LCD-10R



# Domestic Hot Water Heaters and Boilers

AND A





## Indoor/Outdoor, Water Heaters and Hydronic Heating Boilers

The LCD Dominator<sup>®</sup> 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
- Galvalume<sup>®</sup> Metal Jacket (Indoor/Outdoor)

#### **Dependable, Efficient Performance**

- 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
- Barometric Damper

### **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.







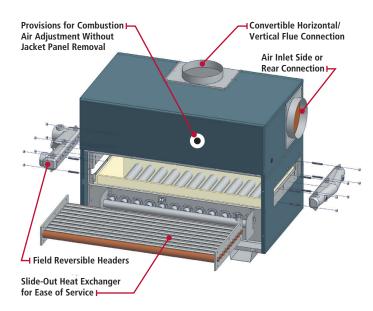
### **Proven Pilot Ignition System**

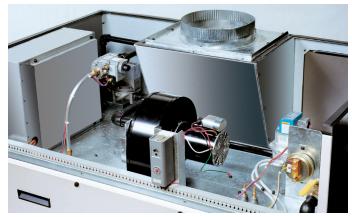
The unique pilot ignition is safer and more reliable than the hot surface systems commonly used on other manufacturers' equipment.

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.

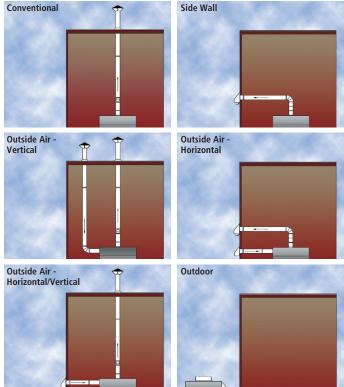


#### **Rack and Stack**

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.

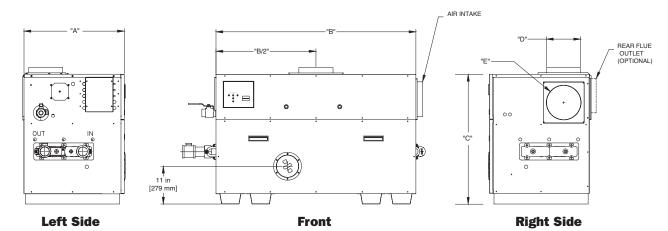
### **Wide Variety of Venting Options**

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*																					
			Boil		Boiler		Length		Width		Height		Flue Vent		Connections		ns	Ducte	ed Air	Shipping	
	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	335	98	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	504	148	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	630	184	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	882	258	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	1,008	295	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	1,243	364	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	1,386	406	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	1,655	485	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 <sup>1</sup>	2,300	674	-	-	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 flue vent transition piece.

<sup>1</sup> Model 2300 boiler not available due to DOE regulations.

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 Drop
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	44.7	0.73	2.8	2.1	33.5	0.43	2.1	1.3	26.8	0.28	1.7	0.8	-	-	-	-	-	-	-	-
600	67.2	1.92	4.2	5.7	50.4	1.13	3.2	3.3	40.3	0.75	2.5	2.2	33.6	0.53	2.1	1.6	28.8	0.40	1.8	1.2
750	84.0	3.47	5.3	10.2	63.0	2.04	4.0	6.0	50.4	1.35	3.2	4.0	42.0	0.96	2.6	2.8	36.0	0.72	2.3	2.1
1050	-	-	-	-	88.2	5.40	5.6	15.9	70.6	3.57	4.5	10.5	58.8	2.55	3.7	7.5	50.4	1.91	3.2	5.6
1200	-	-	-	-	100.8†	8.51	6.4	25.1	80.6	5.63	5.1	16.6	67.2	4.01	4.2	11.8	57.6	3.02	3.6	8.9
1480	-	-	-	-	124.3†	8.30	7.8	24.4	99.5	5.49	6.3	16.2	82.9	3.92	5.2	11.5	71.0	2.94	4.5	8.7
1650	-	-	-	-	-	-	-	-	110.9	7.34	7.0	21.6	92.4	5.24	5.8	15.4	79.2	3.94	5.0	11.6
1970	-	-	-	-	-	-	-	-	-	-	-	-	110.3	9.15	7.0	27.0	94.6	6.88	7.0	28.8

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

	LCD D	ominator	<b>Series</b>	Water He	eaters —	- Hourly	Recover	y Capaci	ty <b>AT (G</b> 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 <sup>1</sup>	982	3,712	655	2,474	491	1,856	393	1,845	327	1,237	281	1,060
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	2,584	9,768	1,723	6,512	1,292	4,884	1,034	3,907	861	3,256	738	2,791
1200	2,953	11,163	1,969	7,442	1,477	5,582	1,181	4,465	984	3,721	844	3,189
1480	3,642	13,768	2,428	9,178	1,821	6,884	1,457	5,507	1,214	4,589	1,041	3,934
1650	4,061	15,349	2,707	10,233	2,030	7,675	1,624	6,140	1,354	5,116	1,160	4,385
1970	4,848	18,326	3,232	12,217	2,424	9,163	1,939	7,330	1,616	6,109	1,385	5,236
2300	5,729	21,657	3,820	14,438	2,865	10,828	2,292	8,663	1,910	7,219	1,637	6,188

<sup>1</sup> 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.



260 North Elm Street, Westfield, MA 01085 Tel. (413) 564-5515 7555 Tranmere Drive, Mississauga, Ontario L5S 1L4

Tel. (905) 670-5888 www.rbiwaterheaters.com



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