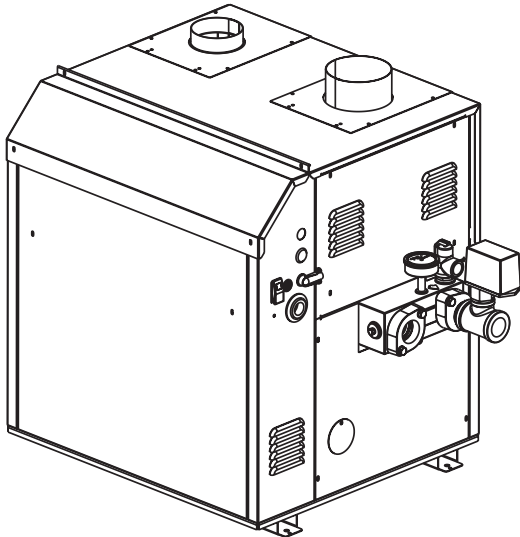


MIGHTY THERM²

Boiler

MT2H 400 Hydronic Heater

Indoor/Outdoor



Date:

Project #:

Engineer:

Prepared By:

Bid Date:

Submittal Data



Project Name:

Location:

Contractor:

Standard Equipment

- Certified for indoor or outdoor use
- Low NOX Emissions
- ASME 160 psi working pressure heat exchanger
- ASME "H" stamp
- Flanged water connections
- Glass-lined headers
- External header gaskets
- Temperature pressure gauge
- 75psi (517kPa) ASME rated pressure relief valve
- Water flow switch
- 24V control system
- 115/24V transformer
- Temperature controller
- Manual reset high limit
- On-off firing
- Hot surface ignition
- On/off toggle switch
- CSD-1 compliant
- Removable burner tray(s)
- Multiple operating gas valve/ pressure regulators
- Manual "A" gas valve
- Burner site glass
- Intake air filter
- Built-in fan for Category I or III vent systems
- Blower pre- & post-purge
- Air pressure switch
- Blocked vent switch

Controller Features

- PI temperature controller
- Outdoor reset with ratios of 0.4 to 3.6
- Warm weather shutdown
- Indicator lights for power, heat call, DHW call & WWSD
- Indirect DHW operation
- Automatic boiler differential
- Pump pre-purge, post-purge and exercise
- Outdoor air sensor
- Codes for sensor errors

Boiler Data

Number of Units:

Fuel

- ☐ Natural
☐ Propane

Heat Exchanger

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

Water Trim

- ☐ Glass-Lined Cast Iron
☐ Bronze Trim

Options

- ☐ Low Water Cutoff



Sizing Data

Model	Input		Output		Gas Conn. Size	Water Conn. Size	Shipping Weight	
	BTU/h	kW	BTU/h	kW	NPT	NPT	lbs	kg
MT2H0400	399,000	116.9	340,000	99.6	3/4	1-1/2	330	150

- 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. For other boiler ratings:
Boiler Horsepower: $HP = \frac{\text{Output}}{33,475}$ Radiation Surface: EDR sq. ft. = $\frac{\text{Output}}{150}$

Accessories

- Side-wall vent terminal for indoor installation (required for side-wall venting)
- Side-wall combustion air terminal for indoor installation (required only for ducted combustion air)
- Outdoor vent terminal and combustion air terminal

Water Flow Data

TEMPERATURE RISE																
Size	20°F		11°C		25°F		14°C		30°F		17°C		35°F		19°C	
	Flow	H/L	Flow	H/L	Flow	H/L	Flow	H/L	Flow	H/L	Flow	H/L	Flow	H/L	Flow	H/L
	gpm	feet	lpm	m	gpm	feet	lpm	m	gpm	feet	lpm	m	gpm	feet	lpm	m
400	34	6.3	129	1.9	27	4.0	102	1.2	23	2.8	87	0.9	19	2.1	72	0.6

Clearances

Appliance Surface	Required Clearance from Combustible Material		Suggested Service Access Clearance	
	inches	cm	inches	cm
Left Side	1	2.5	24	61.0
Right Side	1	2.5	24	61.0
Top	1	2.5	12	30.5
Back*	1	2.5	12	30.5
Front	1	2.5	36	91.4
Vertical Vent** (Category 1)	6	15.2		
Horizontal Vent (Category 3)	per UL1738 venting system supplier's instructions			

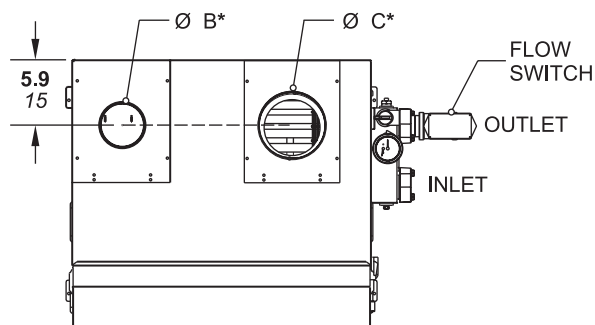
* When vent and/or combustion air connects to the back, recommended clearance is 36" 91cm.

** 1" when b-vent is used.

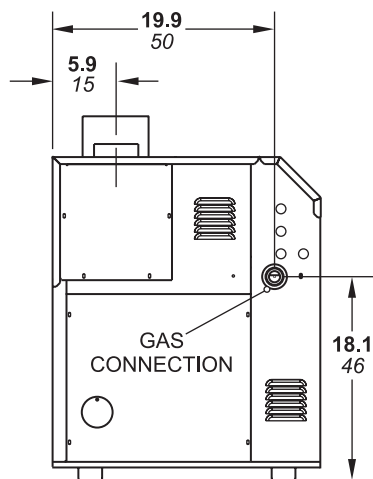
Electrical Data

Size	Boiler / Heater Circuit Size			Pump Delay Connection Rating			Blower
	Volts	Phase	Amps	Pilot Duty	Phase	Power	
400	120	Single	15	24V	Single	Up to 25VA	Included in Boiler Circuit

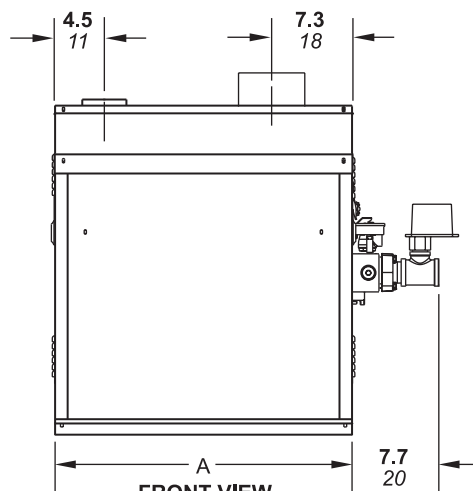
Dimensional Data



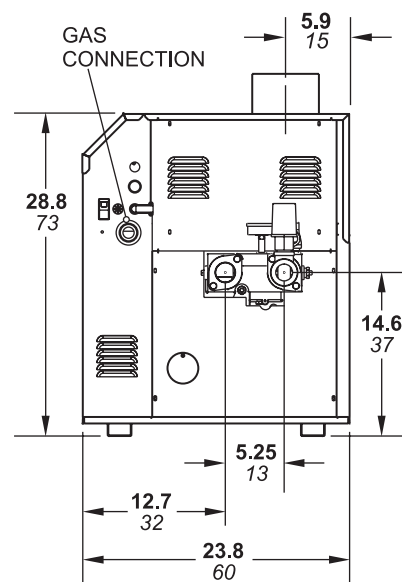
TOP VIEW



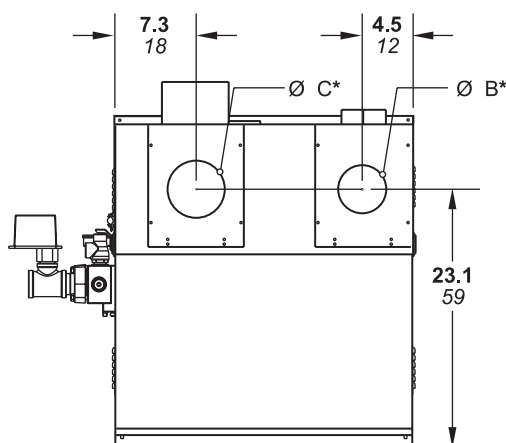
LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW



REAR VIEW

Size	A		Air Conn. B*		Vent Conn. C*		Horiz Vent Pipe	
	in	cm	in	cm	in	cm	in	cm
400	33½	85	6	15	7	18	6	15

*Air and vent connections may be on top or back of the Mighty Therm2, and are field convertible.

Laars Heating Systems Company reserves the right to change specifications, components, features, or to discontinue products without notice.