Commercial Gas

Water Heaters

SANDBLASTER®

SELF-CLEANING COMMERCIAL GAS WATER HEATER — SBD MODELS

Sandblaster® is the original money-saving self-cleaning water heater. It provides outstanding performance and installation flexibility for new construction and replacement applications. The Sandblaster SBD series offers installer-friendly features, including compact low-profile design, multiple options for water connections and low installation clearances.

FACTORY-INSTALLED DRAFT DIVERTER AND AUTOMATIC FLUE DAMPER (SBD-120-400 MODELS)

- Low-profile draft diverter helps for installation in tight spaces
- Automatic motorized flue damper helps minimize standby heat loss
- SBD85-500 Model features induced draft design and no damper

THREE WATER CONNECTION OPTIONS FOR ADDED FLEXIBILITY

- Hot and cold water connections can be made through front, top or back of unit
- HYDRO CANNON™ system operates when cold water is connected through front

PERMAGLAS® ULTRA COAT™ GLASS LINING

- Exclusive process provides superior protection against corrosion
- CoreGard™ anode rods with stainless steel core provide additional corrosion protection

INTERMITTENT ELECTRONIC IGNITION

- Eliminates standing pilot, saves energy
- Includes power ON/OFF switch
- Provides flame failure response in less than one second

FACTORY- INSTALLED, CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE

MAXIMUM HYDROSTATIC WORKING PRESSURE: 160 PSI

CODES AND STANDARDS

- Design-certified by UL (Underwriters Laboratories), according to ANSI Z.21.10.3 - CSA 4.3 standards governing storage-type water heaters
- Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/ IESNA 90.1
- Design-certified by Underwriters Laboratories Sanitation to NSF Standard 5 for 180°F (82°C) water
- Optional ASME tank construction available on select models

HYDRO CANNON™ SELF-CLEANING SYSTEM

- Designed to significantly reduce or eliminate sediment build-up inside the tank
- Reduced sediment build-up maintains rated thermal efficiency and reduces water heating costs
- Self-cleaning system maximizes tank life

3-YEAR LIMITED TANK / 1-YEAR LIMITED PARTS WARRANTY

- For complete warranty information, consult written warranty or statewaterheaters.com.

Low Lead Content

HLW

ON SELECT MODELS

GAS-FIRED c UL us LISTED

CERTIFIED UL WATER QUALITY

AHRI CERTIFIED® www.ahridirectory.org

HYDRO CANNON™

SOLID. STATE.

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OTHER SANDBLASTER® FEATURES

FULLY AUTOMATIC CONTROL SYSTEM

- Manual-reset gas shut-off device prevents excessive water temperature
- Adjustable thermostat with 120ºF — 180ºF range
- Gas pressure regulator and pilot filter

HANDHOLE CLEANOUT

- Allows easy access to tank interior for cleaning

PLUG KITS

- Pipe nipples and caps included to plug unused water connections SANDBLASTER® options:

MANIFOLD KITS FOR MULTIPLE HEATER INSTALLATIONS

- 2-unit kit, Part Number 9003426205
- 3-unit kit, Part Number 9003427205
- 4-unit kit, Part Number 9003428205

OPTIONAL LEG KIT TO MEET NSF STANDARD 5

- For all SBD models, Part Number 9003425205

MECHANICAL VENTING KITS

- For SBD71 120NE through SBD100 199NES, Part Number 9005381205
- For SBD100 250NE through SBD100 390NE, Part Number 9003434205
- For installation of approved power venter to operate in conjunction with water heater thermostat
- Field wiring should conform to latest version of the National Electric Code ANSI/NFPA No.70
- For more information, consult manual shipped with water heater or contact the State Technical Support Center at 1-800-365-0024

Water Connections in Inches						
Model Number	Inlet			Outlet		
	Top	Front	Back	Top	Front	Back
SBD71 120NE	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
SBD81 154NE	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
SBD81 180NE	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
SBD100 199NET	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
SBD100 199NE	1-1/2	1-1/2	2	1-1/2	1-1/2	2
SBD81 199N	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
SBD100 199NES(A)	1-1/2	2	2	1-1/2	2	2
SBD100 250NE(A)	1-1/2	2	2	1-1/2	2	2
SBD65 251NE(A)	N/A	1-1/2	1-1/2	N/A	1-1/2	1-1/2
SBD100 275NE(A)	1-1/2	2	2	1-1/2	2	2
SBD65 305NE(A)	N/A	1-1/2	1-1/2	N/A	1-1/2	1-1/2
SBD85 365NE	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
SBD100 390NE(A)	1-1/2	2	2	1-1/2	2	2
SBD85 500NE(A)	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2

When ordering LP gas, Change the “N” to “P” in the model number. exp. SBD71 120PE

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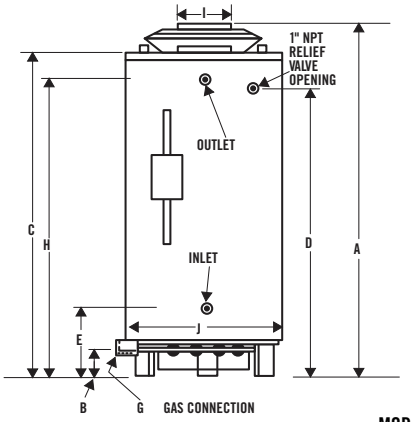
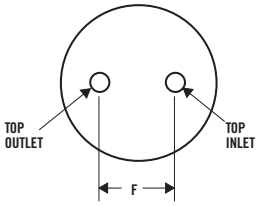
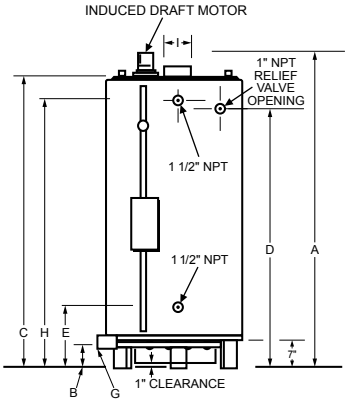
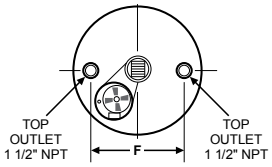


MODELS
SDB85 100-390





MODEL
SBD85 500



TOP VIEW

Model Number	Inches or CM	Dimensions										Approx. Shipping Weight	
		A	B	C	D	E	F	G	H	I	J	Standard	ASME
SBD71 120NE*	Inches	69-3/4"	4-1/4"	59-1/2"	50-7/8"	19-11/16"	19"	1/2"	51-7/8"	6"	27-3/4"	400 lbs.	-
	CM	177	11	151	129	50	48	-	132	15	71	182 Kg	-
SBD81 154NE	Inches	73"	4-1/4"	66-1/2"	57-7/8"	19-11/16"	19"	1/2"	59"	6"	27-3/4"	470 lbs.	-
	CM	185	11	169	147	50	48	-	150	15	71	213 Kg	-
SBD81 180NE	Inches	67-1/2"	4-1/2"	62"	53-1/2"	20-1/2"	21"	1/2"	54-5/8"	6"	27-3/4"	470 lbs.	-
	CM	171	12	157	136	52	53	-	139	15	71	213 Kg	-
SBD100 199NET	Inches	75"	4-1/2"	70	61-1/2"	20-1/2"	21"	1/2"	62-5/8"	6"	27-3/4"	603 lbs.	-
	CM	192	12	178	157	52	53	-	159	15	71	273 Kg	-
SBD100 199NE	Inches	75"	4-1/2"	70	61-1/2"	20-1/2"	21"	1/2"	61-1/2"	6"	27-3/4"	603 lbs.	-
	CM	192	12	178	157	52	53	-	150	15	71	273 Kg	-
SBD81 199N	Inches	67-1/2"	4-1/2"	62	53-1/2"	20-1/2"	21"	1/2"	54-1/8"	6"	27-3/4"	470 lbs.	-
	CM	171	12	157	136	52	53	-	139	15	71	213 Kg	-
SBD100 199NES(A)	Inches	72"	4-1/2"	65-1/8"	55-7/8"	19-3/4"	23"	1/2"	56-3/8"	8"	30-1/4"	630 lbs.	725 lbs.
	CM	183	12	165	142	50	58	-	143	20	77	286 Kg	329 Kg
SBD100 250NE(A)**	Inches	72"	4-1/2"	65-1/8"	55-7/8"	19-3/4"	23"	1/2"	56-3/8"	8"	30-1/4"	630 lbs.	725 lbs.
	CM	183	12	165	142	50	58	-	143	20	77	286 Kg	329 Kg
SBD65 251NE(A)**	Inches	75"	4-1/2"	65-3/4"	57-1/4"	20"	N/A	1/2"	58-3/4"	8"	27-3/4"	750 lbs.	862 lbs.
	CM	191	12	167	145	51	N/A	-	149	20	70	341 Kg	391 Kg
SBD100 275NE(A)**	Inches	72"	4-1/2"	65-1/8"	55-7/8"	19-3/4"	23"	1/2"	56-3/8"	8"	30-1/4"	630 lbs.	725 lbs.
	CM	183	12	165	142	50	58	-	143	20	77	286 Kg	329 Kg
SBD65 305NE(A)	Inches	75"	4-1/2"	6- 3/4"	57-1/4"	20"	N/A	1/2"	58-3/4"	8"	27.75	750 lbs.	862 lbs.
	CM	191	12	167	145	51	N/A	-	149	20	70	341 Kg	391 Kg
SBD85 365NE	Inches	79-1/2"	4-1/2"	70-1/4"	62-1/2"	22-1/2'	23"	3/4"	63"	8"	27-3/4"	725 lbs.	833 lbs.
	CM	202	12	178	159	57	58	-	160	20	71	329 Kg	379 Kg
SBD100 390NE(A)	Inches	75-1/2"	4-1/2"	67-1/2"	58-1/4"	26-3/4"	23"	3/4"	59"	8"	30-1/4"	760 lbs.	874 lbs.
	CM	192	12	171	148	68	58	-	150	20	77	345 Kg	396 Kg
SBD85 500NE(A)†**	Inches	81-1/2"	17.5"	77-1/4"	67-1/2"	27-1/8"	21"	1"	67-1/2"	8"	27-3/4"	812 lbs.	857 lbs.
	CM	209	44	196	171	69	53	3	171	20	70	368 Kg	389 Kg

When ordering LP gas, Change the "N" to "P" in the model number. exp. SBD71 120PE
*Model SBD71 120NE is shipped with a 6" x 5" flue outlet adapter.
**Models SBD100 250NE,SBD65 251NE, SBD100 275NE and SBD85 500NE are shipped with a 8" x 6" flue outlet adapter.
Standard models certified for sea level to 2,000 ft. elevation. Order SMR S54 for elevations up to 8,000 ft.
† SBD85 500NE model features induced draft design and no damper.
Back side water connections, Inlet and outlet, are represented by "E" and "H" respectively for height dimensions.

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Model Number	Input BTU/HR	Gallons or Litres	Tank Size	Litres	Recovery - Gallons or Litres Per Hour at Degree Rise		
					40°F	100°F	140°F
					22°C	56°C	78°C
SBD71 120NE*	120,000	U.S. Gallons	71	GPH	291	116	83
		Litres	268	LPH	1102	439	314
SBD81 154NE	154,000	U.S. Gallons	81	GPH	373	149	107
		Litres	307	LPH	1412	564	405
SBD81 180NE	180,000	U.S. Gallons	81	GPH	434	174	124
		Litres	307	LPH	1643	659	469
SBD100 199NET	199,000	U.S. Gallons	100	GPH	482	193	132
		Litres	379	LPH	1825	731	500
SBD100 199NE	199,000	U.S. Gallons	100	GPH	482	193	132
		Litres	379	LPH	1825	731	500
SBD81 199NE	199,000	U.S. Gallons	81	GPH	482	193	132
		Litres	307	LPH	1825	731	500
SBD100 199NES(A)	199,000	U.S. Gallons	100	GPH	482	193	132
		Litres	379	LPH	1825	731	500
SBD100 250NE(A)**	250,000	U.S. Gallons	100	GPH	606	242	173
		Litres	379	LPH	2294	918	655
SBD65 251NE(A)**	251,000	U.S. Gallons	65	GPH	608	243	174
		Litres	246	LPH	2303	921	658
SBD100 275NE(A)**	275,000	U.S. Gallons	100	GPH	667	267	190
		Litres	379	LPH	2524	1009	721
SBD65 305NE(A)	305,000	U.S. Gallons	65	GPH	739	296	211
		Litres	246	LPH	2799	1120	800
SBD85 365NE(A)	365,000	U.S. Gallons	85	GPH	885	354	253
		Litres	322	LPH	3349	1340	957
SBD100 390NE(A)	390,000	U.S. Gallons	100	GPH	970	388	277
		Litres	379	LPH	3671	1468	1049
SBD85 500NE(A)†**	500,000	U.S. Gallons	85	GPH	1212	485	346
		Litres	322	LPH	4588	1835	1311

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Standard models certified for sea level to 2,000 ft. elevation. Order SMR S54 for elevations up to 8,000 ft.
† SBD85 500NE model features induced draft design and no damper.
Recovery based on 80% efficiency.

SPECIFICATION

(Natural or Propane) gas water heater(s) shall be State SANDBLASTER® model # _____ or equal, with a storage capacity of _____ gallons, an input rating of _____ BTUs per hour, a recovery rating of_____ gallons per hour (gph) at 100ºF rise and a maximum hydrostatic working pressure of 160 psi. Water heater(s) shall be protected against overheating caused by the buildup of scale, film and other sediment by a self-cleaning device, positioned inside the tank so that it directs the flow of inlet water to keep precipitated solids in suspension so that they are removed from the water heater on that or successive draws. Glasslined water heater(s) shall also be protected against electrolytic corrosion by multiple factory-installed anode rods. In addition, water heater(s) shall: 1) Be equipped with an integrated control system consisting of a 180ºF adjustable thermostat with upper and lower sensing bulbs. 2) Be equipped with intermittent electronic ignition, a manual reset gas shutoff device, a gas pressure regulator, factory-installed, CSA Certified and ASME Rated T&P relief valve and 2-3/4˝ x 3-3/4˝ tank inspection port. 3) Be design-certified by UL (Underwriters Laboratories) to current edition of ANSI Z.21.10.3 - CSA 4.3 standards governing storage-type water heaters. 4) Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and Current Edition of ASHRAE/ IESNA 90.1. 5) Have a 3-year limited warranty against corrosion as outlined in the written warranty.

FOR TECHNICAL INFORMATION CALL (800) 365-0024. STATE WATER HEATERS RESERVES THE RIGHT TO MAKE PRODUCT CHANGES OR IMPROVEMENTS WITHOUT PRIOR NOTICE.

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