



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

**KNIGHT
HEATING BOILER
Submittal Sheet**

KBN-Sub-09

KNIGHT[®] FLOOR STANDING AND WALL MOUNT HEATING BOILERS

JOB NAME _____

LOCATION _____

ARCH./ENGR. _____

WHOLESALE _____

MECH. CONTRACTOR _____

MODEL NO. _____

TYPE GAS _____

Btu/hr INPUT _____

Btu/hr OUTPUT _____

NOTES

Standard Features

- > Energy Star[®] Qualified
- > Up to 96% DOE AFUE Efficiency
- > Modulating Burner with 5:1 Turndown
- > Direct-Spark Ignition
- > Low NOx Operation
- > Field Convertible from Natural to LP Gas
- > Vertical & Horizontal Direct-Vent
- > PVC, CPVC or SS Venting up to 100 Feet
- > Factory Supplied Sidewall Vent Termination
- > ASME Stainless Steel Heat Exchanger
- > Automatic Reset High Limit
- > Inlet & Outlet Temperature Sensors
- > Boiler Circulating Pump
- > 30 psi ASME Relief Valve
- > Adjustable Leveling Legs (KB Models only)
- > Wall Mount Bracket (WB Models only)
- > Zero Clearances to Combustible Material
- > 12 Year Limited Warranty (See Warranty for Details)

SMART SYSTEM[™] Features

- > SMART SYSTEM Digital Operating Control
- > 2 line, 16 Character Display
- > Dual Level Password Security
- > Domestic Hot Water Prioritization
- > Built in Cascading Sequencer for up to 8 Boilers
- > 0-10 VDC Input Control
- > Outdoor Reset Control with Outdoor Air Sensor
- > Low Water Flow Safety Control & Indication
- > Alarm on Any Failure Contacts
- > Service Reminder
- > Freeze Protection
- > Night Setback
- > Time Clock
- > Three Pump Control (System, Boiler & DHWP)
- > Data Logging
 - > Examples: Hours Running, Space Heating
- > Programmable System Efficiency Optimizers
 - > Examples: Anti-cycling, Ramp Delay

Optional Equipment

Place an X in the box by all options that apply

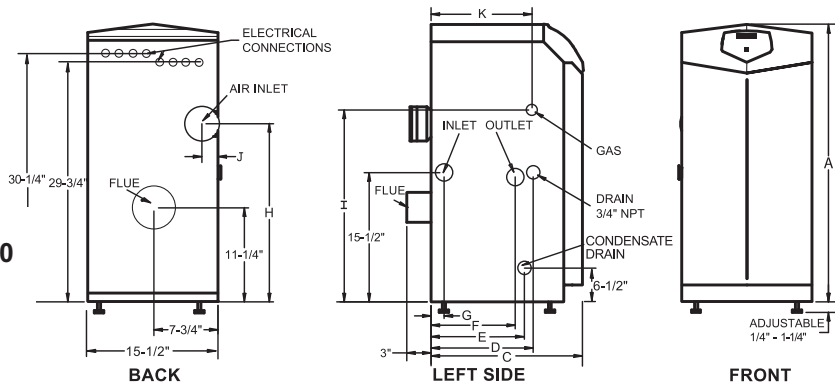
- Adjustable High Limit w/ Manual Reset
- Flow Switch
- Low Water Cutoff w/Manual Reset & Test Alarm Bell
- Concentric Vent Kit
- Condensate Neutralization Kit
- SMART SYSTEM PC Software
- Multi-Stack Frame

Firing Codes

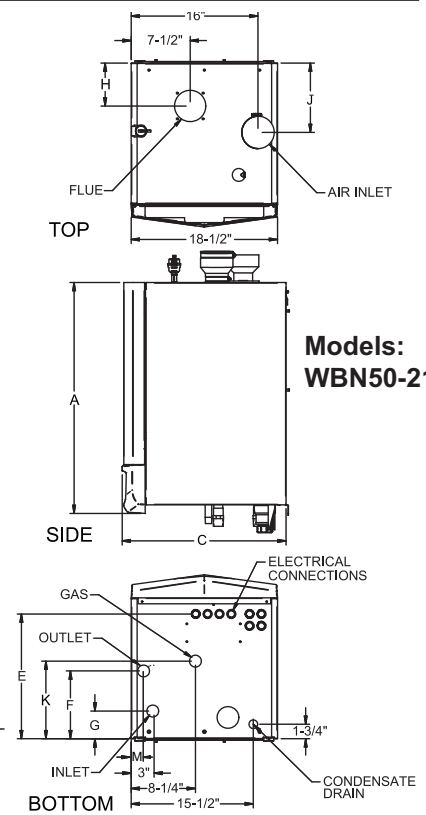
- M9 Standard Construction
- M7 California Code

KNIGHT Heating Boiler and Wall Mount Dimensions & Specifications

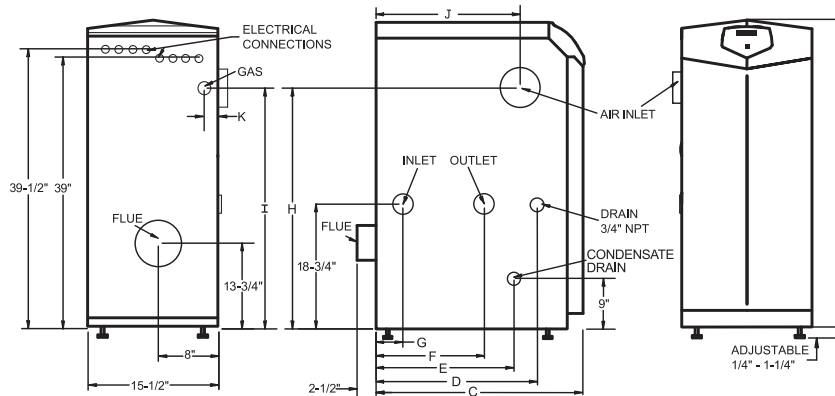
Models:
KBN80-210



Models:
WBN50-210



Models:
KBN285



KNIGHT Heating Boiler						Dimensions & Specifications															
Model Number	Input		AFUE %	Heating Capacity		A	C	D	E	F	G	H	I	J	K	M	Gas Conn.	Water Conn.	Air Inlet	Vent Size	Shipping Weight
	Min MBH	Max MBH		NET	I=B=R																
WBN050	10	50	95.3	45	39	29-1/4"	15-3/4"	NA	10-3/4"	10-3/4"	2"	6-3/4"	NA	3-1/4"	4-1/4"	2-3/4"	1/2"	1"	2"	2"	130
WBN080	16	80	95.3	72	63	29-1/4"	15-3/4"	NA	10-3/4"	10-3/4"	2"	6-3/4"	NA	3-1/4"	4-1/4"	2-3/4"	1/2"	1"	2"	2"	130
WBN105	21	105	95.4	94	82	29-1/4"	15-3/4"	NA	10-3/4"	10-3/4"	3-1/2"	5-1/2"	NA	3-1/4"	4-1/4"	2-3/4"	1/2"	1"	2"	2"	134
WBN150	30	150	95.5	135	119	29-1/4"	20-3/4"	NA	15-3/4"	8-1/2"	3-1/2"	5-1/2"	NA	8-3/4"	9-3/4"	1-1/2"	1/2"	1"	3"	3"	162
WBN210	42	210	95.7	190	165	29-1/4"	25"	NA	20"	12"	3-1/2"	5-1/2"	NA	13"	14"	1-1/2"	1/2"	1"	3"	3"	177
KBN080	16	80	95.3	72	63	33-1/4"	14"	7"	5-3/4"	5"	3"	20-1/2"	22"	1-3/4"	6-1/2"	NA	1/2"	1"	3"	3"	125
KBN105	21	105	95.4	94	82	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"	NA	1/2"	1"	3"	3"	129
KBN150	30	150	95.5	135	119	33-1/4"	18"	12-1/4"	11-1/2"	10"	1-1/2"	21-1/4"	23"	1-3/4"	12"	NA	1/2"	1"	3"	3"	157
KBN210	42	210	95.7	190	165	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"	NA	1/2"	1"	3"	3"	172
KBN285	57	285	96.0	260	226	42-1/2"	19-3/4"	12-3/4"	13-1/2"	6"	2"	34"	31"	11-3/4"	4-1/4"	NA	3/4"	1-1/4"	4"	4"	224

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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