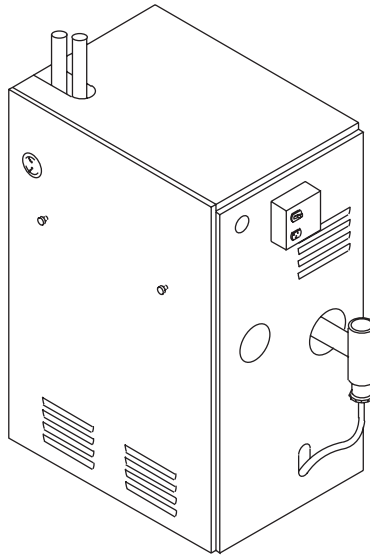




Product Data

Model BW9 Gas-Fired Condensing Water Boiler Series A



**MODEL BW9
Series A**

The BW9 is a gas fired direct vent condensing hot water boiler with cast aluminum heat exchanger sections. A revolutionary cast aluminum heat exchanger means better heat transfer and thermal storage than similarly sized cast iron boiler, which results in higher efficiency. The heating system water absorbs large amounts of heat from the cast aluminum heat exchanger, cooling the flue gases and causing condensation. Sealed combustion, premix gas burner, and low flame temperature means drastically reduced CO and NO_x emissions, which contribute to a cleaner and healthier environment.

The BW9, unlike normal residential atmospheric and induced draft boilers, takes its combustion air directly from the outdoors (sealed combustion) and does not compete with building occupants for fresh air. Sealed combustion (also known as “direct vent”) is the safest and

best way to obtain plenty of clean combustion air. The induced draft fan draws in the outside combustion air, then takes the cooler flue gases from the heat exchanger and provides a positive removal of the flue gases from the building through inexpensive and readily available PVC and CPVC pipes.

FEATURES

Range of Capacities — Seven sizes ranging from 50,000 through 200,000 Btuh input.

Completely Packaged — Each boiler is completely assembled, including all controls (except room thermostat and circulator pump). All necessary wiring is factory installed. The boiler is ready for gas piping, room thermostat, and electrical power connections as shipped. Circulator is shipped pre-wired with 6 ft bx conduit for easy installation for supply side pumping.

Venting — This boiler is direct vented with PVC and CPVC pipe. See the Installation Instructions for common venting requirements.

Aluminum Sections — These sections speed heat transfer to the boiler water. With faster thermal response, greater comfort and economy are achieved.

Pre-Mix Burner — Provides quiet operation and improved combustion efficiency.

Controls — Integrated Boiler control provides safe, dependable operation of burners. Factory-installed safety components provide maximum safety against overheating, pressure buildup. A factory installed low water cut-off is standard on the BW9-125 through 200 sizes and is available as a field installed accessory on the BW9-50 through 100 sizes.

Sections Tested — Each section is hydrostatically tested to 50 psig. Individual sections are tested to 125 psig at factory. Assembled sections are tested to 75 psig at the factory. The maximum allowable pressure is 50 psig for hot water boilers.

Propane Convertible — With factory approved accessory conversion kit.

Warranty — The aluminum sections are covered by a limited 15-year warranty on the entire assembly. All other parts are covered by a 5-year limited warranty.



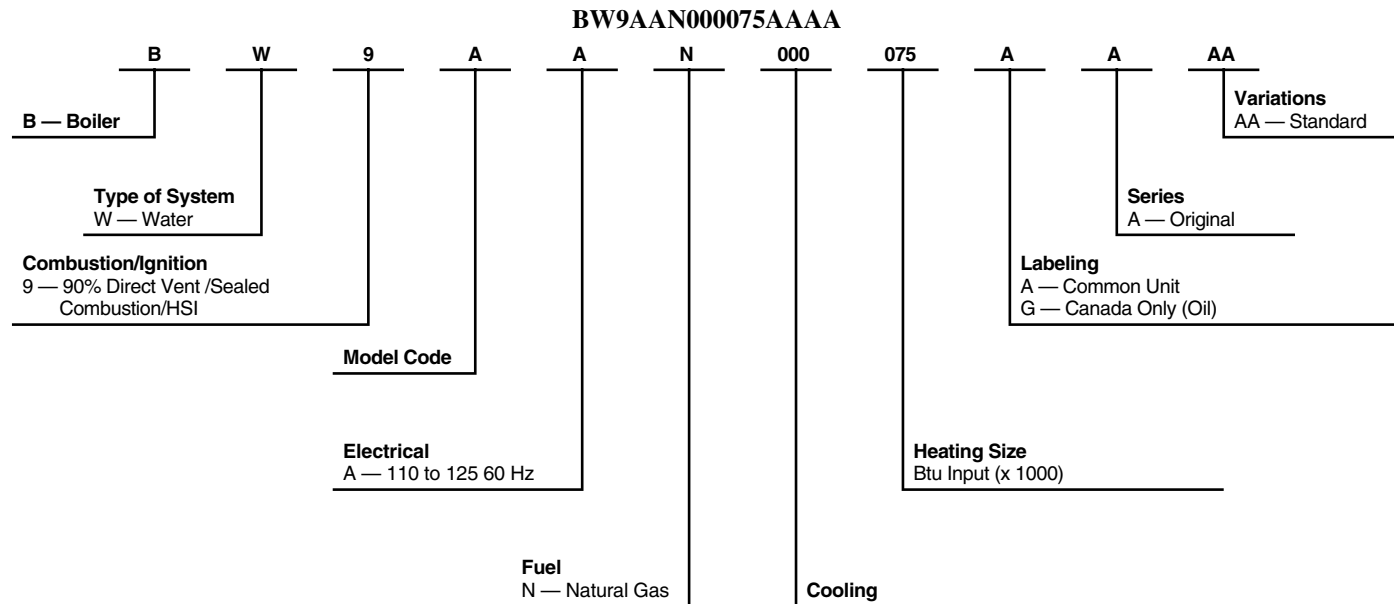
As an ENERGY STAR® Partner, Carrier Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.



ASME



Model number nomenclature

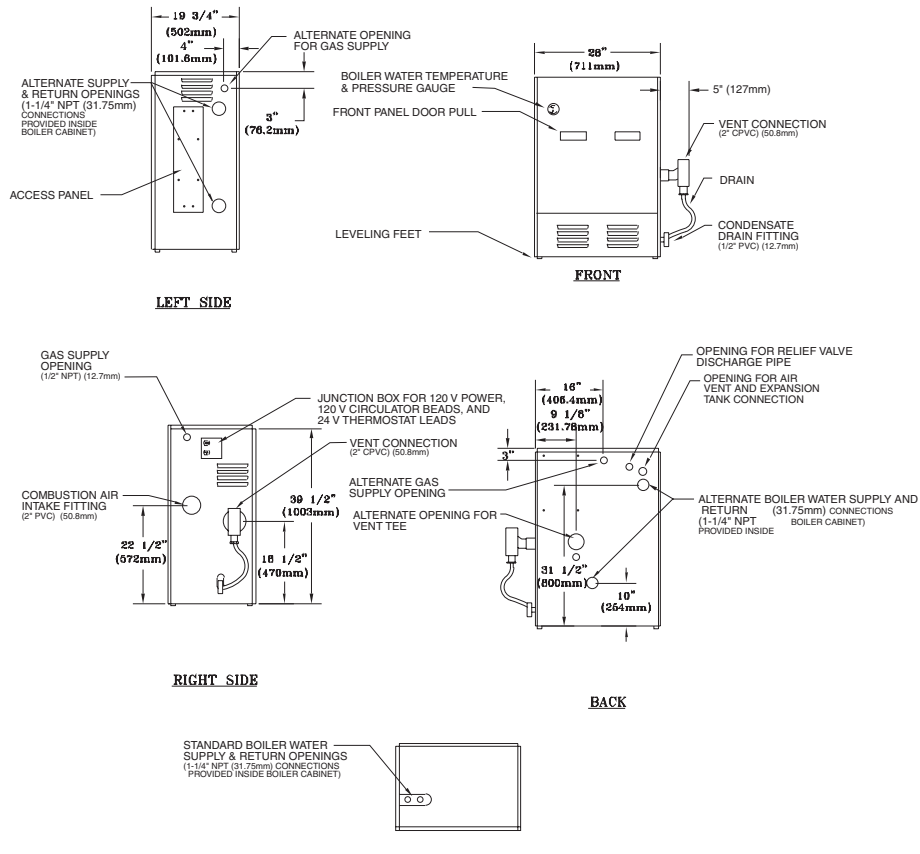


Boiler accessories

BW9	
DESCRIPTION	PART NO.
Filltrol Package (Up to 75,000 BTUH)	KBAFP0101DNK
Filltrol Package (Up to 150,000 BTUH)	KBAFP0201DNK
Filltrol Package (Up to 300,000 BTUH)	KBAFP0301DNK
High Limit Control L6006C1034	KBAHL0101DNK
Zoning Valve 3/4-in.	KBAZV0101DNK
Zoning Valve 1-in.	KBAZV0201DNK
Gas Conversion Kit, Combination Natural to Propane and High Altitude Derate (BW9-050)	KBANP1101DNK
Gas Conversion Kit, Combination Natural to Propane and High Altitude Derate (BW9-075)	KBANP1201DNK
Gas Conversion Kit, Combination Natural to Propane and High Altitude Derate (BW9-100)	KBANP1301DNK
Gas Conversion Kit, Combination Natural to Propane and High Altitude Derate (BW9-125)	KBANP1401DNK
Gas Conversion Kit, Combination Natural to Propane and High Altitude Derate (BW9-150)	KBANP1501DNK
Gas Conversion Kit, Combination Natural to Propane and High Altitude Derate (BW9-175)	KBANP1601DNK
Gas Conversion Kit, Combination Natural to Propane and High Altitude Derate (BW9-200)	KBANP1701DNK
Gas Conversion Kit, Combination Propane to Natural and High Altitude Derate (BW9-050)	KBAPN1101DNK
Gas Conversion Kit, Combination Propane to Natural and High Altitude Derate (BW9-075)	KBAPN1201DNK
Gas Conversion Kit, Combination Propane to Natural and High Altitude Derate (BW9-100)	KBAPN1301DNK
Gas Conversion Kit, Combination Propane to Natural and High Altitude Derate (BW9-125)	KBAPN1401DNK
Gas Conversion Kit, Combination Propane to Natural and High Altitude Derate (BW9-150)	KBAPN1401DNK
Gas Conversion Kit, Combination Propane to Natural and High Altitude Derate (BW9-175)	KBAPN1401DNK
Gas Conversion Kit, Combination Propane to Natural and High Altitude Derate (BW9-200)	KBAPN1401DNK
Concentric Vent Kit 2 inch	KGAVT0501CVT
Concentric Vent Kit 3 inch	KGAVT0601CVT
Low Water Cut-Off Kit (for BW9-50/75/100 only Factory Installed BW9-125 through 200)	KBALW0101DNK

Note: Accessory High Limit Control is a strap-on aquastat used as an auxiliary limit or reverse acting circulator control.

Dimensions—Model BW9-50/75/100



A99156

CLEARANCES (In.)

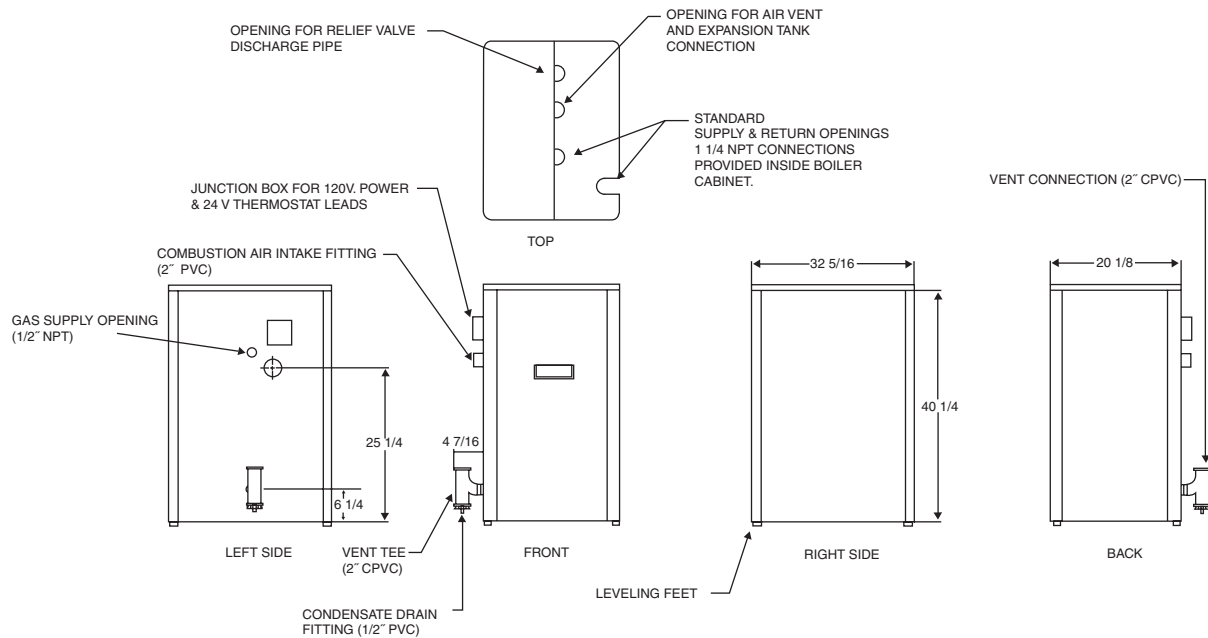
UNIT	COMBUSTIBLE	ACCESSIBILITY/CLEANING	SERVICING
TOP	1	8"	8"
LEFT SIDE	1	24"	24"
RIGHT SIDE	8	—	—
BASE	1	—	—
FRONT	0	24"	24"
BACK	1	—	—
INTAKE/VENT PIPING	0	—	—
NEAR BOILER HOT WATER PIPING	1	—	—

*Service clearance requirement 24 in.

Physical data

UNIT SIZE		050	075	100
Sections				
GAS CONTROLS		1		
Gas Valve		Honeywell		
Inlet Size	In.	1/2		
Ignition		Hot Surface Ignition		
Burner—Stainless/Titanium Alloy		1		
Burner Orifice (No orifice sizes for 125, 150, 175, 200)	No.	0.0615	#48	#44
CONTROLS				
Limit Control Range	°F	100-200		
Pressure Relief Valve Setting	Psig	30		
Integrated Boiler Control		UTEC factory installed		
CIRCULATOR				
Taco	Model	007		
Full Load Amps		2.0 AMPS/330 WATTS		
Flange Size FPT	In.	1-1/4		

Dimensions—Model BW9-125/150/175/200



A04049

CLEARANCES (In.)

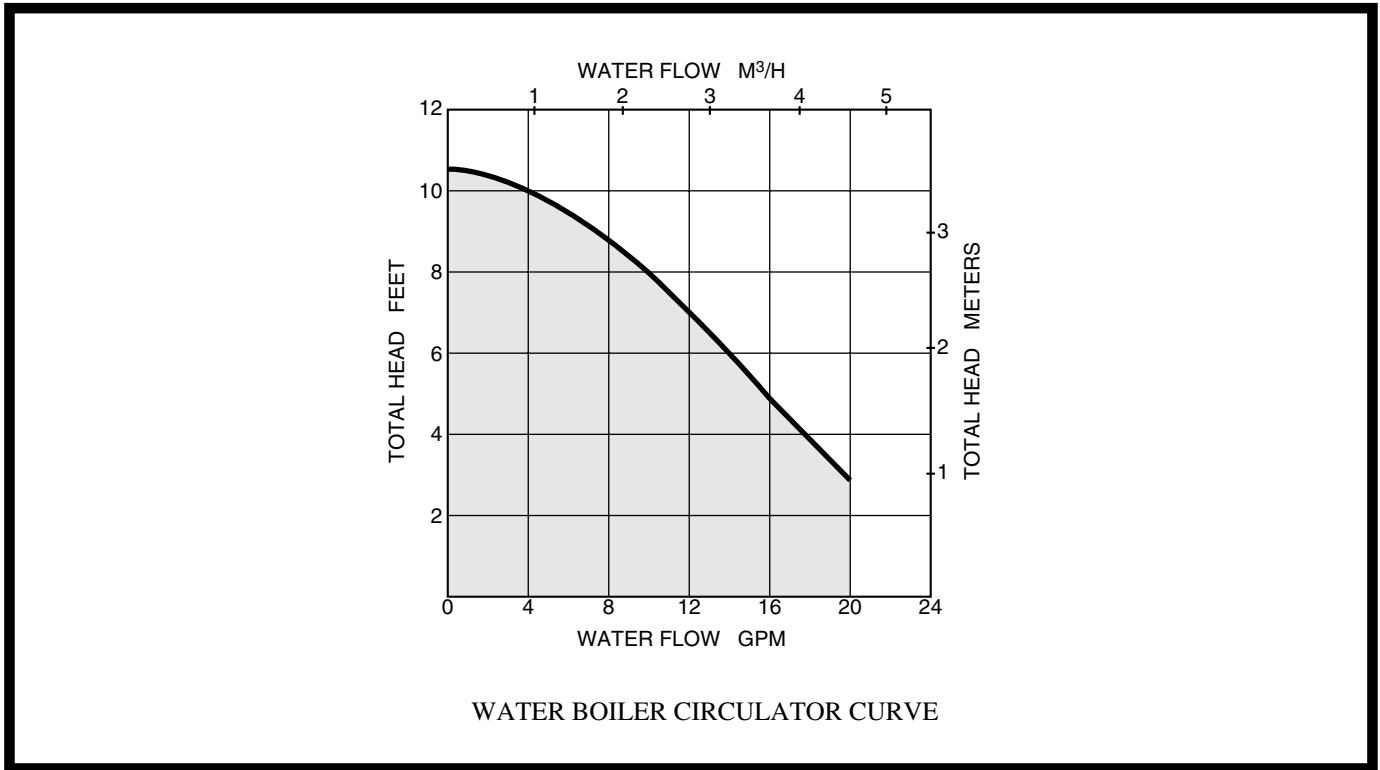
UNIT	COMBUSTIBLE	ACCESSIBILITY/CLEANING	SERVICING
TOP	1	8"	8"
LEFT SIDE	1	24"	24"
RIGHT SIDE	8	—	—
BASE	1	—	—
FRONT	0	24"	24"
BACK	1	—	—
INTAKE/VENT PIPING	0	—	—
NEAR BOILER HOT WATER PIPING	1	—	—

*Service clearance requirement 24 in.

Physical data

UNIT SIZE	125	150	175	200
Sections	1			
GAS CONTROLS				
Gas Valve	Honeywell			
Inlet Size	In.	1/2		
Ignition	Hot Surface Ignition			
Burner—Stainless/Titanium Alloy	1			
Burner Orifice (No orifice sizes for 125, 150, 175, 200)	No.	None, Venturi		
CONTROLS				
Limit Control Range	°F	100-200		
Pressure Relief Valve Setting	Psig	30		
Integrated Boiler Control	UTECH factory installed			
CIRCULATOR				
Taco	Model	007		
Full Load Amps	2.0 AMPS/330 WATTS			
Flange Size FPT	In.	1-1/4		

Circulator curve



Electrical data

ALL MODELS	
Voltage—Hertz—Phase	115 — 60 — 1
Minimum Branch Circuit Wire Size (AWG)	14
Maximum Fuse Size or CKT BKR (Amps)‡	15
Control Circuit Power Available	40va @ 24v

‡Time-delay type is recommended

Performance data*

UNIT	GAS TYPE	MAX INPUT (BTUH)	RATINGS HEATING CAPACITY*		NET RATING	BOILER WATER CAPACITY (GALLONS)	APPROX SHIP. WT (Lb)
			Btuh	AFUE %			
BW9AAN050	Natural	50,000	45,000	90	39,000	2.6	256
BW9AAN075	Natural	75,000	68,000	90	59,000	2.6	256
BW9AAN100	Natural	100,000	90,000	90	78,000	2.6	256
BW9AAN125	Natural	125,000	113,000	90	98,000	3.0	284
BW9AAN150	Natural	150,000	134,000	90	117,000	3.0	284
BW9AAN175	Natural	175,000	158,000	90	137,000	3.0	284
BW9AAN200	Natural	200,000	180,000	90	157,000	3.0	284

* Gas input ratings are for elevations up to 2000 ft. In the USA, for elevations above 2000 ft., reduce input per the charts supplied in the high altitude derate kits. In Canada, boilers may be used at high altitude by using a certified field conversion kit.



Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.