

Encore®

Richmond® Encore® L-Series Super High-Efficiency Condensing Combi 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 5 moving parts – Fan, Bypass Valve, Pump, Gas Valve, and Damper
- Universal shared platform parts – Easily diagnose and service with common parts for all L-Series units

KEY FEATURES

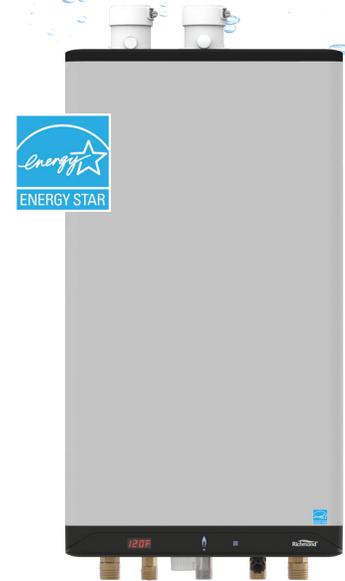
- Innovative Labyrinth Heat Exchanger with 2 independent copper waterways for maximum heat transfer and minimal heat loss

- 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
- Only Combi Boilers that can be cascaded for both space heating and domestic hot water
- ENERGY STAR® certified with up to 96% AFUE and ASME-rated (excludes 160K combi model).

Specifications

| MODEL NO. | | RMCBH-L125i | RMCBH-L160i | RMCBH-L199i |
|--|--------------------|--|---------------|------------------------|
| Input Rate (Heating Mode) | MAX | 99,000 BTU/h | 125,000 BTU/h | 125,000 BTU/h |
| | MIN | 16,500 BTU/h | 23,000 BTU/h | 28,500 BTU/h |
| Output Rate (Heating mode) | MAX | 89,000 BTU/h | 111,000 BTU/h | 111,000 BTU/h |
| | MIN | 15,800 BTU/h | 22,000 BTU/h | 27,100 BTU/h |
| Input Rate (Domestic Hot Water) | MAX | 125,000 BTU/h | 160,000 BTU/h | 199,000 BTU/h |
| | MIN | 16,500 BTU/h | 23,000 BTU/h | 28,500 BTU/h |
| AFUE | | 95% | 94% | 95% |
| Gas Pressure (Nat Gas or LP gas) | MAX | 14" WC | | |
| | MIN | 4" WC | | |
| Power Supply | | 120V/60Hz | | |
| Weight lbs. (empty) | | 85 | 84 | |
| Pressure vessel water content – USG | | 0.5 | 0.19 | |
| Boiler Flow Rate - GPM | MAX | 10 | 11 | 12 |
| | MIN | 2 | | |
| Water Pressure | MAX | DHW 150 psi / Heating 43.5psi | | |
| | MIN | DHW 40psi / Heating 8psi | | |
| Maximum Altitude | | 10,100 ft | 10,100 ft | 10,100 ft ³ |
| Ambient temperature – Low (°F) | | 32° | | |
| Ambient temperature – High (°F) | | 122° | | |
| Max relative humidity (non-condensing) | | 90% | | |
| Temp Range | Heating Mode | 51°F-194°F | | |
| | Domestic Hot Water | 105°F-149°F | | |
| Minimum Activation Flow Rate (DHW) | | 0.5 GPM | | |
| Gallons per Minute - GPM (Domestic Hot Water) | MAX | 4 | 7 | |
| | 67°F Rise | 3.2 | 4.1 | 5 |
| Gas Connection | | 3/4" Male NPT | | |
| Domestic Hot Water Connection | | 3/4" Male NPT | | |
| Heating Connection | | 1" Male NPT | | |
| Max equivalent vent length 2" (each side) ² | | 65' | | |
| Max equivalent vent length 3" (each side) | | 120' | | |
| Ultra Low NOx | | Meets 14ng/J NOx requirements - SCAQMD Rule 1146.2 compliant | | |
| Warranty ¹ | | 10-Year Heat Exchanger, 5-Year Parts, 1-Year Labor | | |

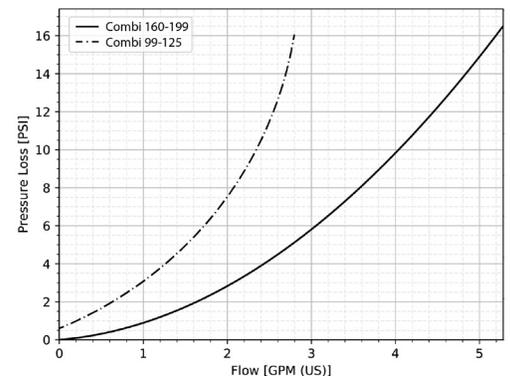
¹See Warranty Certificate for complete information. ²Approximate input derate of 10 - 16% at 2" maximum vent length. ³Natural Gas only, LP is 7,800 ft



RMCBH-L125i, RMCBH-L160i & RMCBH-L199i
Indoor Direct Vent
125,000-199,000 BTU/h
Natural Gas/LP Convertible

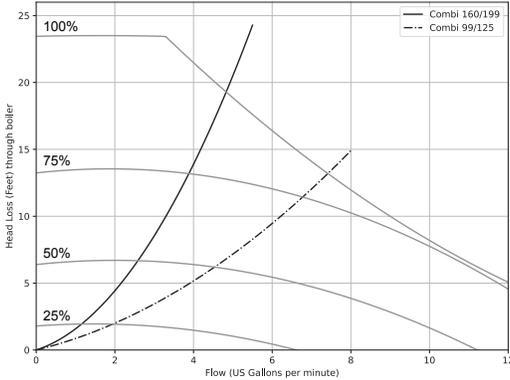


Water heater pressure drop – L-Series
RMCBH-L125i, RMCBH-L160i & RMCBH-L199i



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

View the boiler head loss – L-Series RMCBH-L125i, RMCBH-L160i & RMCBH-L199i



Specifications

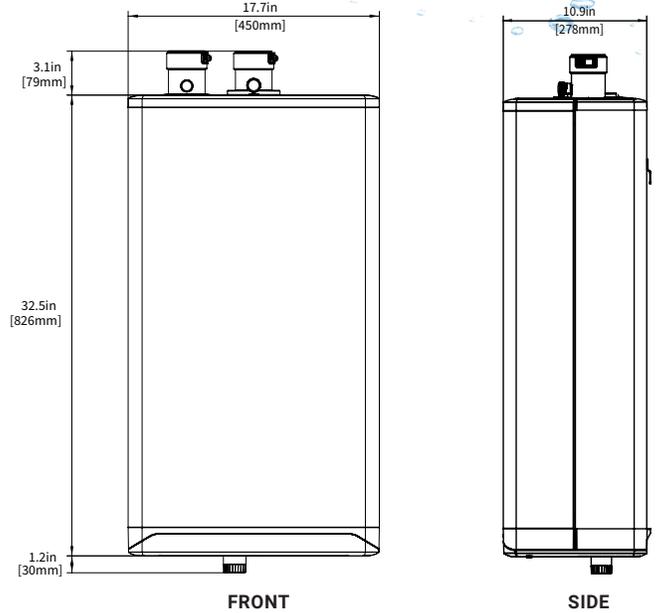
| VENTING | MAXIMUM EQUIVALENT LENGTH |
|---|--|
| Schedule 40 PVC, CPVC or Polypropylene | (each side) |
| 2" | 65' ² |
| 3" | 120' |
| 2" or 3" 90° Long Sweep Vent Elbow | Allow 5 equivalent feet |
| 2" or 3" 90° Short Sweep Vent Elbow | Allow 8 equivalent feet |
| 2" or 3" 45° Vent Elbow | Allow 3 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 10 - 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" |

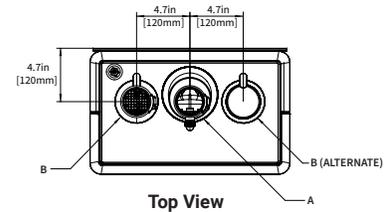
| | PIPING CONNECTIONS | DIMENSION |
|---|--------------------------------|--------------------|
| A | Exhaust Outlet | 2" Schedule 40 PVC |
| B | Combustion Air Inlet | 2" Schedule 40 PVC |
| C | Cold Domestic Water Connection | 3/4" Male NPT |
| D | Hot Domestic Water Connection | 3/4" Male NPT |
|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

Dimensions

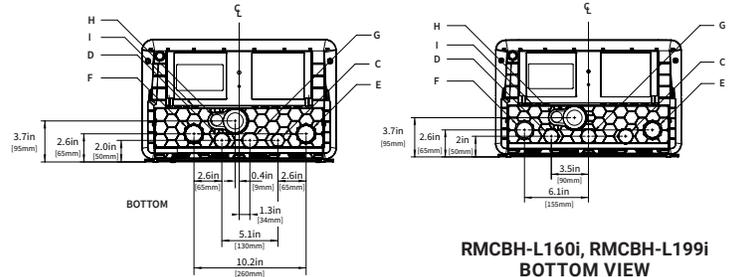


FRONT

SIDE



Top View



RMCBH-L125i
BOTTOM VIEW

RMCBH-L160i, RMCBH-L199i
BOTTOM VIEW

Parts & Accessories

| Floor Stand P-267C | Service Parts Kit P-911R | EZ Pipe Manifold 251-063, 251-064 | 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.