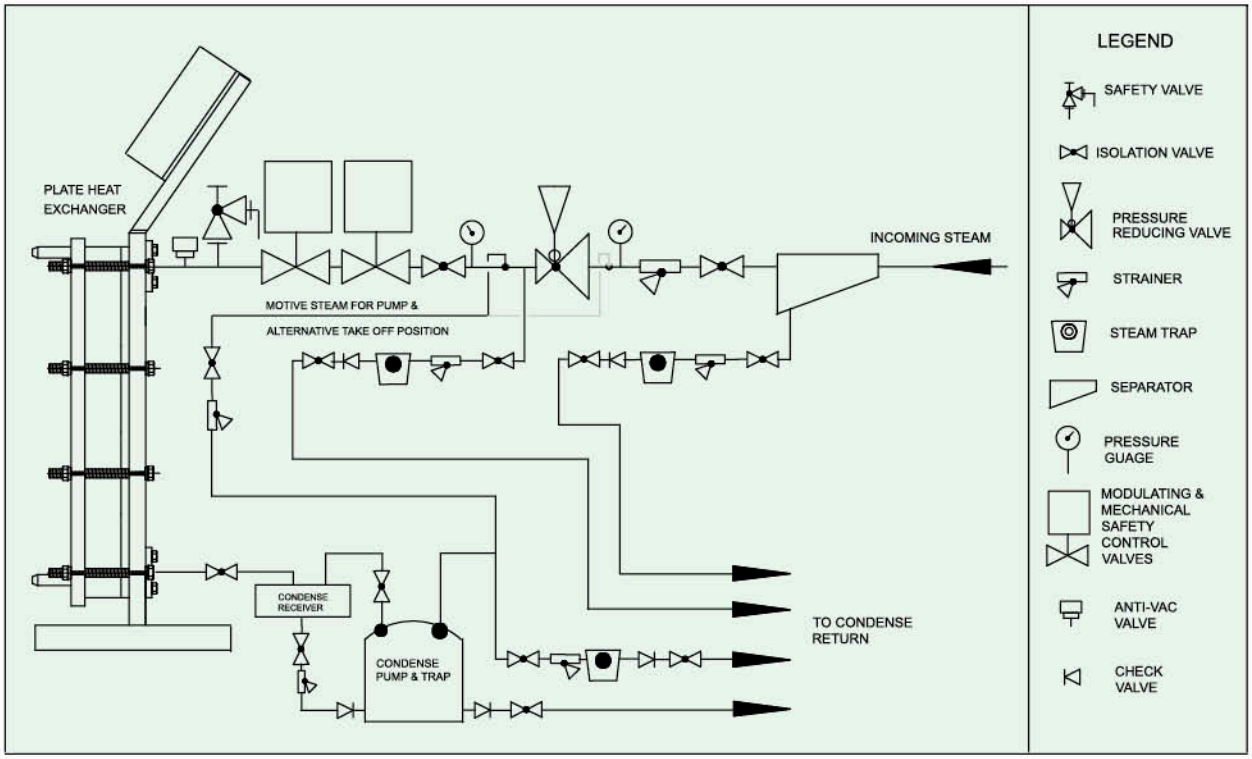
Primary & Secondary – LTHW Heating & Domestic Hot Water Service (DHWS)



The schematics in this document are for guidance purposes only and do not, in any way, constitute a complete system design.
Compliance with any regulations, standards or legislation, should be checked and verified, in addition to specific project requirements.

Installation Schematic

Primary – Steam



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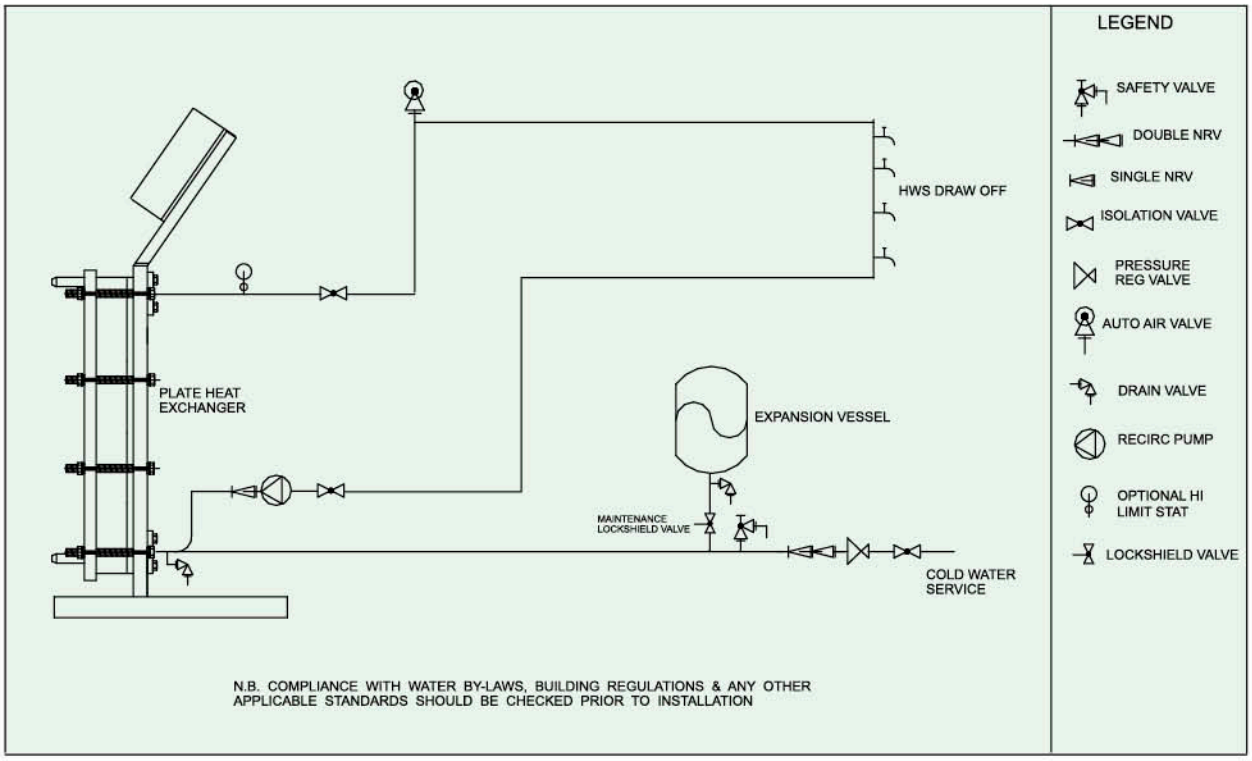
Installation Schematic

Secondary – Instantaneous Domestic Hot Water Service (DHWS)



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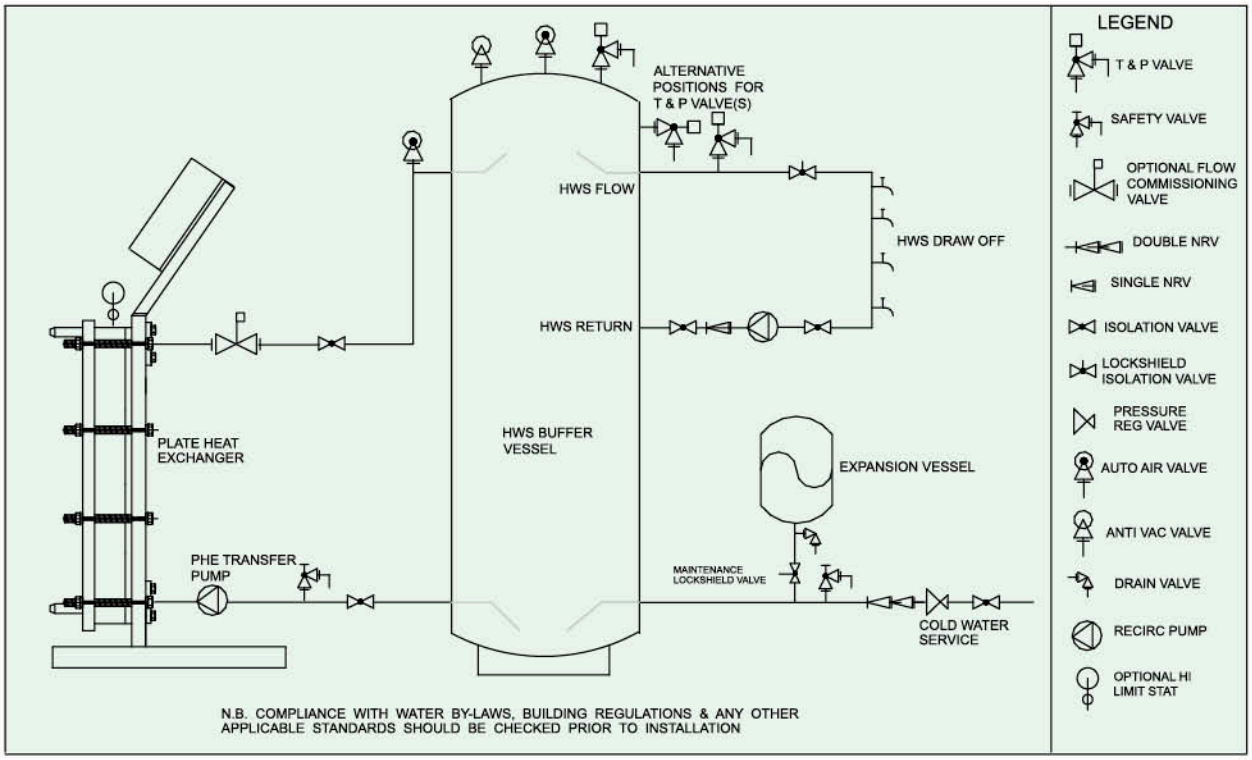
Installation Schematic

Secondary – Semi-Instantaneous Domestic Hot Water Service (DHWS)



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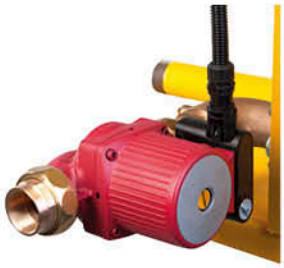
Optional Extras & Accessories

Pumps (Primary & Secondary)

Primary Pump
Duplex Twin-Head

Secondary Pump
HWS Recirculation (+1R)

Secondary Pump
HWS Transfer (+1T)



Primary Safety Shut Off Kit & Control Valve Positional Indication

Primary Safety
Shut Off Kit (AKF)

Additional Mechanical
High Limit Thermostat

Primary Control Valve
Positional Indication

Steam Safety Enhancements

Dual Function
Actuator

Double Valve
Assembly

Additional Mechanical
High Limit Thermostat

Thermal Insulation, Metal Box Cover & Spray Screen

Insulation Jacket

Metal Box Cover

Spray Screen

Buffer Vessels & Immersion Heaters

Buffer Vessel (Standard)
300-1000litre (Stainless Steel)

Buffer Vessel (Bespoke)
Various Sizes & Materials

Immersion Heater
6-18kW

Unvented Kit of Components (Boosted/Mains Fed Cold Feed)

An unvented kit of components, required by Building Regulations and in accordance with any installation requirements for Bylaw Compliance, can be provided when the cold feed is boosted or mains fed.

Pressure Reducing Valve
(PRV)

Pressure Gauge
(bar/psi)

Anti-Vacuum Valve
(AVV)

Double Check Valve
(DCV)

Safety/Expansion/Pressure
Relief Valve

Temperature & Pressure (T&P)
Relief Valve

Expansion Vessel
(24litre)

Expansion Vessel
(60-500litre)

Expansion Vessel
(750-5000litre)

Related Products

Econoplate Bare Plate Gasketed Heat Exchanger (Plate & Frame Only)

- Vast range of plate and gasket materials, plate types, configurations and frame sizes.
- Suitable for all manner of Commercial, Industrial and Process applications – Heating, Cooling, DHWS, LTHW, MTHW, Steam, Chilled Water & Pressure Breaks.

Econoplate BV Series Plate Heat Exchanger & Buffer Vessel Package

- Heat Exchanger:
  - 50-215kW.
  - Brazed.
- Storage Vessel:
  - 300-1000litre.
  - Stainless Steel.
- Controls:
  - Electronic PID.
  - Mechanical Thermostatic.

Econoplate H Series Heat Interface Units Direct & Indirect

- Econoplate H1 (Single Plate Heat Exchanger):
  - Direct Heating & Indirect Hot Water.
  - Indirect heat only.
- Econoplate H2 (Twin Plate Heat Exchanger):
  - Indirect Heating & Indirect Hot Water.

STOKVIS ENERGY SYSTEMS

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