

Domestic Hot Water Heaters and Boilers





Indoor/Outdoor, 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 400 – 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, Two-Pass
- Mounted & Wired Flow Switch
- FM Compliant Gas Train
- Sealed Combustion Chamber Near Condensing
- Mounted ASME Relief Valve (50# Boilers, 125# Water Heaters)
- Pump Delay Control
- Factory Fired Tested
- Barometric Damper (Cat I)
- Galvalume[®] Metal Jacket (Indoor/Outdoor)

Dependable, Efficient Performance

- 82% Efficient
- Uginox Alloy Stainless Steel Burners
- Glass Lined Headers
- On/Off, All Sizes 2-Stage, 600-2300
- Cat I Venting (Vertical)
- Cat III Thru-Wall (up to 35' Equivalent)





LCD Dominator Series boilers and water heaters are standard with corrosion-resistant galvanized steel jacket with Galvalume finish ideal for outdoor or indoor installations.

Easy to Install and Service

- Spin-Off Pilot Service Portal for Easy 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

- Bronze Headers
- Cupro-Nickel Heat Exchanger
- Outdoor Installation
- Freeze Protection Package
- CSD-1Compiant Gas Train and Controls

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.



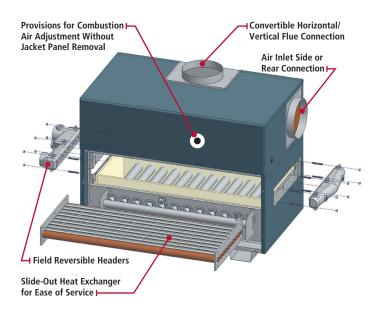
Proven Pilot Ignition System

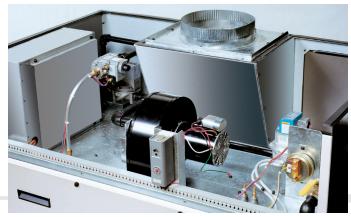
The unique pilot ignition is safer and more reliable than the hot surface systems commonly used on other manufacturers' equipment.

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.

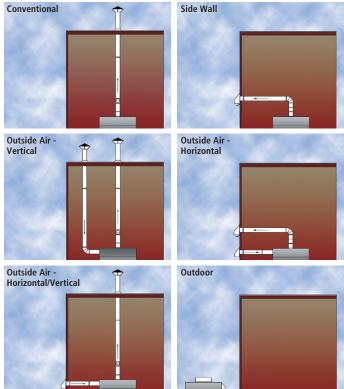


Rack and Stack

The LCD offers greater flexibility and ease of installation in a spacesaving 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.

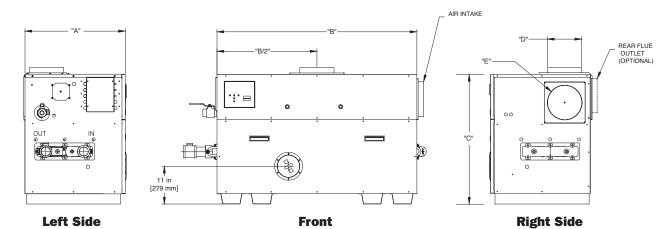
Wide Variety of Venting Options

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 combustible walls.



Quality Construction

The LCD features a robust compact design using high quality materials for dependable performance. From our stainless steel burn tubes to our glass lined headers the LCD is built not only to perform efficiently, it's built to last. 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.

<u>Models</u> LB = Boiler LW = Water Heater

| LCD Dominator Series — Dimensions and Ratings* | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------|-------|-----|--------|-----|---------|-----|---------|-------|----------|-----|--------|-------|---------|------|-------|----------|-----|--------|--------|------|------|
| | | | | | Boi | ler | Leng | jth | Wic | lth | Heigh | nt | Flue | Vent | Co | onnectio | ns | Ducte | ed Air | Ship | ping |
| | Input | | Output | | Dim. A | | Dim. B | | Dim. C | | Dim. D | | Gas In. | | Water | Dim. E | | Weight | | | |
| Size | MBH | kW | MBH | kW | In. | mm | In. | mm | In. | mm | In. | mm | Nat. | LP | In. | In. | mm | lbs. | kgs. | | |
| 400 | 399 | 117 | 327 | 96 | 29-5/16 | 745 | 28-5/8 | 727 | 37-15/16 | 964 | 6 | 152 | .75 | .75 | 1.50 | 6 | 152 | 515 | 234 | | |
| 600 | 600 | 176 | 492 | 144 | 29-5/16 | 745 | 35-1/8 | 892 | 37-15/16 | 964 | 7 | 178 | 1 | 1 | 2.50 | 8 | 203 | 635 | 288 | | |
| 750 | 750 | 220 | 615 | 180 | 29-5/16 | 745 | 41-5/8 | 1,057 | 37-15/16 | 964 | 8 | 203 | 1 | 1 | 2.50 | 8 | 203 | 710 | 322 | | |
| 1050 | 1,050 | 308 | 861 | 252 | 29-5/16 | 745 | 58-3/8 | 1,483 | 37-15/16 | 964 | 10 | 254 | 1.25 | 1.25 | 2.50 | 10 | 254 | 915 | 415 | | |
| 1200 | 1,200 | 352 | 984 | 288 | 29-5/16 | 745 | 71-3/8 | 1,813 | 37-15/16 | 964 | 12 | 305 | 1.25 | 1.25 | 2.50 | 12 | 305 | 972 | 441 | | |
| 1480 | 1,480 | 434 | 1,214 | 356 | 29-5/16 | 745 | 71-3/8 | 1,813 | 37-15/16 | 964 | 12 | 305 | 1.50 | 1.50 | 2.50 | 12 | 305 | 1,000 | 454 | | |
| 1650 | 1,650 | 483 | 1,353 | 396 | 29-5/16 | 745 | 77-7/8 | 1,978 | 37-15/16 | 964 | 14** | 356** | 1.50 | 1.50 | 2.50 | 12 | 305 | 1,075 | 488 | | |
| 1970 | 1,970 | 577 | 1,615 | 473 | 29-5/16 | 745 | 97-3/8 | 2,473 | 37-15/16 | 964 | 14** | 356** | 1.50 | 1.50 | 2.50 | 12 | 305 | 1,270 | 577 | | |
| 2300 | 2,300 | 674 | 1,886 | 553 | 29-5/16 | 745 | 103-7/8 | 2,638 | 37-15/16 | 964 | 14** | 356** | 2 | 1.50 | 2.50 | 12 | 305 | 1,280 | 581 | | |

* Ratings reflect boilers only. For boiler efficiency information please visit www.ahridirectory.org. ** 14" oval to round transition piece.

| LCD Dominator Series Boilers — Heat Exchanger Temperature Rise/Pressure Drop | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------------------------------------|-----------|-----------|--------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|--------------|----------|
| | 15°F | | 5°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 | Pres Drop | Flow Rate | Pres Drop | Flow Rate | Pres Drop | Flow Rate | Pres Drop | Flow Rate | Pres Drop | Flow Rate | Pres Drop | Flow Rate | Pres Drop | Flow Rate | Pres Drop | Flow Rate | Pres Drop | Flow Rate | Pres Dro |
| Size | GPM | Ft | $\Delta L/s$ | kPa | GPM | Ft | $\Delta L/s$ | kPa | GPM | Ft | $\Delta L/s$ | kPa | GPM | Ft | $\Delta L/s$ | kPa | GPM | Ft | $\Delta L/s$ | kPa |
| 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 | - | - | - | - | - | - | - | - |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 1970 | - | - | - | - | - | - | - | - | - | - | - | - | 107.7 | 8.75 | 6.8 | 25.8 | 92.3 | 6.58 | 5.8 | 19.4 |
| 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.

| | LCD D | ominato | Series | Water He | eaters — | - Hourly | Recovery | y Capaci | ty AT (G i | PH & LPI |)*** | |
|------------------|-------|---------|--------|----------|----------|----------|----------|----------|-------------------|----------|-------|-------|
| Size | 40°F | 22°C | 60°F | 33°C | 80°F | 44°C | 100°F | 56°C | 120°F | 67°C | 140°F | 78°C |
| 400 ¹ | 982 | 3,717 | 655 | 2,478 | 491 | 1,859 | 393 | 1,487 | 327 | 1,239 | 281 | 1,062 |
| 600 | 1,477 | 5,582 | 984 | 3,721 | 738 | 2,791 | 591 | 2,233 | 492 | 1,861 | 422 | 1,595 |
| 750 | 1,846 | 6,977 | 1,230 | 4,651 | 923 | 3,488 | 738 | 2,791 | 615 | 2,326 | 527 | 1,993 |
| 1050 | 2,587 | 9,780 | 1,725 | 6,520 | 1,294 | 4,890 | 1,035 | 3,912 | 862 | 3,260 | 739 | 2,794 |
| 1200 | 2,960 | 11,190 | 1,974 | 7,460 | 1,480 | 5,595 | 1,184 | 4,476 | 987 | 3,730 | 846 | 3,197 |
| 1480 | 3,656 | 13,818 | 2,437 | 9,212 | 1,828 | 6,909 | 1,462 | 5,527 | 1,219 | 4,606 | 1,044 | 3,948 |
| 1650 | 4,075 | 15,405 | 2,717 | 10,270 | 2,038 | 7,703 | 1,630 | 6,162 | 1,358 | 5,135 | 1,164 | 4,402 |
| 1970 | 4,872 | 18,415 | 3,248 | 12,277 | 2,436 | 9,208 | 1,949 | 7,366 | 1,624 | 6,138 | 1,392 | 5,262 |
| 2300 | 5,695 | 21,526 | 3,797 | 14,351 | 2,847 | 10,763 | 2,278 | 8,611 | 1,898 | 7,175 | 1,627 | 6,150 |

¹ Model 400 water heater not available for sale in the U.S. market due to DOE regulations.

*** For water heater efficiency information please visit www.ahridirectory.org.



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