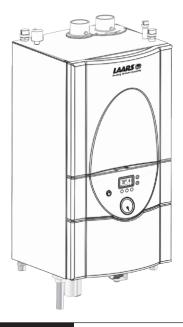
# MASCOT<sup>®</sup> LX



# Hydronic Boiler MLXH Hydronic Boiler Indoor, Sizes 50, 75, 100, 125, 150, 175, 220 Submittal Data Project Name:

Residential

### Standard Equipment

- · High condensing efficiency
- Modulation down to 20% of full fire (5:1 turndown)
- · Sealed combustion chamber
- · Pre-mix stainless steel burner
- Low NOx system exceeds the most stringent regulations for air quality – 10ppm NOx
- · Horizontal or vertical direct vent
- Vent and air pipe lengths of up to 150 equivalent feet (each)
- Horizontal vent and air terminals
- Stainless steel heat exchanger with welded construction
- ASME 30 psi (207kPa) working pressure heat exchanger
- ASME "H" stamp
- 30 psi (207kPa) ASME pressure relief valve
- Auto cascade setup

- Boiler pump wired and mounted inside jacket
- Built-in condensate trap and drain, priming not required
- · Automatic air vent

Date:

Project #:

Engineer:

Prepared By:

Bid Date:

- · Temperature and pressure gauge
- · Boiler water pressure switch
- · Blocked vent pressure switch
- Blocked condensate pressure switch
- · Burner site glass
- Electronic PID modulating control
- Direct spark ignition
- Multiple pump control for boiler pump and system pump, each with delay
- Domestic Hot Water Pump Output
- Customizable Freeze Protection
- · Anti-short cycling

- Large user-interface and display
- · Alarm output

Location:

Contractor:

- Accepts external (4-20mA or 0-10VDC) modulation signal
- Outdoor reset (sensor included)
- · Outdoor air reset curve
- Vent temp auto turn-down before lockout
- Manual reset high limit
- · Lighted on/off toggle switch
- · Wall mount bracket
- Field convertible between natural gas and propane
- Zero clearance to combustible surfaces
- 15-Year limited warranty
- · 2-Year parts warranty

**Boiler Data** 

Number of Units:



Fuel

Natural
Propane

**Options** 

Low Water Cut-off











# Sizing Data

	Inn	uit	Outr	out	Gas	Water		iler ning
Model	шр	ut	Out	Jut	Conn. Size	Conn. Size		
	BTU/h	kW	BTU/h	kW	inches	inches	lbs	kg
MLX H 50	50,000	14.6	47,500	13.2	1/2" NPT	3/4" NPT	88	40
MLX H 75	75,000	21.9	71,250	20.8	1/2" NPT	3/4" NPT	97	44
MLX H 100	100,000	29.3	95,000	27.8	1/2" NPT	3/4" NPT	112	51
MLX H 125	125,000	36.6	118,750	34.8	1/2" NPT	3/4" NPT	126	57
MLX H 150	150,000	43.9	142,500	41.8	1/2" NPT	1" NPT	140	64
MLX H 175	175,000	51.6	166,250	48.7	1/2" NPT	1" NPT	153	69
MLX H 220	220,000	64.4	209,000	61.2	1/2" NPT	1" NPT	161	73
	MLX H 50 MLX H 75 MLX H 100 MLX H 125 MLX H 150 MLX H 175	Model         BTU/h           MLX H 50         50,000           MLX H 75         75,000           MLX H 100         100,000           MLX H 125         125,000           MLX H 150         150,000           MLX H 175         175,000	BTU/h         kW           MLX H 50         50,000         14.6           MLX H 75         75,000         21.9           MLX H 100         100,000         29.3           MLX H 125         125,000         36.6           MLX H 150         150,000         43.9           MLX H 175         175,000         51.6	Model         BTU/h         kW         BTU/h           MLX H 50         50,000         14.6         47,500           MLX H 75         75,000         21.9         71,250           MLX H 100         100,000         29.3         95,000           MLX H 125         125,000         36.6         118,750           MLX H 150         150,000         43.9         142,500           MLX H 175         175,000         51.6         166,250	Model         BTU/h         kW         BTU/h         kW           MLX H 50         50,000         14.6         47,500         13.2           MLX H 75         75,000         21.9         71,250         20.8           MLX H 100         100,000         29.3         95,000         27.8           MLX H 125         125,000         36.6         118,750         34.8           MLX H 150         150,000         43.9         142,500         41.8           MLX H 175         175,000         51.6         166,250         48.7	Model         BTU/h         kW         BTU/h         kW         Conn. Size inches           MLX H 50         50,000         14.6         47,500         13.2         1/2" NPT           MLX H 75         75,000         21.9         71,250         20.8         1/2" NPT           MLX H 100         100,000         29.3         95,000         27.8         1/2" NPT           MLX H 125         125,000         36.6         118,750         34.8         1/2" NPT           MLX H 150         150,000         43.9         142,500         41.8         1/2" NPT           MLX H 175         175,000         51.6         166,250         48.7         1/2" NPT	Model         BTU/h         kW         BTU/h         kW         Conn. Size inches         Conn. Size inches           MLX H 50         50,000         14.6         47,500         13.2         1/2" NPT         3/4" NPT           MLX H 75         75,000         21.9         71,250         20.8         1/2" NPT         3/4" NPT           MLX H 100         100,000         29.3         95,000         27.8         1/2" NPT         3/4" NPT           MLX H 125         125,000         36.6         118,750         34.8         1/2" NPT         3/4" NPT           MLX H 150         150,000         43.9         142,500         41.8         1/2" NPT         1" NPT           MLX H 175         175,000         51.6         166,250         48.7         1/2" NPT         1" NPT	Model         Input BTU/h         Output kW         Gas Conn. Size inches         Water Conn. Size inches         Ship Wei Ibs           MLX H 50         50,000         14.6         47,500         13.2         1/2" NPT         3/4" NPT         88           MLX H 75         75,000         21.9         71,250         20.8         1/2" NPT         3/4" NPT         97           MLX H 100         100,000         29.3         95,000         27.8         1/2" NPT         3/4" NPT         112           MLX H 125         125,000         36.6         118,750         34.8         1/2" NPT         3/4" NPT         126           MLX H 150         150,000         43.9         142,500         41.8         1/2" NPT         1" NPT         140           MLX H 175         175,000         51.6         166,250         48.7         1/2" NPT         1" NPT         153

### NOTES:

1. For other boiler ratings:

Boiler Horsepower: HP = Output

 $\underline{\text{Output}}$  Radiation Surface: EDR sq. ft. =  $\underline{\text{Output}}$  33,475

### Clearances

APPLIANCE SURFACE	SUGGESTED SERVICE INCHES	ACCESS CLEARANCE
Left Side	6	15
Right Side	6	15
Тор	12	30
Closet, Front	6	15
Front	24	61
Bottom	24	61
Vent	1	3

Certified by CSA for zero clearance to combustible materials on all sides.

### Electrical Data

Size		Boiler	
	Volts	Phase	Amps
MLXH 50	120	Single	1.5
MLXH 75	120	Single	1.5
MLX H 100	120	Single	1.5
MLX H 125	120	Single	1.5
MLX H 150	120	Single	1.5
MLX H 175	120	Single	2.2
MLX H 220	120	Single	2.2

<sup>\*</sup> Minimum 15A circuit required

# Vent System

# INTAKE / EXHAUST Max Equivalent Vent and Air Pipe Length (each)

	STANDARD 2-PIPE	STANDARD 2-PIPE	OPTIONAL CONCENTRIC
SIZES	DIA. <b>FT.</b> m	DIA. <b>FT.</b> m	DIA. <b>FT.</b> m
50 - 175	2" <b>40</b> 12.2	3"* <b>150</b> <i>45.7</i>	3/5" <b>40</b> 12.2
220	2" <b>30</b> 9.1	3"* <b>120</b> 36.6	3/5" <b>40</b> <i>12.2</i>

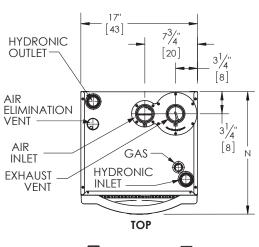
<sup>\*</sup> Must use 2x3 adapter within 1 ft. *(30cm)* of boiler.

Reference the Installation and Operation Manual for more details.

### Dimensional Data

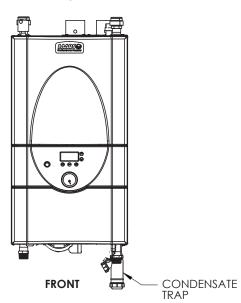
	Dimension							
Model	Α	В	С	D	Е	F	G	Н
50,75 MBH	1" (3)	15-3/4" (40)	3-3/4" (9)	9-1/4" (24)	8" (20)	1-1/2" (4)	5-3/4" (14)	15-1/2" (39)
100, 125 MBH	1" (3)	15-1/2" (39)	1-1/4" (3)	12-3/4" (33)	11" (28)	1-1/4" (3)	9-1/2" (24)	14-3/4" (37)
150, 175 MBH	1-1/2" (4)	15-1/4" (39)	1-3/4" (4)	13" (33)	11-1/4" (28)	2-3/4" (7)	5-1/4" (14)	2" (5)
220 MBH	1-1/2" (4)	15-1/4" (39)	1-3/4" (4)	13" (33)	11-1/4" (28)	2-3/4" (7)	5-1/4" (14)	2" (5)

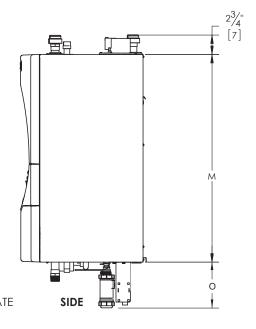
inches (cm)

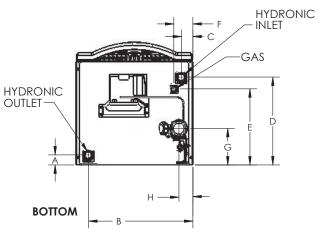


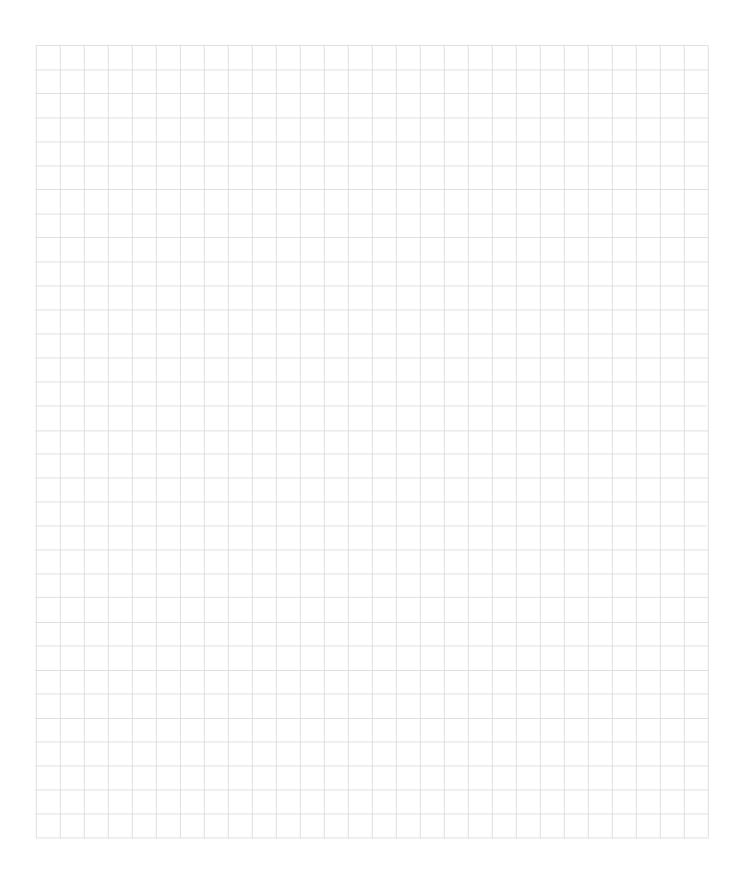
Model	М	N	0
50, 75 MBH	30-1/2" (78)	15-1/4" (39)	4-5/8" (12)
100, 125 MBH	30-1/2" (78)	18" (46)	4-5/8" (12)
150, 175 MBH	35-1/2" (90)	18" (46)	8-7/8" (23)
220 MBH	38-1/2" (90)	18" <i>(46)</i>	8-7/8" (23)

inches (cm)









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

