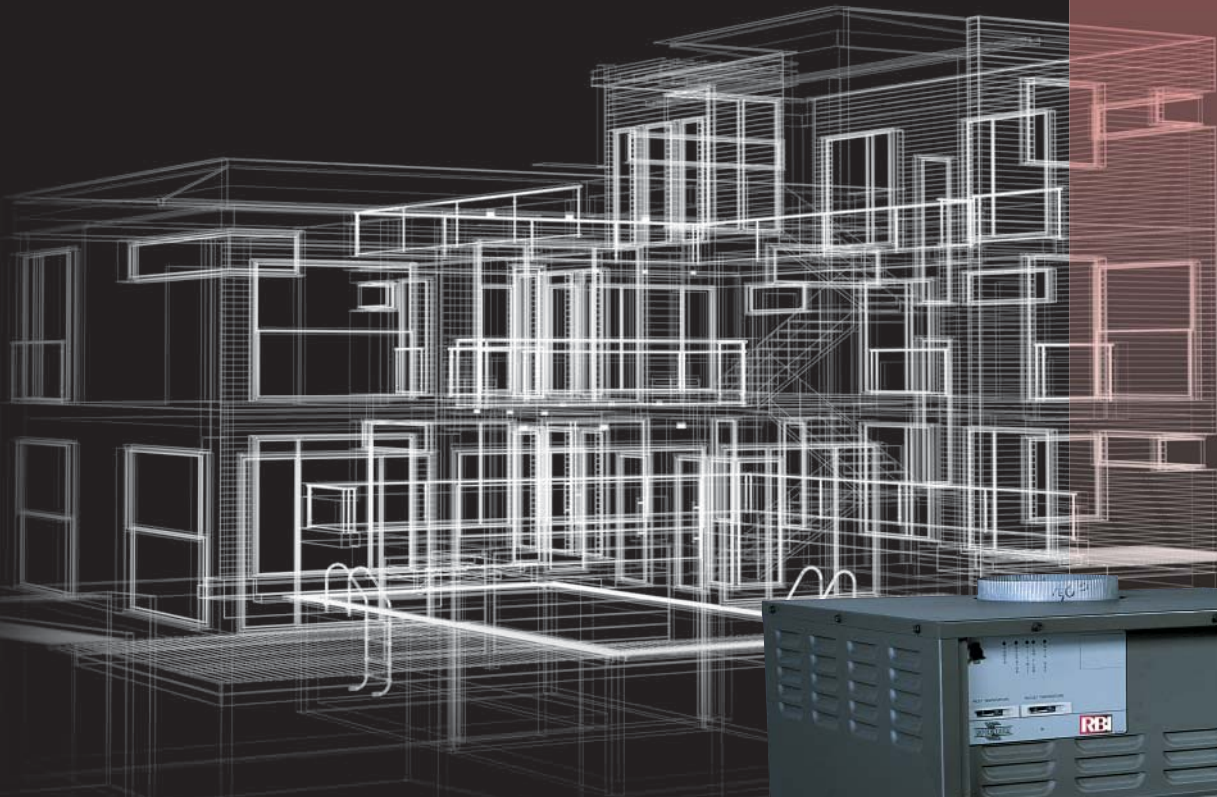


SPECTRUM **SERIES**

Domestic Hot Water Heaters and Boilers



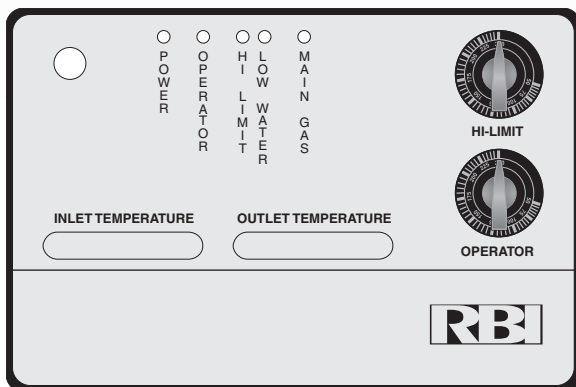
SPECTRUM SERIES

Residential and Light Commercial Gas Boilers, Water Heaters and Pool Heaters* in a Compact Design

The Spectrum's unique design allows for both indoor or outdoor applications where a non-condensing gas-fired boiler or water heater is needed. Its reversible, two or four pass heat exchanger is made of commercial grade 7/8" I.D. finned copper tube and because the fins are extruded from the tubing itself they ensure maximum heat transfer efficiency.

Spectrum series units are available with either cast iron headers for heating applications or bronze headers for domestic hot water and pool heating (Canada Only) applications. Also, all units have built-in draft diverters which reduce the cost of installation and lower the overall height of the unit.

The Spectrum series is simple to maintain with the quick and easy removal of all major components including burner tray, gas train and controls. With the self-diagnostic light package, one can quickly and easily make assessments of the unit.



Self-Diagnostic Light Package



Spectrum 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.

Standard Equipment

- Automatic Reset High Limit 100-200
- Manual Reset High Limit 250-400
- Operating Control
- Mounted ASME Relief Valve (30# Boilers, 125# Water Heaters)
- Built-In Draft Diverter
- Stainless Steel Burners
- Cast Iron Headers (Boilers)
- Bronze Headers (Water Heaters)
- Inlet & Outlet Thermometers
- Mounted And Wired Flow Switch
- Vent Damper (100-250 MBH Boilers Only)
- Self Diagnostic Light Package
- Pump Control
- 160 psi Heat Exchanger
- Field Reversible Heat Exchanger
- Electronic Ignition

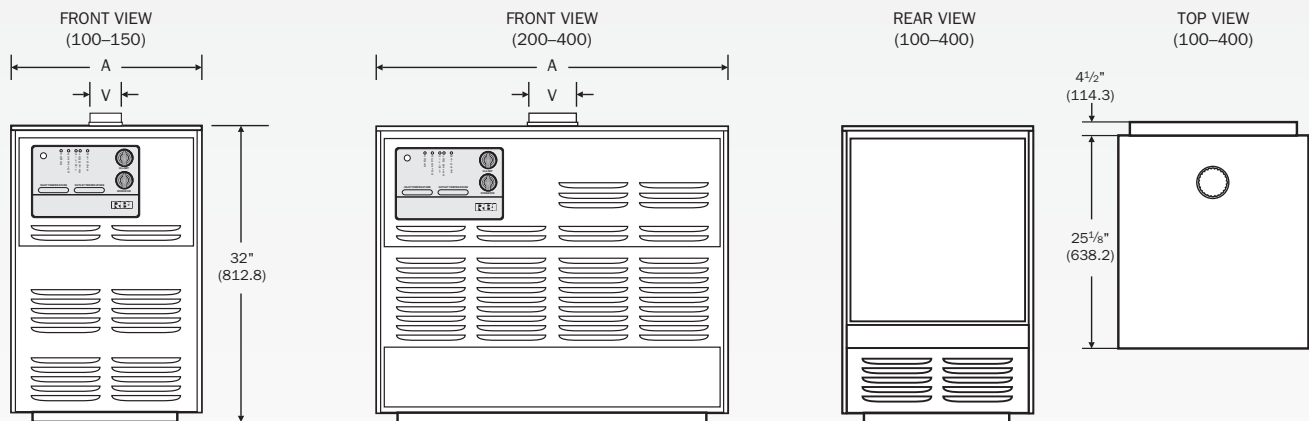
*Pool heaters are sold in Canada only.



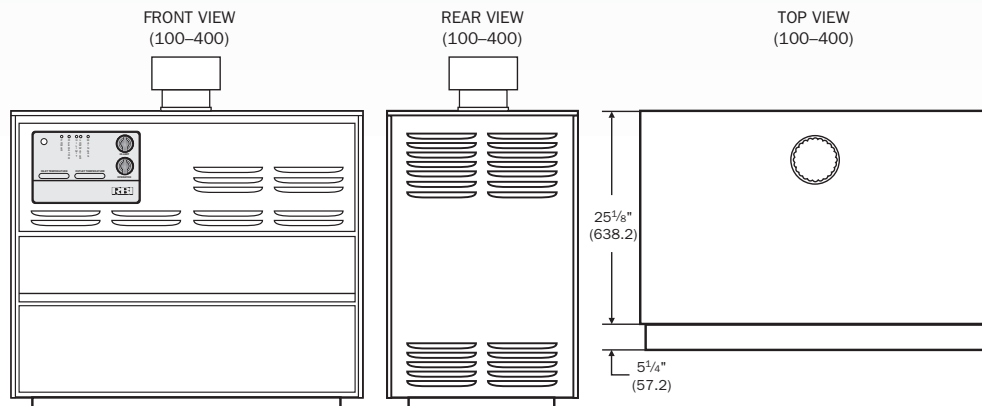
Optional Equipment

- Outdoor Installation
- Four-Pass Heat Exchanger
- Cupro-Nickel Heat Exchanger
- Low Water Cut-Off (Probe Type)
- Induced Draft (up to 100 ft. Horizontal Runs)
- Propane Gas
- 2-Stage Firing
- Combustible Floor Pan

INDOOR UNITS

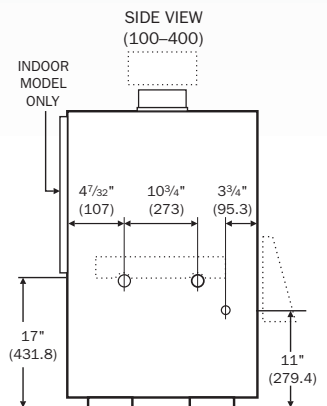


OUTDOOR UNITS



INDOOR & OUTDOOR UNITS

(DOTTED FEATURES ON OUTDOOR MODEL ONLY)



Spectrum Series — Dimensions and Ratings															
Model	Input		Output		Net Rating		AFUE%	Dim. A		Vent Dim. V		Connections		Shipping Weight	
	MBH	kW	MBH	kW	MBH	kW		In.	mm	In.	mm	Gas In.	Water In.	lbs.	kgs.
SB/SW 100	100	29	82	24	73	21	82	16-1/8	410	5	127	1/2	1-1/2	193	88
SB/SW 150	150	44	123	36	109	32	82	19-1/2	495	6	152	1/2	1-1/2	200	91
SB/SW 200	199	58	163	49	144	42	82	22-7/8	581	7	178	1/2	1-1/2	235	107
SB/SW 250	250	73	205	60	182	53	82	26-1/4	667	8	203	3/4	1-1/2	250	113
SB/SW 300	301	88	247	72	214	63	82	29-5/8	752	8	203	3/4	1-1/2	265	120
SB/SW 350	350	103	286	84	248	73	82	33	838	9	229	3/4	1-1/2	285	129
SB/SW 400	399	117	324	95	282	83	81	35-3/8	899	10	254	3/4	1-1/2	300	136

Spectrum Series — 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	
SB/SW 100	243	920	162	613	122	460	97	368	81	307	69	263	
SB/SW 150	369	1,397	246	932	185	699	148	559	23	466	105	399	
SB/SW 200	490	1,854	326	1,236	245	927	196	742	163	618	140	530	
SB/SW 250	615	2,329	410	1,553	308	1,164	246	932	205	776	176	665	
SB/SW 300	741	2,804	494	1,869	370	1,402	296	1,122	247	935	212	801	
SB/SW 350	857	3,245	571	2,163	429	1,622	343	1,298	286	1,082	245	927	
SB/SW 400	972	3,681	648	2,454	486	1,840	389	1,472	324	1,227	278	1,052	

Spectrum Series — Temperature Rise/Pressure Drop — 2 Pass Headers													
Model	T=10°F		T=5.5°C		T=20°F		T=11.1°C		T=30°F		T=16.7°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	
	GPM	Ft	$\Delta L/s$	kPa	GPM	Ft	$\Delta L/s$	kPa	GPM	Ft	$\Delta L/s$	kPa	
SB/SW 100	16.4	0.05	1.0	0.1	-	-	-	-	-	-	-	-	
SB/SW 150	24.6	0.13	1.6	0.4	-	-	-	-	-	-	-	-	
SB/SW 200	32.4	0.27	2.0	0.8	16.2	0.07	1.0	0.2	-	-	-	-	
SB/SW 250	40.5	0.48	2.6	1.4	20.3	0.13	1.3	0.4	-	-	-	-	
SB/SW 300	49.8	0.82	3.1	2.4	24.9	0.23	1.6	0.7	16.6	0.10	1.0	0.3	
SB/SW 350	58.1	1.23	3.7	3.6	29.1	0.34	1.8	1.0	19.4	0.20	1.2	0.5	
SB/SW 400	66.4	1.77	4.2	5.2	33.2	0.49	2.1	1.4	22.1	0.20	1.4	0.7	

Spectrum Series — Temperature Rise/Pressure Drop — 4 Pass Headers													
Model	T=10°F		T=5.5°C		T=20°F		T=11.1°C		T=30°F		T=16.7°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	
	GPM	Ft	$\Delta L/s$	kPa	GPM	Ft	$\Delta L/s$	kPa	GPM	Ft	$\Delta L/s$	kPa	
SB/SW 100	16.4	0.34	1.0	1.0	-	-	-	-	-	-	-	-	
SB/SW 150	24.6	0.94	1.6	2.8	-	-	-	-	-	-	-	-	
SB/SW 200	32.4	1.92	2.0	5.7	16.2	0.53	1.0	1.6	-	-	-	-	
SB/SW 250	40.5	3.46	2.6	10.2	20.3	0.96	1.3	2.8	-	-	-	-	
SB/SW 300	49.8*	5.89	3.1	17.3	24.9	1.63	1.6	4.8	16.6	0.80	1.0	2.3	
SB/SW 350	-	-	-	-	29.1	2.47	1.8	7.3	19.4	1.20	1.2	3.4	
SB/SW 400	-	-	-	-	33.2	3.54	2.1	10.4	22.1	1.70	1.4	4.9	

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

Notes

For normal water conditions and in closed loop systems, a temperature rise of 20°F is generally recommended. In open systems for areas experiencing some degree of heat exchanger scaling as a result of water hardness, a rise of 10°F should not be exceeded.



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