



KNIGHT[®] FIRE TUBE BOILER PRODUCT SUMMARY

(KHB) 55,000 - 285,000 BTU/HR

	KHB-055	KHB-085	KHB-110	KHB-155	KHB-199	KHB- 285
WATER						
GALLON CAPACITY	2.3	2.2	3.2	3.2	5.0	4.9
HEATING SURFACE (SQ. FT.)	5.92	8.33	10.00	14.07	15.66	21.60
WATER CONNECTIONS	1"	1"	1"	1"	1-1/4"	1-1/4"
20°F ΔT WATER FLOW (GPM)	5	8	10	15	19	27
HEAD LOSS (FT. OF HD.)	0.27	0.94	1.53	3.50	1.13	2.42
35°F ΔT WATER FLOW (GPM)	3	5	6	9	11	16
HEAD LOSS (FT. OF HD.)	0.10	0.37	0.55	1.45	0.38	0.85
MAX. WORKING PRESSURE (PSI)	80	80	80	80	80	80
# OF RELIEF VALVES	1	1	1	1	1	1
RELIEF VALVE SIZE	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
RELIEF VALVE RATING (MBH)	535	535	535	535	535	535
RELIEF VALVE PRESSURE RATING (PSI)	30	30	30	30	30	30
GAS						
INLET CONNECTION	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
MAX. INLET PRESSURE, NAT	14.0" w.c.	14.0" w.c.	14.0" w.c.	14.0" w.c.	14.0" w.c.	14.0" w.c.
MIN. INLET PRESSURE, NAT	4.0" w.c.	4.0" w.c.	4.0" w.c.	4.0" w.c.	4.0" w.c.	4.0" w.c.
MAX. INLET PRESSURE, LP	14.0" w.c.	14.0" w.c.	14.0" w.c.	14.0" w.c.	14.0" w.c.	14.0" w.c.
MIN. INLET PRESSURE, LP	8.0" w.c.	8.0" w.c.	8.0" w.c.	8.0" w.c.	8.0" w.c.	8.0" w.c.
BTU/HR INPUT	55,000	85,000	110,000	155,000	199,999	285,000
BTU/HR OUTPUT (HIGH FIRE)	52,250	80,750	104,500	147,250	189,999	270,750
BTU/HR OUTPUT (LOW FIRE)	7,790	8,075	10,450	14,725	18,999	27,075
ELECTRICAL (Boiler and Pump Only)						
VOLTAGE/HEATER	120	120	120	120	120	120
VOLTAGE/CONTROL	24	24	24	24	24	24
FLA	1.8	2.1	2.1	2.2	3.3	3.6
MCA	2.3	2.7	2.7	2.8	4.2	4.5
DIMENSIONS						
HEIGHT	43-1/2"	43-1/2"	43-1/2"	43-1/2"	43-1/2"	43-1/2"
WIDTH	16"	16"	16"	16"	16"	16"
DEPTH	19"	19"	19"	19"	19"	19"
SERVICE CLEARANCES						
FRONT	24"	24"	24"	24"	24"	24"
REAR	0"	0"	0"	0"	0"	0"
RIGHT SIDE	0"	0"	0"	0"	0"	0"
LEFT SIDE	24"	24"	24"	24"	24"	24"
TOP	24"	24"	24"	24"	24"	24"
DIRECT VENTING						
SIZE	2"	2"	3"	3"	3"	3"
VENT CATEGORY	IV	IV	IV	IV	IV	IV
VENT MATERIAL	PVC/CPVC/PP/ AL29-4C	PVC/CPVC/PP/ AL29-4C	PVC/CPVC/PP/ AL29-4C	PVC/CPVC/PP/ AL29- 4C	PVC/CPVC/PP/ AL29-4C	PVC/CPVC/PP/ AL29-4C