

DoubleMax™

Instantaneous Indirect Double-Wall Water Heater

PERFORMANCE TABLES

RATINGS & PRESSURE LOSSES CHART



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 DoubleMax: at the pump flow value, 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).

A) Performances Tables :

	Domestic Water Temperature				
	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	Inlet temperature at 40°F Outlet temperature at 180 °F
Boiler Water Temperature					
Supply temperature at 200°F Return temperature at 180°F	Page 2	Page 7	Page 11	Page 14	Page 16
Supply temperature at 180°F Return temperature at 160°F	Page 3	Page 8	Page 12	Page 15	
Supply temperature at 160°F Return temperature at 140°F	Page 4	Page 9	Page 13		
Supply temperature at 140°F Return temperature at 120°F	Page 5	Page 10			
Supply temperature at 125°F Return temperature at 105°F	Page 6				

B) Pressure Drop VS Flow Rate Curve:

Boiler Water Side :	Page 17
Domestic Water Side :	Page 18

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Domestic water temperature		
In :	40 °F	
Out :	105 °F	

Boiler water temperature		
Feed :	200 °F	
Return :	180 °F	

Production of domestic hot water.

			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
Boiler Net Output		Pump Flow rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate
BTU required per hour	kW	Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
25,000	7	3	220	46	163	46	119	46
50,000	15	5	266	92	209	92	165	92
75,000	22	8	313	139	256	139	212	139
100,000	29	10	359	185	302	185	258	185
125,000	37	13	405	231	348	231	304	231
150,000	44	15	451	277	394	277	350	277
175,000	51	18	497	323	440	323	396	323
200,000	59	21	544	370	487	370	443	370
225,000	66	23	590	416	533	416	489	416
250,000	73	26	636	462	579	462	535	462
275,000	81	28	682	508	625	508	581	508
300,000	88	31	728	554	671	554	628	554
325,000	95	34	775	601	718	601	674	601
350,000	103	36	821	647	764	647	720	647
375,000	110	39	867	693	810	693		693
400,000	117	41	913	739	856	739		
425,000	125	44	959	785		785		
450,000	132	46	1 006	832		832		
475,000	139	49	1 052	878		878		
500,000	146	52	1 098	924				
525,000	154	54	1 144	970				
550,000	161	57	1 190	1 016				
575,000	168	59	1 237	1 063				
600,000	176	62	1 283	1 109				
625,000	183	65	1 329	1 155				
650,000	190	67	1 375	1 201				
675,000	198	70	1 421	1 247				
700,000	205	72	1 468	1 294				
725,000	212	75	1 514	1 340				
750,000	220	77	1 560	1 386				
775,000	227	80	1 606	1 432				
800,000	234	83		1 478				
825,000	242	85		1 525				
850,000	249	88		1 571				
875,000	256	90		1 617				
900,000	264	93						
925,000	271	96						
950,000	278	98						
975,000	286	101						
1,000,000	293	103						
1,025,000	300	106						
1,050,000	308	108						
1,075,000	315	111						
1,100,000	322	114						
1,125,000	330	116						
1,150,000	337	119						
1,175,000	344	121						
1,200,000	352	124						
1,225,000	359	127						
1,250,000	366	129						
1,275,000	374	132						
1,300,000	381	134						
1,325,000	388	137						
1,350,000	396	139						
1,375,000	403	142						
1,400,000	410	145						
1,425,000	418	147						
1,450,000	425	150						
1,475,000	432	152						
1,500,000	439	155						
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Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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Domestic water temperature		
In :	40 °F	
Out :	105 °F	

Boiler water temperature		
Feed :	180 °F	
Return :	160 °F	

Production of domestic hot water.

			<i>DoubleMax™ 120-9 & 120-9A</i>		<i>DoubleMax™ 80-5</i>		<i>DoubleMax™ 50-4</i>	
Boiler Net Output		Pump Flow rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate
BTU required per hour	kW	Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	184	46	139	46	104	46
2 50,000	15	5	230	92	185	92	150	92
3 75,000	22	8	276	139	231	139	196	139
4 100,000	29	10	322	185	277	185	243	185
5 125,000	37	13	368	231	323	231	289	231
6 150,000	44	15	415	277	370	277	335	277
7 175,000	51	18	461	323	416	323	381	323
8 200,000	59	21	507	370	462	370	427	370
9 225,000	66	23	553	416	508	416	474	416
10 250,000	73	26	599	462	554	462	520	462
11 275,000	81	28	646	508	601	508	566	508
12 300,000	88	31	692	554	647	554	612	554
13 325,000	95	33	738	601	693	601	658	601
14 350,000	103	36	784	647	739	647	705	647
15 375,000	110	38	830	693	785	693		693
16 400,000	117	41	877	739	832	739		
17 425,000	125	44	923	785	878	785		
18 450,000	132	46	969	832		832		
19 475,000	139	49	1 015	878		878		
20 500,000	146	51	1 061	924				
21 525,000	154	54	1 108	970				
22 550,000	161	56	1 154	1 016				
23 575,000	168	59	1 200	1 063				
24 600,000	176	62	1 246	1 109				
25 625,000	183	64	1 292	1 155				
26 650,000	190	67	1 339	1 201				
27 675,000	198	69	1 385	1 247				
28 700,000	205	72	1 431	1 294				
29 725,000	212	74	1 477	1 340				
30 750,000	220	77	1 523	1 386				
31 775,000	227	79	1 570	1 432				
32 800,000	234	82	1 616	1 478				
33 825,000	242	85		1 525				
34 850,000	249	87		1 571				
35 875,000	256	90		1 617				
36 900,000	264	92						
37 925,000	271	95						
38 950,000	278	97						
39 975,000	286	100						
40 1,000,000	293	103						
41 1,025,000	300	105						
42 1,050,000	308	108						
43 1,075,000	315	110						
44 1,100,000	322	113						
45 1,125,000	330	115						
46 1,150,000	337	118						
47 1,175,000	344	120						
48 1,200,000	352	123						
49 1,225,000	359	126						
50 1,250,000	366	128						
51 1,275,000	374	131						
52 1,300,000	381	133						
53 1,325,000	388	136						
54 1,350,000	396	138						
55 1,375,000	403	141						
56 1,400,000	410	144						
57 1,425,000	418	146						
58 1,450,000	425	149						
59 1,475,000	432	151						
60 1,500,000	439	154						
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Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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Domestic water temperature		
In :	40 °F	
Out :	105 °F	

Boiler water temperature		
Feed :	160 °F	
Return :	140 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
25,000	7	3	147	46	114	46	89	46
50,000	15	5	193	92	160	92	135	92
75,000	22	8	239	139	206	139	181	139
100,000	29	10	286	185	253	185	227	185
125,000	37	13	332	231	299	231	273	231
150,000	44	15	378	277	345	277	320	277
175,000	51	18	424	323	391	323	366	323
200,000	59	20	470	370	437	370	412	370
225,000	66	23	517	416	484	416	458	416
250,000	73	25	563	462	530	462	504	462
275,000	81	28	609	508	576	508	551	508
300,000	88	31	655	554	622	554	597	554
325,000	95	33	701	601	668	601		
350,000	103	36	748	647	715	647		
375,000	110	38	794	693	761	693		
400,000	117	41	840	739				
425,000	125	43	886	785				
450,000	132	46	932	832				
475,000	139	48	979	878				
500,000	146	51	1 025	924				
525,000	154	53	1 071	970				
550,000	161	56	1 117	1 016				
575,000	168	59	1 163	1 063				
600,000	176	61	1 210	1 109				
625,000	183	64	1 256	1 155				
650,000	190	66	1 302	1 201				
675,000	198	69	1 348	1 247				
700,000	205	71	1 394	1 294				
725,000	212	74						
750,000	220	76						
775,000	227	79						
800,000	234	82						
825,000	242	84						
850,000	249	87						
875,000	256	89						
900,000	264	92						
925,000	271	94						
950,000	278	97						
975,000	286	99						
1,000,000	293	102						
1,025,000	300	104						
1,050,000	308	107						
1,075,000	315	110						
1,100,000	322	112						
1,125,000	330	115						
1,150,000	337	117						
1,175,000	344	120						
1,200,000	352	122						
1,225,000	359	125						
1,250,000	366	127						
1,275,000	374	130						
1,300,000	381	132						
1,325,000	388	135						
1,350,000	396	138						
1,375,000	403	140						
1,400,000	410	143						
1,425,000	418	145						
1,450,000	425	148						
1,475,000	432	150						
1,500,000	439	153						
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Domestic water temperature		
In :	40 °F	
Out :	105 °F	

Boiler water temperature		
Feed :	140 °F	
Return :	120 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Pump Flow rate Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	110	46	89	46	73	46
2 50,000	15	5	156	92	135	92	119	92
3 75,000	22	8	203	139	182	139	166	139
4 100,000	29	10	249	185	228	185	212	185
5 125,000	37	13	295	231	274	231	258	231
6 150,000	44	15	341	277	320	277	304	277
7 175,000	51	18	387	323	366	323	350	323
8 200,000	59	20	434	370	413	370		
9 225,000	66	23	480	416	459	416		
10 250,000	73	25	526	462				
11 275,000	81	28	572	508				
12 300,000	88	30	619	554				
13 325,000	95	33	665	601				
14 350,000	103	35	711	647				
15 375,000	110	38	757	693				
16 400,000	117	41	803	739				
17 425,000	125	43						
18 450,000	132	46						
19 475,000	139	48						
20 500,000	146	51						
21 525,000	154	53						
22 550,000	161	56						
23 575,000	168	58						
24 600,000	176	61						
25 625,000	183	63						
26 650,000	190	66						
27 675,000	198	68						
28 700,000	205	71						
29 725,000	212	73						
30 750,000	220	76						
31 775,000	227	79						
32 800,000	234	81						
33 825,000	242	84						
34 850,000	249	86						
35 875,000	256	89						
36 900,000	264	91						
37 925,000	271	94						
38 950,000	278	96						
39 975,000	286	99						
40 1,000,000	293	101						
41 1,025,000	300	104						
42 1,050,000	308	106						
43 1,075,000	315	109						
44 1,100,000	322	111						
45 1,125,000	330	114						
46 1,150,000	337	117						
47 1,175,000	344	119						
48 1,200,000	352	122						
49 1,225,000	359	124						
50 1,250,000	366	127						
51 1,275,000	374	129						
52 1,300,000	381	132						
53 1,325,000	388	134						
54 1,350,000	396	137						
55 1,375,000	403	139						
56 1,400,000	410	142						
57 1,425,000	418	144						
58 1,450,000	425	147						
59 1,475,000	432	149						
60 1,500,000	439	152						
A	B	C	D	E	F	G	H	I

Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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Domestic water temperature		
In :	40 °F	
Out :	105 °F	

Boiler water temperature		
Feed :	125 °F	
Return :	105 °F	

Production of domestic hot water.

Boiler Net Output			Pump Flow rate		DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
					First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
					Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1	25,000	7	3	83	46	71	46	62	46	1
2	50,000	15	5	129	92	117	92	108	92	2
3	75,000	22	8	175	139	163	139	154	139	3
4	100,000	29	10	221	185	209	185	200	185	4
5	125,000	37	13	268	231	256	231			5
6	150,000	44	15	314	277					6
7	175,000	51	18	360	323					7
8	200,000	59	20	406	370					8
9	225,000	66	23	452	416					9
10	250,000	73	25							10
11	275,000	81	28							11
12	300,000	88	30							12
13	325,000	95	33							13
14	350,000	103	35							14
15	375,000	110	38							15
16	400,000	117	40							16
17	425,000	125	43							17
18	450,000	132	45							18
19	475,000	139	48							19
20	500,000	146	50							20
21	525,000	154	53							21
22	550,000	161	55							22
23	575,000	168	58							23
24	600,000	176	61							24
25	625,000	183	63							25
26	650,000	190	66							26
27	675,000	198	68							27
28	700,000	205	71							28
29	725,000	212	73							29
30	750,000	220	76							30
31	775,000	227	78							31
32	800,000	234	81							32
33	825,000	242	83							33
34	850,000	249	86							34
35	875,000	256	88							35
36	900,000	264	91							36
37	925,000	271	93							37
38	950,000	278	96							38
39	975,000	286	98							39
40	1,000,000	293	101							40
41	1,025,000	300	103							41
42	1,050,000	308	106							42
43	1,075,000	315	108							43
44	1,100,000	322	111							44
45	1,125,000	330	114							45
46	1,150,000	337	116							46
47	1,175,000	344	119							47
48	1,200,000	352	121							48
49	1,225,000	359	124							49
50	1,250,000	366	126							50
51	1,275,000	374	129							51
52	1,300,000	381	131							52
53	1,325,000	388	134							53
54	1,350,000	396	136							54
55	1,375,000	403	139							55
56	1,400,000	410	141							56
57	1,425,000	418	144							57
58	1,450,000	425	146							58
59	1,475,000	432	149							59
60	1,500,000	439	151							60
A	B	C	D	E	F	G	H	I		

Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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Domestic water temperature		
In :	40 °F	
Out :	120 °F	

Boiler water temperature		
Feed :	200 °F	
Return :	180 °F	

Production of domestic hot water.

			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
Boiler Net Output		Pump Flow rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate
BTU required per hour	kW	Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
25,000	7	3	157	38	118	38	88	38
50,000	15	5	194	75	155	75	125	75
75,000	22	8	232	113	193	113	163	113
100,000	29	10	269	150	230	150	200	150
125,000	37	13	307	188	268	188	238	188
150,000	44	15	344	225	305	225	275	225
175,000	51	18	382	263	343	263	313	263
200,000	59	21	420	301	381	301	351	301
225,000	66	23	457	338	418	338	388	338
250,000	73	26	495	376	456	376	426	376
275,000	81	28	532	413	493	413	463	413
300,000	88	31	570	451	531	451	501	451
325,000	95	34	607	488	568	488	538	488
350,000	103	36	645	526	606	526	576	526
375,000	110	39	683	564	644	564	614	564
400,000	117	41	720	601	681	601	651	601
425,000	125	44	758	639	719	639	689	639
450,000	132	46	795	676	756	676		676
475,000	139	49	833	714	794	714		714
500,000	146	52	870	751	831	751		
525,000	154	54	908	789	869	789		
550,000	161	57	946	827		827		
575,000	168	59	983	864		864		
600,000	176	62	1 021	902				
625,000	183	65	1 058	939				
650,000	190	67	1 096	977				
675,000	198	70	1 133	1 014				
700,000	205	72	1 171	1 052				
725,000	212	75	1 209	1 090				
750,000	220	77	1 246	1 127				
775,000	227	80	1 284	1 165				
800,000	234	83	1 321	1 202				
825,000	242	85	1 359	1 240				
850,000	249	88	1 396	1 277				
875,000	256	90	1 434	1 315				
900,000	264	93	1 472	1 353				
925,000	271	96	1 509	1 390				
950,000	278	98	1 547	1 428				
975,000	286	101	1 584	1 465				
1,000,000	293	103		1 503				
1,025,000	300	106		1 540				
1,050,000	308	108		1 578				
1,075,000	315	111		1 616				
1,100,000	322	114						
1,125,000	330	116						
1,150,000	337	119						
1,175,000	344	121						
1,200,000	352	124						
1,225,000	359	127						
1,250,000	366	129						
1,275,000	374	132						
1,300,000	381	134						
1,325,000	388	137						
1,350,000	396	139						
1,375,000	403	142						
1,400,000	410	145						
1,425,000	418	147						
1,450,000	425	150						
1,475,000	432	152						
1,500,000	439	155						
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Domestic water temperature		
In :	40 °F	
Out :	120 °F	

Boiler water temperature		
Feed :	180 °F	
Return :	160 °F	

Production of domestic hot water.

			<i>DoubleMax™ 120-9 & 120-9A</i>		<i>DoubleMax™ 80-5</i>		<i>DoubleMax™ 50-4</i>	
Boiler Net Output		Pump Flow rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate	First Hour Maximum Flow Rate	Continuous Maximum Flow Rate
BTU required per hour	kW	Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	127	38	98	38	75	38
2 50,000	15	5	164	75	135	75	113	75
3 75,000	22	8	202	113	173	113	150	113
4 100,000	29	10	240	150	210	150	188	150
5 125,000	37	13	277	188	248	188	225	188
6 150,000	44	15	315	225	285	225	263	225
7 175,000	51	18	352	263	323	263	300	263
8 200,000	59	21	390	301	361	301	338	301
9 225,000	66	23	427	338	398	338	376	338
10 250,000	73	26	465	376	436	376	413	376
11 275,000	81	28	503	413	473	413	451	413
12 300,000	88	31	540	451	511	451	488	451
13 325,000	95	33	578	488	548	488	526	488
14 350,000	103	36	615	526	586	526	563	526
15 375,000	110	38	653	564	624	564	601	564
16 400,000	117	41	690	601	661	601		
17 425,000	125	44	728	639	699	639		
18 450,000	132	46	766	676	736	676		
19 475,000	139	49	803	714				
20 500,000	146	51	841	751				
21 525,000	154	54	878	789				
22 550,000	161	56	916	827				
23 575,000	168	59	953	864				
24 600,000	176	62	991	902				
25 625,000	183	64	1 029	939				
26 650,000	190	67	1 066	977				
27 675,000	198	69	1 104	1 014				
28 700,000	205	72	1 141	1 052				
29 725,000	212	74	1 179	1 090				
30 750,000	220	77	1 216	1 127				
31 775,000	227	79	1 254	1 165				
32 800,000	234	82	1 292	1 202				
33 825,000	242	85	1 329	1 240				
34 850,000	249	87	1 367	1 277				
35 875,000	256	90	1 404	1 315				
36 900,000	264	92						
37 925,000	271	95						
38 950,000	278	97						
39 975,000	286	100						
40 1,000,000	293	103						
41 1,025,000	300	105						
42 1,050,000	308	108						
43 1,075,000	315	110						
44 1,100,000	322	113						
45 1,125,000	330	115						
46 1,150,000	337	118						
47 1,175,000	344	120						
48 1,200,000	352	123						
49 1,225,000	359	126						
50 1,250,000	366	128						
51 1,275,000	374	131						
52 1,300,000	381	133						
53 1,325,000	388	136						
54 1,350,000	396	138						
55 1,375,000	403	141						
56 1,400,000	410	144						
57 1,425,000	418	146						
58 1,450,000	425	149						
59 1,475,000	432	151						
60 1,500,000	439	154						
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Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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Domestic water temperature		
In :	40 °F	
Out :	120 °F	

Boiler water temperature		
Feed :	160 °F	
Return :	140 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Pump Flow rate Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	97	38	78	38	63	38
2 50,000	15	5	135	75	115	75	100	75
3 75,000	22	8	172	113	153	113	138	113
4 100,000	29	10	210	150	190	150	175	150
5 125,000	37	13	247	188	228	188	213	188
6 150,000	44	15	285	225	265	225	250	225
7 175,000	51	18	322	263	303	263	288	263
8 200,000	59	20	360	301	341	301	326	301
9 225,000	66	23	398	338	378	338	363	338
10 250,000	73	25	435	376	416	376		
11 275,000	81	28	473	413	453	413		
12 300,000	88	31	510	451	491	451		
13 325,000	95	33	548	488				
14 350,000	103	36	585	526				
15 375,000	110	38	623	564				
16 400,000	117	41	661	601				
17 425,000	125	43	698	639				
18 450,000	132	46	736	676				
19 475,000	139	48	773	714				
20 500,000	146	51	811	751				
21 525,000	154	53	848	789				
22 550,000	161	56	886	827				
23 575,000	168	59						
24 600,000	176	61						
25 625,000	183	64						
26 650,000	190	66						
27 675,000	198	69						
28 700,000	205	71						
29 725,000	212	74						
30 750,000	220	76						
31 775,000	227	79						
32 800,000	234	82						
33 825,000	242	84						
34 850,000	249	87						
35 875,000	256	89						
36 900,000	264	92						
37 925,000	271	94						
38 950,000	278	97						
39 975,000	286	99						
40 1,000,000	293	102						
41 1,025,000	300	104						
42 1,050,000	308	107						
43 1,075,000	315	110						
44 1,100,000	322	112						
45 1,125,000	330	115						
46 1,150,000	337	117						
47 1,175,000	344	120						
48 1,200,000	352	122						
49 1,225,000	359	125						
50 1,250,000	366	127						
51 1,275,000	374	130						
52 1,300,000	381	132						
53 1,325,000	388	135						
54 1,350,000	396	138						
55 1,375,000	403	140						
56 1,400,000	410	143						
57 1,425,000	418	145						
58 1,450,000	425	148						
59 1,475,000	432	150						
60 1,500,000	439	153						
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Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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Domestic water temperature		
In :	40 °F	
Out :	120 °F	

Boiler water temperature		
Feed :	140 °F	
Return :	120 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Pump Flow rate Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	67	38	58	38	50	38
2 50,000	15	5	105	75	95	75	88	75
3 75,000	22	8	142	113	133	113	125	113
4 100,000	29	10	180	150	170	150	163	150
5 125,000	37	13	218	188	208	188	200	188
6 150,000	44	15	255	225	245	225		
7 175,000	51	18	293	263				
8 200,000	59	20	330	301				
9 225,000	66	23	368	338				
10 250,000	73	25	405	376				
11 275,000	81	28	443	413				
12 300,000	88	30	481	451				
13 325,000	95	33						
14 350,000	103	35						
15 375,000	110	38						
16 400,000	117	41						
17 425,000	125	43						
18 450,000	132	46						
19 475,000	139	48						
20 500,000	146	51						
21 525,000	154	53						
22 550,000	161	56						
23 575,000	168	58						
24 600,000	176	61						
25 625,000	183	63						
26 650,000	190	66						
27 675,000	198	68						
28 700,000	205	71						
29 725,000	212	73						
30 750,000	220	76						
31 775,000	227	79						
32 800,000	234	81						
33 825,000	242	84						
34 850,000	249	86						
35 875,000	256	89						
36 900,000	264	91						
37 925,000	271	94						
38 950,000	278	96						
39 975,000	286	99						
40 1,000,000	293	101						
41 1,025,000	300	104						
42 1,050,000	308	106						
43 1,075,000	315	109						
44 1,100,000	322	111						
45 1,125,000	330	114						
46 1,150,000	337	117						
47 1,175,000	344	119						
48 1,200,000	352	122						
49 1,225,000	359	124						
50 1,250,000	366	127						
51 1,275,000	374	129						
52 1,300,000	381	132						
53 1,325,000	388	134						
54 1,350,000	396	137						
55 1,375,000	403	139						
56 1,400,000	410	142						
57 1,425,000	418	144						
58 1,450,000	425	147						
59 1,475,000	432	149						
60 1,500,000	439	152						
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Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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Domestic water temperature		
In :	40 °F	
Out :	140 °F	

Boiler water temperature		
Feed :	200 °F	
Return :	180 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Pump Flow rate Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	102	30	78	30	60	30
2 50,000	15	5	132	60	108	60	90	60
3 75,000	22	8	162	90	138	90	120	90
4 100,000	29	10	192	120	168	120	150	120
5 125,000	37	13	222	151	199	151	181	151
6 150,000	44	15	252	181	229	181	211	181
7 175,000	51	18	282	211	259	211	241	211
8 200,000	59	21	312	241	289	241	271	241
9 225,000	66	23	342	271	319	271	301	271
10 250,000	73	26	372	301	349	301	331	301
11 275,000	81	28	403	331	379	331	361	331
12 300,000	88	31	433	361	409	361	391	361
13 325,000	95	34	463	391	439	391	421	391
14 350,000	103	36	493	421	469	421	451	421
15 375,000	110	39	523	452	500	452	482	452
16 400,000	117	41	553	482	530	482	512	482
17 425,000	125	44	583	512	560	512	542	512
18 450,000	132	46	613	542	590	542		
19 475,000	139	49	643	572	620	572		
20 500,000	146	52	673	602	650	602		
21 525,000	154	54	704	632	680	632		
22 550,000	161	57	734	662	710	662		
23 575,000	168	59	764	692				
24 600,000	176	62	794	722				
25 625,000	183	65	824	753				
26 650,000	190	67	854	783				
27 675,000	198	70	884	813				
28 700,000	205	72	914	843				
29 725,000	212	75	944	873				
30 750,000	220	77	975	903				
31 775,000	227	80	1 005	933				
32 800,000	234	83	1 035	963				
33 825,000	242	85	1 065	993				
34 850,000	249	88	1 095	1 024				
35 875,000	256	90	1 125	1 054				
36 900,000	264	93	1 155	1 084				
37 925,000	271	96	1 185	1 114				
38 950,000	278	98	1 215	1 144				
39 975,000	286	101	1 245	1 174				
40 1,000,000	293	103	1 276	1 204				
41 1,025,000	300	106	1 306	1 234				
42 1,050,000	308	108						
43 1,075,000	315	111						
44 1,100,000	322	114						
45 1,125,000	330	116						
46 1,150,000	337	119						
47 1,175,000	344	121						
48 1,200,000	352	124						
49 1,225,000	359	127						
50 1,250,000	366	129						
51 1,275,000	374	132						
52 1,300,000	381	134						
53 1,325,000	388	137						
54 1,350,000	396	139						
55 1,375,000	403	142						
56 1,400,000	410	145						
57 1,425,000	418	147						
58 1,450,000	425	150						
59 1,475,000	432	152						
60 1,500,000	439	155						
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Domestic water temperature		
In :	40 °F	
Out :	140 °F	

Boiler water temperature		
Feed :	180 °F	
Return :	160 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Pump Flow rate Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	78	30	62	30	50	30
2 50,000	15	5	108	60	92	60	80	60
3 75,000	22	8	138	90	122	90	110	90
4 100,000	29	10	168	120	152	120	140	120
5 125,000	37	13	198	151	183	151	171	151
6 150,000	44	15	228	181	213	181	201	181
7 175,000	51	18	258	211	243	211	231	211
8 200,000	59	21	288	241	273	241	261	241
9 225,000	66	23	319	271	303	271	291	271
10 250,000	73	26	349	301	333	301	321	301
11 275,000	81	28	379	331	363	331	351	331
12 300,000	88	31	409	361	393	361		
13 325,000	95	33	439	391	423	391		
14 350,000	103	36	469	421	453	421		
15 375,000	110	38	499	452				
16 400,000	117	41	529	482				
17 425,000	125	44	559	512				
18 450,000	132	46	589	542				
19 475,000	139	49	620	572				
20 500,000	146	51	650	602				
21 525,000	154	54	680	632				
22 550,000	161	56	710	662				
23 575,000	168	59	740	692				
24 600,000	176	62	770	722				
25 625,000	183	64	800	753				
26 650,000	190	67	830	783				
27 675,000	198	69	860	813				
28 700,000	205	72						
29 725,000	212	74						
30 750,000	220	77						
31 775,000	227	79						
32 800,000	234	82						
33 825,000	242	85						
34 850,000	249	87						
35 875,000	256	90						
36 900,000	264	92						
37 925,000	271	95						
38 950,000	278	97						
39 975,000	286	100						
40 1,000,000	293	103						
41 1,025,000	300	105						
42 1,050,000	308	108						
43 1,075,000	315	110						
44 1,100,000	322	113						
45 1,125,000	330	115						
46 1,150,000	337	118						
47 1,175,000	344	120						
48 1,200,000	352	123						
49 1,225,000	359	126						
50 1,250,000	366	128						
51 1,275,000	374	131						
52 1,300,000	381	133						
53 1,325,000	388	136						
54 1,350,000	396	138						
55 1,375,000	403	141						
56 1,400,000	410	144						
57 1,425,000	418	146						
58 1,450,000	425	149						
59 1,475,000	432	151						
60 1,500,000	439	154						
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Domestic water temperature		
In :	40 °F	
Out :	140 °F	

Boiler water temperature		
Feed :	160 °F	
Return :	140 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Pump Flow rate Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	54	30	46	30	40	30
2 50,000	15	5	84	60	76	60	70	60
3 75,000	22	8	114	90	106	90	100	90
4 100,000	29	10	144	120	136	120	130	120
5 125,000	37	13	174	151	167	151	161	151
6 150,000	44	15	204	181	197	181	191	181
7 175,000	51	18	235	211	227	211		
8 200,000	59	20	265	241	257	241		
9 225,000	66	23	295	271				
10 250,000	73	25	325	301				
11 275,000	81	28	355	331				
12 300,000	88	31	385	361				
13 325,000	95	33	415	391				
14 350,000	103	36	445	421				
15 375,000	110	38	475	452				
16 400,000	117	41						
17 425,000	125	43						
18 450,000	132	46						
19 475,000	139	48						
20 500,000	146	51						
21 525,000	154	53						
22 550,000	161	56						
23 575,000	168	59						
24 600,000	176	61						
25 625,000	183	64						
26 650,000	190	66						
27 675,000	198	69						
28 700,000	205	71						
29 725,000	212	74						
30 750,000	220	76						
31 775,000	227	79						
32 800,000	234	82						
33 825,000	242	84						
34 850,000	249	87						
35 875,000	256	89						
36 900,000	264	92						
37 925,000	271	94						
38 950,000	278	97						
39 975,000	286	99						
40 1,000,000	293	102						
41 1,025,000	300	104						
42 1,050,000	308	107						
43 1,075,000	315	110						
44 1,100,000	322	112						
45 1,125,000	330	115						
46 1,150,000	337	117						
47 1,175,000	344	120						
48 1,200,000	352	122						
49 1,225,000	359	125						
50 1,250,000	366	127						
51 1,275,000	374	130						
52 1,300,000	381	132						
53 1,325,000	388	135						
54 1,350,000	396	138						
55 1,375,000	403	140						
56 1,400,000	410	143						
57 1,425,000	418	145						
58 1,450,000	425	148						
59 1,475,000	432	150						
60 1,500,000	439	153						
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Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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Domestic water temperature		
In :	40 °F	
Out :	160 °F	

Boiler water temperature		
Feed :	200 °F	
Return :	180 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Pump Flow rate Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	65	25	52	25	42	25
2 50,000	15	5	90	50	77	50	67	50
3 75,000	22	8	115	75	102	75	92	75
4 100,000	29	10	140	101	127	101	117	101
5 125,000	37	13	165	126	152	126	142	126
6 150,000	44	15	191	151	178	151	168	151
7 175,000	51	18	216	176	203	176	193	176
8 200,000	59	21	241	201	228	201	218	201
9 225,000	66	23	266	226	253	226	243	226
10 250,000	73	26	291	251	278	251	268	251
11 275,000	81	28	316	277	303	277	293	277
12 300,000	88	31	341	302	328	302	318	302
13 325,000	95	34	367	327	354	327	344	327
14 350,000	103	36	392	352	379	352		
15 375,000	110	39	417	377	404	377		
16 400,000	117	41	442	402	429	402		
17 425,000	125	44	467	427	454	427		
18 450,000	132	46	492	453				
19 475,000	139	49	517	478				
20 500,000	146	52	542	503				
21 525,000	154	54	568	528				
22 550,000	161	57	593	553				
23 575,000	168	59	618	578				
24 600,000	176	62	643	603				
25 625,000	183	65	668	629				
26 650,000	190	67	693	654				
27 675,000	198	70	718	679				
28 700,000	205	72	744	704				
29 725,000	212	75	769	729				
30 750,000	220	77	794	754				
31 775,000	227	80	819	779				
32 800,000	234	83	844	805				
33 825,000	242	85						
34 850,000	249	88						
35 875,000	256	90						
36 900,000	264	93						
37 925,000	271	96						
38 950,000	278	98						
39 975,000	286	101						
40 1,000,000	293	103						
41 1,025,000	300	106						
42 1,050,000	308	108						
43 1,075,000	315	111						
44 1,100,000	322	114						
45 1,125,000	330	116						
46 1,150,000	337	119						
47 1,175,000	344	121						
48 1,200,000	352	124						
49 1,225,000	359	127						
50 1,250,000	366	129						
51 1,275,000	374	132						
52 1,300,000	381	134						
53 1,325,000	388	137						
54 1,350,000	396	139						
55 1,375,000	403	142						
56 1,400,000	410	145						
57 1,425,000	418	147						
58 1,450,000	425	150						
59 1,475,000	432	152						
60 1,500,000	439	155						
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Domestic water temperature		
In :	40 °F	
Out :	160 °F	

Boiler water temperature		
Feed :	180 °F	
Return :	160 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Pump Flow rate Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
1 25,000	7	3	45	25	38	25	33	25
2 50,000	15	5	70	50	64	50	59	50
3 75,000	22	8	95	75	89	75	84	75
4 100,000	29	10	120	101	114	101	109	101
5 125,000	37	13	146	126	139	126	134	126
6 150,000	44	15	171	151	164	151	159	151
7 175,000	51	18	196	176	189	176	184	176
8 200,000	59	21	221	201	214	201	209	201
9 225,000	66	23	246	226	240	226		
10 250,000	73	26	271	251	265	251		
11 275,000	81	28	296	277				
12 300,000	88	31	322	302				
13 325,000	95	33	347	327				
14 350,000	103	36	372	352				
15 375,000	110	38	397	377				
16 400,000	117	41	422	402				
17 425,000	125	44	447	427				
18 450,000	132	46	472	453				
19 475,000	139	49						
20 500,000	146	51						
21 525,000	154	54						
22 550,000	161	56						
23 575,000	168	59						
24 600,000	176	62						
25 625,000	183	64						
26 650,000	190	67						
27 675,000	198	69						
28 700,000	205	72						
29 725,000	212	74						
30 750,000	220	77						
31 775,000	227	79						
32 800,000	234	82						
33 825,000	242	85						
34 850,000	249	87						
35 875,000	256	90						
36 900,000	264	92						
37 925,000	271	95						
38 950,000	278	97						
39 975,000	286	100						
40 1,000,000	293	103						
41 1,025,000	300	105						
42 1,050,000	308	108						
43 1,075,000	315	110						
44 1,100,000	322	113						
45 1,125,000	330	115						
46 1,150,000	337	118						
47 1,175,000	344	120						
48 1,200,000	352	123						
49 1,225,000	359	126						
50 1,250,000	366	128						
51 1,275,000	374	131						
52 1,300,000	381	133						
53 1,325,000	388	136						
54 1,350,000	396	138						
55 1,375,000	403	141						
56 1,400,000	410	144						
57 1,425,000	418	146						
58 1,450,000	425	149						
59 1,475,000	432	151						
60 1,500,000	439	154						
A	B	C	D	E	F	G	H	I

Ratings : *DoubleMax™ Instantaneous Indirect Double-Wall Hot Water Heater*

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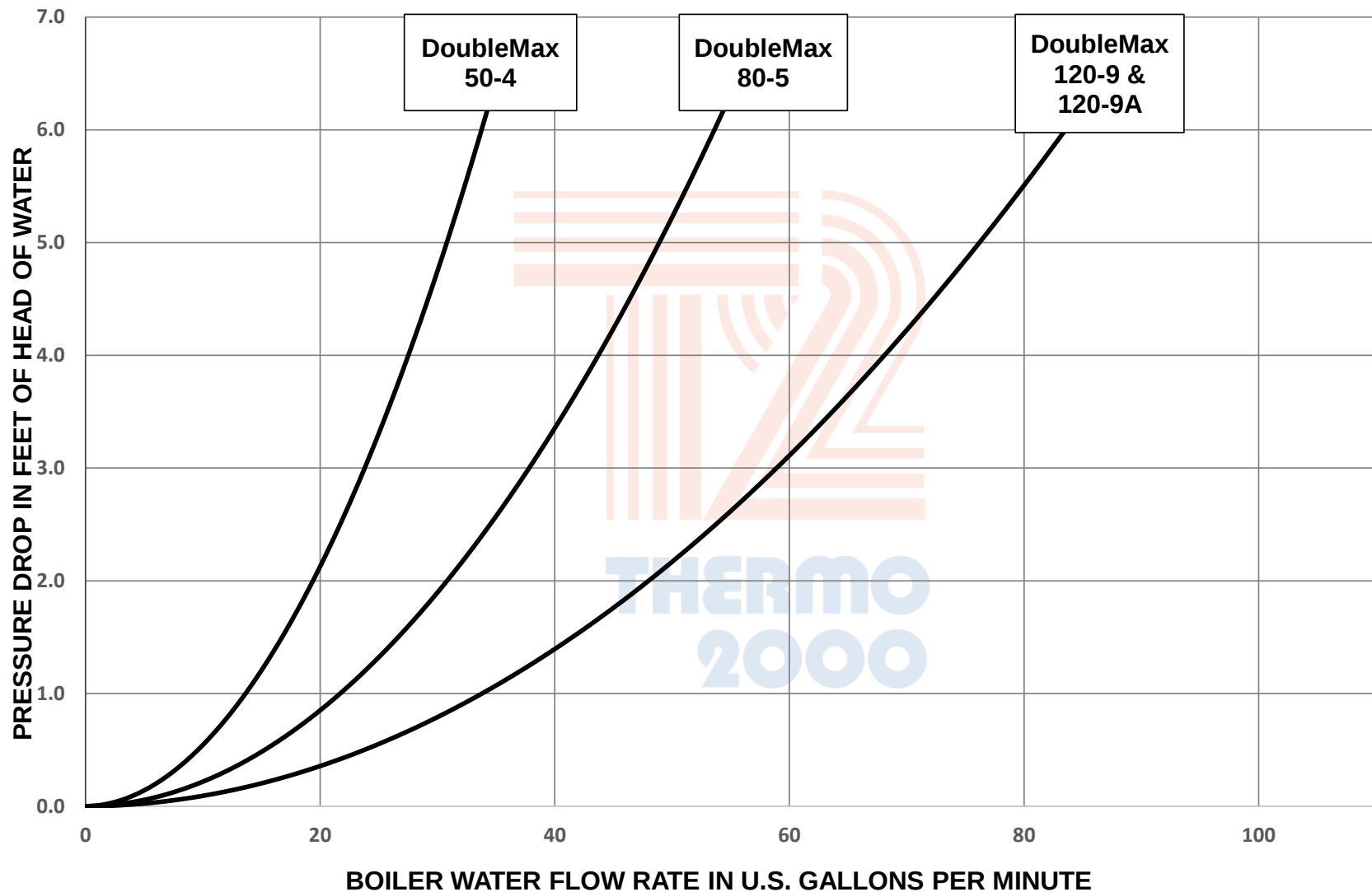
Domestic water temperature		
In :	40 °F	
Out :	180 °F	

Boiler water temperature		
Feed :	200 °F	
Return :	180 °F	

Production of domestic hot water.

Boiler Net Output			DoubleMax™ 120-9 & 120-9A		DoubleMax™ 80-5		DoubleMax™ 50-4	
			First Hour	Continuous	First Hour	Continuous	First Hour	Continuous
			Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate	Maximum Flow Rate
BTU required per hour	kW	Gallons / Minute	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour	Gallons / Hour
25,000	7	3	39	22	33	22	29	22
50,000	15	5	60	43	55	43	50	43
75,000	22	8	82	65	76	65	72	65
100,000	29	10	103	86	98	86	94	86
125,000	37	13	125	108	119	108	115	108
150,000	44	15	147	130	141	130	137	130
175,000	51	18	168	151	163	151	158	151
200,000	59	21	190	173	184	173	180	173
225,000	66	23	211	194	206	194	202	194
250,000	73	26	233	216	227	216		
275,000	81	28	255	238	249	238		
300,000	88	31	276	259				
325,000	95	34	298	281				
350,000	103	36	319	302				
375,000	110	39	341	324				
400,000	117	41	363	346				
425,000	125	44	384	367				
450,000	132	46	406	389				
475,000	139	49	427	410				
500,000	146	52	449	432				
525,000	154	54	471	454				
550,000	161	57						
575,000	168	59						
600,000	176	62						
625,000	183	65						
650,000	190	67						
675,000	198	70						
700,000	205	72						
725,000	212	75						
750,000	220	77						
775,000	227	80						
800,000	234	83						
825,000	242	85						
850,000	249	88						
875,000	256	90						
900,000	264	93						
925,000	271	96						
950,000	278	98						
975,000	286	101						
1,000,000	293	103						
1,025,000	300	106						
1,050,000	308	108						
1,075,000	315	111						
1,100,000	322	114						
1,125,000	330	116						
1,150,000	337	119						
1,175,000	344	121						
1,200,000	352	124						
1,225,000	359	127						
1,250,000	366	129						
1,275,000	374	132						
1,300,000	381	134						
1,325,000	388	137						
1,350,000	396	139						
1,375,000	403	142						
1,400,000	410	145						
1,425,000	418	147						
1,450,000	425	150						
1,475,000	432	152						
1,500,000	439	155						
A	B	C	D	E	F	G	H	I

Pressure Drop VS Boiler Water Flow Rate
DoubleMax™ Instantaneous Indirect double-wall water heater



**Domestic Water Side (Secondary Circuit)
Pressure Drop VS Domestic Hot Water Flow
DoubleMax™ Instantaneous Indirect Double-Wall Water Heater**

