



Domestic Hot Water Heaters and Boilers





INDOOR/OUTDOOR, HOT WATER HEATERS AND HYDRONIC HEATING BOILERS

The LCD Dominator™ Series from RBI offers competitively-priced indoor/outdoor units that meet low NOx requirements, while maintaining superior performance and serviceability. The LCD provides dependable performance in rugged environments and process applications, with a wide 225 – 2300 MBH range. At the heart of the unit is a sealed combustion chamber that provides the flexibility of using outside air or mechanical room air for combustion. Priced in line with the atmospheric category heaters, the LCD features smaller vent sizes, resulting in a lower total installation cost.

STANDARD EQUIPMENT

- Finned copper tube heat exchanger, ASME 160# max WP, 2 pass
- Mounted & wired flow switch
- FM compliant gas train
- Sealed combustion chamber
- Mounted ASME relief valve (50# Boilers, 125# Water Heaters)
- Pump delay control
- Factory fired tested
- Barometric damper (Cat I)

DEPENDABLE, EFFICIENT PERFORMANCE

- 82% efficient
- Low NOx
- Uginox alloy stainless steel burners
- Bronze headers – water heaters
- Cast iron headers – boilers
- On/Off, all sizes 2-stage, 600-2300
- Cat I Venting (Vertical)
- Cat III thru-wall (up to 35' equivalent ft.)

EASY TO INSTALL AND SERVICE

- NEW** Spin-off pilot service hatch for easy pilot access (sizes 750-2300)
- Slide-out heat exchanger
- Side intake, all sizes
- Rear intake, sizes 750-2300
- Stackable frame with seismic approval (up to zone 4)
- Horizontal/vertical venting options
- Power vent option for thru-wall venting
- Low voltage controls
- Direct vent up to 35' equivalent

OPTIONAL FEATURES

- Cupro-nickel heat exchanger
- Outdoor installation
- Stainless steel jacket
- Freeze protection package
- CSD-1



LCD Dominator Series boilers and water heaters are also available with appealing, corrosion-resistant, brushed stainless steel jacket. Ideal for outdoor or indoor installation in corrosive or harsh environments such as coastal areas and processing applications requiring wash down.



RBI products are the easiest to service and maintain.

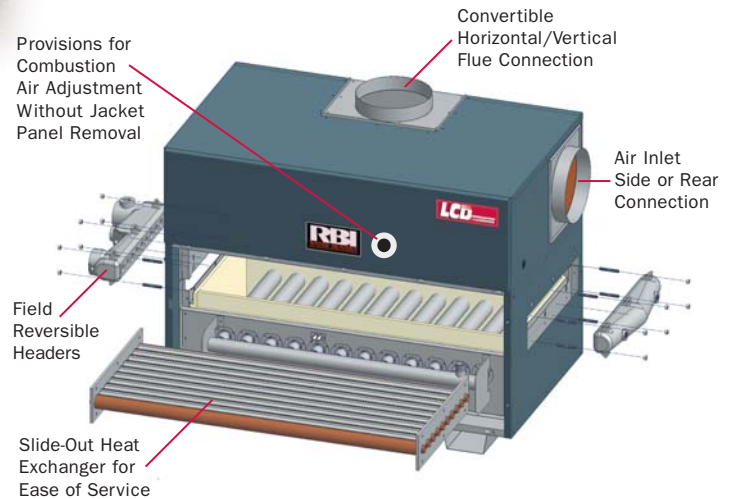
Outdoor Approved

Unlike traditional atmospheric outdoor units, the fan-assisted combustion design of the LCD provides reliable operation. Outdoor concerns associated with pilot outages and poor combustion are eliminated with the LCD's proven pilot ignition and fan-assisted combustion systems.

The LCD Dominator is also available with corrosion-resistant, brushed stainless steel jacket, making it the ideal choice for harsh outdoor environments and process applications.

Proven Pilot Ignition System

The unique pilot ignition is safer and more reliable than the hot surface systems commonly used on other manufacturers' equipment. The system employs a burner tube as a pilot. Gas is injected into a single burner and ignited by spark. A flame rod then monitors the pilot tube flame. Once the pilot is proven, the main gas valves are powered and the remaining burner tubes are safely lit. This proven system offers greater dependability and is superior to fragile HSI systems that can require frequent replacement.



Smart Service Design

Ease of installation and service are trademarks of all RBI water heaters and boilers. Critical components are fully accessible for faster, easier service and maintenance calls. The LCD's sealed combustion chamber features a slide-out heat exchanger for less time-consuming service and repair. At just 29.5" wide, the LCD fits easily through standard doorways.



Critical components are located conveniently at the top of the boiler for easy access.

Rack and Stack

The LCD offers greater flexibility and ease of installation in a space-saving design that leaves more elbowroom in the mechanical room. A rugged frame and stackable design allow for the installation of two units in one small footprint.

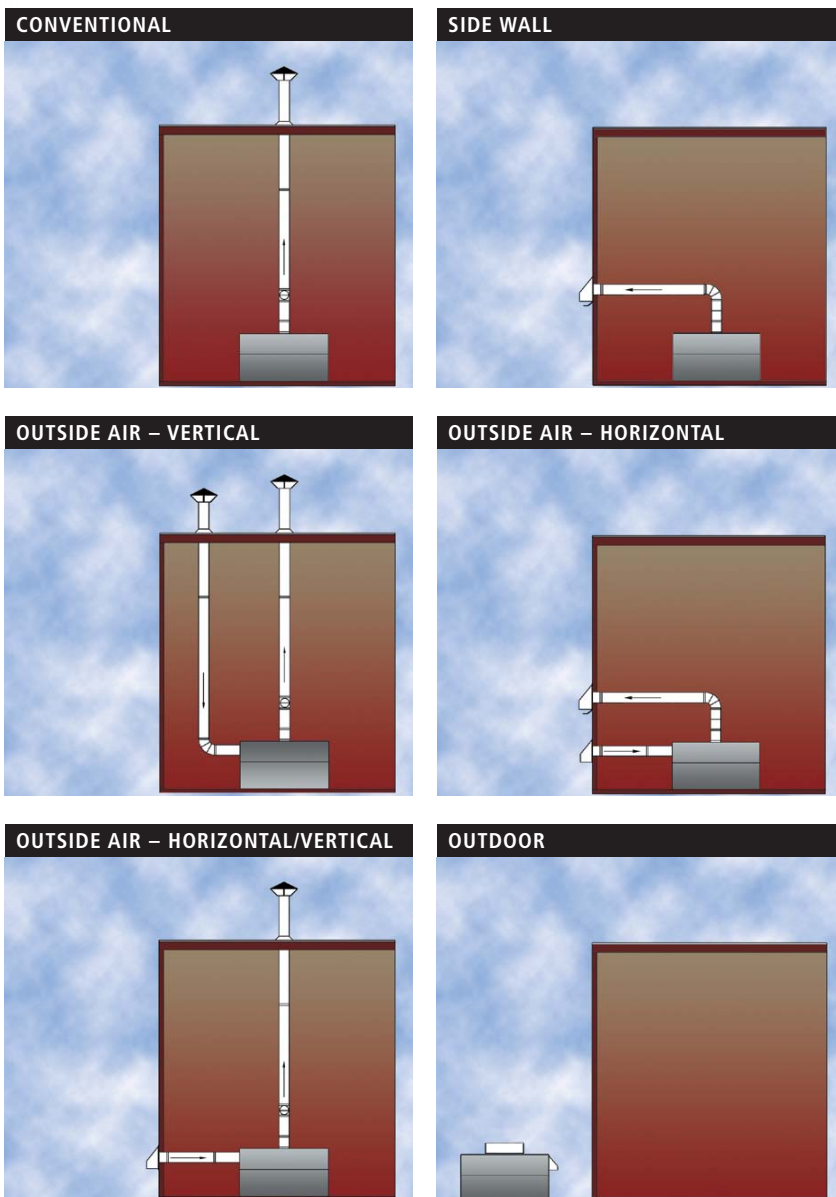
Wide Variety of Venting Options

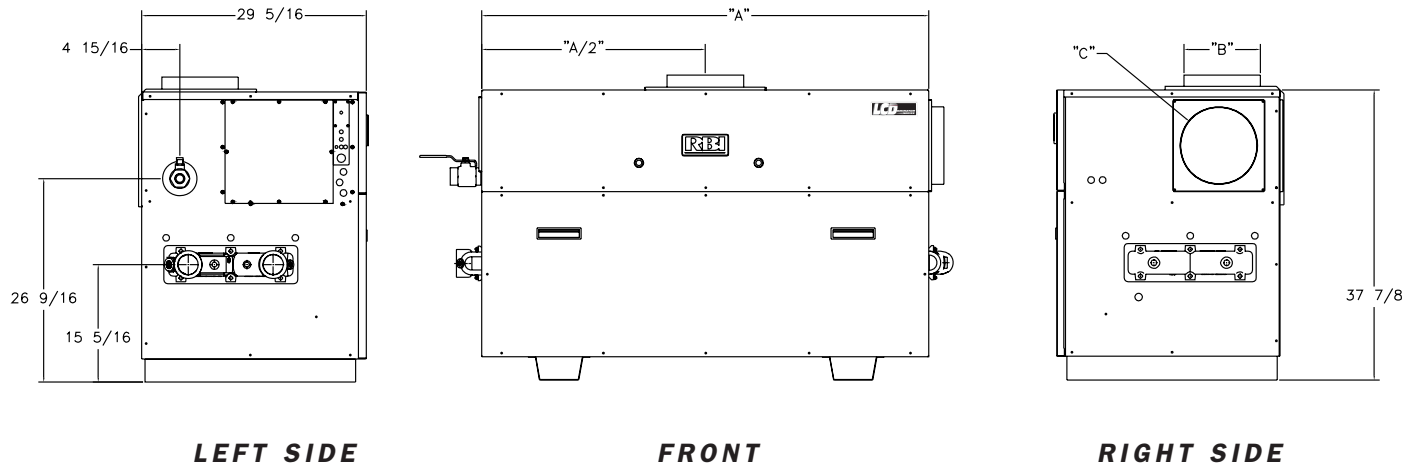
The LCD provides added flexibility and ease of installation with multiple venting options and configurations. The sealed combustion chamber minimizes heat loss and requires less clearance from combustibles walls.



Quality Construction

The LCD features a robust, compact design using the best materials for more dependable performance. Quality components include stainless steel burner tubes and solid bronze headers on water heaters. The LCD's design requires fewer blowers and gas valves to achieved staged firing. Fewer components mean reduced complexity and easier serviceability.





NOTE:
Dimensions are approximate and should not be used to "rough-in" equipment.

| DIMENSIONS & RATINGS | | | | | | | | | | | | | | | |
|----------------------|-------|-----|--------|-----|------------------|-----|---------|------|-----------------|------|-------------|------|-----------|------------------|-----|
| Model | Input | | Output | | Net I=B=R Rating | | Dim A | | Flue Vent Dim B | | Connections | | | Ducted Air Dim C | |
| | MBH | kW | MBH | kW | MBH | kW | In. | mm | In. | mm | Nat | LP | Water In. | In. | mm |
| LB/LW 225 | 225 | 66 | 185 | 54 | 159 | 47 | 22 1/8 | 562 | 6 | 152 | .75 | .75 | 1.50 | 6 | 152 |
| LB/LW 300 | 300 | 88 | 246 | 72 | 212 | 62 | 22 1/8 | 562 | 6 | 152 | .75 | .75 | 1.50 | 6 | 152 |
| LB/LW 400 | 399 | 117 | 327 | 96 | 282 | 83 | 28 5/8 | 727 | 6 | 152 | .75 | .75 | 1.50 | 6 | 152 |
| LB/LW 600 | 600 | 176 | 492 | 144 | 424 | 124 | 35 1/8 | 892 | 7 | 178 | 1 | 1 | 2.50 | 8 | 203 |
| LB/LW 750 | 750 | 220 | 615 | 180 | 530 | 155 | 41 5/8 | 1057 | 8 | 203 | 1 | 1 | 2.50 | 8 | 203 |
| LB/LW 1050 | 1050 | 308 | 861 | 252 | 742 | 217 | 58 3/8 | 1483 | 10 | 254 | 1.25 | 1.25 | 2.50 | 10 | 254 |
| LB/LW 1200 | 1200 | 352 | 984 | 288 | 848 | 249 | 71 3/8 | 1813 | 12 | 305 | 1.25 | 1.25 | 2.50 | 12 | 305 |
| LB/LW 1480 | 1479 | 433 | 1213 | 355 | 1045 | 306 | 71 3/8 | 1813 | 12 | 305 | 1.50 | 1.50 | 2.50 | 12 | 305 |
| LB/LW 1650 | 1643 | 481 | 1347 | 395 | 1161 | 340 | 77 7/8 | 1978 | 14* | 356* | 1.50 | 1.50 | 2.50 | 12 | 305 |
| LB/LW 1970 | 1971 | 577 | 1616 | 474 | 1393 | 408 | 97 3/8 | 2473 | 14* | 356* | 1.50 | 1.50 | 2.50 | 12 | 305 |
| LB/LW 2300 | 2300 | 674 | 1886 | 553 | 1626 | 476 | 103 7/8 | 2638 | 14* | 356* | 2 | 2 | 2.50 | 12 | 305 |

NOTES
* 14" oval to round transition piece.

| SHIPPING WEIGHTS | | | | | | | | | | | |
|------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Model LB/LW | 225 | 300 | 400 | 600 | 750 | 1050 | 1200 | 1480 | 1650 | 1970 | 2300 |
| lbs | 325 | 325 | 430 | 580 | 725 | 805 | 875 | 1110 | 1130 | 1375 | 1435 |
| kgs | 148 | 148 | 195 | 263 | 329 | 365 | 397 | 504 | 513 | 624 | 651 |



| HOURLY RECOVERY CAPACITY ΔT (GPH & LPH) | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| Model | 40° F | 22° C | 60° F | 33° C | 80° F | 44° C | 100° F | 56° C | 120° F | 67° C | 140° F | 78° C |
| LB/LW 225 | 554 | 2096 | 369 | 1397 | 277 | 1048 | 221 | 838 | 185 | 699 | 158 | 599 |
| LB/LW 300 | 738 | 2795 | 492 | 1863 | 369 | 1397 | 295 | 1118 | 246 | 932 | 211 | 799 |
| LB/LW 400 | 982 | 3717 | 655 | 2478 | 491 | 1859 | 393 | 1487 | 327 | 1239 | 281 | 1062 |
| LB/LW 600 | 1477 | 5590 | 984 | 3726 | 738 | 2795 | 591 | 2236 | 492 | 1863 | 422 | 1597 |
| LB/LW 750 | 1846 | 6987 | 1230 | 4658 | 923 | 3493 | 738 | 2795 | 615 | 2329 | 527 | 1996 |
| LB/LW 1050 | 2584 | 9782 | 1723 | 6521 | 1292 | 4891 | 1034 | 3913 | 861 | 3261 | 738 | 2795 |
| LB/LW 1200 | 2953 | 11179 | 1969 | 7453 | 1477 | 5590 | 1181 | 4472 | 984 | 3726 | 844 | 3194 |
| LB/LW 1480 | 3639 | 13774 | 2426 | 9182 | 1819 | 6887 | 1455 | 5509 | 1213 | 4591 | 1040 | 3935 |
| LB/LW 1650 | 4043 | 15304 | 2695 | 10203 | 2021 | 7652 | 1617 | 6122 | 1348 | 5101 | 1155 | 4373 |
| LB/LW 1970 | 4851 | 18365 | 3234 | 12243 | 2426 | 9182 | 1941 | 7346 | 1617 | 6122 | 1386 | 5247 |
| LB/LW 2300 | 5660 | 21426 | 3773 | 14284 | 2830 | 10713 | 2264 | 8570 | 1887 | 7142 | 1617 | 6122 |

| TEMPERATURE RISE/PRESSURE DROP | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|
| Temperature Rise Across Heat Exchanger | | | | | | | | | | | | | | | | | | | | |
| Model | 15° F | | 8.3° C | | 20° F | | 11.1° C | | 25° F | | 13.9° C | | 30° F | | 16.7° C | | 35° F | | 19.4° C | |
| | Flow Rate GPM | Pres. Drop Ft. | Flow Rate l/s | Pres. Drop kPa | Flow Rate GPM | Pres. Drop Ft. | Flow Rate l/s | Pres. Drop kPa | Flow Rate GPM | Pres. Drop Ft. | Flow Rate l/s | Pres. Drop kPa | Flow Rate GPM | Pres. Drop Ft. | Flow Rate l/s | Pres. Drop kPa | Flow Rate GPM | Pres. Drop Ft. | Flow Rate l/s | Pres. Drop kPa |
| LB/LW 225 | 24.6 | 0.18 | 1.6 | 0.5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LB/LW 300 | 32.8 | 0.31 | 2.1 | 0.9 | 24.6 | 0.18 | 1.6 | 0.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| LB/LW 400 | 43.7 | 0.70 | 2.8 | 2.1 | 32.8 | 0.41 | 2.1 | 1.2 | 26.2 | 0.27 | 1.7 | 0.8 | - | - | - | - | - | - | - | - |
| LB/LW 600 | 65.6 | 1.84 | 4.1 | 5.4 | 49.2 | 1.08 | 3.1 | 3.2 | 39.4 | 0.71 | 2.5 | 2.1 | 32.8 | 0.51 | 2.1 | 1.5 | 28.1 | 0.38 | 1.8 | 1.1 |
| LB/LW 750 | 82.0 | 3.32 | 5.2 | 9.8 | 61.5 | 1.95 | 3.9 | 5.7 | 49.2 | 1.29 | 3.1 | 3.8 | 41.0 | 0.92 | 2.6 | 2.7 | 35.1 | 0.69 | 2.2 | 2.0 |
| LB/LW 1050 | - | - | - | - | 86.1 | 5.16 | 5.4 | 15.2 | 68.9 | 3.41 | 4.3 | 10.1 | 57.4 | 2.44 | 3.6 | 7.2 | 49.2 | 1.83 | 3.1 | 5.4 |
| LB/LW 1200 | - | - | - | - | 98.4* | 8.14 | 6.2 | 24.0 | 78.7 | 5.38 | 5.0 | 15.9 | 65.6 | 3.84 | 4.1 | 11.3 | 56.2 | 2.89 | 3.5 | 8.5 |
| LB/LW 1480 | - | - | - | - | 121.4* | 7.94 | 7.7 | 23.4 | 97.1 | 5.25 | 6.1 | 15.5 | 80.9 | 3.75 | 5.1 | 11.0 | 69.3 | 2.82 | 4.4 | 8.3 |
| LB/LW 1650 | - | - | - | - | - | - | - | - | 108.2 | 7.02 | 6.8 | 20.7 | 90.2 | 5.01 | 5.7 | 14.8 | 77.3 | 3.77 | 4.9 | 11.1 |
| LB/LW 1970 | - | - | - | - | - | - | - | - | - | - | - | - | 107.7 | 8.75 | 6.8 | 25.8 | 92.3 | 6.58 | 5.8 | 19.4 |
| LB/LW 2300 | - | - | - | - | - | - | - | - | - | - | - | - | 125.7* | 12.45 | 7.9 | 36.7 | 107.8 | 9.36 | 6.8 | 27.6 |

*Flow exceeds recommended maximum use a greater temperature rise or consult manufacturer. Cupro-Nickel heat exchanger should be considered.



In the interest of product improvement, RBI reserves the right to make changes without notice.

7555 Tranmere Drive, Mississauga, Ontario L5S 1L4
Tel. (905) 670-5888 Fax (905) 670-5782

260 North Elm Street, Westfield, MA 01085
Tel. (413) 568-9571 Fax (413) 568-9613

A MESTEK COMPANY www.rbiwaterheaters.com