Domestic Hot Water Heaters and Boilers





High Performance Boilers and Water Heaters

The Dominator® Series from RBI offers superior performance and serviceability in a near condensing high efficiency, multi-stage boiler. 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. The chamber design, with fan-assist, multi-speed blowers and state-of-the-art staging control, offers high efficiency staged firing in a compact package and virtually eliminates heat loss. The Dominator incorporates all the latest technological advances that engineers, contractors, and building owners look for when specifying boilers and water heaters.

Standard Equipment

- Finned Copper Tube Heat Exchanger Two-Pass
- Mounted & Wired Flow Switch
- FM Compliant Gas Train
- Sealed Combustion Chamber
- Mounted ASME Relief Valve
- Pump Delay Control
- Factory Fired Tested
- Barometric Damper Category 1

Dependable, Efficient Performance

- 85+% Efficient
- Uginox Alloy Stainless Steel Burners
- Bronze Headers Water Heaters
- Cast Iron Headers Boilers
- 2 or 4-Stage Firing Modes
- Category I & III Venting











^{*}Pool heater applications available in non-U.S. markets only.



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

Easy to Install and Service

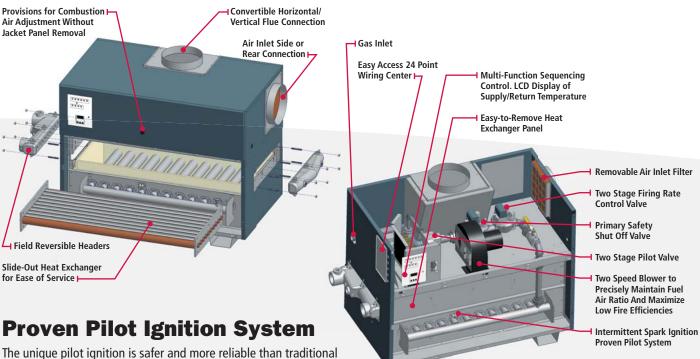
- Slide-Out Heat Exchanger
- Side Intake, All Sizes
- Rear Intake, Sizes 750-2100
- Stackable Frame (Seismic Approval up to Zone 4)
- Field Reversible Headers
- Low Voltage Controls
- Direct Vent (up to 35' Equivalent)

Optional Features

- Cupro-Nickel Finned Tubes
- Outdoor Installation
- Stainless Steel Jacket
- Freeze Protection Package
- Thru-Wall Venting
- CSD-1Compiant Gas Train and Controls

Load Matching Staged Firing

Unlike most non-condensing units that are limited to only two-stage firing, the Dominator provides up to four-stages of firing, allowing the boiler/water heater to more closely match the heating load. The Dominator utilizes the most advanced Proportional Integral Derivative (P.I.D.) sequencing control on the market to accurately control the staging of the units. The control has six modes of operation that can be field set, with built-in standard features that are options on most competitive units. These standard features include outdoor reset and pump delay on temperature differential between the supply and return temperatures of the unit.



The unique pilot ignition is safer and more reliable than traditional hot surface systems (HSI) 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

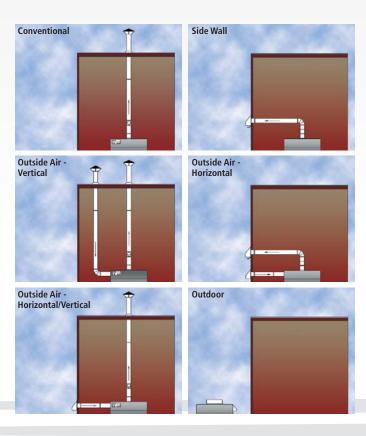
Ease of installation and service are trademarks of all RBI water heaters and boilers. Critical components are fully accessible to make short work of service and maintenance calls. The Dominator is the only sealed combustion chamber boiler/water heater with time-saving service features including a slide-out control cabinet for easy access to wiring and a slide-out heat exchanger for less time-consuming service and repair. And the Dominator is only 29.5" wide to fit easily through standard doorways.

Quality Construction for Dependable Performance

The Dominator 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 Dominator's design requires fewer blowers and gas valves to achieve staged firing. Fewer components mean reduced complexity, easier maintenance and service, and reduced likelihood of breakdown.

Wide Variety of Venting Options

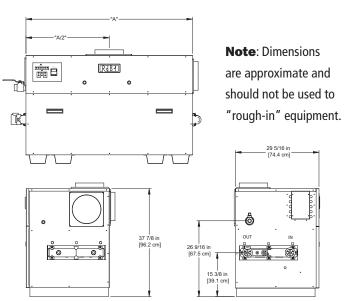
The Dominator provides added flexibility and ease of installation with multiple venting options and configurations. The sealed combustion chamber minimizes heat loss and requires less clearance from combustible walls.





Rack and Stack

The Dominator 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 you to install two units in the space of one small footprint.



Dominator Series — Dimensions and Ratings														
	Input		Output			Length n. A	Flue Ve	ent Dia.	Ducted	Air Size	Shipping Weight			
Model	MBH	kW	MBH	kW	ln.	mm	ln.	mm	ln.	mm	lbs.	kgs.		
DB/DW 300	300	88	255	75	22-1/8	562	6	152	6	152	325	148		
DB/DW 400	400	117	340	99	28-5/8	727	6	152	6	152	430	195		
DB/DW 600	600	176	511	150	35-1/8	892	7	178	8	203	580	263		
DB/DW 750	750	220	638	187	41-5/8	1,057	8	203	8	203	725	329		
DB/DW 900	900	264	766	225	48-1/8	1,222	10	254	10	254	805	365		
DB/DW 1050	1,050	308	894	262	58-3/8	1,483	10	254	10	254	875	397		
DB/DW 1350	1,350	396	1,149	337	71-3/8	1,813	12	305	12	305	1,110	504		
DB/DW 1500	1,500	440	1,277	374	77-7/8	1,978	14*	356	12	305	1,130	513		
DB/DW 1950	1,950	572	1,659	487	97-3/8	2,473	14*	356	12	305	1,375	624		
DB/DW 2100	2,100	616	1,789	524	103-7/8	2,638	14*	356	12	305	1,435	651		

^{* 14&}quot; oval to round transition piece.

Dominator Series — Hourly Recovery Capacity ∆T (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		
DB/DW 300	766	2,900	511	1,934	383	1,450	306	1,160	255	967	219	829		
DB/DW 400	1,019	3,858	679	2,572	510	1,929	408	1,543	340	1,286	291	1,102		
DB/DW 600	1,532	5,801	1,022	3,867	766	2,900	613	2,320	511	1,934	438	1,657		
DB/DW 750	1,916	7,251	1,277	4,834	958	3,626	766	2,900	639	2,417	547	2,072		
DB/DW 900	2,299	8,701	1,532	5,801	1,149	4,351	919	3,480	766	2,900	657	2,486		
DB/DW 1050	2,682	10,151	1,788	6,768	1,341	5,076	1,073	4,061	894	3,384	766	2,900		
DB/DW 1350	3,448	13,052	2,299	8,701	1,724	6,526	1,379	5,221	1,149	4,351	985	3,729		
DB/DW 1500	3,831	14,502	2,554	9,668	1,916	7,251	1,532	5,801	1,277	4,834	1,095	4,143		
DB/DW 1950	4,980	18,853	3,320	12,568	2,490	9,426	1,992	7,541	1,660	6,284	1,423	5,386		
DB/DW 2100	5,363	20,303	3,576	13,535	2,682	10,151	2,145	8,121	1,788	6,768	1,532	5,801		

Dominator Series — Temperature Rise/Pressure Drop																				
	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																		
Model	GPM	Ft	∆L/s	kPa																
DB/DW 300	34.0	0.22	2.1	0.6	25.5	0.13	1.6	0.4	20.4	0.09	1.3	0.3	-	-	-	-	-	-	-	-
DB/DW 400	45.4	0.49	2.9	1.5	34.0	0.29	2.1	0.9	27.2	0.19	1.7	0.6	-	-	-	-	-	-	-	-
DB/DW 600	68.1	1.30	4.3	3.8	51.1	0.76	3.2	2.3	40.8	0.51	2.6	1.5	34.0	0.36	2.1	1.1	-	-	-	-
DB/DW 750	85.1	2.35	5.4	6.9	63.8	1.38	4.0	4.1	51.0	0.91	3.2	2.7	42.6	0.65	2.7	1.9	36.5	0.49	2.3	1.4
DB/DW 900	102.1	3.84	6.4	11.3	76.6	2.25	4.8	6.6	61.3	1.49	3.9	4.4	51.1	1.06	3.2	3.1	43.8	0.80	2.8	2.4
DB/DW 1050	119.1*	6.23	7.5	18.4	89.4	3.66	5.6	10.8	71.5	2.42	4.5	7.1	59.6	1.73	3.8	5.1	51.1	1.30	3.2	3.8
DB/DW 1350	-	-	-	-	114.9*	7.17	7.2	21.1	91.9	4.74	5.8	14.0	76.6	3.38	4.8	10.0	65.6	2.54	4.1	7.5
DB/DW 1500	-	-	-	-	-	-	-	-	102.1	6.31	6.4	18.6	85.1	4.50	5.4	13.3	72.9	3.38	4.6	10.0
DB/DW 1950	-	-	-	-	-	-	-	-	-	-	-	-	110.6*	9.20	7.0	27.1	94.8	6.91	6.0	20.4
DB/DW 2100	-	-	-	-	-	-	-	-	-	-	-	-	119.1*	11.27	7.5	33.2	102.1	8.47	6.4	25.0

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



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