

# ***TurboMax***<sup>®</sup>

***Instantaneous Indirect Water Heater***

## **1) 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=2<sup>nd</sup> 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 TurboMax: 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).

(March. 2023)

# Quick Reference Manual

## TurboMax® Instantaneous Indirect Water Heater

### A) Performances Tables:

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

### B) Pressure Drop VS Flow Rate Curve:

<b>Boiler Water Side :</b>	<b>Page 17</b>
<b>Domestic Water Side :</b>	<b>Page 18</b>

# Performances : **TURBOMAX<sup>®</sup>** Instantaneous Indirect Water Heater

Domestic Water Temperature	
In :	40 °F
Out :	105 °F

Boiler Water Temperature	
Feed :	200 °F
Return :	180 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate Gallons / Minute	TURBOMAX <sup>®</sup> 120-9, 120-9A			TURBOMAX <sup>®</sup> 80-5, 80-5A, 50-5			TURBOMAX <sup>®</sup> 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	
			BTU required per hour	kW	120-9	120-9A	All	80-5	80-5A	50-5	All	50-3
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	212	212	37	154	154	110	37	110	81	37
40,000	12	4	249	249	74	191	191	147	74	147	118	74
60,000	18	6	286	286	111	228	228	184	111	184	155	111
80,000	23	8	323	323	148	265	265	221	148	221	192	148
100,000	29	10	360	360	185	302	302	258	185	258	229	185
120,000	35	12	397	397	222	339	339	295	222	295	266	222
140,000	41	14	434	434	259	376	376	332	259	332	303	259
160,000	47	17	472	472	296	413	413	369	296	369	340	296
180,000	53	19	509	509	333	450	450	406	333	406	377	333
200,000	59	21	546	546	370	487	487	443	370	443	414	370
220,000	64	23	583	583	407	524	524	480	407	480	451	407
240,000	70	25	620	620	444	561	561	517	444	517	488	444
260,000	76	27	657	657	481	598	598	554	481	554	525	481
280,000	82	29	694	694	518	635	635	591	518	591	562	518
300,000	88	31	731	731	555	672	672	628	555	628	599	555
320,000	94	33	768	768	592	709	709	665	592	665	636	592
340,000	100	35	805	805	629	746	746	702	629	702	673	629
360,000	105	37	842	842	666	783	783	739	666	739	710	666
380,000	111	39	879	879	703	820	820	776	703	776	747	703
400,000	117	41	916	916	740	857	857	813	740	813	784	740
420,000	123	43	953	953	777	894	894	850	777	850	821	777
440,000	129	45	990	990	814	931	931	887	814	887	858	814
460,000	135	48	1 027	1 027	851	968	968	924	851	924	895	851
480,000	141	50	1 064	1 064	888	1 005	1 005	961	888	961	932	888
500,000	146	52	1 101	1 101	925	1 042	1 042	998	925	998	969	925
520,000	152	54	1 138	1 138	962	1 079	1 079	1 036	962	1 036	1 006	962
540,000	158	56	1 175	1 175	999	1 116	1 116	1 073	999	1 073	1 043	999
560,000	164	58	1 212	1 212	1 036			1 110	1 036			
580,000	170	60	1 249	1 249	1 073				1 073			
600,000	176	62	1 286	1 286	1 110				1 110			
620,000	182	64	1 323	1 323	1 148							
640,000	188	66	1 360	1 360	1 185							
660,000	193	68	1 397	1 397	1 222							
680,000	199	70	1 434	1 434	1 259							
700,000	205	72	1 471	1 471	1 296							
720,000	211	74	1 508	1 508	1 333							
740,000	217	76	1 545	1 545	1 370							
760,000	223	79	1 582	1 582	1 407							
780,000	229	81	1 619	1 619	1 444							
800,000	234	83	1 656	1 656	1 481							
820,000	240	85	1 693	1 693	1 518							
840,000	246	87	1 730	1 730	1 555							
860,000	252	89	1 767	1 767	1 592							
880,000	258	91	1 804	1 804	1 629							
900,000	264	93	1 841	1 841	1 666							
920,000	270	95	1 878	1 878	1 703							
940,000	275	97	1 915	1 915	1 740							
960,000	281	99	1 952	1 952	1 777							
980,000	287	101	1 989	1 989	1 814							
1,000,000	293	103			1 851							
1,020,000	299	105			1 888							
1,040,000	305	107			1 925							
1,060,000	311	110			1 962							
1,080,000	316	112			1 999							
1,100,000	322	114										
1,120,000	328	116										
1,140,000	334	118										
1,160,000	340	120										
1,180,000	346	122										
1,200,000	352	124										
1,220,000	357	126										
1,240,000	363	128										
1,260,000	369	130										
1,280,000	375	132										
1,300,000	381	134										
1,320,000	387	136										
1,340,000	393	138										
1,360,000	398	140										
1,380,000	404	143										
1,400,000	410	145										
1,420,000	416	147										
1,440,000	422	149										
1,460,000	428	151										
1,480,000	434	153										
1,500,000	439	155										
1,520,000	445	157										

# Performances : **TURBOMAX<sup>®</sup>** Instantaneous Indirect Water Heater

Domestic Water Temperature	
In :	40 °F
Out :	105 °F

Boiler Water Temperature	
Feed :	180 °F
Return :	160 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate Gallons / Minute	TURBOMAX <sup>®</sup> 120-9, 120-9A			TURBOMAX <sup>®</sup> 80-5, 80-5A, 50-5			TURBOMAX <sup>®</sup> 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	
BTU required per hour	KW		120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	175	175	37	129	129	95	37	95	72	37
40,000	12	4	212	212	74	166	166	132	74	132	109	74
60,000	18	6	250	250	111	203	203	169	111	169	146	111
80,000	23	8	287	287	148	240	240	206	148	206	183	148
100,000	29	10	324	324	185	277	277	243	185	243	220	185
120,000	35	12	361	361	222	314	314	280	222	280	257	222
140,000	41	14	398	398	259	351	351	317	259	317	294	259
160,000	47	16	435	435	296	388	388	354	296	354	331	296
180,000	53	18	472	472	333	425	425	391	333	391	368	333
200,000	59	21	509	509	370	462	462	428	370	428	405	370
220,000	64	23	546	546	407	499	499	465	407	465	442	407
240,000	70	25	583	583	444	537	537	502	444	502	479	444
260,000	76	27	620	620	481	574	574	539	481	539	516	481
280,000	82	29	657	657	518	611	611	576	518	576	553	518
300,000	88	31	694	694	555	648	648	613	555	613	590	555
320,000	94	33	731	731	592	685	685	650	592	650	627	592
340,000	100	35	768	768	629	722	722	687	629		664	629
360,000	105	37	805	805	666	759	759	724	666			666
380,000	111	39	842	842	703	796	796	761	703			
400,000	117	41	879	879	740	833	833	798	740			
420,000	123	43	916	916	777	870	870	835	777			
440,000	129	45	953	953	814	907	907	872	814			
460,000	135	47	990	990	851	944	944	909	851			
480,000	141	49	1 027	1 027	888	981	981	946	888			
500,000	146	51	1 064	1 064	925	1 018	1 018	983	925			
520,000	152	53	1 101	1 101	962	1 055	1 055	1 020	962			
540,000	158	55	1 138	1 138	999	1 092	1 092	1 057	999			
560,000	164	57	1 175	1 175	1 036			1 094	1 036			
580,000	170	59	1 212	1 212	1 073				1 073			
600,000	176	62	1 249	1 249	1 110				1 110			
620,000	182	64	1 286	1 286	1 148							
640,000	188	66	1 323	1 323	1 185							
660,000	193	68	1 360	1 360	1 222							
680,000	199	70	1 397	1 397	1 259							
700,000	205	72	1 434	1 434	1 296							
720,000	211	74	1 471	1 471	1 333							
740,000	217	76	1 508	1 508	1 370							
760,000	223	78	1 545	1 545	1 407							
780,000	229	80	1 582	1 582	1 444							
800,000	234	82	1 619	1 619	1 481							
820,000	240	84	1 656	1 656	1 518							
840,000	246	86	1 693	1 693	1 555							
860,000	252	88	1 730	1 730	1 592							
880,000	258	90	1 767	1 767	1 629							
900,000	264	92	1 804	1 804	1 666							
920,000	270	94	1 841	1 841	1 703							
940,000	275	96	1 878	1 878	1 740							
960,000	281	98	1 915	1 915	1 777							
980,000	287	101	1 952	1 952	1 814							
1,000,000	293	103	1 989	1 989	1 851							
1,020,000	299	105			1 888							
1,040,000	305	107			1 925							
1,060,000	311	109			1 962							
1,080,000	316	111			1 999							
1,100,000	322	113										
1,120,000	328	115										
1,140,000	334	117										
1,160,000	340	119										
1,180,000	346	121										
1,200,000	352	123										
1,220,000	357	125										
1,240,000	363	127										
1,260,000	369	129										
1,280,000	375	131										
1,300,000	381	133										
1,320,000	387	135										
1,340,000	393	137										
1,360,000	398	139										
1,380,000	404	142										
1,400,000	410	144										
1,420,000	416	146										
1,440,000	422	148										
1,460,000	428	150										
1,480,000	434	152										
1,500,000	439	154										
1,520,000	445	156										

A B C D E F G H I J K L M

# Performances : **TURBOMAX<sup>®</sup>** Instantaneous Indirect Water Heater

Domestic Water Temperature	
In :	40 °F
Out :	105 °F

Boiler Water Temperature	
Feed :	160 °F
Return :	140 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate	TURBOMAX <sup>®</sup> 120-9, 120-9A			TURBOMAX <sup>®</sup> 80-5, 80-5A, 50-5			TURBOMAX <sup>®</sup> 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
BTU required per hour	kW	Gallons / Minute	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	
			120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	139	139	37	105	105	79	37	79	62	37
40,000	12	4	176	176	74	142	142	116	74	116	99	74
60,000	18	6	213	213	111	179	179	153	111	153	136	111
80,000	23	8	250	250	148	216	216	190	148	190	173	148
100,000	29	10	287	287	185	253	253	227	185	227	210	185
120,000	35	12	324	324	222	290	290	264	222	264	247	222
140,000	41	14	361	361	259	327	327	301	259	301	284	259
160,000	47	16	398	398	296	364	364	338	296	338	322	296
180,000	53	18	435	435	333	401	401	375	333	375	359	333
200,000	59	20	472	472	370	438	438	412	370	412	396	370
220,000	64	22	509	509	407	475	475	449	407	449	433	407
240,000	70	24	546	546	444	512	512	487	444	487	470	444
260,000	76	26	583	583	481	549	549	524	481	524	507	481
280,000	82	29	620	620	518	586	586	561	518	561	544	518
300,000	88	31	657	657	555	623	623	598	555	598	581	555
320,000	94	33	694	694	592	660	660	635	592	635	618	592
340,000	100	35	731	731	629	697	697	672	629		655	629
360,000	105	37	768	768	666	734	734	709	666			666
380,000	111	39	805	805	703	771	771	746	703			
400,000	117	41	842	842	740	808	808	783	740			
420,000	123	43	879	879	777	845	845	820	777			
440,000	129	45	916	916	814	882	882	857	814			
460,000	135	47	953	953	851	919	919	894	851			
480,000	141	49	990	990	888	956	956	931	888			
500,000	146	51	1 027	1 027	925	993	993	968	925			
520,000	152	53	1 064	1 064	962	1 030	1 030	1 005	962			
540,000	158	55	1 101	1 101	999	1 067	1 067	1 042	999			
560,000	164	57	1 138	1 138	1 036	1 104	1 104	1 079	1 036			
580,000	170	59	1 175	1 175	1 073			1 116	1 073			
600,000	176	61	1 212	1 212	1 110				1 110			
620,000	182	63	1 249	1 249	1 148							
640,000	188	65	1 286	1 286	1 185							
660,000	193	67	1 323	1 323	1 222							
680,000	199	69	1 360	1 360	1 259							
700,000	205	71	1 397	1 397	1 296							
720,000	211	73	1 434	1 434	1 333							
740,000	217	75	1 471	1 471	1 370							
760,000	223	77	1 508	1 508	1 407							
780,000	229	79	1 545	1 545	1 444							
800,000	234	82	1 582	1 582	1 481							
820,000	240	84	1 619	1 619	1 518							
840,000	246	86	1 656	1 656	1 555							
860,000	252	88	1 693	1 693	1 592							
880,000	258	90	1 730	1 730	1 629							
900,000	264	92	1 767	1 767	1 666							
920,000	270	94	1 804	1 804	1 703							
940,000	275	96	1 841	1 841	1 740							
960,000	281	98	1 878	1 878	1 777							
980,000	287	100	1 915	1 915	1 814							
1,000,000	293	102	1 952	1 952	1 851							
1,020,000	299	104	1 989	1 989	1 888							
1,040,000	305	106			1 925							
1,060,000	311	108			1 962							
1,080,000	316	110			1 999							
1,100,000	322	112										
1,120,000	328	114										
1,140,000	334	116										
1,160,000	340	118										
1,180,000	346	120										
1,200,000	352	122										
1,220,000	357	124										
1,240,000	363	126										
1,260,000	369	128										
1,280,000	375	130										
1,300,000	381	132										
1,320,000	387	134										
1,340,000	393	137										
1,360,000	398	139										
1,380,000	404	141										
1,400,000	410	143										
1,420,000	416	145										
1,440,000	422	147										
1,460,000	428	149										
1,480,000	434	151										
1,500,000	439	153										
1,520,000	445	155										

# Performances : **TURBOMAX<sup>®</sup> Instantaneous Indirect Water Heater**

Domestic Water Temperature	
In :	40 °F
Out :	105 °F

Boiler Water Temperature	
Feed :	140 °F
Return :	120 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate Gallons / Minute	TURBOMAX <sup>®</sup> 120-9, 120-9A			TURBOMAX <sup>®</sup> 80-5, 80-5A, 50-5			TURBOMAX <sup>®</sup> 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	
BTU required per hour	KW		120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	102	102	37	80	80	64	37	64	53	37
40,000	12	4	139	139	74	117	117	101	74	101	90	74
60,000	18	6	176	176	111	154	154	138	111	138	127	111
80,000	23	8	213	213	148	191	191	175	148	175	164	148
100,000	29	10	250	250	185	228	228	212	185	212	201	185
120,000	35	12	287	287	222	265	265	249	222	249	238	222
140,000	41	14	324	324	259	302	302	286	259	286	275	259
160,000	47	16	361	361	296	339	339	323	296	323	312	296
180,000	53	18	398	398	333	376	376	360	333	360	349	333
200,000	59	20	435	435	370	413	413	397	370	397	386	370
220,000	64	22	472	472	407	450	450	434	407	434	423	
240,000	70	24	509	509	444	487	487	471	444			
260,000	76	26	546	546	481	524	524	508	481			
280,000	82	28	583	583	518	561	561	545	518			
300,000	88	30	620	620	555	598	598	582	555			
320,000	94	32	657	657	592	635	635	619	592			
340,000	100	34	694	694	629	672	672	656	629			
360,000	105	36	731	731	666	709	709	693	666			
380,000	111	38	768	768	703							
400,000	117	41	805	805	740							
420,000	123	43	842	842	777							
440,000	129	45	879	879	814							
460,000	135	47	916	916	851							
480,000	141	49	953	953	888							
500,000	146	51	990	990	925							
520,000	152	53	1 027	1 027	962							
540,000	158	55	1 064	1 064	999							
560,000	164	57	1 101	1 101	1 036							
580,000	170	59	1 138	1 138	1 073							
600,000	176	61	1 175	1 175	1 110							
620,000	182	63	1 212	1 212	1 148							
640,000	188	65	1 249	1 249	1 185							
660,000	193	67	1 286	1 286								
680,000	199	69										
700,000	205	71										
720,000	211	73										
740,000	217	75										
760,000	223	77										
780,000	229	79										
800,000	234	81										
820,000	240	83										
840,000	246	85										
860,000	252	87										
880,000	258	89										
900,000	264	91										
920,000	270	93										
940,000	275	95										
960,000	281	97										
980,000	287	99										
1,000,000	293	101										
1,020,000	299	103										
1,040,000	305	105										
1,060,000	311	107										
1,080,000	316	109										
1,100,000	322	111										
1,120,000	328	113										
1,140,000	334	115										
1,160,000	340	117										
1,180,000	346	120										
1,200,000	352	122										
1,220,000	357	124										
1,240,000	363	126										
1,260,000	369	128										
1,280,000	375	130										
1,300,000	381	132										
1,320,000	387	134										
1,340,000	393	136										
1,360,000	398	138										
1,380,000	404	140										
1,400,000	410	142										
1,420,000	416	144										
1,440,000	422	146										
1,460,000	428	148										
1,480,000	434	150										
1,500,000	439	152										
1,520,000	445	154										

A B C D E F G H I J K L M

# Performances : **TURBOMAX<sup>®</sup> Instantaneous Indirect Water Heater**

Domestic Water Temperature	
In :	40 °F
Out :	105 °F

Boiler Water Temperature	
Feed :	125 °F
Return :	105 °F

## Production d'eau chaude domestique.

			<b>TURBOMAX<sup>®</sup> 120-9, 120-9A</b>			<b>TURBOMAX<sup>®</sup> 80-5, 80-5A, 50-5</b>			<b>TURBOMAX<sup>®</sup> 50-3, 30-3</b>			
<b>Boiler Net Output</b>		<b>Pump Flow Rate</b>	<b>First Hour</b>		<b>Continuous</b>	<b>First Hour</b>		<b>Continuous</b>	<b>First Hour</b>		<b>Continuous</b>	
<b>BTU required per hour</b>	<b>kW</b>	<b>Gallons / Minute</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>	
			<b>120-9</b>	<b>120-9A</b>	<b>All</b>	<b>80-5</b>	<b>80-5A</b>	<b>50-5</b>	<b>All</b>	<b>50-3</b>	<b>30-3</b>	<b>All</b>
			<b>Gallons / Hour</b>			<b>Gallons / Hour</b>			<b>Gallons / Hour</b>			
1	20,000	6	74	74	37	62	62	52	37	52	46	37
2	40,000	12	111	111	74	99	99	89	74	89	83	74
3	60,000	18	148	148	111	136	136	126	111	126	120	111
4	80,000	23	185	185	148	173	173	163	148	163	157	148
5	100,000	29	222	222	185	210	210	200	185	200	194	185
6	120,000	35	259	259	222	247	247	237	222	237	231	222
7	140,000	41	296	296	259	284	284	274	259			
8	160,000	47	333	333	296	321	321	312	296			
9	180,000	53	370	370	333	358	358	349	333			
10	200,000	59	407	407	370	395	395	386	370			
11	220,000	64	444	444	407	432	432	423	407			
12	240,000	70	481	481	444							
13	260,000	76	518	518	481							
14	280,000	82	555	555	518							
15	300,000	88	592	592	555							
16	320,000	94	629	629	592							
17	340,000	100	666	666	629							
18	360,000	105	703	703	666							
19	380,000	111	740	740	703							
20	400,000	117	777	777								
21	420,000	123										
22	440,000	129										
23	460,000	135										
24	480,000	141										
25	500,000	146										
26	520,000	152										
27	540,000	158										
28	560,000	164										
29	580,000	170										
30	600,000	176										
31	620,000	182										
32	640,000	188										
33	660,000	193										
34	680,000	199										
35	700,000	205										
36	720,000	211										
37	740,000	217										
38	760,000	223										
39	780,000	229										
40	800,000	234										
41	820,000	240										
42	840,000	246										
43	860,000	252										
44	880,000	258										
45	900,000	264										
46	920,000	270										
47	940,000	275										
48	960,000	281										
49	980,000	287										
50	1,000,000	293										
51	1,020,000	299										
52	1,040,000	305										
53	1,060,000	311										
54	1,080,000	316										
55	1,100,000	322										
56	1,120,000	328										
57	1,140,000	334										
58	1,160,000	340										
59	1,180,000	346										
60	1,200,000	352										
61	1,220,000	357										
62	1,240,000	363										
63	1,260,000	369										
64	1,280,000	375										
65	1,300,000	381										
66	1,320,000	387										
67	1,340,000	393										
68	1,360,000	398										
69	1,380,000	404										
70	1,400,000	410										
71	1,420,000	416										
72	1,440,000	422										
73	1,460,000	428										
74	1,480,000	434										
75	1,500,000	439										
76	1,520,000	445										

A B C D E F G H I J K L M

# Performances : **TURBOMAX<sup>®</sup>** Instantaneous Indirect Water Heater

Domestic Water Temperature	
In :	40 °F
Out :	120 °F

Boiler Water Temperature	
Feed :	200 °F
Return :	180 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate Gallons / Minute	TURBOMAX <sup>®</sup> 120-9, 120-9A			TURBOMAX <sup>®</sup> 80-5, 80-5A, 50-5			TURBOMAX <sup>®</sup> 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	
BTU required per hour	KW		120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	150	150	30	110	110	80	30	80	60	30
40,000	12	4	180	180	60	140	140	110	60	110	90	60
60,000	18	6	210	210	90	170	170	140	90	140	120	90
80,000	23	8	240	240	120	200	200	170	120	170	150	120
100,000	29	10	271	271	151	231	231	201	151	201	181	151
120,000	35	12	301	301	181	261	261	231	181	231	211	181
140,000	41	14	331	331	211	291	291	261	211	261	241	211
160,000	47	17	361	361	241	321	321	291	241	291	271	241
180,000	53	19	391	391	271	351	351	321	271	321	301	271
200,000	59	21	421	421	301	381	381	351	301	351	331	301
220,000	64	23	451	451	331	411	411	381	331	381	361	331
240,000	70	25	481	481	361	441	441	411	361	411	391	361
260,000	76	27	511	511	391	471	471	441	391	441	421	391
280,000	82	29	542	542	422	502	502	472	422	472	452	422
300,000	88	31	572	572	452	532	532	502	452	502	482	452
320,000	94	33	602	602	482	562	562	532	482	532	512	482
340,000	100	35	632	632	512	592	592	562	512	562	542	512
360,000	105	37	662	662	542	622	622	592	542	592	572	542
380,000	111	39	692	692	572	652	652	622	572	622	602	572
400,000	117	41	722	722	602	682	682	652	602	652	632	602
420,000	123	43	752	752	632	712	712	682	632	682	662	632
440,000	129	45	782	782	662	742	742	712	662			662
460,000	135	48	813	813	693	773	773	743	693			
480,000	141	50	843	843	723	803	803	773	723			
500,000	146	52	873	873	753	833	833	803	753			
520,000	152	54	903	903	783	863	863	833	783			
540,000	158	56	933	933	813	893	893	863	813			
560,000	164	58	963	963	843	923	923	893	843			
580,000	170	60	993	993	873	953	953	923	873			
600,000	176	62	1 023	1 023	903	983	983	953	903			
620,000	182	64	1 054	1 054	934	1 014	1 014	984	934			
640,000	188	66	1 084	1 084	964	1 044	1 044	1 014	964			
660,000	193	68	1 114	1 114	994	1 074	1 074	1 044	994			
680,000	199	70	1 144	1 144	1 024	1 104	1 104	1 074	1 024			
700,000	205	72	1 174	1 174	1 054			1 104	1 054			
720,000	211	74	1 204	1 204	1 084				1 084			
740,000	217	76	1 234	1 234	1 114				1 114			
760,000	223	79	1 264	1 264	1 144							
780,000	229	81	1 294	1 294	1 174							
800,000	234	83	1 325	1 325	1 205							
820,000	240	85	1 355	1 355	1 235							
840,000	246	87	1 385	1 385	1 265							
860,000	252	89	1 415	1 415	1 295							
880,000	258	91	1 445	1 445	1 325							
900,000	264	93	1 475	1 475	1 355							
920,000	270	95	1 505	1 505	1 385							
940,000	275	97	1 535	1 535	1 415							
960,000	281	99	1 565	1 565	1 445							
980,000	287	101	1 596	1 596	1 476							
1,000,000	293	103	1 626	1 626	1 506							
1,020,000	299	105	1 656	1 656	1 536							
1,040,000	305	107	1 686	1 686	1 566							
1,060,000	311	110	1 716	1 716	1 596							
1,080,000	316	112	1 746	1 746	1 626							
1,100,000	322	114	1 776	1 776	1 656							
1,120,000	328	116	1 806	1 806	1 686							
1,140,000	334	118	1 836	1 836	1 716							
1,160,000	340	120	1 867	1 867	1 747							
1,180,000	346	122	1 897	1 897	1 777							
1,200,000	352	124	1 927	1 927	1 807							
1,220,000	357	126	1 957	1 957	1 837							
1,240,000	363	128	1 987	1 987	1 867							
1,260,000	369	130			1 897							
1,280,000	375	132			1 927							
1,300,000	381	134			1 957							
1,320,000	387	136			1 987							
1,340,000	393	138										
1,360,000	398	140										
1,380,000	404	143										
1,400,000	410	145										
1,420,000	416	147										
1,440,000	422	149										
1,460,000	428	151										
1,480,000	434	153										
1,500,000	439	155										
1,520,000	445	157										

A B C D E F G H I J K L M



# Performances : TURBOMAX® Instantaneous Indirect Water Heater

Domestic Water Temperature	
In :	40 °F
Out :	120 °F

Boiler Water Temperature	
Feed :	180 °F
Return :	160 °F

## Production d'eau chaude domestique.

			TURBOMAX® 120-9, 120-9A			TURBOMAX® 80-5, 80-5A, 50-5			TURBOMAX® 50-3, 30-3			
Boiler Net Output		Pump Flow Rate Gallons / Minute	First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	
BTU required per hour	KW		120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	120	120	30	90	90	68	30	68	53	30
40,000	12	4	150	150	60	120	120	98	60	98	83	60
60,000	18	6	180	180	90	150	150	128	90	128	113	90
80,000	23	8	210	210	120	180	180	158	120	158	143	120
100,000	29	10	241	241	151	211	211	188	151	188	173	151
120,000	35	12	271	271	181	241	241	218	181	218	203	181
140,000	41	14	301	301	211	271	271	248	211	248	233	211
160,000	47	16	331	331	241	301	301	278	241	278	263	241
180,000	53	18	361	361	271	331	331	309	271	309	294	271
200,000	59	21	391	391	301	361	361	339	301	339	324	301
220,000	64	23	421	421	331	391	391	369	331	369	354	331
240,000	70	25	451	451	361	421	421	399	361	399	384	361
260,000	76	27	481	481	391	451	451	429	391	429	414	391
280,000	82	29	512	512	422	482	482	459	422	459	444	422
300,000	88	31	542	542	452	512	512	489	452	489	474	452
320,000	94	33	572	572	482	542	542	519	482	519	504	482
340,000	100	35	602	602	512	572	572	549	512	549	534	512
360,000	105	37	632	632	542	602	602	580	542	580	565	542
380,000	111	39	662	662	572	632	632	610	572	610	595	572
400,000	117	41	692	692	602	662	662	640	602	640	625	602
420,000	123	43	722	722	632	692	692	670	632	670	655	
440,000	129	45	752	752	662	722	722	700	662			
460,000	135	47	783	783	693	753	753	730	693			
480,000	141	49	813	813	723	783	783	760	723			
500,000	146	51	843	843	753	813	813	790	753			
520,000	152	53	873	873	783	843	843	820	783			
540,000	158	55	903	903	813	873	873	851	813			
560,000	164	57	933	933	843	903	903	881	843			
580,000	170	59	963	963	873	933	933	911	873			
600,000	176	62	993	993	903	963	963	941	903			
620,000	182	64	1 024	1 024	934	994	994	971	934			
640,000	188	66	1 054	1 054	964	1 024	1 024	1 001	964			
660,000	193	68	1 084	1 084	994	1 054	1 054	1 031	994			
680,000	199	70	1 114	1 114	1 024	1 084	1 084	1 061	1 024			
700,000	205	72	1 144	1 144	1 054	1 114	1 114	1 091				
720,000	211	74	1 174	1 174	1 084							
740,000	217	76	1 204	1 204	1 114							
760,000	223	78	1 234	1 234	1 144							
780,000	229	80	1 264	1 264	1 174							
800,000	234	82	1 295	1 295	1 205							
820,000	240	84	1 325	1 325	1 235							
840,000	246	86	1 355	1 355	1 265							
860,000	252	88	1 385	1 385	1 295							
880,000	258	90	1 415	1 415	1 325							
900,000	264	92	1 445	1 445	1 355							
920,000	270	94	1 475	1 475	1 385							
940,000	275	96	1 505	1 505	1 415							
960,000	281	98	1 535	1 535	1 445							
980,000	287	101	1 566	1 566	1 476							
1,000,000	293	103	1 596	1 596	1 506							
1,020,000	299	105	1 626	1 626	1 536							
1,040,000	305	107	1 656	1 656	1 566							
1,060,000	311	109	1 686	1 686	1 596							
1,080,000	316	111	1 716	1 716	1 626							
1,100,000	322	113	1 746	1 746	1 656							
1,120,000	328	115	1 776	1 776	1 686							
1,140,000	334	117	1 806	1 806	1 716							
1,160,000	340	119	1 837	1 837	1 747							
1,180,000	346	121	1 867	1 867	1 777							
1,200,000	352	123	1 897	1 897	1 807							
1,220,000	357	125	1 927	1 927	1 837							
1,240,000	363	127	1 957	1 957								
1,260,000	369	129	1 987	1 987								
1,280,000	375	131										
1,300,000	381	133										
1,320,000	387	135										
1,340,000	393	137										
1,360,000	398	139										
1,380,000	404	142										
1,400,000	410	144										
1,420,000	416	146										
1,440,000	422	148										
1,460,000	428	150										
1,480,000	434	152										
1,500,000	439	154										
1,520,000	445	156										
A	B	C	D	E	F	G	H	I	J	K	L	M

# Performances : **TURBOMAX<sup>®</sup> Instantaneous Indirect Water Heater**

Domestic Water Temperature	
In :	40 °F
Out :	120 °F

Boiler Water Temperature	
Feed :	160 °F
Return :	140 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate Gallons / Minute	TURBOMAX <sup>®</sup> 120-9, 120-9A			TURBOMAX <sup>®</sup> 80-5, 80-5A, 50-5			TURBOMAX <sup>®</sup> 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	
BTU required per hour	KW		120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	90	90	30	70	70	55	30	55	45	30
40,000	12	4	120	120	60	100	100	85	60	85	75	60
60,000	18	6	150	150	90	130	130	115	90	115	105	90
80,000	23	8	180	180	120	160	160	145	120	145	135	120
100,000	29	10	211	211	151	191	191	176	151	176	166	151
120,000	35	12	241	241	181	221	221	206	181	206	196	181
140,000	41	14	271	271	211	251	251	236	211	236	226	211
160,000	47	16	301	301	241	281	281	266	241	266	256	241
180,000	53	18	331	331	271	311	311	296	271	296	286	271
200,000	59	20	361	361	301	341	341	326	301	326	316	301
220,000	64	22	391	391	331	371	371	356	331	356	346	331
240,000	70	24	421	421	361	401	401	386	361	386	376	361
260,000	76	26	451	451	391	431	431	416	391	416	406	391
280,000	82	29	482	482	422	462	462	447	422			
300,000	88	31	512	512	452	492	492	477	452			
320,000	94	33	542	542	482	522	522	507	482			
340,000	100	35	572	572	512	552	552	537	512			
360,000	105	37	602	602	542	582	582	567	542			
380,000	111	39	632	632	572	612	612	597	572			
400,000	117	41	662	662	602	642	642	627	602			
420,000	123	43	692	692	632	672	672	657	632			
440,000	129	45	722	722	662	702	702	687				
460,000	135	47	753	753	693							
480,000	141	49	783	783	723							
500,000	146	51	813	813	753							
520,000	152	53	843	843	783							
540,000	158	55	873	873	813							
560,000	164	57	903	903	843							
580,000	170	59	933	933	873							
600,000	176	61	963	963	903							
620,000	182	63	994	994	934							
640,000	188	65	1 024	1 024	964							
660,000	193	67	1 054	1 054	994							
680,000	199	69	1 084	1 084	1 024							
700,000	205	71	1 114	1 114	1 054							
720,000	211	73	1 144	1 144	1 084							
740,000	217	75	1 174	1 174	1 114							
760,000	223	77	1 204	1 204	1 144							
780,000	229	79	1 234	1 234	1 174							
800,000	234	82	1 265	1 265								
820,000	240	84										
840,000	246	86										
860,000	252	88										
880,000	258	90										
900,000	264	92										
920,000	270	94										
940,000	275	96										
960,000	281	98										
980,000	287	100										
1,000,000	293	102										
1,020,000	299	104										
1,040,000	305	106										
1,060,000	311	108										
1,080,000	316	110										
1,100,000	322	112										
1,120,000	328	114										
1,140,000	334	116										
1,160,000	340	118										
1,180,000	346	120										
1,200,000	352	122										
1,220,000	357	124										
1,240,000	363	126										
1,260,000	369	128										
1,280,000	375	130										
1,300,000	381	132										
1,320,000	387	134										
1,340,000	393	137										
1,360,000	398	139										
1,380,000	404	141										
1,400,000	410	143										
1,420,000	416	145										
1,440,000	422	147										
1,460,000	428	149										
1,480,000	434	151										
1,500,000	439	153										
1,520,000	445	155										

A B C D E F G H I J K L M

# Performances : **TURBOMAX<sup>®</sup> Instantaneous Indirect Water Heater**

Domestic Water Temperature	
In :	40 °F
Out :	120 °F

Boiler Water Temperature	
Feed :	140 °F
Return :	120 °F

## Production d'eau chaude domestique.

			<b>TURBOMAX<sup>®</sup> 120-9, 120-9A</b>			<b>TURBOMAX<sup>®</sup> 80-5, 80-5A, 50-5</b>			<b>TURBOMAX<sup>®</sup> 50-3, 30-3</b>				
<b>Boiler Net Output</b>		<b>Pump Flow Rate</b>	<b>First Hour</b>		<b>Continuous</b>	<b>First Hour</b>		<b>Continuous</b>	<b>First Hour</b>		<b>Continuous</b>		
<b>BTU required per hour</b>	<b>kW</b>	<b>Gallons / Minute</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>		
			<b>120-9</b>	<b>120-9A</b>	<b>All</b>	<b>80-5</b>	<b>80-5A</b>	<b>50-5</b>	<b>All</b>	<b>50-3</b>	<b>30-3</b>	<b>All</b>	
			<b>Gallons / Hour</b>			<b>Gallons / Hour</b>			<b>Gallons / Hour</b>				
1	20,000	6	2	60	60	30	50	50	43	30	43	38	30
2	40,000	12	4	90	90	60	80	80	73	60	73	68	60
3	60,000	18	6	120	120	90	110	110	103	90	103	98	90
4	80,000	23	8	150	150	120	140	140	133	120	133	128	120
5	100,000	29	10	181	181	151	171	171	163	151	163	158	151
6	120,000	35	12	211	211	181	201	201	193	181	193	188	181
7	140,000	41	14	241	241	211	231	231	223	211	223	218	211
8	160,000	47	16	271	271	241	261	261	253	241			
9	180,000	53	18	301	301	271	291	291	284	271			
10	200,000	59	20	331	331	301	321	321	314	301			
11	220,000	64	22	361	361	331	351	351	344	331			
12	240,000	70	24	391	391	361	381	381	374	361			
13	260,000	76	26	421	421	391							
14	280,000	82	28	452	452	422							
15	300,000	88	30	482	482	452							
16	320,000	94	32	512	512	482							
17	340,000	100	34	542	542	512							
18	360,000	105	36	572	572	542							
19	380,000	111	38	602	602	572							
20	400,000	117	41	632	632	602							
21	420,000	123	43	662	662	632							
22	440,000	129	45	692	692	662							
23	460,000	135	47										
24	480,000	141	49										
25	500,000	146	51										
26	520,000	152	53										
27	540,000	158	55										
28	560,000	164	57										
29	580,000	170	59										
30	600,000	176	61										
31	620,000	182	63										
32	640,000	188	65										
33	660,000	193	67										
34	680,000	199	69										
35	700,000	205	71										
36	720,000	211	73										
37	740,000	217	75										
38	760,000	223	77										
39	780,000	229	79										
40	800,000	234	81										
41	820,000	240	83										
42	840,000	246	85										
43	860,000	252	87										
44	880,000	258	89										
45	900,000	264	91										
46	920,000	270	93										
47	940,000	275	95										
48	960,000	281	97										
49	980,000	287	99										
50	1,000,000	293	101										
51	1,020,000	299	103										
52	1,040,000	305	105										
53	1,060,000	311	107										
54	1,080,000	316	109										
55	1,100,000	322	111										
56	1,120,000	328	113										
57	1,140,000	334	115										
58	1,160,000	340	117										
59	1,180,000	346	120										
60	1,200,000	352	122										
61	1,220,000	357	124										
62	1,240,000	363	126										
63	1,260,000	369	128										
64	1,280,000	375	130										
65	1,300,000	381	132										
66	1,320,000	387	134										
67	1,340,000	393	136										
68	1,360,000	398	138										
69	1,380,000	404	140										
70	1,400,000	410	142										
71	1,420,000	416	144										
72	1,440,000	422	146										
73	1,460,000	428	148										
74	1,480,000	434	150										
75	1,500,000	439	152										
76	1,520,000	445	154										

A B C D E F G H I J K L M

# Performances : TURBOMAX® Instantaneous Indirect Water Heater

Domestic Water Temperature	
In :	40 °F
Out :	140 °F

Boiler Water Temperature	
Feed :	200 °F
Return :	180 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate	TURBOMAX® 120-9, 120-9A			TURBOMAX® 80-5, 80-5A, 50-5			TURBOMAX® 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	
			120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
BTU required per hour		kW	Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	96	96	24	72	72	54	24	54	42	24
40,000	12	4	120	120	48	96	96	78	48	78	66	48
60,000	18	6	144	144	72	120	120	102	72	102	90	72
80,000	23	8	169	169	97	145	145	127	97	127	115	97
100,000	29	10	193	193	121	169	169	151	121	151	139	121
120,000	35	12	217	217	145	193	193	175	145	175	163	145
140,000	41	14	241	241	169	217	217	199	169	199	187	169
160,000	47	17	265	265	193	241	241	223	193	223	211	193
180,000	53	19	289	289	217	265	265	247	217	247	235	217
200,000	59	21	313	313	241	289	289	271	241	271	259	241
220,000	64	23	337	337	265	313	313	295	265	295	283	265
240,000	70	25	362	362	290	338	338	320	290	320	308	290
260,000	76	27	386	386	314	362	362	344	314	344	332	314
280,000	82	29	410	410	338	386	386	368	338	368	356	338
300,000	88	31	434	434	362	410	410	392	362	392	380	362
320,000	94	33	458	458	386	434	434	416	386	416	404	386
340,000	100	35	482	482	410	458	458	440	410	440	428	410
360,000	105	37	506	506	434	482	482	464	434	464	452	434
380,000	111	39	531	531	459	507	507	489	459	489	477	459
400,000	117	41	555	555	483	531	531	513	483	513	501	483
420,000	123	43	579	579	507	555	555	537	507	537		
440,000	129	45	603	603	531	579	579	561	531			
460,000	135	48	627	627	555	603	603	585	555			
480,000	141	50	651	651	579	627	627	609	579			
500,000	146	52	675	675	603	651	651	633	603			
520,000	152	54	700	700	628	676	676	658	628			
540,000	158	56	724	724	652	700	700	682	652			
560,000	164	58	748	748	676	724	724	706	676			
580,000	170	60	772	772	700	748	748	730	700			
600,000	176	62	796	796	724	772	772	754	724			
620,000	182	64	820	820	748	796	796	778	748			
640,000	188	66	844	844	772	820	820	802	772			
660,000	193	68	868	868	796	844	844	826	796			
680,000	199	70	893	893	821	869	869	851				
700,000	205	72	917	917	845	893	893					
720,000	211	74	941	941	869							
740,000	217	76	965	965	893							
760,000	223	79	989	989	917							
780,000	229	81	1 013	1 013	941							
800,000	234	83	1 037	1 037	965							
820,000	240	85	1 062	1 062	990							
840,000	246	87	1 086	1 086	1 014							
860,000	252	89	1 110	1 110	1 038							
880,000	258	91	1 134	1 134	1 062							
900,000	264	93	1 158	1 158	1 086							
920,000	270	95	1 182	1 182	1 110							
940,000	275	97	1 206	1 206	1 134							
960,000	281	99	1 231	1 231	1 159							
980,000	287	101	1 255	1 255	1 183							
1,000,000	293	103	1 279	1 279	1 207							
1,020,000	299	105	1 303	1 303	1 231							
1,040,000	305	107	1 327	1 327	1 255							
1,060,000	311	110	1 351	1 351	1 279							
1,080,000	316	112	1 375	1 375	1 303							
1,100,000	322	114	1 399	1 399	1 327							
1,120,000	328	116	1 424	1 424	1 352							
1,140,000	334	118	1 448	1 448	1 376							
1,160,000	340	120	1 472	1 472	1 400							
1,180,000	346	122	1 496	1 496	1 424							
1,200,000	352	124	1 520	1 520	1 448							
1,220,000	357	126	1 544	1 544	1 472							
1,240,000	363	128	1 568	1 568								
1,260,000	369	130	1 593	1 593								
1,280,000	375	132										
1,300,000	381	134										
1,320,000	387	136										
1,340,000	393	138										
1,360,000	398	140										
1,380,000	404	143										
1,400,000	410	145										
1,420,000	416	147										
1,440,000	422	149										
1,460,000	428	151										
1,480,000	434	153										
1,500,000	439	155										
1,520,000	445	157										

# Performances : **TURBOMAX<sup>®</sup> Instantaneous Indirect Water Heater**

Domestic Water Temperature	
In :	40 °F
Out :	140 °F

Boiler Water Temperature	
Feed :	180 °F
Return :	160 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate Gallons / Minute	TURBOMAX <sup>®</sup> 120-9, 120-9A			TURBOMAX <sup>®</sup> 80-5, 80-5A, 50-5			TURBOMAX <sup>®</sup> 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	
			BTU required per hour	kW	120-9	120-9A	All	80-5	80-5A	50-5	All	50-3
		Gallons / Hour			Gallons / Hour			Gallons / Hour				
20,000	6	2	72	72	24	56	56	44	24	44	36	24
40,000	12	4	96	96	48	80	80	68	48	68	60	48
60,000	18	6	120	120	72	104	104	92	72	92	84	72
80,000	23	8	145	145	97	129	129	117	97	117	109	97
100,000	29	10	169	169	121	153	153	141	121	141	133	121
120,000	35	12	193	193	145	177	177	165	145	165	157	145
140,000	41	14	217	217	169	201	201	189	169	189	181	169
160,000	47	16	241	241	193	225	225	213	193	213	205	193
180,000	53	18	265	265	217	249	249	237	217	237	229	217
200,000	59	21	289	289	241	273	273	261	241	261	253	241
220,000	64	23	313	313	265	297	297	285	265	285	277	265
240,000	70	25	338	338	290	322	322	310	290	310	302	290
260,000	76	27	362	362	314	346	346	334	314	334	326	314
280,000	82	29	386	386	338	370	370	358	338	358		
300,000	88	31	410	410	362	394	394	382	362			
320,000	94	33	434	434	386	418	418	406	386			
340,000	100	35	458	458	410	442	442	430	410			
360,000	105	37	482	482	434	466	466	454	434			
380,000	111	39	507	507	459	491	491	479	459			
400,000	117	41	531	531	483	515	515	503	483			
420,000	123	43	555	555	507	539	539	527	507			
440,000	129	45	579	579	531	563	563	551	531			
460,000	135	47	603	603	555	587	587	575				
480,000	141	49	627	627	579							
500,000	146	51	651	651	603							
520,000	152	53	676	676	628							
540,000	158	55	700	700	652							
560,000	164	57	724	724	676							
580,000	170	59	748	748	700							
600,000	176	62	772	772	724							
620,000	182	64	796	796	748							
640,000	188	66	820	820	772							
660,000	193	68	844	844	796							
680,000	199	70	869	869	821							
700,000	205	72	893	893	845							
720,000	211	74	917	917	869							
740,000	217	76	941	941	893							
760,000	223	78	965	965	917							
780,000	229	80	989	989	941							
800,000	234	82	1 013	1 013	965							
820,000	240	84	1 038	1 038	990							
840,000	246	86										
860,000	252	88										
880,000	258	90										
900,000	264	92										
920,000	270	94										
940,000	275	96										
960,000	281	98										
980,000	287	101										
1,000,000	293	103										
1,020,000	299	105										
1,040,000	305	107										
1,060,000	311	109										
1,080,000	316	111										
1,100,000	322	113										
1,120,000	328	115										
1,140,000	334	117										
1,160,000	340	119										
1,180,000	346	121										
1,200,000	352	123										
1,220,000	357	125										
1,240,000	363	127										
1,260,000	369	129										
1,280,000	375	131										
1,300,000	381	133										
1,320,000	387	135										
1,340,000	393	137										
1,360,000	398	139										
1,380,000	404	142										
1,400,000	410	144										
1,420,000	416	146										
1,440,000	422	148										
1,460,000	428	150										
1,480,000	434	152										
1,500,000	439	154										
1,520,000	445	156										

# Performances : **TURBOMAX<sup>®</sup> Instantaneous Indirect Water Heater**

Domestic Water Temperature	
In :	40 °F
Out :	140 °F

Boiler Water Temperature	
Feed :	160 °F
Return :	140 °F

## Production d'eau chaude domestique.

			<b>TURBOMAX<sup>®</sup> 120-9, 120-9A</b>			<b>TURBOMAX<sup>®</sup> 80-5, 80-5A, 50-5</b>			<b>TURBOMAX<sup>®</sup> 50-3, 30-3</b>				
<b>Boiler Net Output</b>		<b>Pump Flow Rate</b>	<b>First Hour</b>		<b>Continuous</b>	<b>First Hour</b>		<b>Continuous</b>	<b>First Hour</b>		<b>Continuous</b>		
<b>BTU required per hour</b>	<b>kW</b>	<b>Gallons / Minute</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>	<b>Max Flow Rate</b>		<b>Max Flow Rate</b>		
			<b>120-9</b>	<b>120-9A</b>	<b>All</b>	<b>80-5</b>	<b>80-5A</b>	<b>50-5</b>	<b>All</b>	<b>50-3</b>	<b>30-3</b>	<b>All</b>	
			<b>Gallons / Hour</b>			<b>Gallons / Hour</b>			<b>Gallons / Hour</b>				
1	20,000	6	2	48	48	24	40	40	34	24	34	30	24
2	40,000	12	4	72	72	48	64	64	58	48	58	54	48
3	60,000	18	6	96	96	72	88	88	82	72	82	78	72
4	80,000	23	8	121	121	97	113	113	107	97	107	103	97
5	100,000	29	10	145	145	121	137	137	131	121	131	127	121
6	120,000	35	12	169	169	145	161	161	155	145	155	151	145
7	140,000	41	14	193	193	169	185	185	179	169	179	175	169
8	160,000	47	16	217	217	193	209	209	203	193	203	199	193
9	180,000	53	18	241	241	217	233	233	227	217			
10	200,000	59	20	265	265	241	257	257	251	241			
11	220,000	64	22	289	289	265	281	281	275	265			
12	240,000	70	24	314	314	290	306	306	300	290			
13	260,000	76	26	338	338	314	330	330	324	314			
14	280,000	82	29	362	362	338							
15	300,000	88	31	386	386	362							
16	320,000	94	33	410	410	386							
17	340,000	100	35	434	434	410							
18	360,000	105	37	458	458	434							
19	380,000	111	39	483	483	459							
20	400,000	117	41	507	507	483							
21	420,000	123	43	531	531	507							
22	440,000	129	45	555	555	531							
23	460,000	135	47	579	579	555							
24	480,000	141	49	603	603	579							
25	500,000	146	51										
26	520,000	152	53										
27	540,000	158	55										
28	560,000	164	57										
29	580,000	170	59										
30	600,000	176	61										
31	620,000	182	63										
32	640,000	188	65										
33	660,000	193	67										
34	680,000	199	69										
35	700,000	205	71										
36	720,000	211	73										
37	740,000	217	75										
38	760,000	223	77										
39	780,000	229	79										
40	800,000	234	82										
41	820,000	240	84										
42	840,000	246	86										
43	860,000	252	88										
44	880,000	258	90										
45	900,000	264	92										
46	920,000	270	94										
47	940,000	275	96										
48	960,000	281	98										
49	980,000	287	100										
50	1,000,000	293	102										
51	1,020,000	299	104										
52	1,040,000	305	106										
53	1,060,000	311	108										
54	1,080,000	316	110										
55	1,100,000	322	112										
56	1,120,000	328	114										
57	1,140,000	334	116										
58	1,160,000	340	118										
59	1,180,000	346	120										
60	1,200,000	352	122										
61	1,220,000	357	124										
62	1,240,000	363	126										
63	1,260,000	369	128										
64	1,280,000	375	130										
65	1,300,000	381	132										
66	1,320,000	387	134										
67	1,340,000	393	137										
68	1,360,000	398	139										
69	1,380,000	404	141										
70	1,400,000	410	143										
71	1,420,000	416	145										
72	1,440,000	422	147										
73	1,460,000	428	149										
74	1,480,000	434	151										
75	1,500,000	439	153										
76	1,520,000	445	155										

# Performances : **TURBOMAX<sup>®</sup> Instantaneous Indirect Water Heater**

Domestic Water Temperature	
In :	40 °F
Out :	160 °F

Boiler Water Temperature	
Feed :	200 °F
Return :	180 °F

## Production d'eau chaude domestique.

			<b>TURBOMAX<sup>®</sup> 120-9, 120-9A</b>			<b>TURBOMAX<sup>®</sup> 80-5, 80-5A, 50-5</b>			<b>TURBOMAX<sup>®</sup> 50-3, 30-3</b>			
Boiler Net Output		Pump Flow Rate	First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	Max Flow Rate		Max Flow Rate	
BTU required per hour	kW	Gallons / Minute	120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	60	60	20	47	47	37	20	37	30	20
40,000	12	4	80	80	40	67	67	57	40	57	50	40
60,000	18	6	100	100	60	87	87	77	60	77	70	60
80,000	23	8	121	121	81	107	107	97	81	97	91	81
100,000	29	10	141	141	101	127	127	117	101	117	111	101
120,000	35	12	161	161	121	148	148	138	121	138	131	121
140,000	41	14	181	181	141	168	168	158	141	158	151	141
160,000	47	17	201	201	161	188	188	178	161	178	171	161
180,000	53	19	221	221	181	208	208	198	181	198	191	181
200,000	59	21	242	242	202	228	228	218	202	218	212	202
220,000	64	23	262	262	222	248	248	238	222	238	232	222
240,000	70	25	282	282	242	268	268	258	242	258	252	242
260,000	76	27	302	302	262	289	289	279	262	279	272	262
280,000	82	29	322	322	282	309	309	299	282	299	292	282
300,000	88	31	342	342	302	329	329	319	302			
320,000	94	33	362	362	322	349	349	339	322			
340,000	100	35	383	383	343	369	369	359	343			
360,000	105	37	403	403	363	389	389	379	363			
380,000	111	39	423	423	383	410	410	400	383			
400,000	117	41	443	443	403	430	430	420	403			
420,000	123	43	463	463	423	450	450	440	423			
440,000	129	45	483	483	443	470	470	460	443			
460,000	135	48	503	503	463	490	490	480	463			
480,000	141	50	524	524	484	510	510	500	484			
500,000	146	52	544	544	504							
520,000	152	54	564	564	524							
540,000	158	56	584	584	544							
560,000	164	58	604	604	564							
580,000	170	60	624	624	584							
600,000	176	62	645	645	605							
620,000	182	64	665	665	625							
640,000	188	66	685	685	645							
660,000	193	68	705	705	665							
680,000	199	70	725	725	685							
700,000	205	72	745	745	705							
720,000	211	74	765	765	725							
740,000	217	76	786	786	746							
760,000	223	79	806	806	766							
780,000	229	81	826	826	786							
800,000	234	83	846	846	806							
820,000	240	85	866	866	826							
840,000	246	87	886	886	846							
860,000	252	89	906	906	866							
880,000	258	91	927	927								
900,000	264	93										
920,000	270	95										
940,000	275	97										
960,000	281	99										
980,000	287	101										
1,000,000	293	103										
1,020,000	299	105										
1,040,000	305	107										
1,060,000	311	110										
1,080,000	316	112										
1,100,000	322	114										
1,120,000	328	116										
1,140,000	334	118										
1,160,000	340	120										
1,180,000	346	122										
1,200,000	352	124										
1,220,000	357	126										
1,240,000	363	128										
1,260,000	369	130										
1,280,000	375	132										
1,300,000	381	134										
1,320,000	387	136										
1,340,000	393	138										
1,360,000	398	140										
1,380,000	404	143										
1,400,000	410	145										
1,420,000	416	147										
1,440,000	422	149										
1,460,000	428	151										
1,480,000	434	153										
1,500,000	439	155										
1,520,000	445	157										

# Performances : **TURBOMAX®** Instantaneous Indirect Water Heater

Domestic Water Temperature	
In :	40 °F
Out :	160 °F

Boiler Water Temperature	
Feed :	180 °F
Return :	160 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate Gallons / Minute	TURBOMAX® 120-9, 120-9A			TURBOMAX® 80-5, 80-5A, 50-5			TURBOMAX® 50-3, 30-3			
			First Hour		Continuous	First Hour		Continuous	First Hour		Continuous	
			Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	Max Flow Rate	
BTU required per hour	KW		120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
			Gallons / Hour			Gallons / Hour			Gallons / Hour			
20,000	6	2	40	40	20	33	33	28	20	28	25	20
40,000	12	4	60	60	40	54	54	49	40	49	45	40
60,000	18	6	80	80	60	74	74	69	60	69	65	60
80,000	23	8	101	101	81	94	94	89	81	89	86	81
100,000	29	10	121	121	101	114	114	109	101	109	106	101
120,000	35	12	141	141	121	134	134	129	121	129	126	121
140,000	41	14	161	161	141	154	154	149	141	149	146	141
160,000	47	16	181	181	161	175	175	170	161	170	166	161
180,000	53	18	201	201	181	195	195	190	181	190	186	181
200,000	59	21	222	222	202	215	215	210	202			
220,000	64	23	242	242	222	235	235	230	222			
240,000	70	25	262	262	242	255	255	250	242			
260,000	76	27	282	282	262	275	275	270	262			
280,000	82	29	302	302	282	295	295	290	282			
300,000	88	31	322	322	302	316	316	311	302			
320,000	94	33	342	342	322							
340,000	100	35	363	363	343							
360,000	105	37	383	383	363							
380,000	111	39	403	403	383							
400,000	117	41	423	423	403							
420,000	123	43	443	443	423							
440,000	129	45	463	463	443							
460,000	135	47	483	483	463							
480,000	141	49	504	504	484							
500,000	146	51	524	524	504							
520,000	152	53	544	544	524							
540,000	158	55	564	564	544							
560,000	164	57										
580,000	170	59										
600,000	176	62										
620,000	182	64										
640,000	188	66										
660,000	193	68										
680,000	199	70										
700,000	205	72										
720,000	211	74										
740,000	217	76										
760,000	223	78										
780,000	229	80										
800,000	234	82										
820,000	240	84										
840,000	246	86										
860,000	252	88										
880,000	258	90										
900,000	264	92										
920,000	270	94										
940,000	275	96										
960,000	281	98										
980,000	287	101										
1,000,000	293	103										
1,020,000	299	105										
1,040,000	305	107										
1,060,000	311	109										
1,080,000	316	111										
1,100,000	322	113										
1,120,000	328	115										
1,140,000	334	117										
1,160,000	340	119										
1,180,000	346	121										
1,200,000	352	123										
1,220,000	357	125										
1,240,000	363	127										
1,260,000	369	129										
1,280,000	375	131										
1,300,000	381	133										
1,320,000	387	135										
1,340,000	393	137										
1,360,000	398	139										
1,380,000	404	142										
1,400,000	410	144										
1,420,000	416	146										
1,440,000	422	148										
1,460,000	428	150										
1,480,000	434	152										
1,500,000	439	154										
1,520,000	445	156										

A B C D E F G H I J K L M



# Performances : **TURBOMAX®** Instantaneous Indirect Water Heater

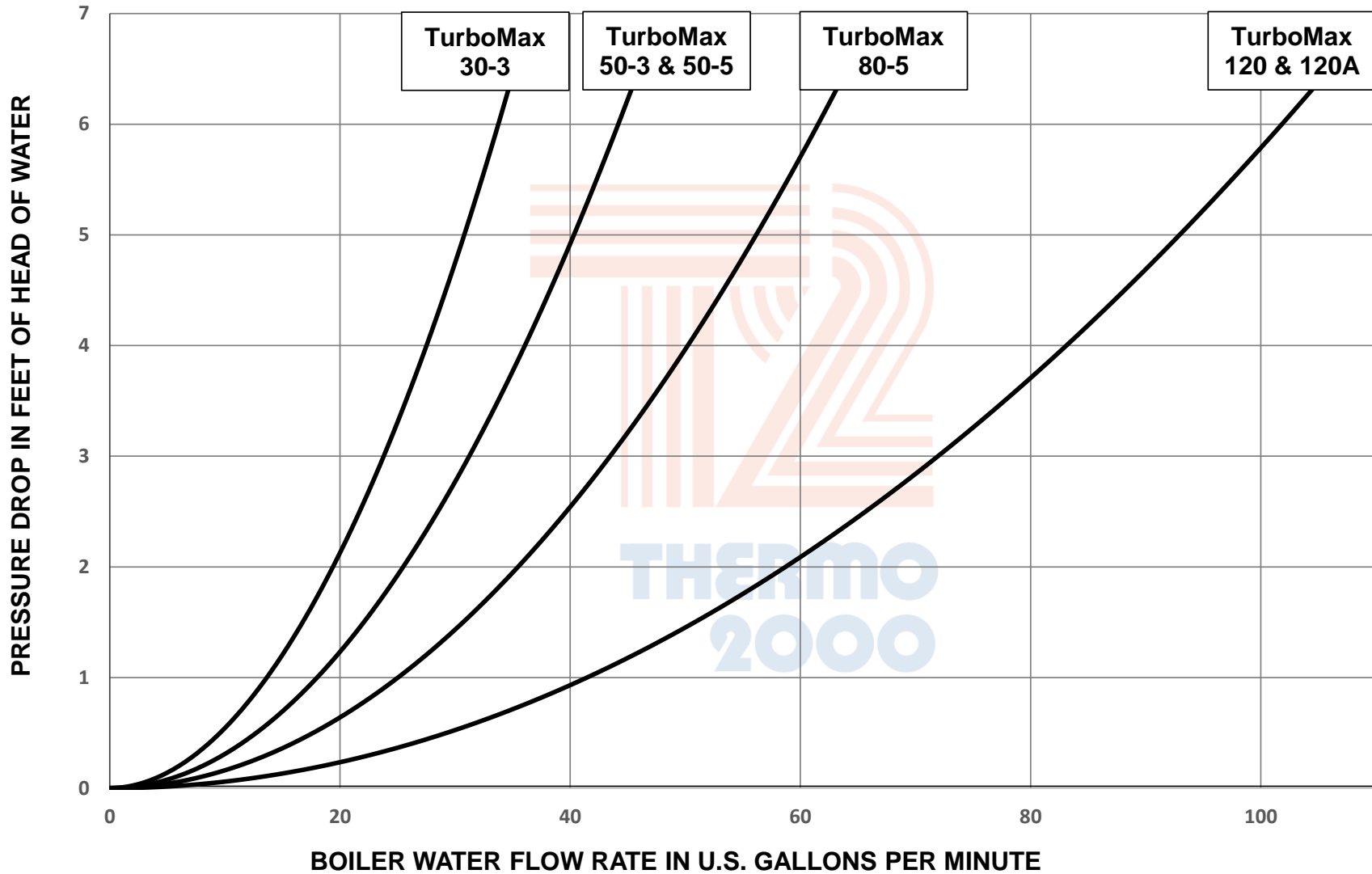
Domestic Water Temperature	
In :	40 °F
Out :	180 °F

Boiler Water Temperature	
Feed :	200 °F
Return :	180 °F

## Production d'eau chaude domestique.

Boiler Net Output		Pump Flow Rate Gallons / Minute	TURBOMAX® 120-9, 120-9A			TURBOMAX® 80-5, 80-5A, 50-5			TURBOMAX® 50-3, 30-3			
			First Hour Max Flow Rate		Continuous Max Flow Rate	First Hour Max Flow Rate		Continuous Max Flow Rate	First Hour Max Flow Rate		Continuous Max Flow Rate	
			120-9	120-9A	All	80-5	80-5A	50-5	All	50-3	30-3	All
BTU required per hour	kW	Gallons / Hour			Gallons / Hour			Gallons / Hour				
20,000	6	2	34	34	17	29	29	24	17	24	22	17
40,000	12	4	52	52	35	46	46	42	35	42	39	35
60,000	18	6	69	69	52	63	63	59	52	59	56	52
80,000	23	8	86	86	69	81	81	76	69	76	74	69
100,000	29	10	104	104	87	98	98	94	87	94	91	87
120,000	35	12	121	121	104	115	115	111	104	111	108	104
140,000	41	14	138	138	121	133	133	128	121	128	125	121
160,000	47	17	156	156	138	150	150	146	138	146	143	138
180,000	53	19	173	173	156	167	167	163	156	163	160	156
200,000	59	21	190	190	173	184	184	180	173	180		
220,000	64	23	207	207	190	202	202	197	190			
240,000	70	25	225	225	208	219	219	215	208			
260,000	76	27	242	242	225	236	236	232	225			
280,000	82	29	259	259	242	254	254	249	242			
300,000	88	31	277	277	260	271	271	267	260			
320,000	94	33	294	294	277	288	288	284	277			
340,000	100	35	311	311	294							
360,000	105	37	329	329	311							
380,000	111	39	346	346	329							
400,000	117	41	363	363	346							
420,000	123	43	381	381	363							
440,000	129	45	398	398	381							
460,000	135	48	415	415	398							
480,000	141	50	432	432	415							
500,000	146	52	450	450	433							
520,000	152	54	467	467	450							
540,000	158	56	484	484	467							
560,000	164	58	502	502	485							
580,000	170	60	519	519	502							
600,000	176	62	536	536								
620,000	182	64										
640,000	188	66										
660,000	193	68										
680,000	199	70										
700,000	205	72										
720,000	211	74										
740,000	217	76										
760,000	223	79										
780,000	229	81										
800,000	234	83										
820,000	240	85										
840,000	246	87										
860,000	252	89										
880,000	258	91										
900,000	264	93										
920,000	270	95										
940,000	275	97										
960,000	281	99										
980,000	287	101										
1,000,000	293	103										
1,020,000	299	105										
1,040,000	305	107										
1,060,000	311	110										
1,080,000	316	112										
1,100,000	322	114										
1,120,000	328	116										
1,140,000	334	118										
1,160,000	340	120										
1,180,000	346	122										
1,200,000	352	124										
1,220,000	357	126										
1,240,000	363	128										
1,260,000	369	130										
1,280,000	375	132										
1,300,000	381	134										
1,320,000	387	136										
1,340,000	393	138										
1,360,000	398	140										
1,380,000	404	143										
1,400,000	410	145										
1,420,000	416	147										
1,440,000	422	149										
1,460,000	428	151										
1,480,000	434	153										
1,500,000	439	155										
1,520,000	445	157										

## Pressure Drop VS Boiler Water Flow Rate TurboMax® Instantaneous Indirect water heater



**Domestic Water Side (Secondary Circuit)  
Pressure Drop VS Domestic Hot Water Flow  
TurboMax® Instantaneous Indirect Water Heater**

