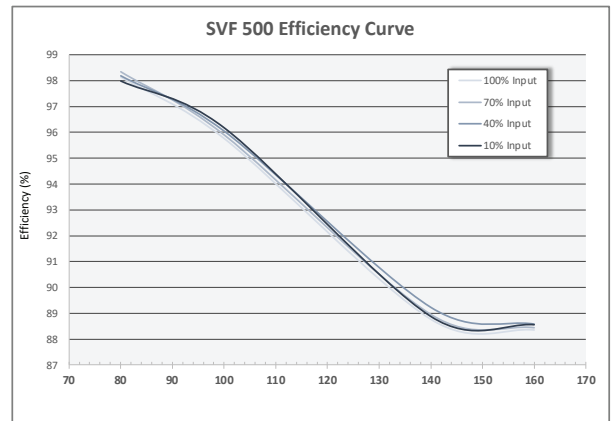


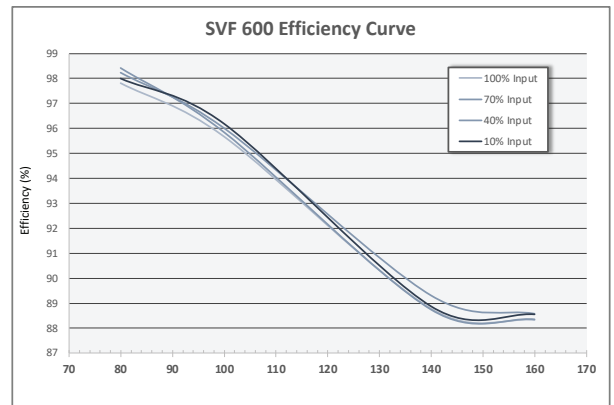
High Efficiency Condensing Boiler 500–600 MBH

	Specifications	SVF 500	SVF 600	
Heat Exchanger	Maximum Input MBH	500	600	
	Minimum Input MBH	50	50	
	Gross Output MBH	490	588	
	Thermal Efficiency - AHRI Ratings	98.0%	98.0%	
	Turn Down	10:1	12:1	
	BTU Gross Output / Gallon of Water	41	49	
Fuel	Fuel Type	NG / LP		
	Minimum / Maximum Gas Pressure (w.c.)	3-½" - 14		
	Gas Connection NPT Size	1-¼"		
System Water	Maximum Allowed Working Pressure	160 PSIG		
	Water Volume	12		
	Supply / Return Flange Connections	2"		
	Water Pressure Drop	3.2 ft. w.c. (@ 32 gpm)	3.6 ft. w.c. (@ 38 gpm)	
	High-Limit Maximum Temperature	210°F		
	Operating Minimum / Maximum Water Temperature	50°F / 190°F		
	Maximum Water Flow (gpm)	57	57	
	100% Firing Rate Water Flow (gpm)	16	19	
	Ignition / 50% Firing Rate Water Flow (gpm)	20 gpm		
	Low Firing Rate Water Flow (gpm)	4	4	
Electrical	Ambient Operating Temperature Range	40° - 120° F		
	Electrical Requirement	120/1/60 10 Amp		
Venting / Emissions	Vent / Air Size (inches)	4"		
	Min / Max Vent / Air Length (ea.)	4' / 100'		
	Vent Material	PVC, CPVC, PP, SS (AL29-4C)		
	Vent Rating	CAT II & IV		
Stack Vent Flow Rate (cfm)	SVF 500	136	163	
	SVF 600			
Certs	Boiler Category	ASME Sect. IV		
	Standard Listing & Approvals	ASME, AHRI, CSA		
	Gas Train Operations	CSD-1		
Dims	Length (inches)	42 ¾"		
	Width (inches)	24 ⅞"		
	Height (inches)	49 ⅜"		
Weights	Dry Weight (approximate pounds.)	472	472	
	Operating Weight (approximate pounds)	500	500	
	Shipping Weight (approximate pounds)	572	572	



Input	Return Water Temperatures*			
	80°F	100°F	140°F	160°F
100	98.2%	95.8%	88.8%	88.3%
70	98.3%	95.9%	89.0%	88.4%
40	98.2%	96.0%	89.2%	88.6%
10	98.0%	96.2%	88.9%	88.6%

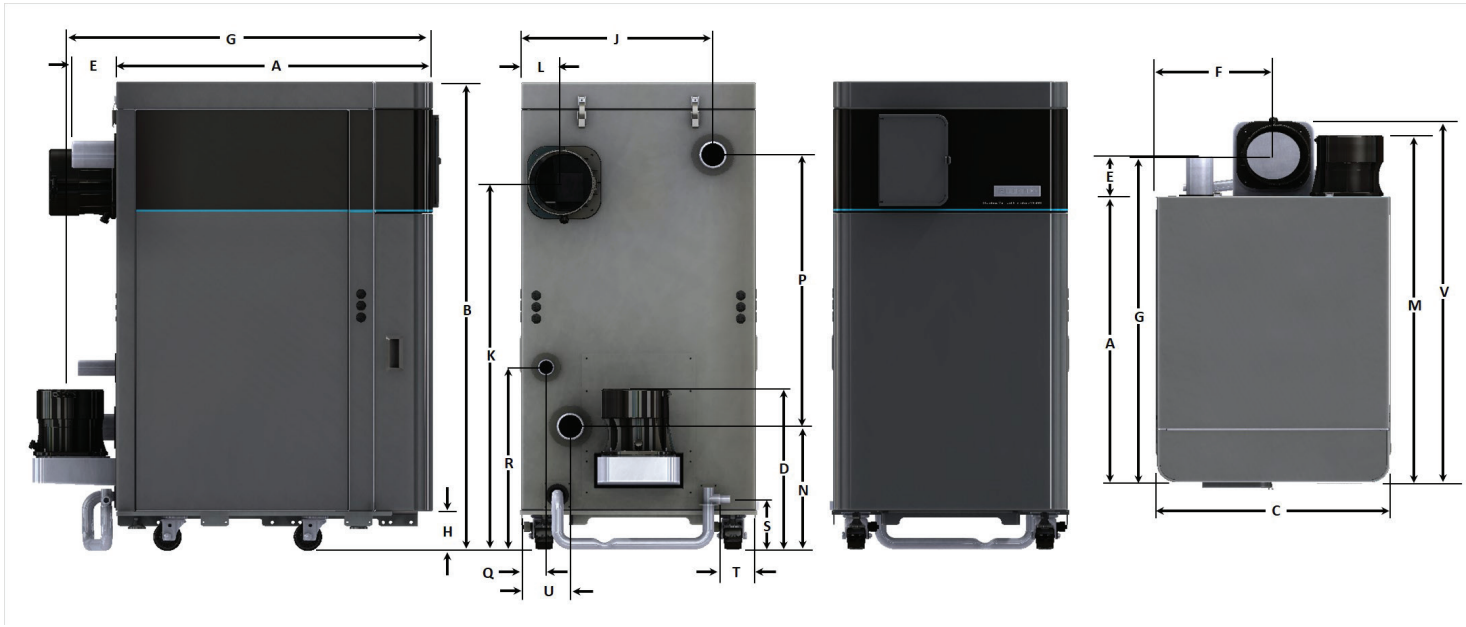
* Test was conducted at a flow rate which gave a 30°F rise at 100% input rate.



Input	Return Water Temperatures*			
	80°F	100°F	140°F	160°F
100	97.8%	95.7%	88.8%	88.3%
70	98.4%	95.8%	88.8%	88.4%
40	98.2%	96.0%	89.3%	88.6%
10	98.0%	96.2%	88.9%	88.6%

* Test was conducted at a flow rate which gave a 30°F rise at 100% input rate.

SVF 500-600 Dimensions and Product Specifications



Model No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V
SVF 500 600	33-3/8"	49-13/16"	24-7/8"	17-1/4"	4-3/4"	12-1/16"	38-3/16"	4-4/16"	20-5/16"	39-3/16"	4-9/16"	42-1/8"	13-3/16"	29"	2-5/8"	19-1/2"	5-3/8"	3-13/16"	5-1/4"	42-3/16"

Model No.	Minimum Thermal Efficiency	Max Pressure (psi)	Max Input (MBH)	Max output (MBH)	Turn Down	Water Volume (gal)	Water Conn	Gas Conn	Air/Intake Vent Size	Length	Width	Height	Shipping Weight
SVF 500	98.0%	160	500	490	10:1	12	2"	1 1/4"	4"	42 3/16"	24 7/8"	49 3/16"	572
SVF 600	98.0%	160	600	588	12:1	12	2"	1 1/4"	4"	42 3/16"	24 7/8"	49 3/16"	572

Industry Leading Efficiency

- Up to 98% Thermal Efficiency*
- ASME Certified Stainless Steel Firetube Heat Exchanger and Shell
- Advanced Design Firetube Geometry with Robotic Weldments for Maximum Heat Transfer and Reliability

Standard Features

- Natural Gas
- Up to 12:1 Turndown Ratio*
- 160 psi Working Pressure
- 30 psi Relief Valve
- Low Gas Pressure Operation
- Direct Spark Ignition
- Variable Speed Blower Assembly
- Negative Pressure Regulated Gas Valve
- Temperature & Pressure Gauge
- Outdoor Temp. Sensor
- Outlet & Inlet Water Temp. Sensor
- Flue Gas Temp. Sensor
- System Water Temp. Sensors
 - Immersion Style—Supply & Return

CSD-1 Compliant

- Manual Reset LWCO
- Manual Reset High & Low Gas Pressure Switches
- UL 353 Certified High Limit Control with Manual Reset
- UL 353 Certified Operating Control

Complete Jacket Assembly

- Fully Removable Jacket
- Rugged, Steel Frame & Panels

Easy Install/Serviceability

- Easy Set-up with Control Wizard
- Industrial-Grade Roller Casters and Leveling Legs
- Shipping Crate Ramp
- "Door-Fit" Design
- Zero-Clearance to Combustibles
- Stainless Steel Burner with Woven Fiber Mesh
- Single-Point Installation
 - All Field Connections (Excludes Gas/Front) Out Back of Boiler

Venting Options

- Direct Exhaust—Vertical (CAT II)
- Direct Vent—Sidewall, Vertical, & Side Intake with Vertical Exhaust (CAT IV)
- Direct Exhaust—Vertical (CAT IV)

Optional Equipment

- Pressure Relief Valve—50/80/100/150 psi
- System Water Temp. Sensors
 - Strap-On—Supply & Return
- BACnet or LonWorks Converter Kit
- Annual Maintenance Kit
- Corrosion Inhibitor
- Condensate Neutralizer Kit
- Anti-Freeze

Unity 2.0 Controller

- Color Touchscreen Display
- Easy-Navigate Logic
- Intuitive Prompts and Functionality

Control Features

- Zone and/or Priority-Based Control
- Ten Preloaded System Types including Custom-Design
- 0-10V Input (Modulation of Setpoint)
- Outdoor Reset for Each Priority
- Rate Adjustment per Priority
- Individually Fused 120V Outputs
- Warm Weather Shutdown
- System Match Blower Control with Rapid Response
- Rectified Flame Detection for Supervision and Boost Override
- 24 Hour Operational Trend Collection
- Before/After Fault Detection Data Logging

Boiler and Building Management System Compatible

- Variable Speed Boiler Pump Control for Variable/Primary Applications
- 8-Boiler Sequencing
- Modbus Communication
- Additional Heat Demand Output for Hybrid System Control

Boiler Certification

- ASME IV, CSA, AHRI, Commercial Energy Star, SCAQMD

Non-Pro-Rated Warranty

- 10 Year Heat Exchanger Warranty
- 2 Year Parts Warranty

In the interest of continual improvements in product and performance, Weil-McLain reserves the right to change specifications without notice.

Weil-McLain offers BIM-Revit product content to help architects, engineers and contractors design projects accurately and efficiently.

*model dependent



Solutions that Matter™

