

BWB GAS-FIRED WATER BOILER

PRODUCT DATA

Features



Fig. 1 – Fig. 1 - Model BWB

A12443

Range of Capacities

These boilers are available in sizes 45,000 to 295,000 BTUH.

2012 DOE Compliant

The BWB boiler features a Honeywell 2012 DOE compliant High Limit/Electronic Control. The control monitors the water temperature and delays the burner starting until the residual heat has been transferred. This maximizes efficiency by turning on the burner only when needed.

Completely Packaged

Each boiler is completely assembled, including all controls (except thermostat and expansion tank). All necessary wiring is factory installed, except for the circulator pump. The boiler is ready for gas, water, room thermostat, and electrical connections.

Thermal-Pin, Cast-Iron Sections

These sections speed heat transfer from the flue gases to the boiler water with faster thermostat response, providing greater comfort and economy. Maximum heat is produced at a lower level on the thermal-pin sections, leading to peak efficiency. Steel push nipples are used between each section to provide a water-tight seal.

Integral Draft

These boilers incorporate an integral draft system to simplify installation. A factory-supplied, field-installed draft hood is included.

Titanium Composite Burners

Provide quiet operation, corrosion resistance and improved combustion efficiency. Propane convertible with accessory kit.

Other Controls

An automatic gas valve and intermittent pilot provide quiet dependable operation of the burners. Factory-supplied safety components assure protection against overheating and pressure build-up. A factory authorized accessory kit is available for protection against low water operation where required by local code. The circulator is pre-wired with 5-ft. (1.5 M) of BX conduit for easy installation for supply-side pumping.

Insulated Casing

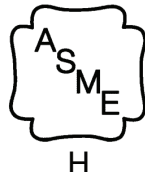
The casing is fully insulated with fiberglass for maximum operating efficiency and economy.

Automatic Vent Damper

The BWB boiler is CSA design certified for use with the factory supplied automatic vent damper.

Sections Tested

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



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.

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The Model BWB Gas-Fired Hot Water Boiler provides fast heat quietly and economically to assure the finest in hydronic heating.

These boilers provide quality design in a small, compact unit easily installed in a basement, garage, or utility room. They can be installed on a combustible floor when an optional combustible floor base is used.

The BWB boilers are CSA certified for use with natural gas and are field convertible for use with propane gas when a factory-authorized conversion kit is used.

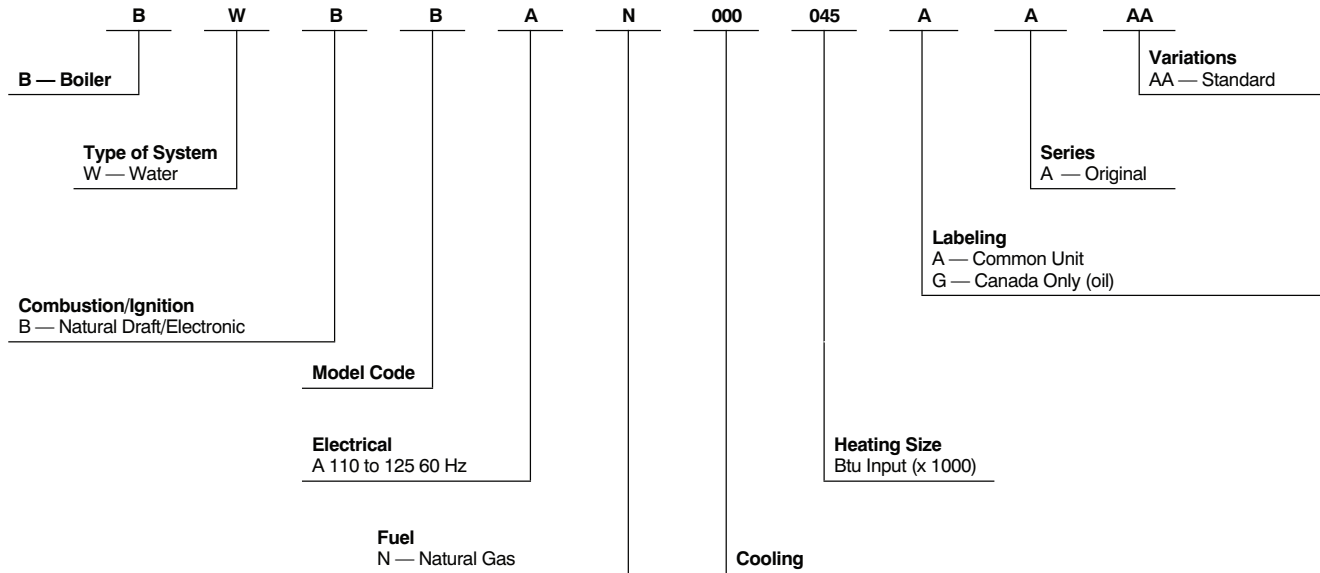


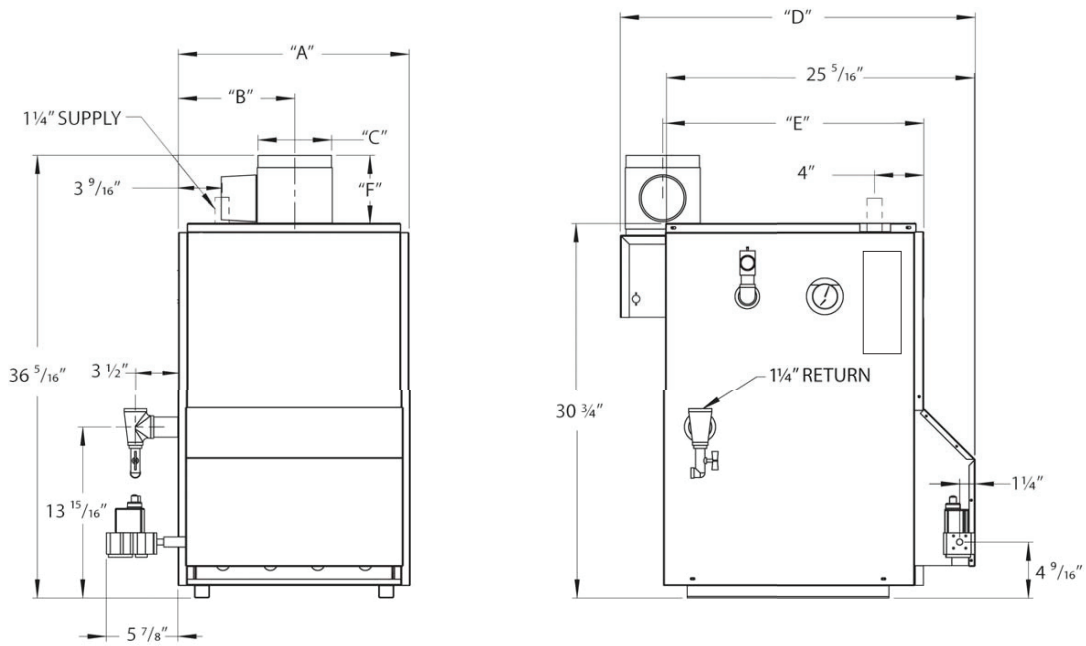
Fig. 2 – MODEL NUMBER NOMENCLATURE

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Table 1 – BOILER ACCESSORIES

DESCRIPTION	PART NUMBER
Filltrol Package (Up to 75,000 BTUH)	KBAFP0101DNK
Filltrol Package (Up to 200,000 BTUH)	KBAFP0201DNK
Filltrol Package (Over 200,000 BTUH)	KBAFP0301DNK
High Limit Control (L6006C1034)	KBAHL0101DNK
Combustible Floor Base - 045	KBASB0501DNK
Combustible Floor Base - 070 & 096	KBAMB0601DNK
Combustible Floor Base - 120 & 145	KBAMB0701DNK
Combustible Floor Base -170 & 195	KBAMB0801DNK
Combustible Floor Base -245	KBAMB0801DNK
Combustible Floor Base -295	KBAMB0101DNK
Zoning Valve 3/4-in.	KBZV0101DNK
Low Water Cut-off Kit	KBALW0101DNK
Gas Conversion Kit Propane to Natural 045	KBAPN2101DNK
Gas Conversion Kit Propane to Natural 070	KBAPN2201DNK
Gas Conversion Kit Propane to Natural 096	KBAPN2301DNK
Gas Conversion Kit Propane to Natural 120	KBAPN2401DNK
Gas Conversion Kit Propane to Natural 145	KBAPN2501DNK
Gas Conversion Kit Propane to Natural 170	KBAPN2601DNK
Gas Conversion Kit Propane to Natural 195	KBAPN2701DNK
Gas Conversion Kit Propane to Natural 245	KBAPN2801DNK
Gas Conversion Kit Propane to Natural 295	KBAPN2901DNK
Gas Conversion Kit Natural to Propane 045	KBANP3101DNK
Gas Conversion Kit Natural to Propane 070	KBANP3201DNK
Gas Conversion Kit Natural to Propane 096	KBANP3301DNK
Gas Conversion Kit Natural to Propane 120	KBANP3401DNK
Gas Conversion Kit Natural to Propane 145	KBANP3501DNK
Gas Conversion Kit Natural to Propane 170	KBANP3601DNK
Gas Conversion Kit Natural to Propane 195	KBANP3701DNK
Gas Conversion Kit Natural to Propane 245	KBANP3801DNK
Gas Conversion Kit Natural to Propane 295	KBANP3901DNK

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



Dimensions								
Model No.	Natural Gas Inlet*	Dimensions (Inches)						Pump Size Supply & Return Tappings
		A	B	C	D	E	F	
*045	1/2"	11 1/4	5 5/8	4	27 1/8	20 7/16	4 15/16	1 1/4"
*070	1/2"	15 1/8	7	5	28 1/8	20 15/16	4 15/16	1 1/4"
*096	1/2"	15 1/8	7	5	28 1/8	20 15/16	4 15/16	1 1/4"
*120	1/2"	19	9 1/2	6	29 1/8	21 7/16	5 7/16	1 1/4"
*145	1/2"	19	9 1/2	6	29 1/8	21 7/16	5 7/16	1 1/4"
*170	1/2"	22 7/8	11 3/16	7	30 1/8	21 15/16	5 15/16	1 1/4"
*195	1/2"	22 7/8	11 3/16	7	30 1/8	21 15/16	5 15/16	1 1/4"
*245	3/4"	26 3/4	13 6/16	8	31 1/8	22 7/16	6 15/16	1 1/4"
*295	3/4"	30 5/8	15 5/16	9	32 1/8	22 15/16	8 15/16	1 1/4"

* Propane Gas Inlet (All Units) 1/2"

Fig. 3 – Fig. 3 - DIMENSIONS

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Table 2 – CLEARANCES - in. (MM)

PART OF BOILER	CLEARANCE
Right Side	3 (76 mm)*
Left Side (Control Side)	9 (229 mm)
Top	18 (457 mm)
Back	8 (203 mm)
Front	18 (457 mm)*

*Service clearance requirement 24 in. (610 mm); Front alcove clearance 18 in. (457 mm).

Table 3 – ELECTRICAL DATA

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

Table 4 – RATINGS and CAPACITIES*

MODEL	GAS TYPE	NUMBER OF SECTIONS	MAX INPUT (BTUH)	HEATING CAPACITY (BTUH)	NET RATINGS (BTUH)	AFUE (WITH DAMPER)	APPROXIMATE SHIP WEIGHT
BWBBAN000045	Natural	2	45,000	37,000	32,000	82.0	208
BWBBAN000070	Natural	3	70,000	57,000	50,000	82.0	271
BWBBAN000096	Natural	3	96,000	79,000	69,000	82.0	269
BWBBAN000120	Natural	4	120,000	98,000	85,000	82.0	328
BWBBAN000145	Natural	4	145,000	119,000	103,000	82.0	328
BWBBAN000170	Natural	5	170,000	140,000	122,000	82.0	407
BWBBAN000195	Natural	5	195,000	160,000	139,000	82.0	390
BWBBAN000245	Natural	6	245,000	201,000	174,000	82.0	460
BWBBAN000295	Natural	7	295,000	242,000	210,000	82.0	508

*Gas input ratings are for elevations up to 2000 ft. (610 M).

Table 5 – SPECIFICATIONS

UNIT SIZE	045	070	096	120	145	170	195	245	295
General Data									
Sections -Fine Grain Cast Iron	2	3	3	4	4	5	5	6	7
Burners-Stainless/Titanium Alloy	1	2	2	3	3	4	4	5	6
Burners- Orifice Drill Size	3.1 mm	2.8 mm	3.2 mm	2.9 mm	3.2 mm	2.9 mm	3.2 mm	3.2 mm	3.2 mm
Gas Controls - Intermittent Pilot									
Gas Valve	Honeywell								
Inlet Size	1/2-in.	1/2-in.	1/2-in.	1/2-in.	1/2-in.	1/2-in.	1/2-in.	3/4-in.	3/4-in.
Pilot Assembly	Honeywell								
Controls									
Limit Control Range	130 _ F to 220 _ F								
Pressure/Temperature Gauge	0 to 75 PSIG / 70 _ F to 320 _ F								
Pressure Relief Valve Setting	30 lbs.	30 lbs.	30 lbs.	30 lbs.	30 lbs.	30 lbs.	30 lbs.	30 lbs.	30 lbs.
Spark Generator	Integrated High Limit and Electronic Control								
Circulator Relay - Aquastat									
Vent Damper*	4	5	5	6	6	7	7	8	9
Circulator									
Taco	007								
Full Load Amps	0.70								
Flange Size FPT	1 1/4-in.								

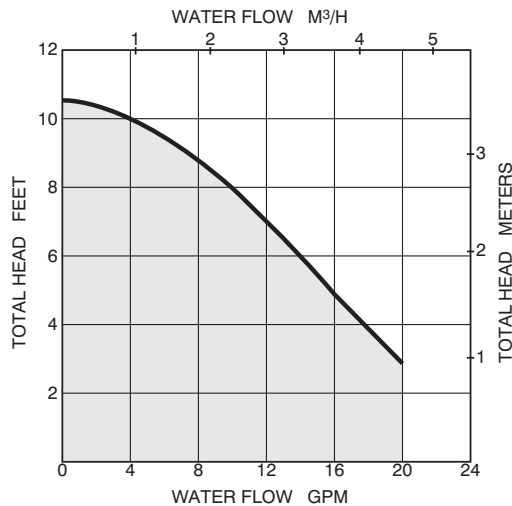


Fig. 4 – Circulator Curve

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