

Encore®

Richmond® Encore® L-Series Super High-Efficiency Condensing Boilers

FLEXIBLE INSTALLATION

- Moveable combustion air intake (left/ right) and ability to flex vent in existing B-vent
- Extra long pipe fittings with notched sides for easy gripping with wrench
- Only 4 moving parts – Fan, Pump, Gas Valve, and Damper
- Universal shared platform parts – Easily diagnose and service with common parts for all L-Series units

KEY FEATURES

- Innovative single pass Labyrinth Heat Exchanger with Integrated copper waterways ensures maximum heat transfer and minimal heat loss
- Built-in ECM variable speed, high efficiency boiler pump
- Built-in Illuminated Touchscreen Control Panel
- Outdoor reset technology increases efficiency by lowering water temperature automatically
- Wireless cascading using RF balances workload of each unit for longer life
- ENERGY STAR® certified with up to 96% AFUE and ASME-rated

Specifications

MODEL NO.		RMHBH-L99i	RMHBH-L120i
Input Rate	MAX	99,000 BTU/h	120,000 BTU/h
	MIN	15,500 BTU/h	13,650 BTU/h
Output Rate	MAX	89,000 BTU/h	108,000 BTU/h
	MIN	14,800 BTU/h	13,000 BTU/h
AFUE		96%	95%
Gas Pressure (Nat Gas or LP gas)	MAX	14" WC	
	MIN	4" WC	
Power Supply		120V/60Hz	
Weight lbs. (empty)		85	
Pressure vessel water content – USG		0.5	
Boiler Flow Rate – GPM	MAX	10	11
	MIN	2	
Water Pressure	MAX	43.5psi	
	MIN	8psi	
Maximum Altitude		10,100 ft	
Ambient temperature – Low (°F)		32°	
Ambient temperature – High (°F)		122°	
Max relative humidity (non-condensing)		90%	
Temperature Range		51°F - 194°F	
Gas Connection		3/4" Male NPT	
Max equivalent vent length 2" (each side) ²		65'	
Max equivalent vent length 3" each side)		120'	
Ultra Low NOx		Meets 14 ng/J NOx requirements - SCAQMD Rule 1146.2 compliant	
Warranty ¹		10-Year Heat Exchanger, 5-Year Parts, 1-Year Labor	

¹See Warranty Certificate for complete information. ²Approximate input derate of 5 - 16% at 2" maximum vent length.

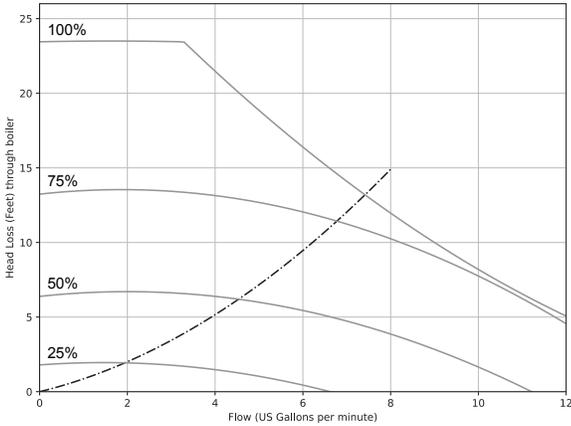


**RMHBH-L99i &
RMHBH-L120i**
Indoor Direct Vent
99,000-120,000 BTU/h
Natural Gas/LP Convertible



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View the boiler head loss – L-Series RMHBH-L99i & RMHBH-L120i



Specifications

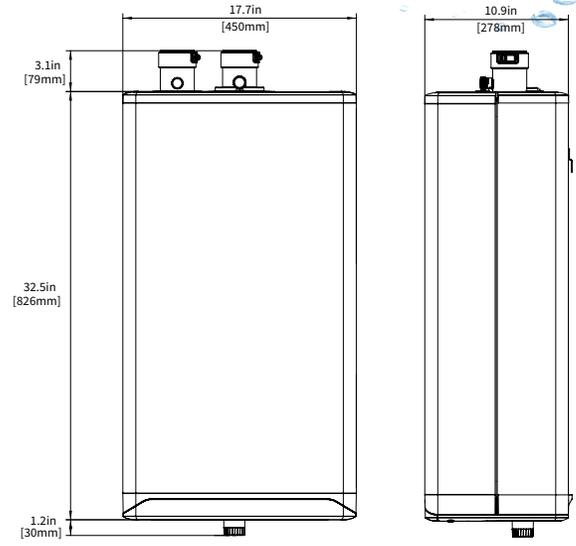
VENTING	MAX EQUIVALENT LENGTH
Schedule 40 PVC, CPVC, or Polypropylene	(each side)
2"	65 ²
3"	120 ¹
2" or 3" 90° Long Sweep Vent Elbow	Allow 5 equivalent feet
2" or 3" 90° Short Sweep Vent Elbow	Allow 8 equivalent feet
2" or 3" 45° Vent Elbow	Allow 3 equivalent feet
Polypropylene	
PPs 87-90° Elbow	Allow 8 equivalent feet
Flex PPs	
3" PPs Flex	35' Actual (Equivalent = Actual x 1.4)

² Approximate input derate of 5 - 16% at 2" maximum vent length.

SURFACE	MIN. DISTANCE FROM COMBUSTIBLE SURFACES	RECOMMENDED DISTANCE FOR INSTALLATION AND SERVICE
Front	2"	24"
Rear	0"	0"
Left Side	1.5"	6"
Right Side	4"	6"
Top	2"	24"
Bottom	8"	24"

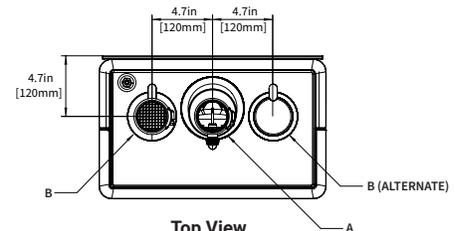
	PIPING CONNECTIONS	DIMENSION
A	Exhaust Outlet	2" Schedule 40 PVC
B	Combustion Air Inlet	2" Schedule 40 PVC
C	Heating Water Inlet	1" Male NPT
D	Heating Water Outlet	1" Male NPT
E	Gas Inlet	3/4" Male NPT
F	Condensate Outlet	3/4" Hose
G	Control Wiring	7/16" Rubber Plug

Dimensions

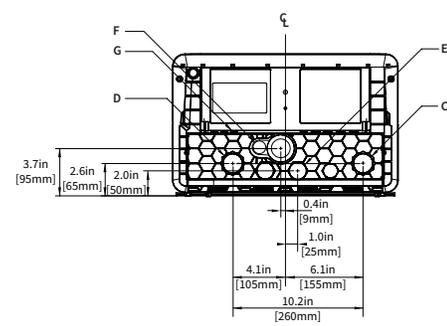


FRONT

SIDE



Top View



Bottom View

Parts & Accessories

Floor Stand P-267C	Service Parts Kit P-911R	EZ Pipe Manifold 251-063	2" PVC Sidewall Vent Kit P-741	3" PVC Sidewall Vent Kit P-742

In keeping with its policy of continuous progress and product improvement, Richmond reserves the right to make changes without notice.