

## 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)

#### **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)











#### **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
- Stainless Steel Jacket
- 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.

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.

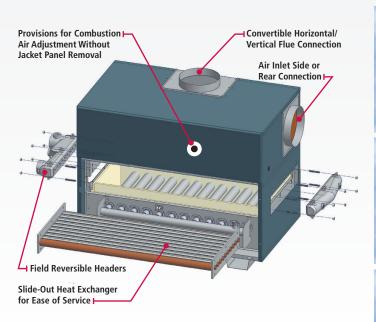
## **Proven Pilot Ignition System**

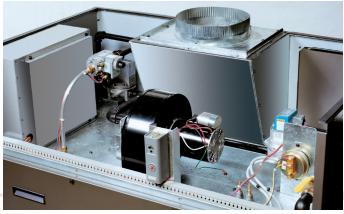
The unique pilot ignition is safer and more reliable than the hot surface systems commonly used on other manufacturers' equipment.

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.

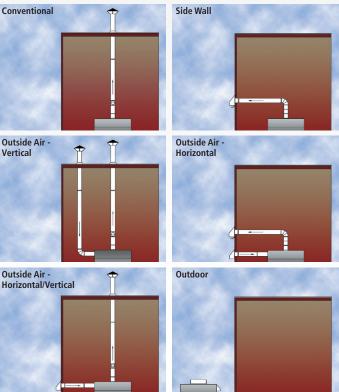


#### **Rack and Stack**

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

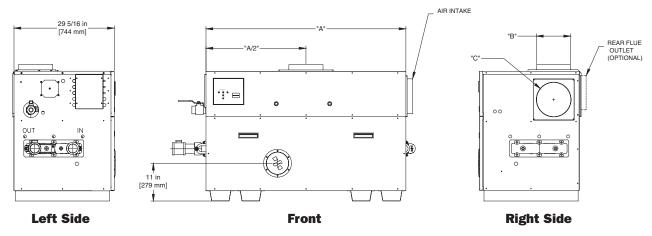
## **Wide Variety of Venting Options**

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.

Models
LB = Boiler
LW = Water Heater

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

<sup>\*</sup> Ratings reflect boilers only. For boiler efficiency information please visit www.ahridirectory.org.

<sup>\*\* 14&</sup>quot; oval to round transition piece.

LCD Dominator Series Boilers — Heat Exchanger Temperature Rise/Pressure Drop																				
	15°F		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	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 Drop
Size	GPM	Ft	∆L/s	kPa	GPM	Ft	∆L/s	kPa	GPM	Ft	$\Delta$ L/s	kPa	GPM	Ft	∆L/s	kPa	GPM	Ft	∆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

<sup>†</sup> 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 ∆T (Gi	PH & LPI	H)***	
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
400¹	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

<sup>&</sup>lt;sup>1</sup> Model 400 water heater not available for sale in the U.S. market due to DOE regulations.

<sup>\*\*\*</sup> 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.