Altsource®

PERFORMANCE TABLES

RATINGS & PRESSURE LOSS CHARTS



Select the model that fits your needs by looking at the charts at the desired domestic water output temperature and the boiler water input temperature. Find the boiler output required (column A or B) and look at the amount of hot water produced during the first hour or the second hour (Continuous demand=2nd hour or recovery capacity)

When a model is selected, look at pump flow rate shown in column C. To know the pressure losses of boiler water flowing through the Altsource®: at the pump flow valus, use the pressure drop VS boiler water flow rate chart: Boiler Water Side (Primary Circuit).
To know the pressure, drop on the domestic water side, use the pressure drop VS domestic water flow chart: Domestic Water Side (Secondary circuit).

Quick Reference Manual

Altsource® 120 with Optional DHW Coil

A) Performance Tables:

Domestic Water Temperature				
Inlet temperature at 40 °F Outlet temperature at **85 °F**	Inlet temperature at 40 °F Outlet temperature at **105 °F**	Inlet temperature at 40 °F Outlet temperature at **120 °F**	Inlet temperature at 40 °F Outlet temperature at **140 °F**	Inlet temperature at 40 °F Outlet temperature at **160 °F**
Page 1	**Page 2**	**Page 3**	**Page 4**	**Page 5**

B) Pressure Drop VS Flow Rate Curve:

Boiler Water Side :	**Page 6**
Domestic Water Side :	**Page 7**

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Performances : *ALTSOURCE® 120 - Optional DHW Coil*

				Domestic Water Production											
	Domestic Water Temperature			Boiler Water Temperature											
	In :	40 °F		Outlet :	180 °F	Outlet :	160 °F	Outlet :	140 °F	Outlet :	125 °F	Outlet :	105 °F		
	Out :	85 °F		Return :	160 °F	Return :	140 °F	Return :	120 °F	Return :	105 °F	Return :	85 °F		
	Boiler Net Output		Pump Flow Rate	First hour	Continuous	First hour	Continuous	First hour	Continuous	First hour	Continuous	First hour	Continuous		
	BTU required per hour	*kW*	Gallons / Minute	Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour			
1	20,400	6	2	**308**	54	**254**	54	**201**	54	**161**	54	**108**	54	1	
2	40,800	12	4	**362**	109	**309**	109	**256**	109	**216**	109	**162**	109	2	
3	61,200	18	6	**417**	163	**363**	163	**310**	163	**270**	163	**217**	163	3	
4	81,600	24	8	**471**	218	**418**	218	**364**	218	**324**	218	**271**	218	4	
5	102,000	30	10	**526**	272	**472**	272	**419**	272	**379**	272	**326**	272	5	
6	122,400	36	12	**580**	327	**527**	327	**473**	327	**433**	327	**380**	327	6	
7	142,800	42	14	**634**	381	**581**	381	**528**	381	**488**	381	**434**	381	7	
8	163,200	48	16	**689**	435	**635**	435	**582**	435	**542**	435	**489**	435	8	
9	183,600	54	18	**743**	490	**690**	490	**637**	490	**597**	490	**543**	490	9	
10	204,000	60	21	**798**	544	**744**	544	**691**	544	**651**	544	**598**	544	10	
11	224,400	66	23	**852**	599	**799**	599	**745**	599	**705**	599	**652**	599	11	
12	244,800	72	25	**907**	653	**853**	653	**800**	653	**760**	653	**707**	653	12	
13	265,200	78	27	**961**	708	**908**	708	**854**	708	**814**	708			13	
14	285,600	84	29	**1 015**	762	**962**	762	**909**	762	**869**	762			14	
15	306,000	90	31	**1 070**	817	**1 017**	817	**963**	817	**923**	817			15	
16	326,400	96	33	**1 124**	871	**1 071**	871	**1 018**	871	**978**	871			16	
17	346,800	102	35	**1 179**	925	**1 125**	925	**1 072**	925	**1 032**	925			17	
18	367,200	108	37	**1 233**	980	**1 180**	980	**1 127**	980	**1 087**	980			18	
19	387,600	114	39	**1 288**	1 034	**1 234**	1 034	**1 181**	1 034	**1 141**	1 034			19	
20	408,000	120	41	**1 342**	1 089	**1 289**	1 089	**1 235**	1 089	**1 195**	1 089			20	
21	428,400	126	43	**1 396**	1 143	**1 343**	1 143	**1 290**	1 143	**1 250**	1 143			21	
22	448,800	132	45	**1 451**	1 198	**1 398**	1 198	**1 344**	1 198	**1 304**	1 198			22	
23	469,200	138	47	**1 505**	1 252	**1 452**	1 252	**1 399**	1 252	**1 359**	1 252			23	
24	489,600	144	49	**1 560**	1 306	**1 506**	1 306	**1 453**	1 306	**1 413**	1 306			24	
25	510,000	150	51	**1 614**	1 361	**1 561**	1 361	**1 508**	1 361	**1 468**	1 361			25	
26	530,400	156	53	**1 669**	1 415	**1 615**	1 415	**1 562**	1 415	**1 522**				26	
27	550,800	162	55	**1 723**	1 470	**1 670**	1 470	**1 616**	1 470					27	
28	571,200	168	57		1 524	**1 724**	1 524	**1 671**	1 524					28	
29	591,600	174	59		1 579		1 579	**1 725**	1 579					29	
30	612,000	180	62		1 633		1 633		1 633					30	
31	632,400	186	64		1 687		1 687		1 687					31	
32	652,800	192	66		1 742		1 742		1 742					32	
33	673,200	198	68											33	
34	693,600	204	70											34	
35	714,000	210	72											35	
36	734,400	216	74											36	
37	754,800	222	76											37	
38	775,200	228	78											38	
39	795,600	234	80											39	
40	816,000	240	82											40	
41	836,400	246	84											41	
42	856,800	252	86											42	
43	877,200	258	88											43	
44	897,600	264	90											44	
45	918,000	270	92											45	
46	938,400	276	94											46	
47	958,800	282	96											47	
48	979,200	288	98											48	
49	999,600	294	101											49	
50	1,020,000	300	103											50	
51	1,040,400	306	105											51	
52	1,060,800	312	107											52	
53	1,081,200	318	109											53	
54	1,101,600	324	111											54	
55	1,122,000	330	113											55	
56	1,142,400	336	115											56	
57	1,162,800	342	117											57	
58	1,183,200	348	119											58	
59	1,203,600	354	121											59	
60	1,224,000	360	123											60	
61	1,244,400	366	125											61	
62	1,264,800	372	127											62	
63	1,285,200	378	129											63	
64	1,305,600	384	131											64	
65	1,326,000	390	133											65	
66	1,346,400	396	135											66	
67	1,366,800	402	137											67	
68	1,387,200	408	139											68	
69	1,407,600	414	142											69	
70	1,428,000	420	144											70	
71	1,448,400	426	146											71	
72	1,468,800	432	148											72	
73	1,489,200	438	150											73	
74	1,509,600	444	152											74	
75	1,530,000	450	154											75	
76	1,550,400	456	156											76	
	A	B	C	D	F	D	F	D	F	D	F	D	F		

Performances : *ALTSOURCE® 120 - Optional DHW Coil*

				Domestic Water Production										
	Domestic Water Temperature			Boiler Water Temperature										
	In :	40 °F		Outlet :	180 °F	Outlet :	160 °F	Outlet :	140 °F	Outlet :	125 °F	Outlet :	105 °F	
	Out :	105 °F		Return :	160 °F	Return :	140 °F	Return :	120 °F	Return :	105 °F	Return :	85 °F	
	Boiler Net Output		Pump Flow Rate	First hour	Continuous	First hour	Continuous	First hour	Continuous	First hour	Continuous	First hour	Continuous	
	BTU required per hour	*kW*	Gallons / Minute	Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour		
1	20,400	6	2	**176**	38	**139**	38	**102**	38	**75**	38	N/A	N/A	1
2	40,800	12	4	**214**	76	**177**	76	**140**	76	**112**	76			2
3	61,200	18	6	**252**	113	**215**	113	**178**	113	**150**	113			3
4	81,600	24	8	**289**	151	**253**	151	**216**	151	**188**	151			4
5	102,000	30	10	**327**	189	**290**	189	**253**	189	**226**	189			5
6	122,400	36	12	**365**	227	**328**	227	**291**	227	**263**	227			6
7	142,800	42	14	**403**	264	**366**	264	**329**	264	**301**	264			7
8	163,200	48	16	**441**	302	**404**	302	**367**	302	**339**	302			8
9	183,600	54	18	**478**	340	**441**	340	**404**	340	**377**	340			9
10	204,000	60	21	**516**	378	**479**	378	**442**	378	**414**	378			10
11	224,400	66	23	**554**	415	**517**	415	**480**	415	**452**	415			11
12	244,800	72	25	**592**	453	**555**	453	**518**	453	**490**	453			12
13	265,200	78	27	**629**	491	**592**	491	**555**	491	**528**	491			13
14	285,600	84	29	**667**	529	**630**	529	**593**	529	**566**	529			14
15	306,000	90	31	**705**	566	**668**	566	**631**	566					15
16	326,400	96	33	**743**	604	**706**	604	**669**	604					16
17	346,800	102	35	**780**	642	**743**	642	**706**	642					17
18	367,200	108	37	**818**	680	**781**	680	**744**	680					18
19	387,600	114	39	**856**	717	**819**	717	**782**	717					19
20	408,000	120	41	**894**	755	**857**	755	**820**	755					20
21	428,400	126	43	**931**	793	**894**	793	**858**	793					21
22	448,800	132	45	**969**	831	**932**	831	**895**	831					22
23	469,200	138	47	**1 007**	868	**970**	868	**933**	868					23
24	489,600	144	49	**1 045**	906	**1 008**	906							24
25	510,000	150	51	**1 082**	944	**1 045**	944							25
26	530,400	156	53	**1 120**	982	**1 083**	982							26
27	550,800	162	55	**1 158**	1 019	**1 121**	1 019							27
28	571,200	168	57	**1 196**	1 057	**1 159**	1 057							28
29	591,600	174	59	**1 233**	1 095	**1 196**	1 095							29
30	612,000	180	62	**1 271**	1 133	**1 234**	1 133							30
31	632,400	186	64	**1 309**	1 170	**1 272**	1 170							31
32	652,800	192	66	**1 347**	1 208	**1 310**	1 208							32
33	673,200	198	68	**1 384**	1 246	**1 348**	1 246							33
34	693,600	204	70	**1 422**	1 284	**1 385**	1 284							34
35	714,000	210	72	**1 460**	1 321	**1 423**	1 321							35
36	734,400	216	74	**1 498**	1 359	**1 461**	1 359							36
37	754,800	222	76	**1 535**	1 397	**1 499**	1 397							37
38	775,200	228	78	**1 573**	1 435	**1 536**								38
39	795,600	234	80	**1 611**	1 473	**1 574**								39
40	816,000	240	82	**1 649**	1 510									40
41	836,400	246	84	**1 686**	1 548									41
42	856,800	252	86	**1 724**	1 586									42
43	877,200	258	88		1 624									43
44	897,600	264	90		1 661									44
45	918,000	270	92		1 699									45
46	938,400	276	94		1 737									46
47	958,800	282	96											47
48	979,200	288	98											48
49	999,600	294	101											49
50	1,020,000	300	103											50
51	1,040,400	306	105											51
52	1,060,800	312	107											52
53	1,081,200	318	109											53
54	1,101,600	324	111											54
55	1,122,000	330	113											55
56	1,142,400	336	115											56
57	1,162,800	342	117											57
58	1,183,200	348	119											58
59	1,203,600	354	121											59
60	1,224,000	360	123											60
61	1,244,400	366	125											61
62	1,264,800	372	127											62
63	1,285,200	378	129											63
64	1,305,600	384	131											64
65	1,326,000	390	133											65
66	1,346,400	396	135											66
67	1,366,800	402	137											67
68	1,387,200	408	139											68
69	1,407,600	414	142											69
70	1,428,000	420	144											70
71	1,448,400	426	146											71
72	1,468,800	432	148											72
73	1,489,200	438	150											73
74	1,509,600	444	152											74
75	1,530,000	450	154											75
76	1,550,400	456	156											76
	A	B	C	D	F	D	F	D	F	D	F	D	F	

Performances : *ALTSOURCE® 120 - Optional DHW Coil*

				Domestic Water Production									
Domestic Water Temperature			Boiler Water Temperature									
In :	40 °F		Outlet :	180 °F	Outlet :	160 °F	Outlet :	140 °F	Outlet :	125 °F	Outlet :	105 °F
Out :	120 °F		Return :	160 °F	Return :	140 °F	Return :	120 °F	Return :	105 °F	Return :	85 °F
Boiler Net Output		Pump Flow Rate	First hour	Continuous	First hour	Continuous	First hour	Continuous	First hour	Continuous	First hour	Continuous
BTU required per hour	*kW*	Gallons / Minute	Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour	
20,400	6	2	**121**	31	**91**	31	**61**	31	**38**	31	N/A	N/A
40,800	12	4	**151**	61	**121**	61	**91**	61	**69**	61		
61,200	18	6	**182**	92	**152**	92	**122**	92	**100**	92		
81,600	24	8	**213**	123	**183**	123	**153**	123	**130**	123		
102,000	30	10	**244**	154	**214**	154	**184**	154	**161**	154		
122,400	36	12	**274**	184	**244**	184	**214**	184	**192**	184		
142,800	42	14	**305**	215	**275**	215	**245**	215	**223**	215		
163,200	48	16	**336**	246	**306**	246	**276**	246	**253**	246		
183,600	54	18	**366**	276	**336**	276	**306**	276				
204,000	60	21	**397**	307	**367**	307	**337**	307				
224,400	66	23	**428**	338	**398**	338	**368**	338				
244,800	72	25	**459**	369	**429**	369	**399**	369				
265,200	78	27	**489**	399	**459**	399	**429**	399				
285,600	84	29	**520**	430	**490**	430	**460**	430				
306,000	90	31	**551**	461	**521**	461	**491**	461				
326,400	96	33	**581**	491	**551**	491	**521**	491				
346,800	102	35	**612**	522	**582**	522						
367,200	108	37	**643**	553	**613**	553						
387,600	114	39	**674**	584	**644**	584						
408,000	120	41	**704**	614	**674**	614						
428,400	126	43	**735**	645	**705**	645						
448,800	132	45	**766**	676	**736**	676						
469,200	138	47	**796**	706	**766**	706						
489,600	144	49	**827**	737	**797**	737						
510,000	150	51	**858**	768	**828**	768						
530,400	156	53	**889**	799	**859**	799						
550,800	162	55	**919**	829	**889**	829						
571,200	168	57	**950**	860	**920**							
591,600	174	59	**981**	891								
612,000	180	62	**1 011**	921								
632,400	186	64	**1 042**	952								
652,800	192	66	**1 073**	983								
673,200	198	68	**1 104**	1 014								
693,600	204	70	**1 134**	1 044								
714,000	210	72	**1 165**	1 075								
734,400	216	74	**1 196**	1 106								
754,800	222	76	**1 226**	1 136								
775,200	228	78	**1 257**	1 167								
795,600	234	80	**1 288**	1 198								
816,000	240	82	**1 319**	1 229								
836,400	246	84	**1 349**	1 259								
856,800	252	86	**1 380**									
877,200	258	88	**1 411**									
897,600	264	90										
918,000	270	92										
938,400	276	94										
958,800	282	96										
979,200	288	98										
999,600	294	101										
1,020,000	300	103										
1,040,400	306	105										
1,060,800	312	107										
1,081,200	318	109										
1,101,600	324	111										
1,122,000	330	113										
1,142,400	336	115										
1,162,800	342	117										
1,183,200	348	119										
1,203,600	354	121										
1,224,000	360	123										
1,244,400	366	125										
1,264,800	372	127										
1,285,200	378	129										
1,305,600	384	131										
1,326,000	390	133										
1,346,400	396	135										
1,366,800	402	137										
1,387,200	408	139										
1,407,600	414	142										
1,428,000	420	144										
1,448,400	426	146										
1,468,800	432	148										
1,489,200	438	150										
1,509,600	444	152										
1,530,000	450	154										
1,550,400	456	156										
A	B	C	D	F	D	F	D	F	D	F	D	F

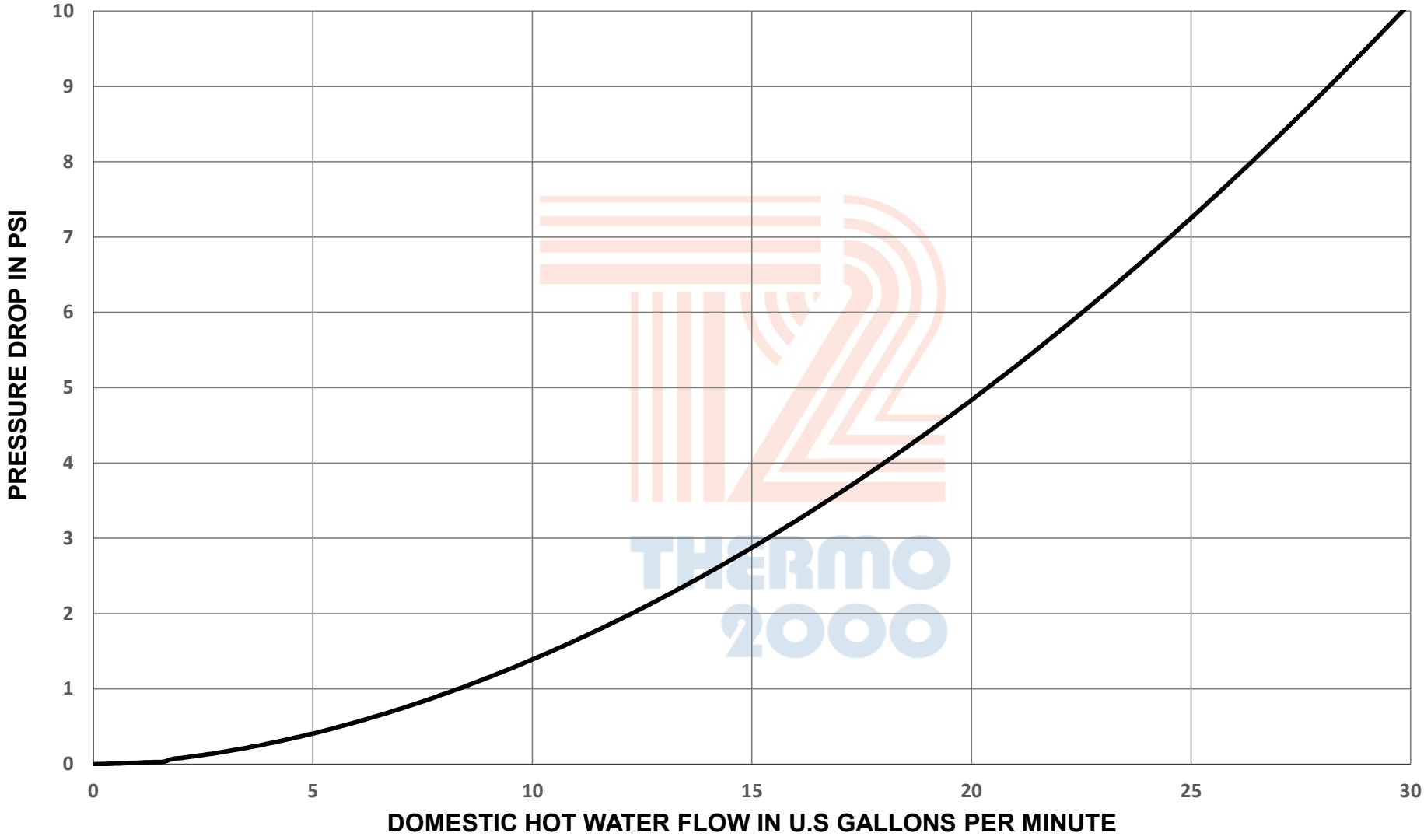
Performances : *ALTSOURCE® 120 - Optional DHW Coil*

				Domestic Water Production									
	Domestic Water Temperature			Boiler Water Temperature									
	In :	40 °F		Outlet :	180 °F	Outlet :	160 °F	Outlet :	140 °F	Outlet :	125 °F	Outlet :	105 °F
	Out :	140 °F		Return :	160 °F	Return :	140 °F	Return :	120 °F	Return :	105 °F	Return :	85 °F
	Boiler Net Output		Pump Flow Rate	First hour	Continuous	First hour	Continuous	First hour	Continuous	First hour	Continuous	First hour	Continuous
	BTU required per hour	*kW*	Gallons / Minute	Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour	
1	20,400	6	2	**73**	25	**49**	25	N/A	N/A	N/A	N/A	N/A	N/A
2	40,800	12	4	**97**	49	**73**	49						
3	61,200	18	6	**122**	74	**98**	74						
4	81,600	24	8	**146**	98	**122**	98						
5	102,000	30	10	**171**	123	**147**	123						
6	122,400	36	12	**196**	148	**172**	148						
7	142,800	42	14	**220**	172	**196**	172						
8	163,200	48	16	**245**	197	**221**	197						
9	183,600	54	18	**270**	222	**246**	222						
10	204,000	60	21	**294**	246	**270**	246						
11	224,400	66	23	**319**	271	**295**	271						
12	244,800	72	25	**343**	295	**319**	295						
13	265,200	78	27	**368**	320	**344**	320						
14	285,600	84	29	**393**	345	**369**	345						
15	306,000	90	31	**417**	369	**393**	369						
16	326,400	96	33	**442**	394	**418**	394						
17	346,800	102	35	**467**	419	**443**	419						
18	367,200	108	37	**491**	443	**467**	443						
19	387,600	114	39	**516**	468								
20	408,000	120	41	**540**	492								
21	428,400	126	43	**565**	517								
22	448,800	132	45	**590**	542								
23	469,200	138	47	**614**	566								
24	489,600	144	49	**639**	591								
25	510,000	150	51	**663**	615								
26	530,400	156	53	**688**	640								
27	550,800	162	55	**713**	665								
28	571,200	168	57	**737**	689								
29	591,600	174	59	**762**	714								
30	612,000	180	62	**787**									
31	632,400	186	64										
32	652,800	192	66										
33	673,200	198	68										
34	693,600	204	70										
35	714,000	210	72										
36	734,400	216	74										
37	754,800	222	76										
38	775,200	228	78										
39	795,600	234	80										
40	816,000	240	82										
41	836,400	246	84										
42	856,800	252	86										
43	877,200	258	88										
44	897,600	264	90										
45	918,000	270	92										
46	938,400	276	94										
47	958,800	282	96										
48	979,200	288	98										
49	999,600	294	101										
50	1,020,000	300	103										
51	1,040,400	306	105										
52	1,060,800	312	107										
53	1,081,200	318	109										
54	1,101,600	324	111										
55	1,122,000	330	113										
56	1,142,400	336	115										
57	1,162,800	342	117										
58	1,183,200	348	119										
59	1,203,600	354	121										
60	1,224,000	360	123										
61	1,244,400	366	125										
62	1,264,800	372	127										
63	1,285,200	378	129										
64	1,305,600	384	131										
65	1,326,000	390	133										
66	1,346,400	396	135										
67	1,366,800	402	137										
68	1,387,200	408	139										
69	1,407,600	414	142										
70	1,428,000	420	144										
71	1,448,400	426	146										
72	1,468,800	432	148										
73	1,489,200	438	150										
74	1,509,600	444	152										
75	1,530,000	450	154										
76	1,550,400	456	156										
	A	B	C	D	F	D	F	D	F	D	F	D	F

Performances : *ALTSOURCE® 120 - Optional DHW Coil*

				Domestic Water Production									
Domestic Water Temperature			**Boiler Water Temperature**									
In :	40 °F		Outlet :	180 °F	Outlet :	160 °F	Outlet :	140 °F	Outlet :	125 °F	Outlet :	105 °F
Out :	160 °F		Return :	160 °F	Return :	140 °F	Return :	120 °F	Return :	105 °F	Return :	85 °F
Boiler Net Output		**Pump Flow Rate**	**First hour**	Continuous	**First hour**	Continuous	**First hour**	Continuous	**First hour**	Continuous	**First hour**	Continuous
BTU required per hour	*kW*	Gallons / Minute	Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour		Gallons / Hour	
20,400	6	2	**41**	21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40,800	12	4	**61**	41								
61,200	18	6	**82**	62								
81,600	24	8	**102**	82								
102,000	30	10	**123**	103								
122,400	36	12	**143**	123								
142,800	42	14	**164**	144								
163,200	48	16	**184**	164								
183,600	54	18	**205**	185								
204,000	60	21	**226**	206								
224,400	66	23	**246**	226								
244,800	72	25	**267**	247								
265,200	78	27	**287**	267								
285,600	84	29	**308**	288								
306,000	90	31	**328**	308								
326,400	96	33	**349**	329								
346,800	102	35	**369**	349								
367,200	108	37	**390**	370								
387,600	114	39	**411**	391								
408,000	120	41	**431**	411								
428,400	126	43										
448,800	132	45										
469,200	138	47										
489,600	144	49										
510,000	150	51										
530,400	156	53										
550,800	162	55										
571,200	168	57										
591,600	174	59										
612,000	180	62										
632,400	186	64										
652,800	192	66										
673,200	198	68										
693,600	204	70										
714,000	210	72										
734,400	216	74										
754,800	222	76										
775,200	228	78										
795,600	234	80										
816,000	240	82										
836,400	246	84										
856,800	252	86										
877,200	258	88										
897,600	264	90										
918,000	270	92										
938,400	276	94										
958,800	282	96										
979,200	288	98										
999,600	294	101										
1,020,000	300	103										
1,040,400	306	105										
1,060,800	312	107										
1,081,200	318	109										
1,101,600	324	111										
1,122,000	330	113										
1,142,400	336	115										
1,162,800	342	117										
1,183,200	348	119										
1,203,600	354	121										
1,224,000	360	123										
1,244,400	366	125										
1,264,800	372	127										
1,285,200	378	129										
1,305,600	384	131										
1,326,000	390	133										
1,346,400	396	135										
1,366,800	402	137										
1,387,200	408	139										
1,407,600	414	142										
1,428,000	420	144										
1,448,400	426	146										
1,468,800	432	148										
1,489,200	438	150										
1,509,600	444	152										
1,530,000	450	154										
1,550,400	456	156										
A	B	C	D	F	D	F	D	F	D	F	D	F

Domestic Water Side (Secondary Circuit)
Pressure Drop VS Domestic Hot Water Flow
Altsource with Optional DHW Coil



Pressure Drop VS Boiler Water Flow Rate
Altsource with or without Optional DHW Coil

