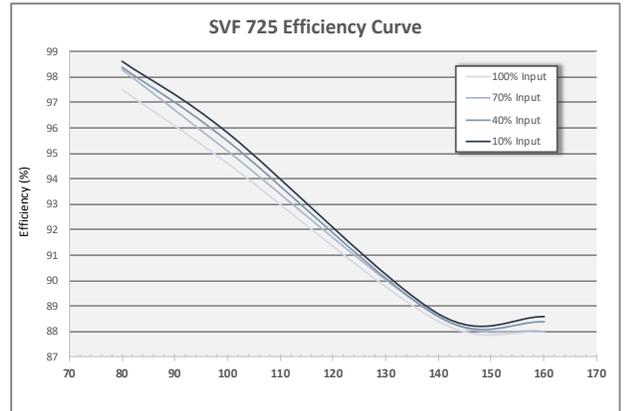


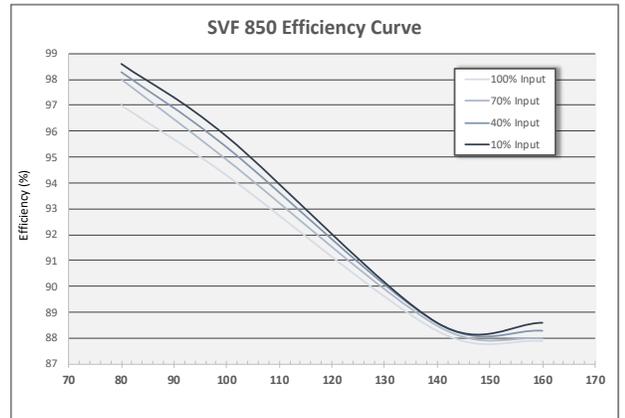
**High Efficiency Condensing Boiler 725–850 MBH**

	Specifications	SVF 725	SVF 850
Heat Exchanger	Maximum Input MBH	725	850
	Minimum Input MBH	73	73
	Gross Output MBH	708	829
	Thermal Efficiency - AHRI Ratings	97.7%	97.5%
	Turn Down	10:1	12:1
	BTU Gross Output / Gallon of Water	43	50
Fuel	Fuel Type	NG	
	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	17	
	Supply / Return Flange Connections	2 ½" (NPT)	
	Water Pressure Drop	3.6 ft. w.c. (@ 46 gpm)	4.0 ft. w.c. (@ 54 gpm)
	High-Limit Maximum Temperature	210° F	
	Operating Minimum / Maximum Water Temperature	50° F / 190° F	
	Maximum Water Flow (gpm)	81	81
	100% Firing Rate Water Flow (gpm)	23	27
	Ignition / 50% Firing Rate Water Flow (gpm)	13	13
	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)	6"	
	Min / Max Vent / Air Length (ea.)	10' / 100'	
	Vent Material	PVC, CPVC, PP, SS (AL29-4C)	
	Vent Rating	CAT II & IV	
	Stack Vent Flow Rate (cfm)	197	230
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 ¾"	
Weights	Dry Weight (approximate pounds.)	532	532
	Operating Weight (approximate pounds)	669	669
	Shipping Weight (approximate pounds)	675	675



Input	Return Water Temperatures*			
	80°F	100°F	140°F	160°F
100%	97.5%	94.6%	88.4%	88.0%
70%	98.3%	95.1%	88.6%	88.0%
40%	98.4%	95.5%	88.6%	88.4%
10%	98.6%	95.8%	88.7%	88.6%

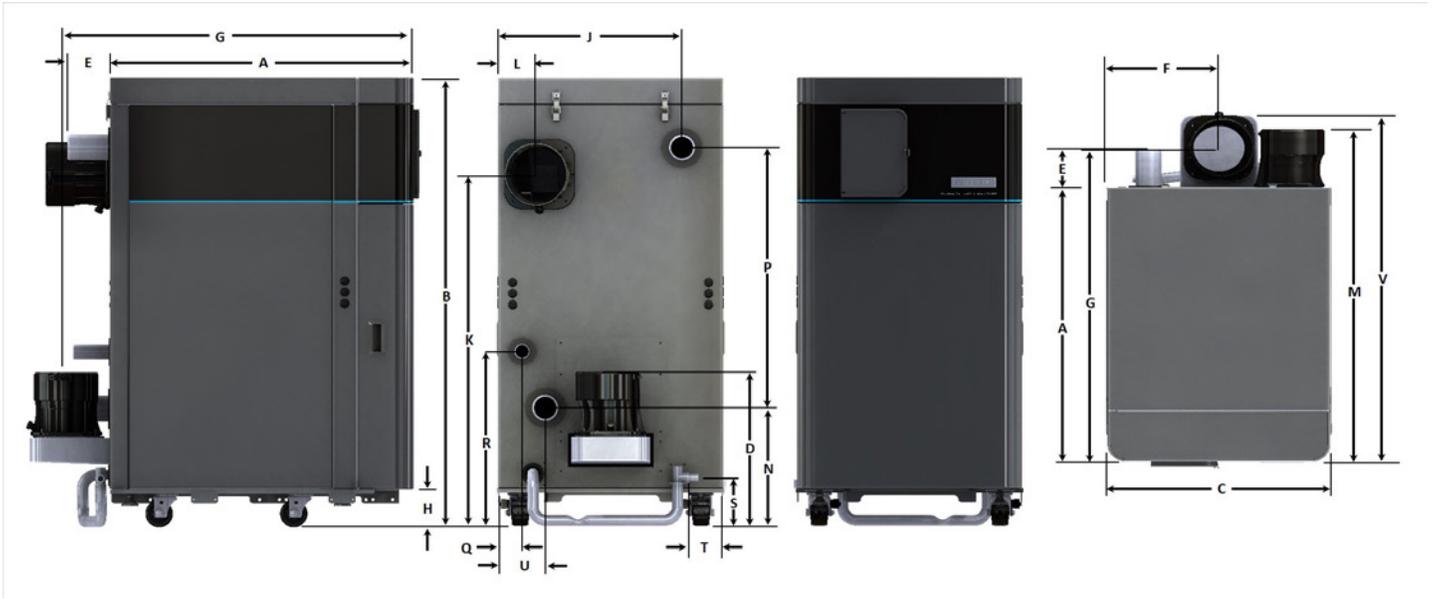
\* Test was conducted at a flow rate which gave a 30°F rise at 100% input rate.



Input	Return Water Temperatures*			
	80°F	100°F	140°F	160°F
100%	97.0%	94.3%	88.3%	87.9%
70%	98.0%	94.9%	88.5%	88.0%
40%	98.3%	95.4%	88.6%	88.3%
10%	98.6%	95.8%	88.6%	88.6%

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

# SVF 725-850 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 725   850	33-3/8"	49-13/16"	24-7/8"	17-3/16"	4-3/4"	12-1/16"	38-3/16"	4-9/16"	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 725	97.7%	160	725	708	10:1	16.5	2-1/2"	1-1/4"	6"	42 3/16"	24 7/8"	49 14/16"	675 lbs
SVF 850	97.5%	160	850	829	12:1	16.5	2-1/2"	1-1/4"	6"	42 3/16"	24 7/8"	49 14/16"	675 lbs

## Industry Leading Efficiency

- Up to 97.7% 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

## Venting Options

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

## 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

## Enhanced Controls Specification

- 7" Color Touchscreen
- Two USB Ports - Charging and Mouse Capable
- One Ethernet Port
- One BMX Modbus RTU Port
- One Boiler Cascade Port

## Control Features

- Setup Wizard provides guided setup for virtually all applications
- Real time visual alarms with diagnostics and troubleshooting tips
- "Black Box" error trending providing performance data 10 minutes before and after error
- User selectable control algorithms allow for customized PID
- Upgradeable software through USB

- Import and export parameters allow for copying complex parameters to other boilers and restoring settings
- Fully customizable night setback with relay for BMS and onboard 7 day schedule
- Outdoor air setpoint (ODA curve)
- Virtual technician with help buttons on all parameters
- CH and DHW priority mode to alternate between or simultaneously meet CH and DHW demands
- Customizable info screen for adding or removing information
- Screen shots capture current screen picture
- Setpoint boost for temporary "boosting" of setpoint
- Set relays to activate once every set time period with Relay Exercise

## 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

## Non-Pro-Rated Warranty

- 10 Year Heat Exchanger Warranty
- 2 Year Parts Warranty

## 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

## Boiler Certification

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

*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



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