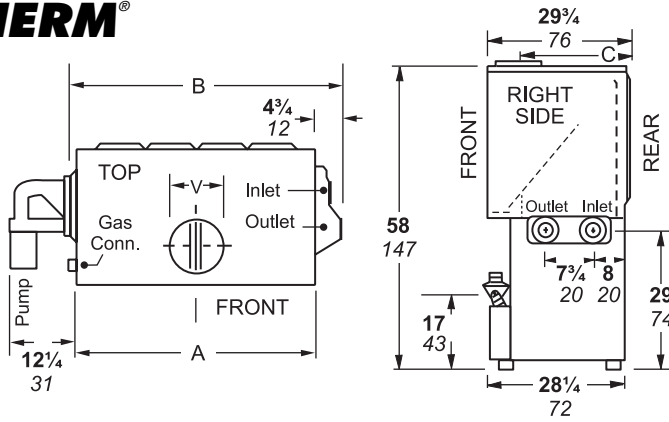


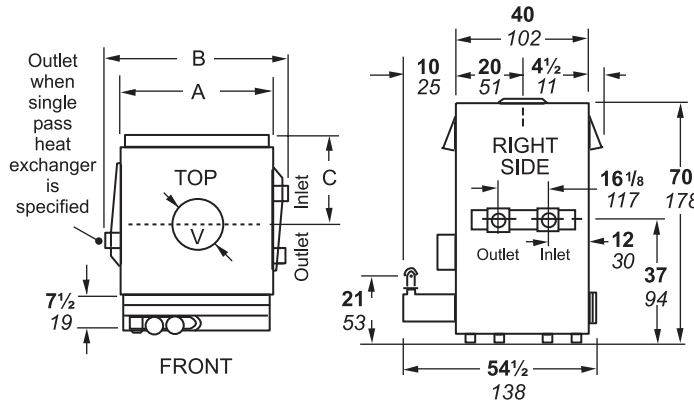
# MIGHTY THERM®

# Volume Water Heaters

Indoor  
Sizes 500-1825



Indoor  
Sizes 2000-5000



WW	Volume Water Heater (circulating storage tank type)
PW	Volume Water Heater with built-in pump
IW	Instantaneous Water Heater

Indoor Sizes 500,000 - 5,000,000 BTU/h

Submittal Data **LAARS** Heating Systems

Dimensions shown in inches cm.

## Standard Equipment

- ASME 160 lb. working pressure heat exchanger
- 24V control system
- Operating gas valve/pressure regulator
- Water flow sensing device
- Removable burner tray (500-1825)
- Built-in draft hood
- Glass lined cast iron headers
- Covered control box
- Redundant safety gas valve
- Operating control
- Manual reset high limit
- Automatic reset high limit (3050-5000)
- Manual "A" gas valve
- Manual pilot valve
- Manual shut-off valve
- Stainless steel burners
- External water side gaskets
- Flanged connections
- High gas pressure switch (3050-5000)
- Pressure relief valve (125 PSI)
- 115/230/24V transformer
- Terminal strip
- On/off toggle switch
- 2 amp fuse (500-1825)
- 5 amp fuse (2000-5000)
- Power on light

## Dimensional Data

Size <sup>6</sup>	Input <sup>1</sup>		Output <sup>1</sup>		IBR Net Rating <sup>1</sup>		Gas Conn. <sup>2, 4</sup> Size		Water Conn. <sup>2, 5</sup> Size		Dimensions <sup>2</sup>						Shipping Weight <sup>3</sup>		
	MBTU/h	kW	MBTU/h	kW	MBTU/h	kW	inches	NPT	inches	NPT	A	B	C	V	lbs	kgs			
500	500	147	405	119	325	95	1	3/4-1	2	33 5/8	85	39 5/8	101	23 5/8	60	10	25	612	278
600	600	176	486	142	423	124	1	3/4-1	2	38 5/8	98	44 5/8	113	22 5/8	58	12	31	702	319
715	715	209	579	170	504	148	1	3/4-1	2	44 1/4	112	50 1/4	128	22 5/8	58	12	31	750	340
850	850	249	689	202	599	176	1-1 1/4	3/4-1 1/4	2	50 5/8	129	56 5/8	141	21 1/8	55	14	36	830	377
1010	1010	296	818	240	711	208	1 1/4	1-1 1/4	2 1/2	58	147	64	163	20 5/8	52	16	41	986	447
1200	1200	352	972	285	845	248	1 1/4	1-1 1/4	2 1/2	66 1/4	168	72 1/4	184	20 5/8	52	16	41	995	451
1430	1430	419	1158	339	1007	295	1 1/4	1 1/4	2 1/2	76	193	82	208	19 5/8	50	18	46	1080	490
1670	1670	489	1353	396	1176	345	1 1/4-1 1/2	1 1/4	2 1/2	85 3/8	217	91 3/8	232	19 5/8	50	18	46	1175	533
1825	1825	535	1478	433	1285	377	1 1/4-1 1/2	1 1/4	2 1/2	92 1/4	234	98 1/4	249	19 5/8	50	18	46	1270	576
2000	2000	586	1640	481	1425	418	1 1/2	1 1/4-1 1/2	4	55 1/2	141	63	160	24 1/4	62	22	56	1815	823
2450	2450	718	2009	589	1747	512	1 1/2-2	1 1/2	4	65 1/2	166	73	185	24 1/2	62	24	61	1950	885
3050	3050	894	2501	733	2175	637	1 1/2-2	1 1/2	4	78	198	85 1/4	217	24 1/2	62	26	66	2100	953
3500	3500	1026	2870	841	2496	731	2	1 1/2	4	88	224	95 1/2	243	24 1/2	62	28	71	2237	1016
4050	4050	1187	3321	973	2888	846	2-2 1/2	2	4	100 1/2	255	108	274	24 1/2	62	30	76	2555	1160
4500	4500	1319	3690	1081	3209	940	2 1/2	2	4	110 1/2	281	118	300	24 1/2	62	32	81	3075	1396
5000	5000	1465	4100	1201	3565	1045	2 1/2	2	4	123	312	130 1/2	315	24 1/2	62	34	83	3050	1385

**NOTES:** 1. Input and output must be derated 4% per 1000 feet above sea level when installed above 2000 feet altitude. 2. Dimensions are nominal. 3. Units with pumps: Add 20 lbs. (9 kg) to sizes 175-400 and 55 lbs. (25 kg) to sizes 500-1825. 4. When two gas connection sizes are shown, the smaller applies to the standard gas train, while the larger applies to optional trains, such as four stage or motorized gas valves. 5. Sizes 1010-1670 IW models have 2-inch water connections. 6. Models PW and IW Sizes 500-1825 only. Consult factory for exact specifications.

## Recovery Tables

### Required Water Temperature Rise

Size	40°F	22°C	50°F	28°C	60°F	33°C	70°F	39°C	80°F	44°C	90°F	50°C	100°F	56°C	120°F	67°C	140°F	78°C
	gph	mL/s	gph	mL/s	gph	mL/s	gph	mL/s	gph	mL/s	gph	mL/s	gph	mL/s	gph	mL/s	gph	mL/s
500	1215	1276	972	1021	810	851	694	729	608	638	540	567	486	510	405	425	347	365
600	1458	1531	1166	1225	972	1021	833	875	729	765	648	680	583	612	486	510	417	437
715	1737	1824	1390	1459	1158	1216	993	1042	869	912	772	811	695	730	579	608	496	521
850	2066	2169	1652	1735	1377	1446	1180	1239	1033	1084	918	964	826	868	689	723	590	620
1010	2454	2577	1963	2062	1636	1718	1402	1473	1227	1289	1091	1145	982	1031	818	859	701	736
1200	2916	3062	2333	2449	1944	2041	1666	1750	1458	1531	1296	1361	1166	1225	972	1021	833	875
1430	3475	3649	2780	2919	2317	2432	1986	2085	1738	1824	1544	1622	1390	1459	1158	1216	993	1042
1670	4058	4261	3246	3409	2705	2841	2319	2435	2029	2131	1804	1894	1623	1704	1353	1420	1159	1217
1825	4435	4656	3548	3725	2957	3104	2534	2661	2217	2328	1971	2070	1774	1863	1478	1552	1267	1330
2000	4920	5166	3936	4133	3280	3444	2811	2952	2460	2583	2187	2296	1968	2066	1640	1722	1406	1476
2450	6027	6328	4822	5063	4018	4219	3444	3616	3014	3164	2679	2813	2411	2531	2009	2109	1722	1808
3050	7503	7878	6002	6303	5002	5252	4287	4502	3752	3939	3335	3501	3001	3151	2501	2626	2144	2251
3500	8610	9041	6888	7232	5740	6027	4920	5166	4305	4520	3827	4018	3444	3616	2870	3014	2460	2583
4050	9963	10461	7970	8369	6642	6974	5693	5978	4982	5231	4428	4649	3985	4184	3321	3487	2847	2989
4500	11070	11624	8856	9299	7380	7749	6326	6642	5535	5812	4920	5166	4428	4649	3690	3875	3163	3321
5000	12300	12915	9840	10332	8200	8610	7029	7380	6150	6458	5467	5740	4920	5166	4100	4305	3514	3690

## Motor Electrical Data

Sizes	Power (HP)			Current (Amps)		
	Soft	Normal	Hard	Soft	Normal	Hard
500-715	1/3	1/3	3/4	5.4	5.4	8.8
850-1430	1/3	1/2	3/4	5.4	5.8	8.8
1670	1/3	3/4	3/4	5.4	8.8	8.8
1825	3/4	3/4	3/4	8.8	8.8	8.8

Data is shown for 115 volt single phase motors.

## Minimum Clearances from Adjacent Construction

Recommended Minimum Clearance From	Sizes 500-1825		Sizes 200-5000	
	inches	mm	inches	mm
Top	30	762	24	610
Water Connection Side	12	305	24	610
Opposite Side	6	152	24	610
Front	24	610	48	1220
Rear	8	203	24	610
Vent	**6	152	**6	152

**NOTES:** Sizes 500 to 1825 must be installed on non-combustible floors. Sizes 2000 to 5000 require installation on non-combustible floors. At least 48" clearance should be provided in front of the heater for maintenance accessibility (removal of burners, etc.).

\*\*1" (25mm) if double wall vent is used.



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