

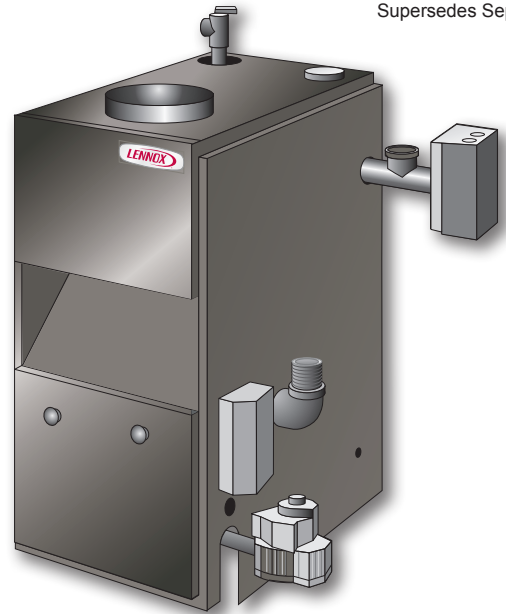


PRODUCT SPECIFICATIONS

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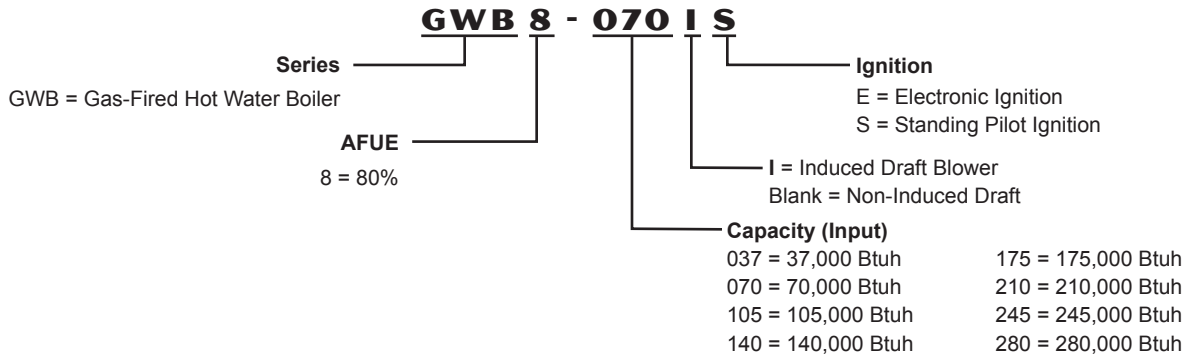


Induced Draft Model
 (Electronic Ignition)



AFUE up to 84.4%
Heating Input – 37,000 to 280,000 Btuh

MODEL NUMBER IDENTIFICATION



FEATURES

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WARRANTY

Cast iron boiler assembly - Limited twenty year warranty in residential applications only.

All other covered components - Limited one year warranty in residential applications.

Refer to Lennox Equipment Limited Warranty certificate included with equipment for details.

FEATURES

APPROVALS

Low pressure, sectional cast iron boilers are design certified by CSA for use with natural gas or LPG/Propane.

Annual Fuel Utilization Efficiencies are based on US DOE test procedures and FTC labeling regulations.

I=B=R ratings are certified in accordance with standards set by The Hydronics Institute.

Boiler heat exchanger assemblies are constructed and hydrostatically tested in accordance with American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section IV Standards for cast iron heating boilers.

APPLICATIONS

Twenty-two models with heating inputs of 37,500 to 280,000 Btuh.

AFUE's of up to 84.4%.

Available with a choice of electronic or standing pilot ignition.

Natural gas or LPG/Propane (LPG with optional conversion kit).

Boiler applications include radiant floor heating, baseboard heating and zoned heating systems.

Compact size allows easy installation in a basement or utility room.

All units are completely factory assembled with all controls installed and wired.

Each unit is factory test operated to ensure dependable performance.

HEATING SYSTEM

Cast Iron Boiler Assembly

Boiler sections and push nipples are constructed of long life cast iron.

Boiler sections and push nipples expand and contract together, providing positive watertight seal.

Boiler components are easily accessible for cleaning and servicing.

Electronic Ignition ("E" Models Only)

Solid-state electronic spark igniter provides positive ignition of pilot burner on each operating cycle.

Pilot gas is ignited and burns during each running cycle (intermittent pilot) of the boiler.

Main burners and pilot gas are extinguished during the off cycle.

Ignition system permits main gas valve to open only when the pilot burner is proven to be lit.

Pilot operation is fully automatic on demand for heat. Should a loss of flame occur, the main valve closes, shutting down the unit.

Standing Pilot Ignition ("S" Models Only)

Manual lighted standing pilot provides dependable and safe burner ignition.

Automatic Gas Control

Silent operating gas controls provide 100% safety shut off.

24 volt redundant combination gas control valve combines automatic safety pilot, manual shut off option (On-Off), pilot filtration, automatic electric valve (dual) and gas pressure regulation into a compact combination control.

Dual valve design provides double assurance of 100% close off of gas to the pilot and main burners on each off cycle.

Titanium Burners

Titanium composite burners resist corrosion and oxidation.

Superior strength and longevity.

Used with natural or LPG/Propane gas.

Induced Draft Blower ("I" Models)

Heavy duty blower safely vents flue products.

Motor is permanently lubricated and has ball bearings.

Pressure switch prevents unit operation in case of flue blockage of flue outlet.

Circulating Pump

Heavy duty pump is constructed of cast iron.

Bronze isolation ball type valves on inlet and outlet of pump eliminate need to drain system if pump servicing is required.

Pump motor is impedance protected.

Motor and impeller is removeable as a single unit for servicing.

Pump is shipped separately for field installation.

Relief Valve

Furnished as standard for field installation in top of cabinet.

Valve provides for pressure relief of heating system in case of abnormal operating conditions.

Valve opens at 30 psig and is approved by ASME.

Combination Temperature/Pressure Gauge

Located in top of unit cabinet.

Gauge monitors system for safe and reliable operation.

Brass Drain Valve

3/4 in. brass drain valve is furnished for field installation in drain outlet on side of cabinet.

See dimension drawing for location.

OPTIONS

LPG/Propane Conversion Kit

Conversion kit required for field changeover from natural gas.

Kits available for standard and high altitude operation.

See Specifications tables.

FEATURES

VENTING

Blocked Vent Shutoff Sensor (“I” and “E” Models)

Temperature sensitive fusible-link device prevents unit operation in case of flue blockage.

Sensor is furnished as standard and factory installed at the relief opening of the draft diverter.

Vent Damper (Non-induced draft models)

Motorized vent damper electrically interlocks with the gas ignition system to increase efficiency of heating system by reducing loss of heated air up the chimney after burner shut off.

Also reduces chimney infiltration during boiler off cycle.

Furnished as standard for field installation.

OPTIONS

Sidewall Power Venting Kit (Certain Sizes of Induced Draft Models Only)

Required for horizontal venting.

Kit includes ETL listed power venter and control kit.

Control kit includes junction box with pressure switch, aluminum tubing, tubing, conduit connectors and barometric draft control.

Flue piping must be field provided.

See Specifications tables.

CONTROLS

Flame Rollout Switch

Temperature sensitive fusible-link device is furnished and factory installed on the boiler base just outside of the burner box.

Fuse prevents unit operation in the event combustion products passageway through the flueway is reduced or blocked.

Aquastat Limit Control And Circulator Relay

Factory installed immersion type limit control gives protection against abnormal operating conditions.

Limit control adjustable from 140°F to 240°F.

Circulator relay operates pump during thermostat demand.

OPTIONS

Thermostat

See Thermostat bulletins in Controls section and Lennox Price Book for a complete list of thermostats.

CABINET

Constructed of heavy gauge steel with a baked-on enamel paint finish.

Cabinet is fully insulated with fiberglass insulation, keeping cabinet surface temperatures low.

Hole for drain valve (furnished) is furnished on left side of cabinet.

Controls are shipped factory installed on right side of cabinet.

Controls may be field relocated to left side of cabinet (models without induced draft blower).

Water supply and return connections are furnished on both sides of cabinet.

Burner access panel is easily removed for servicing.

Integral draft diverter is part of unit cabinet (models without induced draft blower only).

OPTIONS

Combustible Flooring Base

For applications where it is necessary to locate boiler on a combustible floor, a combustible floor base must be ordered extra for field installation.

See Specifications tables for order number.

SPECIFICATIONS - NON-INDUCED DRAFT MODELS

Model No. - "E" Electronic Ignition Models		GWB8-037E	GWB8-070E	GWB8-105E	GWB8-140E	GWB8-175E	GWB8-210E	GWB8-245E	GWB8-280E		
Model No. - "S" Standing Pilot Models		GWB8-037S	GWB8-070S	GWB8-105S	GWB8-140S	GWB8-175S	GWB8-210S	GWB8-245S	GWB8-280S		
Gas Heating Performance	Heating capacity input - Btuh	37,500	70,000	105,000	140,000	175,000	210,000	245,000	280,000		
	Heating capacity output - Btuh	30,000	57,000	85,000	113,000	142,000	170,000	198,000	226,000		
	¹ Net I=B=R rating - Btuh	26,000	50,000	74,000	98,000	123,000	148,000	172,000	197,000		
	² AFUE - "E" electronic ignition models	81.4%	81.6%	81.5%	81.3%	81.1%	81.0%	80.8%	80.7%		
	² AFUE - "S" standing pilot models	80.0%	80.4%	80.4%	80.3%	80.2%	80.1%	80.0%	80.0%		
Boiler Data	Number of boiler sections	2	3	4	5	6	7	8	9		
	Net boiler heating surface - sq. ft.	4.69	9.38	14.07	18.76	23.45	28.14	32.83	37.52		
	Boiler capacity - U.S. gallons	1.75	3.00	4.25	5.50	6.75	8.00	9.25	10.50		
Connections in.	Flue size diameter (round)		3	5	6	6	7	7	7		
	Gas piping size I.P.S.	Natural gas	1/2 NPT			3/4 NPT					
		LPG/Propane	3/4 NPT								
	Water supply and return size		1-1/4 NPT								
	Drain connection size		3/4 NPT								
Electrical characteristics		120 volts - 60 hertz - 1 phase (less than 12 amps)									
Shipping Data		lbs. - 1 package		232	290	355	426	493	569	631	694

OPTIONAL ACCESSORIES

See Lennox Price Book For Complete Listing of Optional Accessories

LPG/Propane Conversion Kit	Standard (0-5000 ft)	72M80			
	High Altitude (over 5000 ft)	54L58			
Combustible Flooring Base		92P79		18P26	

SPECIFICATIONS - INDUCED DRAFT MODELS

Model No.		GWB8-042IE	GWB8-075IE	GWB8-112IE	GWB8-150IE	GWB8-187IE	GWB8-225IE		
Gas Heating Performance	Heating capacity input - Btuh	42,500	75,000	112,500	150,000	187,500	225,000		
	Heating capacity output - Btuh	36,000	63,000	94,000	125,000	155,000	186,000		
	¹ Net I=B=R rating - Btuh	31,000	55,000	82,000	109,000	135,000	162,000		
	² AFUE	84.4%	83.4%	83.0%	82.7%	82.3%	82.0%		
Boiler Data	Number of boiler sections	2	3	4	5	6	7		
	Net boiler heating surface - sq. ft.	4.61	8.17	11.73	15.29	18.85	22.41		
	Boiler capacity - U.S. gallons	1.75	3.00	4.25	5.50	6.75	8.00		
Connections in.	3 Flue Size diameter (round)	Conventional	4						
		Horizontal	3				4		
	Gas piping size I.P.S.	Natural gas	1/2			3/4			
		LPG/Propane	3/4						
	Water supply and return size		1-1/4 NPT						
Drain connection size		3/4 NPT							
Electrical characteristics		120 volts - 60 hertz - 1 phase (less than 12 amps)							
Shipping Data		lbs. - 1 package		232	290	355	426	493	569

OPTIONAL ACCESSORIES

See Lennox Price Book For Complete Listing of Optional Accessories

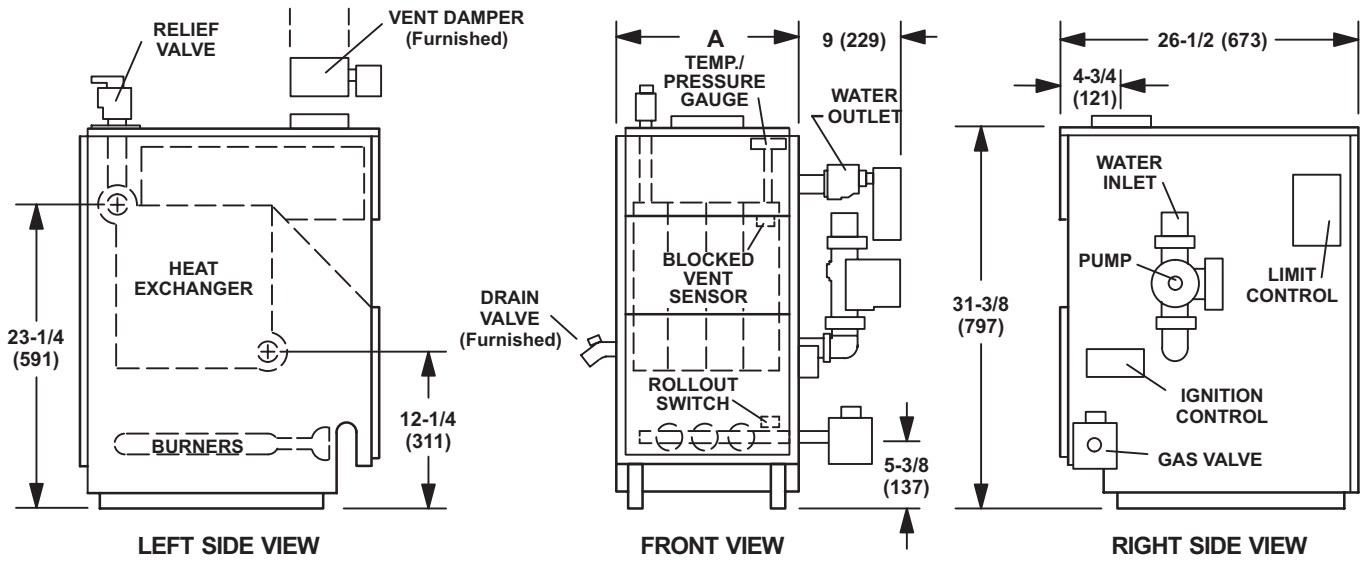
LPG/Propane Conversion Kit	Standard (0-5000 ft.)	72M81			
	High Altitude (5000+ ft.)	54L58			
Combustible Flooring Base		92P79		18P26	
Sidewall Power Venting	Venting Kit	SWG-4 (79J15)		N/A	

¹ I=B=R ratings indicate the amount of equivalent direct radiation each boiler will produce under normal conditions and thermostatic control. Ratings based on an allowance of 1.15 in accordance with the factors shown on the I=B=R Standard as published by The Hydronics Institute. Selection of boiler size should be based on "Net I=B=R Rating" being equal to or greater than the calculated heat loss of the building.

² Annual Fuel Utilization Efficiency based on US DOE test procedures and FTC labeling regulations.

³ 3 in. to 4 in. adaptor furnished for flue connection to induced draft blower.

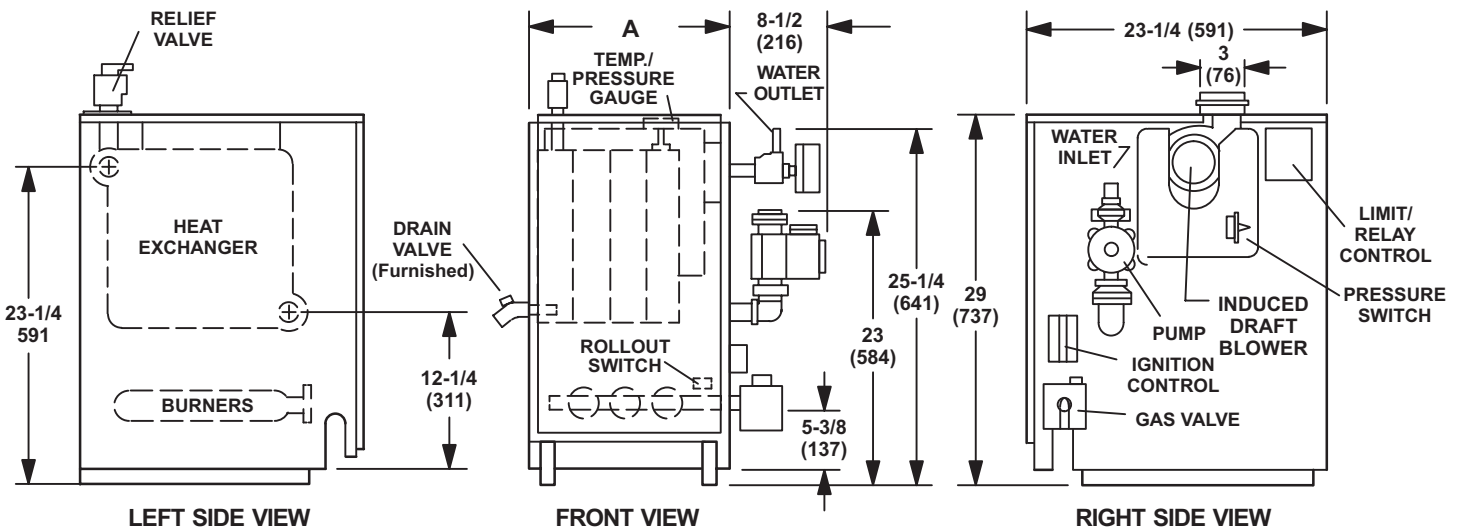
DIMENSIONS - INCHES (MM) - NON-INDUCED DRAFT MODELS



NOTE - Pump is shipped separately with unit for field installation.

Model No.	A	
	in.	mm
GWB8-037E/S	8	203
GWB8-070E/S	11-1/4	286
GWB8-105E/S	14-1/2	368
GWB8-140E/S	17-3/4	451
GWB8-175E/S	21	533
GWB8-210E/S	24-1/4	616
GWB8-245E/S	27-1/2	699
GWB8-280E/S	30-3/4	781

DIMENSIONS - INCHES (MM) - INDUCED DRAFT MODELS



NOTE - Pump is shipped separately with unit for field installation.

Model No.	A	
	in.	mm
GWB8-042IE	11	279
GWB8-075IE	14-1/4	362
GWB8-112IE	17-1/2	445
GWB8-150IE	20-3/4	527
GWB8-187IE	24	610
GWB8-225IE	27-1/4	692

HIGH ALTITUDE DERATE

CSA certified units for the U.S. must be derated when installed at an elevation of more than 2000 feet above sea level. If unit is installed at an altitude higher than 2000 feet, the unit must be derated 4% for every 1000 feet above sea level. Thus, at an altitude of 4000 feet, the unit would require a derate of 16%.

CSA certified units for Canada must be derated when installed at an elevation of more than 2000 feet above sea level. If unit is installed at an altitude higher than 2000 feet, the unit must be derated 10% for elevations between 2000 feet and 4500 feet above sea level.

NOTE — This is the only permissible derate for these units.

INSTALLATION CLEARANCES - INCHES (MM)

Type	Non-Induced Draft Models	Induced Draft Models
Side	---	6 (152)
Side (037 - 140 models)	6 (152)	---
Side (175 - 280 models)	24 (914)	---
Gas Supply/Control Side	24 (914)	
Rear	6 (152)	
Top	6 (152)	
Service Clearance (Front)	24 (914)	
¹ Floor		Combustible
Flue Pipe	Vertical	6 (152)
	Horizontal	---
	Type "B" vent pipe (vertical venting only)	1 (25)

NOTE - Air for combustion must conform to the methods outlined in the National Fuel Gas Code (NFPA 54/ANSI-Z223.1) or the National Standard of Canada CAN/CSA-B149.1 "Natural Gas and Propane Installation Code".

NOTE - In the U.S. flue sizing must conform to the methods outlined in the current National Fuel Gas Code (NFPA 54/ANSI-Z223.1) or applicable provisions of local building codes. In Canada flue sizing must conform to the methods outlined in National Standard of Canada CAN/CSA-B149.1.

¹ Clearance for installation on combustible floor if optional combustible floor base is installed between the boiler and the combustible floor.

REVISIONS

Sections	Description of Change
Dimensions	Added note that circulating pump is furnished separately with unit for field installaiton.
Optional Accessories	Deleted SWG-5 Sidewall Power Venting Kit.



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NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

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