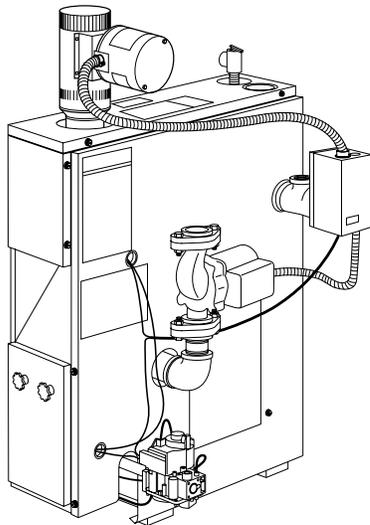
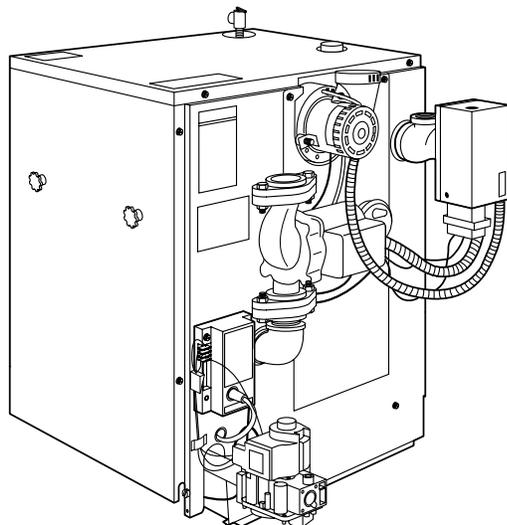


## Product Data



**MODEL BW1, BW2**  
Series B



**MODEL BW3**  
Series B

### MODELS BW1, BW2, and BW3

Models BW1 and BW2 Gas-Fired Hot Water Boilers provide fast heat quietly and economically to assure the finest in hydronic heating. Model BW3 Gas-Fired Induced Combustion Water Boilers are the answer to energy-efficient residential 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 BW1, BW2 and BW3 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.

### FEATURES

**RANGE OF CAPACITIES**—BW1 and BW2 boilers are available in sizes 37,500 to 280,000 BTUH. The BW3 boiler is available in sizes from 42,500 to 225,000.

**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.

**INTEGRAL DRAFT**—These boilers incorporate an integral draft system to simplify installation. No external draft diverter is needed.

**TITANIUM COMPOSITE BURNERS**—Provide quiet operation, corrosion resistance and improved combustion efficiency. Propane convertible – with accessory kit.

**CONTROLS**—An automatic gas valve and continuous pilot or intermittent pilot provide quiet, dependable operation of the burners. Factory-installed 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. of BX conduit for easy installation for supply-side plumping.

**INSULATED CASING**—The casing is fully insulated with fiberglass for maximum operating efficiency and economy.

**AUTOMATIC VENT DAMPER**—The BW1 and BW2 boilers are CSA design certified for use with the factory-supplied automatic vent damper. The BW3 boiler is an induced draft design and does not require or use an automatic vent damper. These boilers are category 1 for venting purpose.

**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.

**WARRANTY**—The cast-iron sections are covered by a non-prorated 20-year warranty on the entire assembly. All other parts are covered by a 5-year limited warranty.



## BOILER ACCESSORIES

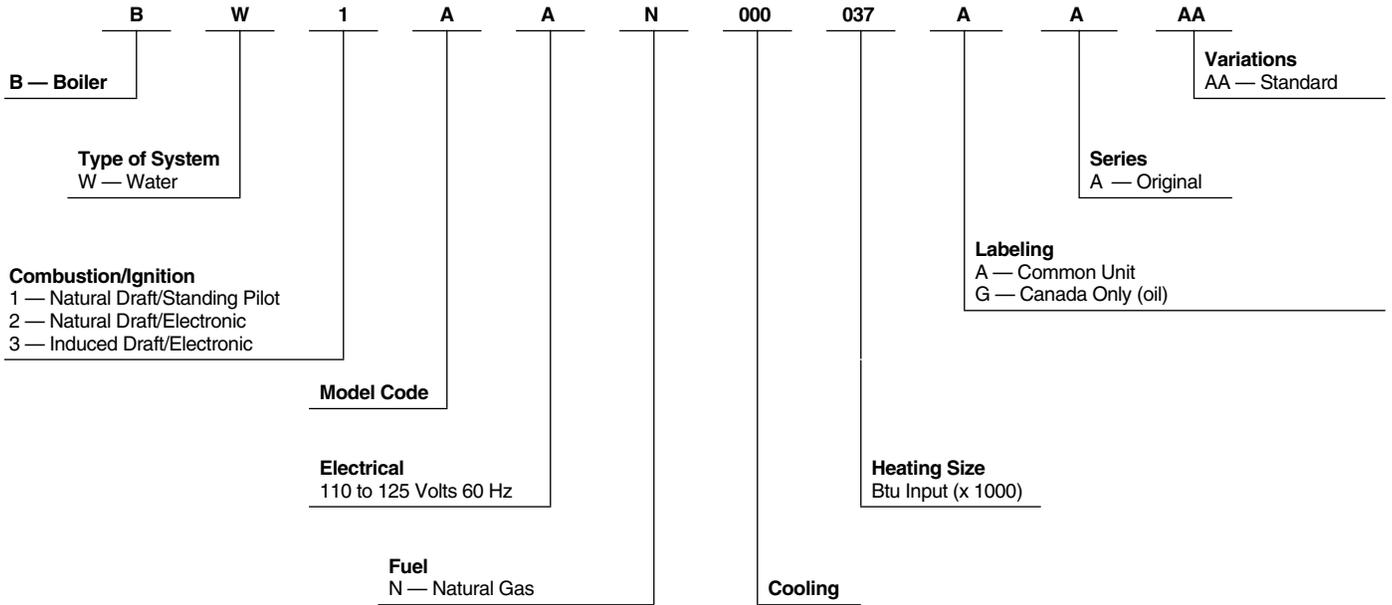
BW1/BW2/BW3	
DESCRIPTION	PART NO.
Filltrol Package (Up to 75,000 Btuh Input)	KBAFP0101DNK
Filltrol Package (Up to 150,000 Btuh Input)	KBAFP0201DNK
Filltrol Package (Over 150,000 Btuh Input)	KBAFP0301DNK
High Limit Control	KBAHL0101DNK
Combustible Floor Base (2 thru 6 section models) 2 through 6 section BW1/BW2, 2 through 5 BW3	KBASB0301DNK
Combustible Floor Base (7 thru 9 section models) 7 through 9 section BW1/BW2, 6 and 7 section BW3	KBASB0401DNK
Zoning Valve 3/4 in.	KBAZV0101DNK
Zoning Valve 1 in.	KBAZV0201DNK
Low Water Cut-off Kit	KBALW0101DNK
Gas Conversion Kit Natural to Propane Series A Boiler Only	KBANP0101DNK
Gas Conversion Kit Natural to Propane	KBANP0201DNK
Gas Conversion Kit Propane to Natural	KBAPN0201DNK
<b>NOTE:</b> There was never a Natural to Propane conversion kit for BW/BS boiler prior to 1799V.	

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

BW1A

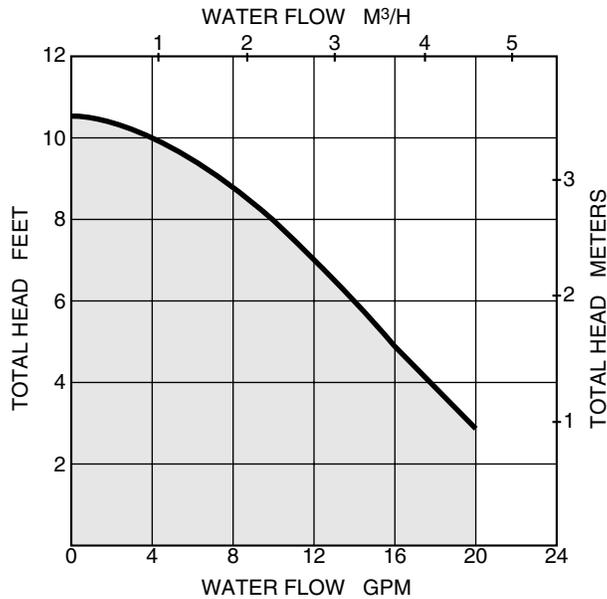
## MODEL NUMBER NOMENCLATURE

**BW1AAN00037AAAA**



**BW1A**

## CIRCULATOR CURVE



**WATER BOILER CIRCULATOR CURVE**

## ELECTRICAL DATA

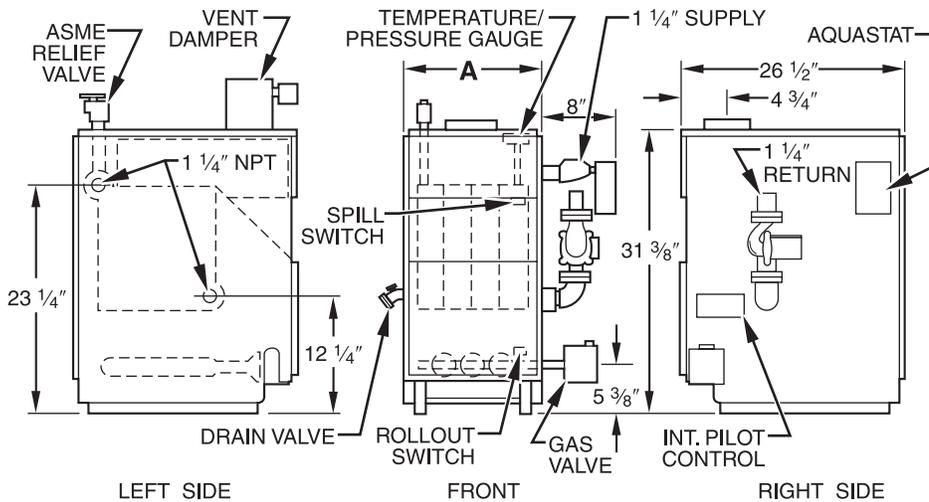
<b>ALL MODELS</b>	
Voltage—Hertz—Phase	115 — 60 — 1
Minimum Branch Circuit Wire Size (AWG)	14
Maximum Fuse Size (Amps)	15
Control Circuit Power Available	40va—@ 24v

## SPECIFICATIONS

BW1/BW2 UNIT SIZE		037	070	105	140	175	210	245	280
<b>GENERAL DATA</b>									
Sections—Fine Grain Cast Iron	No.	2	3	4	5	6	7	8	9
Burners—Stainless/Titanium Alloy	No.	1	2	3	4	5	6	7	8
Burners—Orifice Drill Size	Natural	36	36	36	36	36	36	36	36
<b>GAS CONTROLS — STANDING PILOT (BW1)</b>									
Gas Valve		Honeywell							
Inlet Size	In.	1/2 FPT						3/4 FPT	
Pilot Assembly		Honeywell							
<b>GAS CONTROLS — INTERMITTENT PILOT (BW2)</b>									
Gas Valve		Honeywell							
Inlet Size	In.	1/2 FPT						3/4 FPT	
Pilot Assembly		Honeywell							
Spark Generator		Honeywell/UTEC							
<b>CONTROLS</b>									
Limit Control Range	°F	140–240							
Pressure/Temperature Gauge	Psig	10–70							
	°F	60–320							
Pressure Relief Valve Setting	Psig	30							
Circulator Relay—Aquastat		Honeywell (Factory Installed)							
Vent Damper*	In.	4†	5	6			7		
<b>CIRCULATOR</b>									
Taco	Model	007							
Full Load Amps		0.70							
Flange Size FPT	In.	1-1/4							

\* Factory authorized and listed, field installed.

## DIMENSIONS BW1 and BW2 MODELS



A04205

### DIMENSIONS (IN.)

UNIT SIZE	A	VENT CONNECTION
037	8	3
070	11-1/4	5
105	14-1/2	6
140	17-3/4	6
175	21	7
210	24-1/4	7
245	27-1/2	7
280	30-3/4	7

### CLEARANCES (IN.)

RIGHT SIDE	6 (2-5 Section)* 24 (6-9 Section)*
LEFT SIDE	6 (2-5 Section) 24 (6-9 Section)
TOP	6
BACK	6
FRONT	6*

\* Service clearance requirement 24 in.

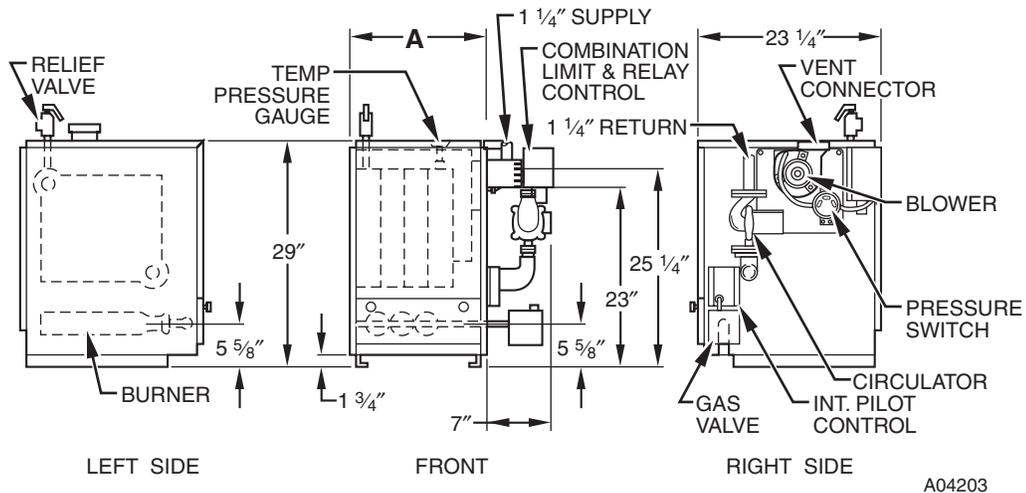
## SPECIFICATIONS

BW3 UNIT SIZE		042	075	112	150	187	225
Sections—Fine Grain Cast-Iron	No.	2	3	4	5	6	7
GAS CONTROLS — INTERMITTENT PILOT							
Gas Valve		Honeywell					
Inlet Size	In.	1/2 FPT					
Pilot Assembly		Honeywell					
Spark Generator		Honeywell					
Burners—Stainless/Titanium Alloy	No.	1	2	3	4	5	6
Burner Orifice—Drill Size	Natural	32	34	34	34	34	34
CONTROLS							
Limit Control Range	°F	180–240					
Pressure/Temperature Gauge	Psig	0–60					
	°F	60–260					
Pressure Relief Valve Setting	Psig	30					
Circulator Relay—AquaStat		Honeywell (Factory Installed)					
CIRCULATOR							
Taco	Model	007					
Full Load Amps		0.70					
Flange Size FPT	In.	1-1/4					

**BW1A**

## DIMENSIONS

### BW3 MODELS



### DIMENSIONS (IN.)

UNIT SIZE	A	VENT CONNECTION
042	11	4*
075	14-1/4	4*
112	17-1/2	4*
150	20-3/4	4*
187	24	4
225	27-1/4	4

### CLEARANCES (IN.)

RIGHT SIDE	6*
LEFT SIDE	6
TOP	6
BACK	6
FRONT	6*

\*Service clearance requirement 24 in.

\*With factory-supplied adapter installed.

**RATINGS AND CAPACITIES\***

UNIT BW1, BW2	GAS TYPE	NUMBER OF SECTIONS	MAX INPUT (BTUH)	HEATING CAPACITY (BTUH)	NET RATING (BTUH)	AFUE %		APPROX SHIP. WT (LB)
						BW1	BW2	
AAN037	Natural	2	37,500	30,000	26,000	80.0	81.1	217
AAN070	Natural	3	70,000	57,000	50,000	80.4	81.6	275
AAN105	Natural	4	105,000	85,000	74,000	80.4	81.5	334
AAN140	Natural	5	140,000	113,000	98,000	80.3	81.3	396
AAN175	Natural	6	175,000	142,000	124,000	80.2	81.1	458
AAN210	Natural	7	210,000	170,000	148,000	80.1	81.0	530
AAN245	Natural	8	245,000	198,000	172,000	80.0	80.8	586
AAN280	Natural	9	280,000	226,000	197,000	80.0	80.7	643

\* Ratings are for altitudes to 2000 ft. Unit ratings for altitudes over 2000 ft are 4% less for each 1000 ft above sea level.

**RATINGS AND CAPACITIES\***

UNIT	GAS TYPE	NO. SEC.	MAX INPUT (BTUH)	RATINGS HEATING CAPACITY‡	AFUE %	NET RATING	BOILER WATER CAPACITY (GALLONS)	APPROX SHIP. WT (LB)
				BTUH		BTUH†		
BW3AAN042	Natural	2	42,500	36,000	84.4	31,000	1.75	211
BW3AAN075	Natural	3	75,000	63,000	83.4	55,000	3.00	263
BW3AAN112	Natural	4	112,500	94,000	83.0	82,000	4.25	320
BW3AAN150	Natural	5	150,000	125,000	82.7	109,000	5.50	369
BW3AAN187	Natural	6	187,500	155,000	82.3	135,000	6.75	418
BW3AAN225	Natural	7	225,000	186,000	82.0	162,000	8.00	471

\* Gas input ratings are for elevations up to 2000 ft. For elevations above 2000 ft, reduce input 4% for each 1000 ft above sea level.

† Selection factors providing for piping loss and starting load are those recommended by the Institute of Boiler and Radiator Manufacturers. Net water boiler ratings are based on an allowance of 1.15.

‡ In accordance with U.S. Government test procedures.

BW1A



