



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

**KNIGHT
HEATING BOILER
Submittal Sheet**

KBN-Sub-02

KNIGHT™ HEATING BOILERS

JOB NAME _____

LOCATION _____

ARCH./ENGR. _____

WHOLESALE _____

MECH. CONTRACTOR _____

MODEL NO. _____

TYPE GAS _____

Btu/hr INPUT _____

Btu/hr OUTPUT _____

NOTES

Standard Features

- 93% AFUE Efficiency (KB 080-285)
- 90.3% Thermal Efficiency (KB 399-500)
- Modulating Burner with 5:1 Turndown
- ENERGY STAR® Qualified
- ASME Stainless Steel Heat Exchanger
- Direct Vent Sealed Combustion
- PVC Venting up to 100 Feet
- Digital Operating Control
- 2-Line, 16-Character LCD Display
- Internal Cascading Sequencer
- 30 psi Relief Valve (KB 080-285)
- 50 psi Relief Valve (KB 399-500)
- Automatic Reset High Limit
- Password Security
- Direct Spark Ignition
- Low NOx Operation
- Low Gas Pressure Operation
- Zero Clearance to Combustibles
- Easy Access Terminal Strip
- Natural to LP Gas Conversion Kit
- Inlet & Outlet Temperature Sensors
- Product Service Indicator
- Outdoor Reset
- Pump Relay w/ Freeze Protection
- Low Water Flow Indication
- Domestic Hot Water Prioritization w/Pump Control
- Boiler Circulating Pump w/ Control (KB 080-285)
- Adjustable Leveling Legs
- Sidewall Vent Terminals
- On/Off Switch
- 0—10 Vdc Input Control
- Contacts on Any Failure
- 12 Year Limited Warranty (See Warranty for Details)

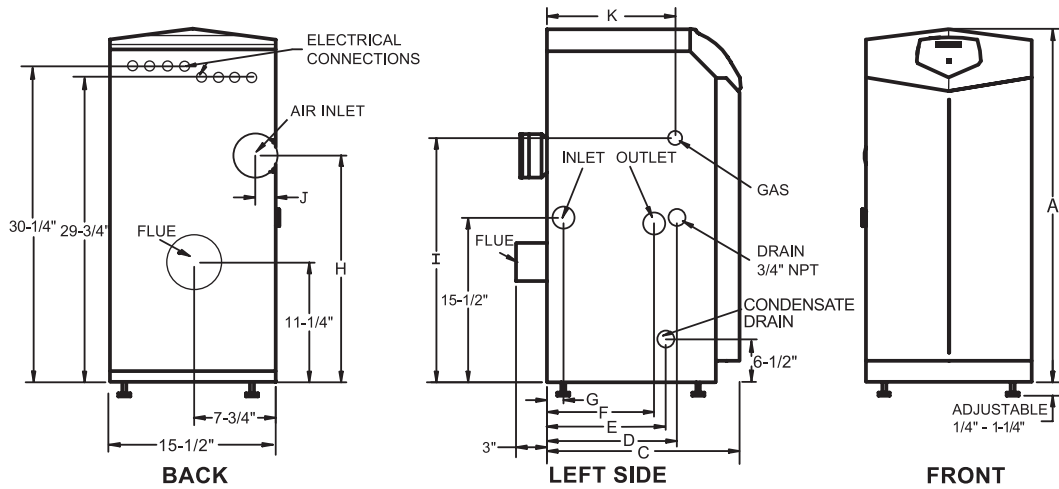
Optional Equipment

Place an X in the box by all options that apply

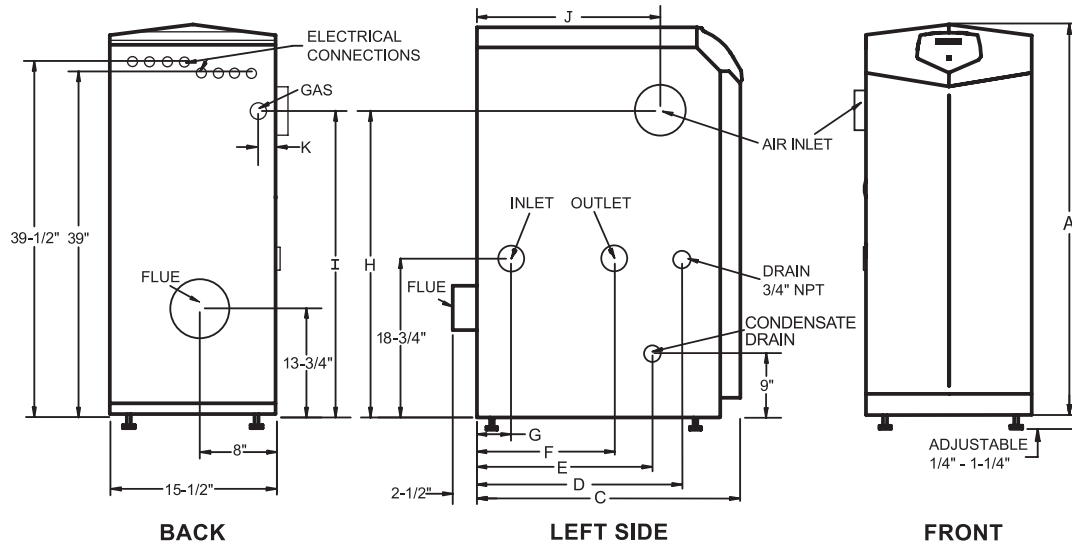
- Adjustable High Limit w/Manual Reset
- Alarm Bell on Any Failure
- Condensate Neutralization Kit
- Concentric Vent Kit (3½)
- Flow Switch
- High Gas Pressure Switch (KB500)
- Low Gas Pressure Switch (KB500)
- Low Water Cut-off w/ Manual Reset and Test
- Multi-Stack Frame
- SMART SYSTEM™ PC Software
- SMART SYSTEM™ Pocket PC Software
- System Temperature Sensor
- Wall Mount Kit (KB80-105)

KNIGHT Heating Boiler Dimensions & Specifications

**Models:
80-210**



**Models:
285-500**



Model Number	Btu/Hr Input Modulation	Max. Btu/Hr Output	Net I=B=R	A	C	D	E	F	G	H	I	J	K	Water Conn.	Gas Conn.	Air Inlet	Vent	Shipping Weight
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"	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"	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"	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"	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"	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"	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"	35"	35"	22"	5-3/4"	1-1/2"	1"	4"	4"	305

Notes: Performance data based on manufacturer's test results. Indoor installation only. All information subject to change.
Change "N" to "L" for L.P. gas models. *KBN500 not available in L.P. Gas.



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Lochinvar Corporation • 300 Maddox Simpson Pkwy • Lebanon, TN 37090 • 615-889-8900 / Fax: 615-547-1000

www.Lochinvar.com