

BW3 GAS-FIRED WATER BOILER SERIES C

PRODUCT DATA

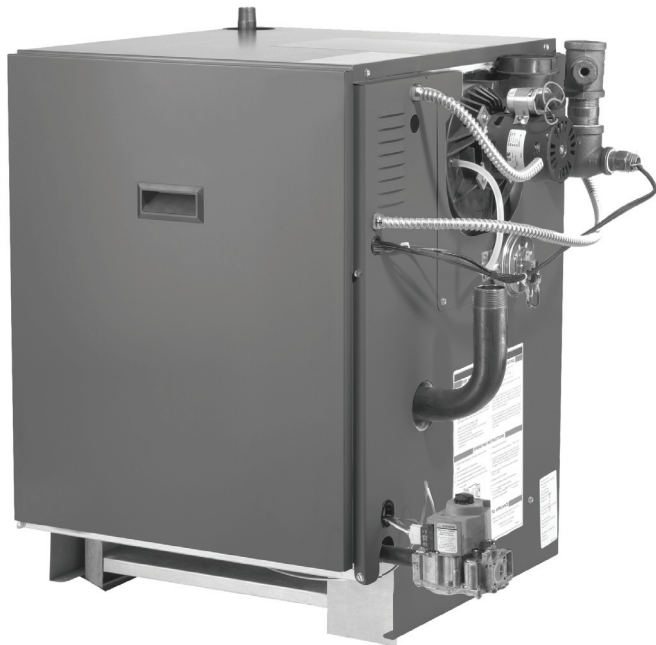
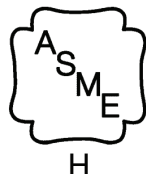


Fig. 1 – Model BW3

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The Model BW3 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 BW3 boiler is CSA certified for use with natural gas and is field convertible for use with propane gas when a factory-authorized conversion kit is used.

Features

Range of Capacities

These boilers are available in sizes 42,500 to 225,000 BTUH.

2012 DOE Compliant

The BW3 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 comes fully assembled, including all controls (except thermostat and expansion tank). Factory pre-wired for quick connection of supplied circulator pump. Easily identified field connections for gas, electric, water, and room thermostat.

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 induced draft system to simplify installation. No external draft diverter is needed. Category I horizontal venting with compatible power venter.

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 6-ft. (1.8 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.

No Automatic Vent Damper Required

The BW3 boiler is an induced draft design and does not require or use an automatic vent damper for chimney venting.

Sections Tested

Each section is hydrostatically tested per ASME Section H requirements. The maximum allowable working pressure is 50 psig for a hot water boiler.

Propane Convertible

With factory approved conversion kit accessory.

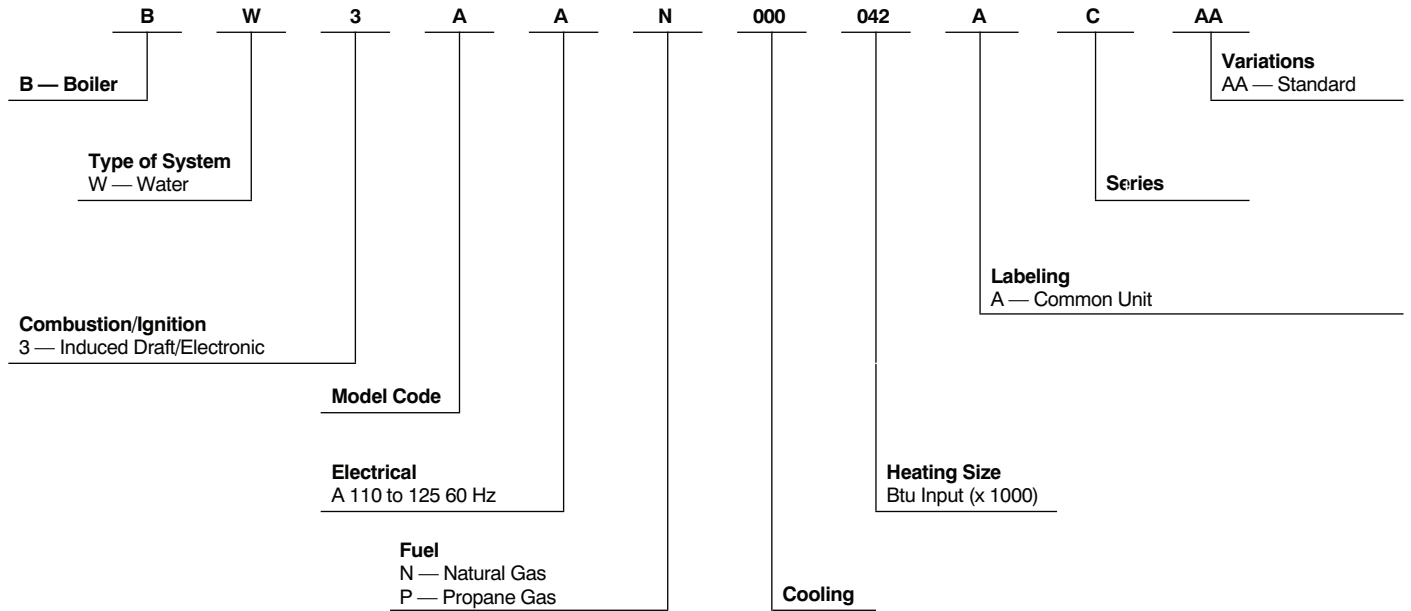


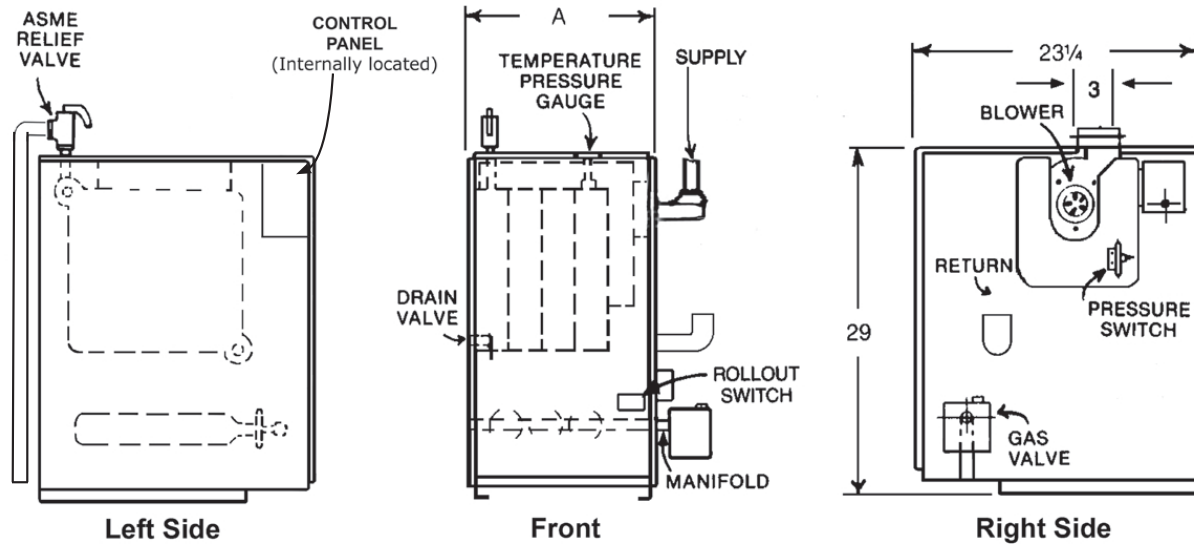
Fig. 2 – Model Number Nomenclature

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Table 1 – 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*	KBAHL0101DNK
Combustible Floor Base - 2 through 5 section models	KBASB0301DNK
Combustible Floor Base - 6 and 7 section models	KBASB0401DNK
Low Water Cut-Off Kit	KBALW0101DNK
Gas Conversion Kit Natural to Propane	KBANP1001DNK
Gas Conversion Kit Propane to Natural	KBAPN1001DNK

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



Model	Width (A)
042	11
075	14-1/4
112	17-1/2
150	20-3/4
187	24
225	27-1/4

Fig. 3 – Dimensions

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Table 2 – Clearances

PART OF BOILER	COMBUSTIBLE - IN. (mm)
Right Side (Control Side)	8 (203 mm)*
Left Side	6 (152 mm)
Top	6 (152 mm)
Back	6 (152 mm)
Front	18 (457 mm)*
Flue/Vent Connector	6 (152 mm)

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

Table 3 – Ratings and capacities*

MODEL	GAS TYPE	MAX INPUT (BTUH)	HEATING CAPACITY (BTUH)	AFUE %	NET RATINGS (BTUH)	BOILER WATER CAPACITY (GALLONS)	APPROXIMATE SHIP WEIGHT (LBS.)
BW3AAN042	Natural	42,500	36,000	84.4	31,000	1.7	202
BW3AAN075	Natural	75,000	63,000	83.4	55,000	3.0	255
BW3AAN112	Natural	112,500	94,000	83.0	82,000	4.2	305
BW3AAN150	Natural	150,000	125,000	82.7	109,000	5.5	362
BW3AAN187	Natural	187,500	155,000	82.3	135,000	6.7	411
BW3AAN225	Natural	225,000	186,000	82.0	162,000	8.0	466

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

Table 4 – Specifications

UNIT SIZE	042	075	112	150	187	225
General Data						
Sections -Fine Grain Cast Iron	2	3	4	5	6	7
Burners-Stainless/Titanium Alloy	1	2	3	4	5	6
Burners Orifice - Drill Size (Natural)	32	34	34	34	34	34
Gas Controls						
Gas Valve	Honeywell Intermittent Pilot					
Inlet Size	1/2-in.					
Pilot Assembly	Honeywell					
Controls						
Limit Control Range	140_ F to 220_ F					
Pressure/Temperature Gauge	0 to 60 Psig / 60_ F to 260_ F					
Pressure Relief Valve Setting	30 Psig					
Spark Generator	Honeywell					
Circulator Relay - Aquastat	Honeywell (Factory Installed)					
Circulator						
Taco	007					
Full Load Amps	0.76					
Flange Size FPT	1 1/4-in.					

Table 5 – 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	50va—@ 24v

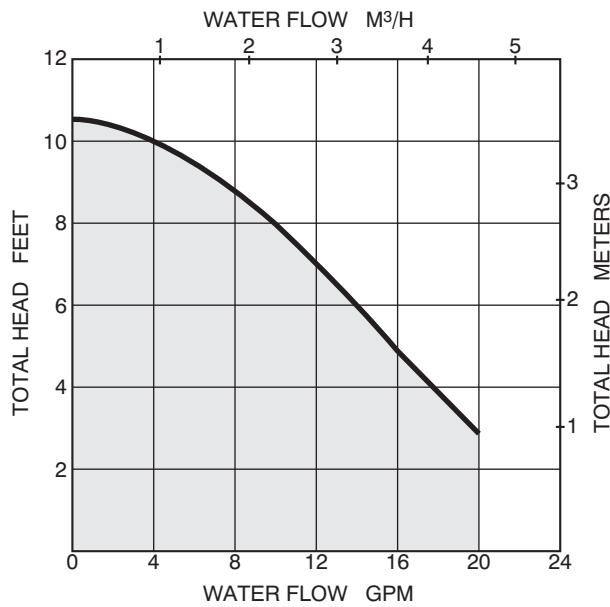


Fig. 4 – Circulator Curve

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