



Lochinvar[®]
High Efficiency Water Heaters, Boilers and Pool Heaters

**KNIGHT
HEATING BOILER
Submittal Sheet**

KBN-Sub-04

KNIGHT[®] FLOOR STANDING AND WALL MOUNT HEATING BOILERS

JOB NAME _____

LOCATION _____

ARCH./ENGR. _____

WHOLESALER _____

MECH. CONTRACTOR _____

MODEL NO. _____

TYPE GAS _____

Btu/hr INPUT _____

Btu/hr OUTPUT _____

NOTES

Standard Features

- 93% AFUE Efficiency (KBN080-285) (WBN050-210)
- 93.3% Thermal Efficiency (KBN399-500)
- ENERGY STAR[®] Qualified
- Modulating Burner with 5:1 Turndown
- ASME Stainless Steel Heat Exchanger
- Gasketless Heat Exchanger Design
- 30 psi Relief Valve (KBN080-285) (WBN050-210)
- 50 psi Relief Valve (KBN399-500)
- SMART SYSTEM[™] Operating Control, with:
 - Digital Operating Control
 - 2-Line, 16-Character LCD Display
 - Password Security
 - Outdoor Reset
 - Built-in Sequencing for 2-8 Boilers
 - 0 – 10 Vdc Input Control
 - Product Service Indicator
 - Time Clock
 - PC Connection Port
- Inlet & Outlet Temperature Sensors
- Easy-Access Terminal Strip
- Low-Water Flow Indication
- Automatic Reset High Limit
- Contacts on Any Failure
- 3-Pump Control (Boiler, System and DHWP)
- Pump Relay with Freeze Protection
- Boiler Circulating Pump (KBN080-285) (WBN050-210)
- Direct-Spark Ignition
- Low-NO_x Operation
- Natural to LP Gas Conversion Kit
- Direct-Vent Sealed Combustion
- PVC Venting up to 100 Feet
- Sidewall Vent Terminals
- Zero Clearance to Combustibles
- Adjustable Leveling Legs (KBN Models only)
- Wall Mount Bracket (WBN Models only)
- 12-Year Limited Warranty (See Warranty for Details)

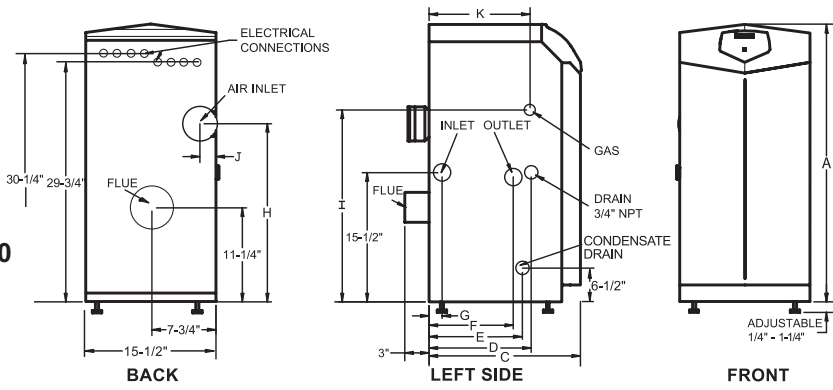
Optional Equipment

Place an X in the box by all options that apply

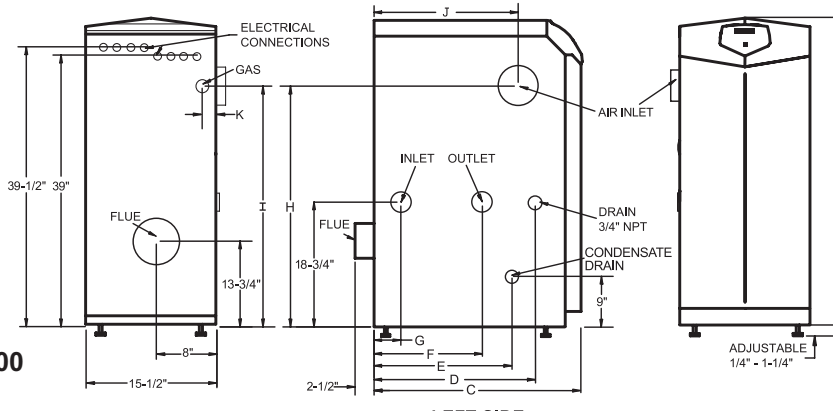
- Adjustable High Limit w/Manual Reset
- Alarm Bell on Any Failure
- Condensate Neutralization Kit
- Concentric Vent Kit
- Flow Switch
- High Gas Pressure Switch (KB500)
- Low Gas Pressure Switch (KB500)
- Low Water Cut-off w/ Manual Reset & Test
- Multi-Stack Frame (KBN models only)
- SMART SYSTEM[™] PC Software
- SMART SYSTEM[™] Pocket PC Software

KNIGHT Heating Boiler and Wall Mount Dimensions & Specifications

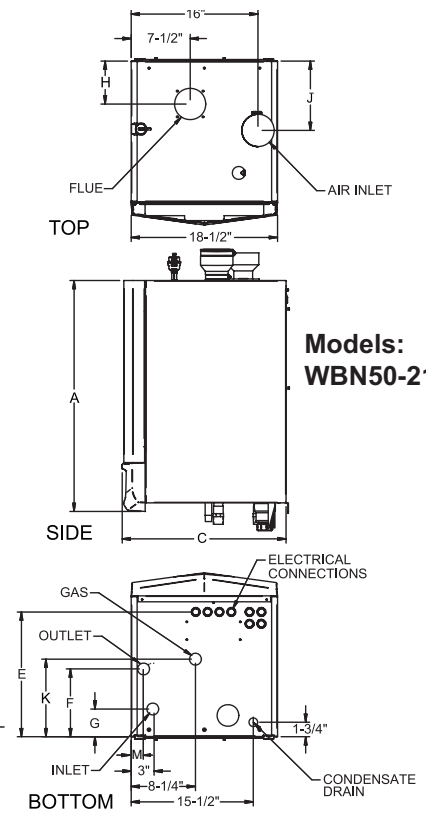
**Models:
KBN80-210**



**Models:
KBN285-500**



**Models:
WBN50-210**



Model Number	Btu/Hr Input Modulation	Max. Btu/Hr Output	Net I=B=R	A	C	D	E	F	G	H	I	J	K	M	Water Conn.	Gas Conn.	Air Inlet	Vent	Ship. Wt.
KBN080	16,000 - 80,000	73,000	63	33-1/4"	14"	7"	5-3/4"	5"	3"	20-1/2"	22"	1-3/4"	6-1/2"	N/A	1"	1/2"	3"	3"	125
KBN105	21,000 - 105,000	95,000	83	33-1/4"	14"	6-1/2"	5-3/4"	4-1/2"	1-1/2"	20-1/2"	22"	1-3/4"	6-1/2"	N/A	1"	1/2"	3"	3"	129
KBN150	30,000 - 150,000	136,000	118	33-1/4"	18"	12-1/4"	11-1/2"	10"	1-1/2"	21-1/4"	23"	1-3/4"	12"	N/A	1"	1/2"	3"	3"	157
KBN210	42,000 - 210,000	191,000	166	33-1/4"	22-1/4"	16-1/2"	15-3/4"	14-1/4"	5-1/4"	21-1/4"	23"	1-3/4"	16-1/4"	N/A	1"	1/2"	3"	3"	172
KBN285	57,000 - 285,000	259,000	225	42-1/2"	19-3/4"	12-3/4"	13-1/2"	6"	2"	34"	31"	11-3/4"	4-1/4"	N/A	1-1/4"	3/4"	4"	4"	224
KBN399	79,800 - 399,000	360,000	313	42-1/2"	27"	21"	20-3/4"	14"	3-1/2"	34"	34"	18-3/4"	2"	N/A	1-1/2"	1"	4"	4"	285
KBN500	100,000 - 500,000	451,000	392	42-1/2"	31-1/4"	21"	25"	14"	3-1/2"	32-1/2"	35-3/4"	17-3/4"	2"	N/A	1-1/2"	1"	4"	4"	305
WBN050	10,000 - 50,000	45,000	39	29-1/4"	15-3/4"	N/A	10-3/4"	10-3/4"	2"	6-3/4"	N/A	3-1/4"	4-1/4"	2-3/4"	1"	1/2"	2"	2"	130
WBN080	16,000 - 80,000	73,000	63	29-1/4"	15-3/4"	N/A	10-3/4"	10-3/4"	2"	6-3/4"	N/A	3-1/4"	4-1/4"	2-3/4"	1"	1/2"	2"	2"	130
WBN105	21,000 - 105,000	95,000	83	29-1/4"	15-3/4"	N/A	10-3/4"	10-1/4"	3-1/2"	5-1/2"	N/A	3-1/4"	4-1/4"	2-3/4"	1"	1/2"	2"	2"	134
WBN150	30,000 - 150,000	136,000	118	29-1/4"	20-3/4"	N/A	15-3/4"	8-1/2"	3-1/2"	5-1/2"	N/A	8-3/4"	9-3/4"	1-1/2"	1"	1/2"	3"	3"	162
WBN210	42,000 - 210,000	191,000	166	29-1/4"	25"	N/A	20"	12"	3-1/2"	5-1/2"	N/A	13"	14"	1-1/2"	1"	1/2"	3"	3"	177

Notes: Performance data based on manufacturer's test results. Indoor installation only. All information subject to change. Change "N" to "L" for LP gas models.



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