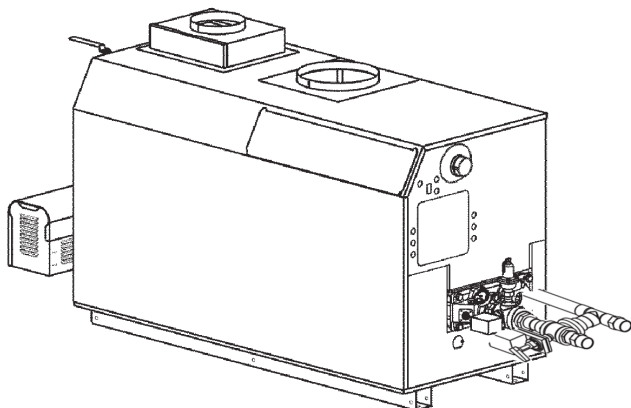


MIGHTY THERM2®



Date:

Project #:

Engineer:

Prepared By:

Bid Date:

Pump-Mounted Pool Heater

MT2P

Pump Mounted Pool Heater

Indoor/Outdoor Sizes 500-2000

Submittal Data **LAARS**
Heating Systems Company

Project Name:

Location:

Contractor:

Standard Equipment

- ASME 160 psi working pressure heat exchanger
- ASME "H" stamp
- Flanged water connections
- Glass-lined cast iron headers
- External header gaskets
- 75 psi (517 kPa) ASME rated pressure relief valve
- Flow switch
- Temperature and pressure gauge
- Pump mounted and wired
- Mixing system for low temperature protection
- Multiple operating gas valve/pressure regulators
- Manual "A" gas valve
- Intake air filter
- Multiple, removable burner trays
- Stainless steel burners
- Built-in draft fan(s) for Category I or III venting
- Air pressure switch
- Burner site glass
- 24V control system
- 115/24VAC transformer
- Manual reset high limit
- Hot surface ignition
- On/Off toggle switch
- Pump time delay
- Diagnostic lights
- Less than 10ppm NOx
- External controller connections with selector switch

Boiler Data

Number of Units:

Fuel

- ☐ Natural
☐ Propane

Heat Exchanger

- ☐ Copper
☐ Cupro-Nickel
☐ Copper, Reversed
☐ Cupro-Nickel, Reversed

Options

- ☐ CSD-1 (LWCO not incl.)
☐ Low water cutoff
☐ Ignition failure alarm with bell and dry contacts, red trouble lights and green main gas lights



Sizing Data

Size	Input ¹ BTU/H	Input ¹ kW	Output ¹ BTU/H	Output ¹ kW	Gas Conn. Size inches ²	Heater Water Conn. Size inches ²	Mixing System Water Conn. Size inches ²	Shipping Weight lbs	Shipping Weight kg
500	500,000	147	425,000	125	1¼	2	2	760	345
750	750,000	220	638,500	187	1¼	2	2	855	388
1000	999,000	293	849,000	249	1½	2½	2	1020	463
1250	1,250,000	366	1,062,500	311	2	2½	2	1115	506
1500	1,500,000	440	1,275,000	374	2	2½	2	1260	572
1750	1,750,000	513	1,487,500	436	2	2½	2	1365	619
2000	1,999,000	586	1,699,000	498	2	2½	2	1495	678

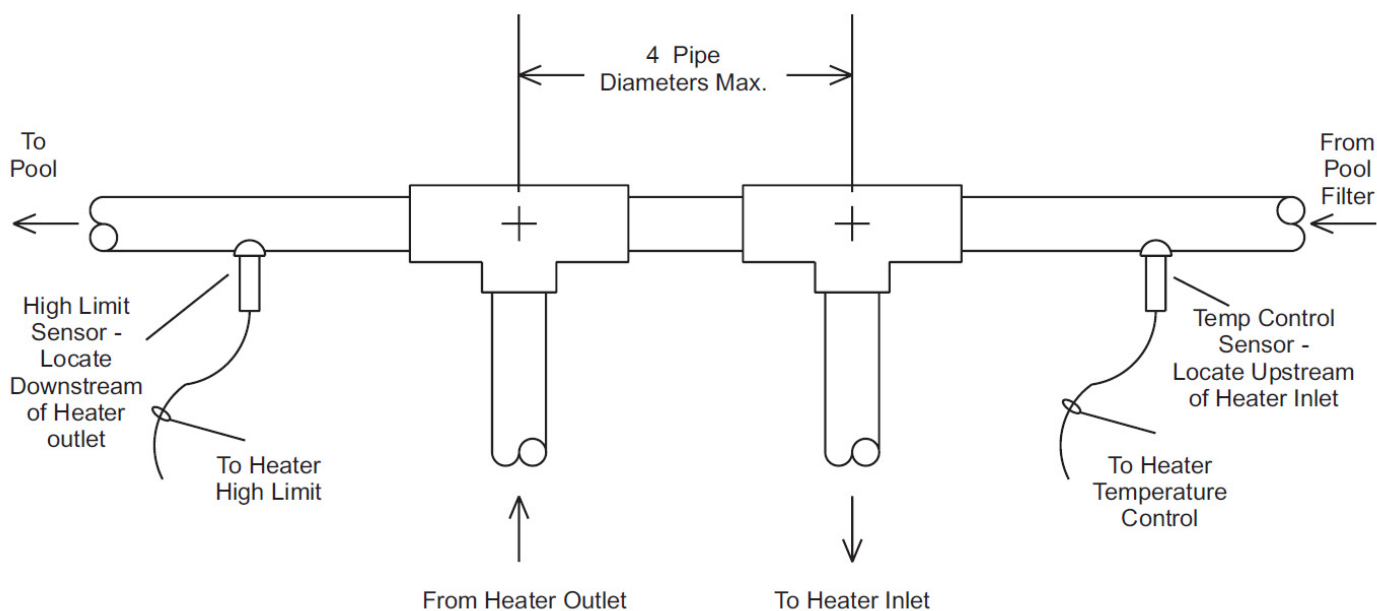
- NOTES:**
1. Input and output must be derated 4% per 1000 feet above sea level when installed above 2000 feet altitude.
 2. Dimensions are nominal.
 3. Shipping weight is approximate, based on previous units shipped and can be affected by several variables including the various weights for optional pumps and even the green or dry wood used in the crate.

Accessories

- Side-wall vent terminal for indoor unit (required for side-wall venting)
- Side-wall combustion air terminal for indoor unit (required only for ducted combustion air)
- Exhaust vent terminal for outdoor unit
- Combustion air intake for outdoor unit

Piping and Sensor Location

The Mighty Therm2 Pool Heater is shipped with a field-installed mixing system, and must be piped in primary-secondary style, as shown. A remote pool temperature sensor and remote pool temperature high limit are wired to the Mighty Therm2, to be mounted in the pool water loop, as shown.



Clearances

Appliance Surface	Required Clearance From Combustible Material		Suggested Service Access Clearances	
Left Side	1	2.5	24	61
Right Side	1	2.5	24	61
Top	1	2.5	12	30
Back*	1	2.5	12	30
Front	1	2.5	36	91
Vent	Per venting system supplier's instructions			

*When vent and/or air is connected to the back, 36" (91cm) is suggested.
Dimensions in **inches** *cm*

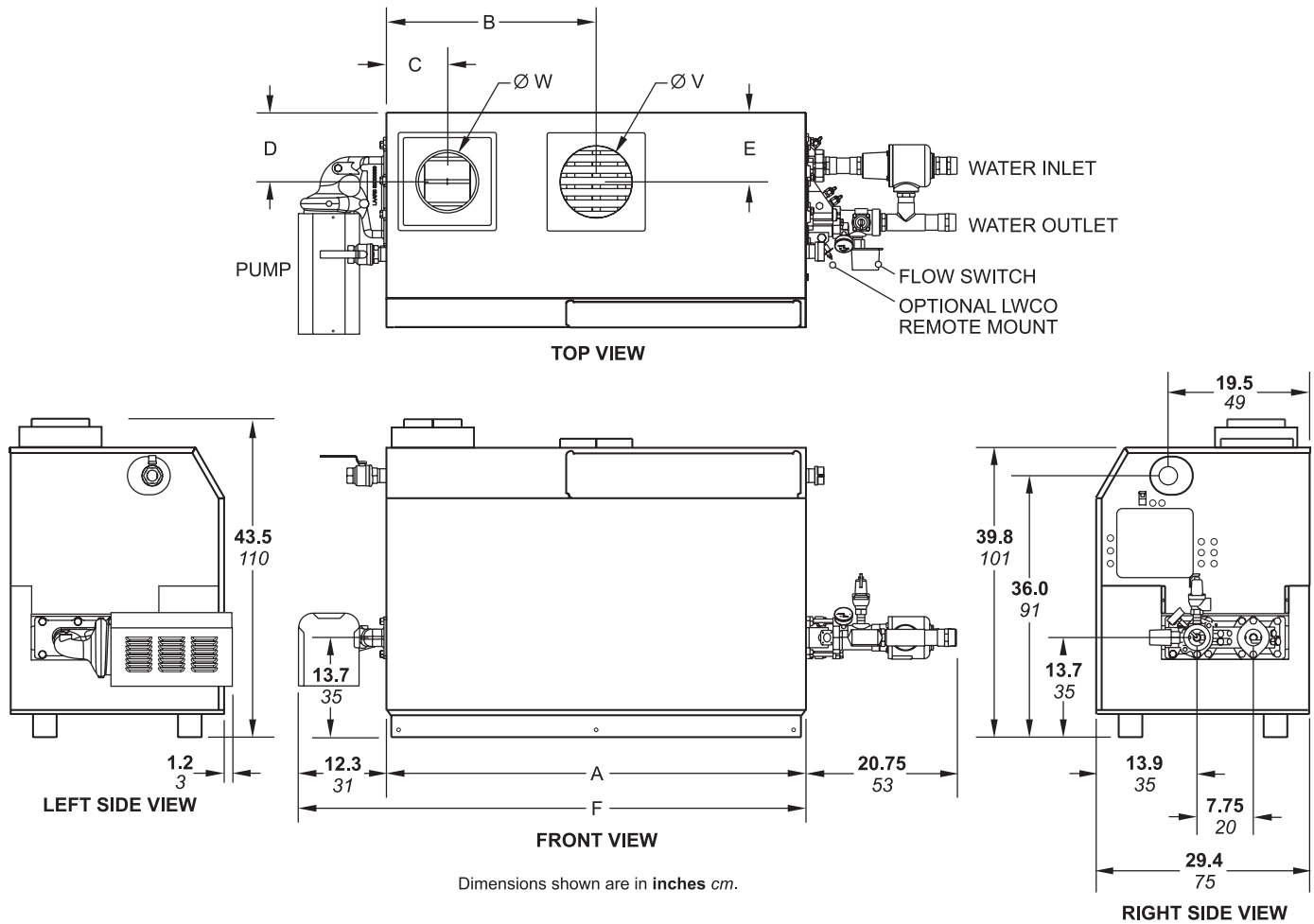
Electrical Data

Model	Volts	Phase	Single Circuit Size	Two Circuit Size	
			(Heater & Pump)	Heater	Pump
MT2P 500 - 750	120	Single	20 Amps	15 Amps	15 Amps
MT2P 1000			25 Amps	20 Amps	15 Amps
MT2P 1250 - 1500			30 Amps	25 Amps	15 Amps
MT2P 1750 - 2000			N/A	25 Amps	20 Amps

Pump Data

Sizes	Power (HP)	Current (Amps)
500	1/3	2.8
750	1/3	2.8
1000	1/2	5.2
1250	1/2	5.2
1500	3/4	7.2
1750	1	9.8
2000	1	9.8

Dimensional Data



UNIT SIZE	A		B		C		D		E		F		AIR CONN. W		VENT CONN. V	
500	33 ³ / ₄	85	16 ³ / ₄	43	6 ¹ / ₂	17	10	25	8	20	46 ¹ / ₄	117	6	15	8	20
750	45 ³ / ₄	116	22 ³ / ₄	53	6 ¹ / ₂	17	10	25	9 ¹ / ₂	24	58 ¹ / ₄	148	8	20	10	25
1000	57 ³ / ₄	147	28 ³ / ₄	73	6 ¹ / ₂	17	10	25	9 ¹ / ₂	24	70 ¹ / ₄	178	8	20	10	25
1250	68 ¹ / ₄	173	34	87	10 ¹ / ₄	26	10	25	9	23	80 ³ / ₄	205	12	30	12	30
1500	78 ³ / ₄	200	39 ¹ / ₂	100	10 ¹ / ₄	26	10	25	9	23	91 ¹ / ₄	232	12	30	12	30
1750	89 ¹ / ₄	227	44 ³ / ₄	113	10 ¹ / ₄	26	10	25	9	23	101 ³ / ₄	258	12	30	14	36
2000	99 ³ / ₄	253	49 ³ / ₄	127	10 ¹ / ₄	26	10	25	9	23	112 ¹ / ₄	285	12	30	14	36

Dimensions in inches cm.