

Flat Plate Heat Exchanger

Water to water Heat Exchanger

Applications:

- ✓ Green House Heating
- ✓ Central Heating
- ✓ HVAC Retrofits
- ✓ Oil Coolers
- ✓ Space Heating
- ✓ Solar Thermal Heat Dump
- ✓ Heat Recovery
- ✓ Infloor heating

Brazed heat exchangers are the single most efficient compact plate type heat exchanger in the market. They are used in a wide variety of heating systems ranging from snow melting systems to radiant floor heating, domestic water heating and several other innovative applications. Heating is a matter of providing comfort in an indoor environment, i.e., at home, at work or in a public building. This can also involve outdoor applications from swimming pools, greenhouses to snow melting systems for driveways. Whether for residential heating, district heating, HVAC cooling or district cooling our brazed plate heat exchangers have a major role to play.



Features and Advantages

- ✓ Stainless steel 316L plates (varies)
- ✓ Compact and durable
- ✓ Cost effective
- ✓ Easy installation and maintenance

Standard Sizes Always In Stock!



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Model - B3/BL		B3-12	B3-14C	B3-14A	B3-23	B3-27	B3-32	B3-52	B3-95	B3-105	BL200
Dimensions inch	A	0.27+0.09n	0.27+0.09n	0.27+0.09n	0.27+0.09n	0.35+0.10n	0.35+0.10n	0.35+0.10n	0.39+0.10n	0.51+0.11n	0.51+0.11n
	B	6.06	6.77	6.14	10.94	9.21	9.56	18.35	20.43	16.93	23.74
	C	7.52	8.19	7.72	12.40	11.26	11.26	20.74	24.25	20.79	29.06
	D	1.57	1.65	1.81	1.57	2.48	2.84	1.97	3.62	5.83	7.40
	E	2.87	2.87	3.39	2.87	4.57	4.57	4.37	7.52	9.69	12.64
	F	12mm	12mm	12mm	12mm	24mm	24mm	29mm	48mm	40mm	52mm
Channel Volume USgallon		0.0047	0.0027	0.0058	0.0106	0.0132	0.0132	0.0124	0.0330	0.0790	0.0581
Max. Number of Plates		60	60	60	60	120	120	120	200	200	250
Weight lbs		1.3+0.10n	1.5+0.13n	0.9+0.13n	2.4+0.20n	2.6+0.28n	2.6+0.26n	4.0+0.50n	10.1+0.90n	29.8+2.14n	28.7+1.76n
Connections size		B3-12	B3-14C	B3-14A	B3-23	B3-27	B3-32	B3-52	B3-95	B3-105	BL200
Threaded NPT (in)		3/4	3/4	3/4	3/4	1 1/4	1	1	2	2 1/2	3
Sweat/Solder (in)		S*	S	S	S	S	S	S	S	S	S

* Standard connection or Customized

n=number of plates

B3/BL Series Hydronic Duty Table

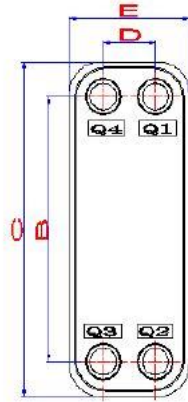
(Applications Guide for Brazed Plate Heat Exchangers)

Floor Heating: Boiler water 180F-150F; System water 100F-130F					
Capacity	Boiler flow	System flow	Model	pd-B	pd-S
kBtu/hour	usgpm	usgpm	B3/BL	psi	psi
30	3.5	3.5	B3-14-10	2.50	1.77
80	5.6	5.6	B3-14-10	6.50	4.52
130	8.9	8.9	B3-14-20	3.80	3.23
180	12.4	12.4	B3-14-20	7.22	6.18
230	15.9	15.9	B3-14-30	5.44	5.03
280	19.0	19.0	B3-14-30	8.05	7.48
330	22.4	22.4	B3-27-30	8.56	8.02
380	26.2	26.2	B3-27-40	6.32	6.24
430	29.0	29.0	B3-27-50	5.23	5.33
480	33.0	33.0	B3-27-50	6.45	6.68
530	36.0	36.0	B3-27-60	5.53	5.86
580	40.0	40.0	B3-27-70	5.13	5.61
630	43	43	B3-95-30	7.12	6.42
800	55	55	B3-95-40	6.33	5.96
1000	69	69	B3-95-50	6.36	6.02
1300	89	89	B3-95-60	7.43	7.25
1500	103	103	B3-95-70	7.45	7.26
1800	124	124	B3-95-80	8.39	8.27
2000	136	136	B3-95-90	8.41	8.35

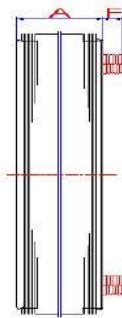
Domestic hot water heating:					
Boiler water 180F-150F; Pipe water 40F-140F					
Capacity	Boiler flow	Pipe flow	Model	pd-B	pd-P
kBtu/hour	usgpm	usgpm	B3/BL	psi	psi
80	4.0	1.2	B3-14-10	4.00	0.30
130	9.0	3.0	B3-14-20	3.86	0.32
200	14.0	4.0	B3-14-30	4.12	0.40
250	17.0	5.0	B3-27-30	5.02	0.46
350	24.0	7.0	B3-27-40	5.40	0.52
400	28.0	8.0	B3-27-50	4.56	0.46
600	41.0	12.0	B3-27-60	7.12	0.75
800	55	16	B3-95-40	6.32	0.60
1000	69	20	B3-95-50	6.30	0.61
1200	83	24	B3-95-60	6.41	0.62
1400	96	28	B3-95-70	6.58	0.63
1600	110	32	B3-95-80	6.62	0.64
1800	124	36	B3-95-90	6.81	0.66
2000	137	40	B3-95-100	7.01	0.69

Snow melting heating:					
Boiler water 180F-150F; Water/glycol-50% 110F-140F					
Capacity	Boiler flow	Glycol flow	Model	pd-B	pd-G
kBtu/hour	usgpm	usgpm	B3/BL	psi	psi
150	10	11	B3-27-20	4.26	5.41
250	17	19	B3-27-30	5.02	6.79
350	24	27	B3-27-40	5.42	7.89
460	31	34	B3-27-50	5.78	8.34
500	34	38	B3-27-60	5.05	7.92
560	38	42	B3-27-70	4.62	7.51
700	48	53	B3-95-40	5.01	6.83
850	58	64	B3-95-50	4.69	6.47
1000	69	76	B3-95-60	4.49	6.32
1200	83	91	B3-95-70	4.80	6.85

Coil-(Fan) heating:					
Boiler water 180F-150F; Coil water/glycol-50% 130F-160F					
Capacity	Boiler flow	Glycol flow	Model	pd-B	pd-G
kBtu/hour	usgpm	usgpm	B3/BL	psi	psi
200	14	15	B3-52-20	7.65	9.22
300	21	23	B3-52-30	7.22	9.34
400	28	30	B3-52-40	7.13	9.89
500	34	38	B3-52-50	7.16	10.2
600	34	38	B3-52-60	5.13	7.68



Standard Material
 Plate: SS316L;
 SS304 Available
 Design Parameters
 Max. Working Pressure: 435psig
 Max./Min. Working Temperature: 392F/-319F
 Plate Pattern H-Plate; L-Plate
 Channel Pattern H, M And L
 Approvals



Produced by
CE UL/ULC
 Recognized Manufacturer

B3/BL Series Refrigeration Duty Table

DX Evaporator

Ton	RT		Model	Connections Solder	
	Btu/h	B3/BL		R-in//R-out	L-in//L-out
1	12000	B3-27-14	7/8	7/8	
2	24000	B3-27-24	7/8	7/8	
3	36000	B3-27-34	1 1/8	1 1/8	
4	48000	B3-27-44	1 1/8	1 1/8	
5	60000	B3-27-54	1 1/8	1 1/8	
5	60000	B3-52-26HQ	5/8//1 1/8	1 1/8	
7.5	90000	B3-52-40HQ	5/8//1 1/8	1 1/8	
10	120000	B3-52-54HQ	5/8//1 3/8	1 1/8	
15	180000	B3-95-48HQ	1 1/8//2 1/8	2 1/8	
20	240000	B3-95-64HQ	1 1/8//2 1/8	2 1/8	
25	300000	B3-95-80HQ	1 1/8//2 1/8	2 1/8	
30	360000	B3-95-96HQ	1 1/8//2 1/8	2 1/8	
35	420000	B3-95-112HQ	1 1/8//2 1/8	2 1/8	
40	480000	B3-95-130HQ	1 1/8//2 1/8	2 1/8	

B3-200s are for duties larger than 40 tons
 1 RT = 12,000Btu/h

Condenser Water Cooled

Ton	CT		Model	Connections Solder	
	Btu/h	B3/BL		R-in//R-out	L-in//L-out
3.5	52500	B3-27-34	1 1/8	1 1/8	
4.75	71250	B3-27-44	1 1/8	1 1/8	
6	90000	B3-27-54	1 1/8	1 1/8	
4.5	67500	B3-52-20	1/2//1 1/8	1 1/8	
6.7	100500	B3-52-30	5/8//1 1/8	1 1/8	
9.5	142500	B3-52-40	5/8//1 1/8	1 1/8	
12.3	184500	B3-52-50	5/8//1 3/8	1 1/8	
13.6	204000	B3-52-60	5/8//1 3/8	1 3/8	
15	225000	B3-52-70	5/8//1 3/8	1 3/8	
19	285000	B3-95-40	7/8//2 1/8	2 1/8	
23.5	352500	B3-95-50	1 1/8//2 1/8	2 1/8	
28	420000	B3-95-60	1 1/8//2 1/8	2 1/8	
32	480000	B3-95-70	1 1/8//2 1/8	2 1/8	
36.5	547500	B3-95-80	1 1/8//2 1/8	2 1/8	
40	600000	B3-95-90	1 1/8//2 1/8	2 1/8	
44	660000	B3-95-100	1 1/8//2 1/8	2 1/8	

B3-200s are for duties larger than 44 tons
 1 CT = 15,000Btu/h



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- Boiler Water to 50% E.glycol									
Btu/hr	USGPM	Inlet Temp	Outlet Temp	P. Drop (psi)	USGPM	Inlet Temp	Outlet Temp	P. Drop (psi)	Model
20,000 Btu/hr	1.37	180F	150F	0.19	1.52	100F	130F	0.23	CB14-14H
30,000 Btu/hr	2.06	180F	150F	0.43	2.28	100F	130F	0.49	CB14-14H
40,000 Btu/hr	2.75	180F	150F	0.73	3.03	100F	130F	0.86	CB14-14H
50,000 Btu/hr	3.44	180F	150F	1.11	3.79	100F	130F	1.31	CB14-14H
60,000 Btu/hr	4.12	180F	150F	1.58	4.55	100F	130F	1.86	CB14-14H
70,000 Btu/hr	4.81	180F	150F	2.10	5.31	100F	130F	2.49	CB14-14H
80,000 Btu/hr	5.50	180F	150F	2.71	6.07	100F	130F	3.21	CB14-14H
90,000 Btu/hr	6.19	180F	150F	3.39	6.83	100F	130F	4.01	CB14-14H
100,000 Btu/hr	6.87	180F	150F	4.13	7.59	100F	130F	4.89	CB14-14H
125,000 Btu/hr	8.59	180F	150F	3.83	9.48	100F	130F	4.85	CB14-20H
150,000 Btu/hr	10.31	180F	150F	4.45	11.38	100F	130F	5.77	CB14-20H
175,000 Btu/hr	12.03	180F	150F	3.37	13.27	100F	130F	4.37	CB27-24H
200,000 Btu/hr	13.74	180F	150F	4.34	15.17	100F	130F	5.64	CB27-24H
225,000 Btu/hr	15.46	180F	150F	5.43	17.07	100F	130F	6.93	CB27-24H
250,000 Btu/hr	17.18	180F	150F	3.42	18.96	100F	130F	4.65	CB27-34H
275,000 Btu/hr	18.90	180F	150F	4.10	20.86	100F	130F	5.58	CB27-34H
300,000 Btu/hr	20.62	180F	150F	4.84	22.76	100F	130F	6.60	CB27-34H
350,000 Btu/hr	24.05	180F	150F	3.34	26.55	100F	130F	4.69	CB27-50H
400,000 Btu/hr	27.49	180F	150F	4.32	30.34	100F	130F	6.07	CB27-50H
450,000 Btu/hr	30.93	180F	150F	5.42	34.13	100F	130F	7.41	CB27-50H
500,000 Btu/hr	34.36	180F	150F	5.03	37.93	100F	130F	7.11	CB27-60H