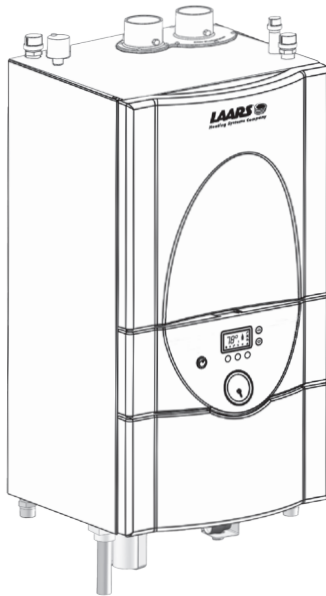


MASCOT[®] LX



Residential Hydronic Combination Boiler

MLXC | COMBINATION Boiler / Water Heater

Indoor, Sizes 125, 150, 175

Date:

Project #:

Engineer:

Prepared By:

Bid Date:

Submittal Data



Project Name:

Location:

Contractor:

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
- Stainless Steel brazed-plate DHW heat exchanger with priority for on-demand hot water
- Boiler pump wired and mounted inside jacket
- Built-in condensate trap and drain, priming not required
- Automatic air vent
- 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
- Customizable Freeze Protection
- Anti-short cycling
- Large user-interface and display
- Alarm output
- 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



Accessories for Field Mounting

☐ Horizontal concentric vent kit	☐ Concentric elbow, 90°	☐ Concentric flush-mount 2" terminal
☐ Concentric vent adapter	☐ Wall plate for concentric pipe	☐ Concentric flush-mount 3" terminal
☐ Concentric pipe, 12" long	☐ Horizontal concentric sstl terminal	☐ BACnet gateway
☐ Concentric pipe, 24" long	☐ Horizontal concentric 2" PVC terminal	☐ LON gateway
☐ Concentric pipe, 36" long	☐ Horizontal concentric 3" PVC terminal	
☐ Concentric pipe, 13"-18" telescoping		

Sizing Data

Model	Input		Output		DHW Output @ 75°F Rise	AFUE	Gas Conn. Size inches	Water Conn. Size inches	DHW Conn. Size inches	Shipping Weight	
	BTU/h	kW	BTU/h	kW						lbs	kg
☐ MLX C 125	125,000	36.6	118,750	34.8	3.1 gpm	95%	1/2" NPT	3/4" NPT	1/2" NPT	133	60
☐ MLX C 150	150,000	43.9	142,500	41.8	3.7 gpm	95%	1/2" NPT	1" NPT	1/2" NPT	148	67
☐ MLX C 175	175,000	51.6	166,250	48.7	4.3 gpm	95%	1/2" NPT	1" NPT	1/2" NPT	163	74

NOTES:

1. For other boiler ratings:

$$\text{Boiler Horsepower: HP} = \frac{\text{Output}}{33,475} \quad \text{Radiation Surface: EDR sq. ft.} = \frac{\text{Output}}{150}$$

Electrical Data

Size	Boiler		
	Volts	Phase	Amps
MLX C 125	120	Single	1.5
MLX C 150	120	Single	1.5
MLX C 175	120	Single	2.2

* Minimum 15A circuit required

Vent System

INTAKE / EXHAUST Max Equivalent Vent and Air Pipe Length (each)									
SIZES	STANDARD 2-PIPE			STANDARD 2-PIPE			OPTIONAL CONCENTRIC		
	DIA.	FT.	m	DIA.	FT.	m	DIA.	FT.	m
125 - 175	2"	40	12.2	3"*	150	45.7	3/5"	40	12.2

* Must use 2x3 adapter within 1 ft. (30cm) of boiler.

Reference the Installation and Operation Manual for more details.

Dimensional Data

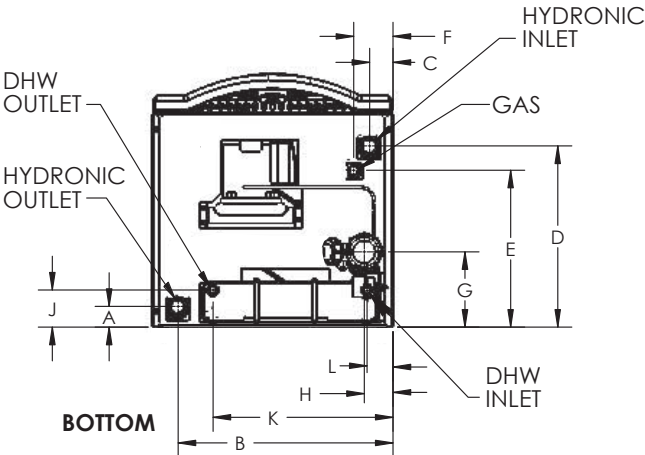
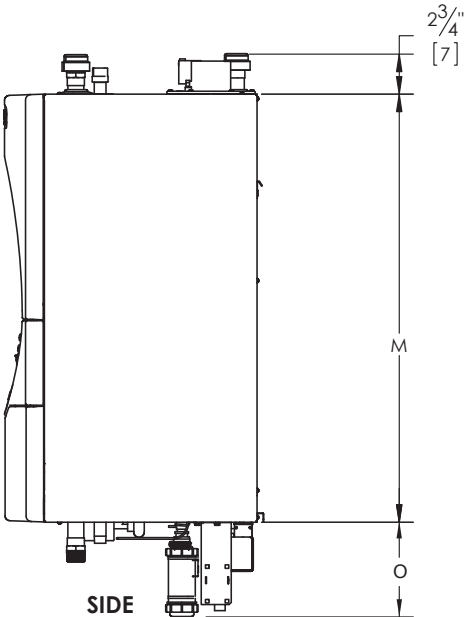
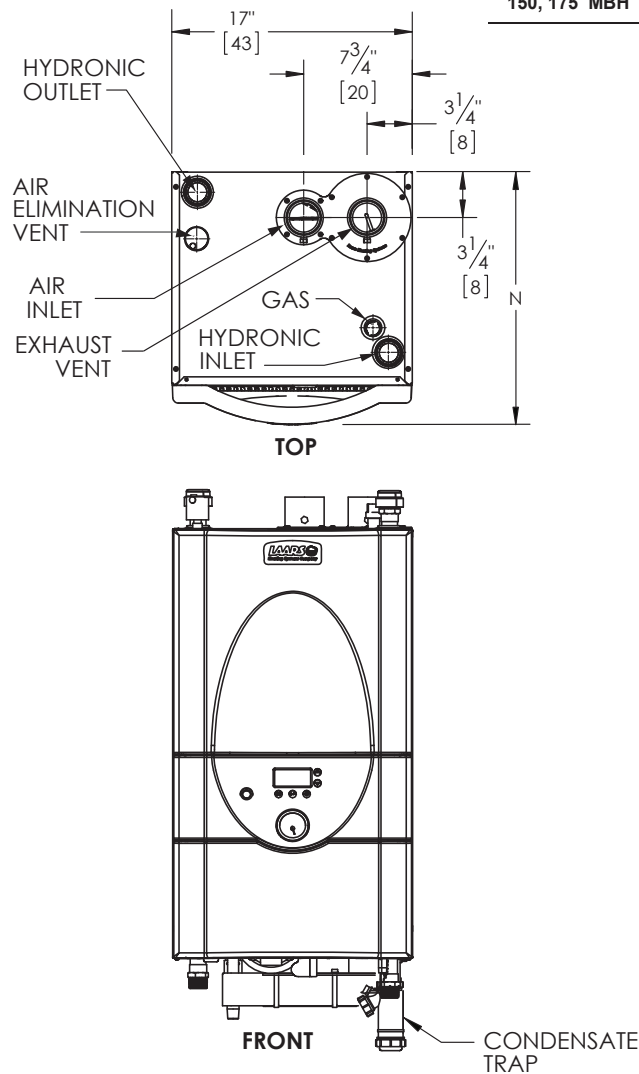
Model	Dimension							
	A	B	C	D	E	F	G	H
125 MBH	1" (3)	15-1/2" (39)	1-1/4" (3)	12-3/4" (33)	11" (28)	1-1/4" (3)	9-1/2" (24)	14-3/4" (37)
150, 175 MBH	1-1/2" (4)	15-1/4" (39)	1-3/4" (4)	13" (33)	11-1/4" (28)	2-3/4" (7)	5-1/4" (14)	2" (5)

inches (cm)

Model	J*	K	L	M	N	O
125 MBH	2-3/4" (7)	12-3/4" (33)	2" (5)	30-1/2" (78)	18" (46)	4-5/8" (12)
150, 175 MBH	2-3/4" (7)	12-3/4" (33)	1-3/4" (5)	35-1/2" (90)	18" (46)	8-7/8" (23)

inches (cm)

* - J dimension applies for both the DHW OUTLET and DHW INLET



Domestic Hot Water Heating Capacity

Model:	125		
		Inlet Temp F	
	50	60	70
GPM		Temp Rise F	
2	100	97	95
3	79	77	75
4	59	58	56
5	48	46	45

Model:	150		
		Inlet Temp F	
	50	60	70
GPM		Temp Rise F	
3	95	92	90
4	71	69	68
6	48	46	45
8	36	35	34

Model:	175		
		Inlet Temp F	
	50	60	70
GPM		Temp Rise F	
4	83	81	79
5	67	65	63
6	55	54	53
8	42	40	39

Clearances

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

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

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