



MODEL CBT BOILERS

10-30 HP



Dimensions and Ratings

Figure 1. Model CBT Dimensional Views

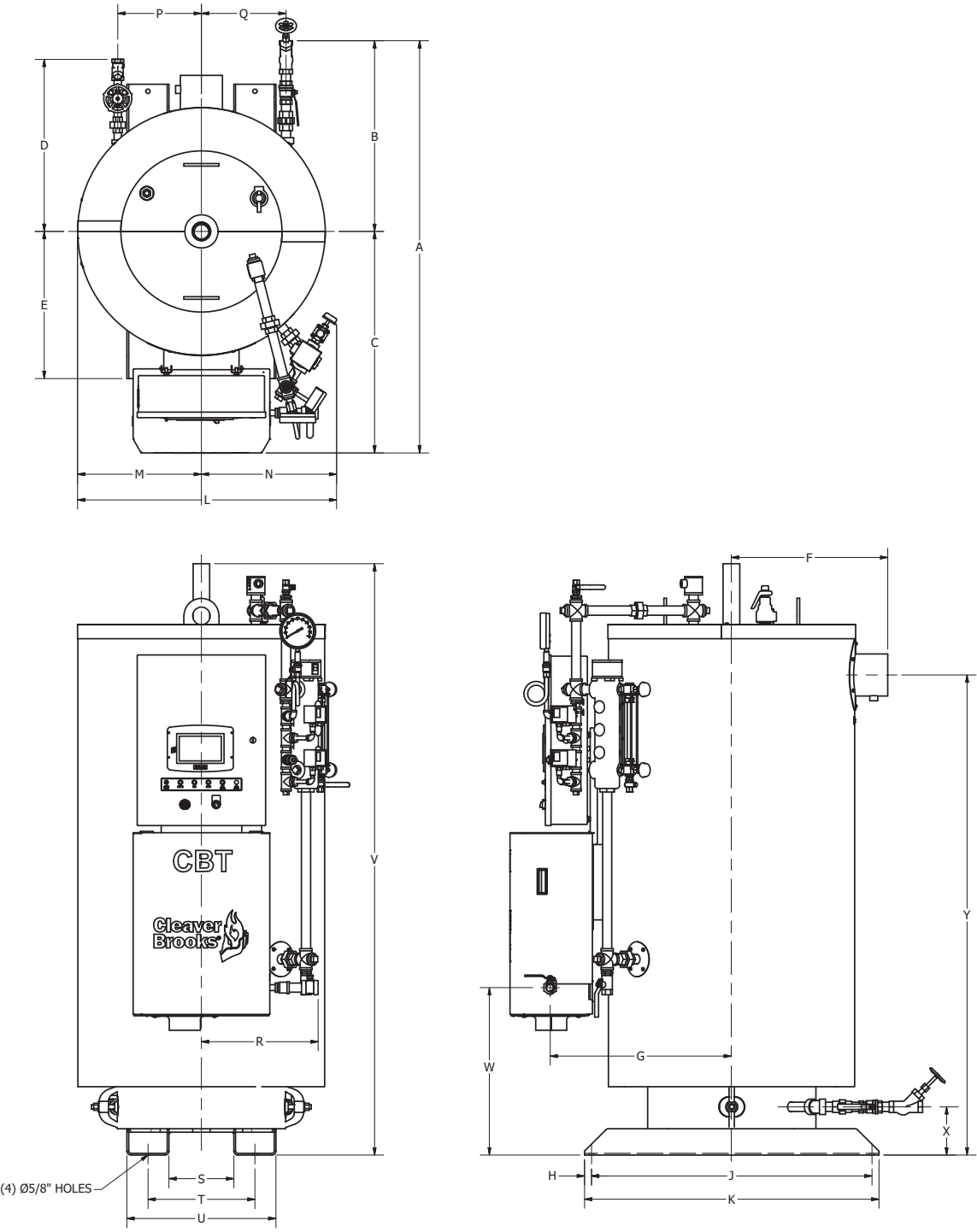


Table 1: Dimensions Model CBT Full Modulating

	Dimension	Boiler Horsepower				
		10	15	20	25	30
LENGTHS						
Overall	A	59	59	68	68	70
Center To Drain / Blowdown	B	27	27	31	31	32
Center To Front	C	32	32	37	37	38
Center To Feedwater	D	25	25	30	30	30.5
Center To Base	E	21	21	25	25	26.5
Center To Stack Outlet	F	22	22	28	28	28.5
Center To Gas Train	G	26	26	31	31	32.5
Base End to Bolt Hole	H	1	1	1	1	1
Bolt Hole to Bolt Hole	J	40	40	49	49	51
Base Channel	K	42	42	51	51	53
WIDTHS						
Overall	L	37	37	47	47	49
Center to Lagging	M	18	18	23	23	24.5
Center to Water Column	N	19	19	24	24	25
Center To Feedwater	P	12	12	15.5	15.5	16.5
Center To Drain / Blowdown	Q	12	12	15.5	15.5	16.5
Center To Gas Train	R	17	17	13.5	13.5	15
Base, Inside of Channel	S	9	9	19	19	22
Base Bolt Hole to Bolt Hole	T	15	15	25	25	28
Base, Outside of Channel	U	21	21	31	31	34
HEIGHTS						
Overall	V	83	83	87	87	90.5
Base to Gas Train	W	24	24	25	25	28.5
Base to Blowdown / Feedwater	X	7	7	7	7	7
Base to Stack Outlet	Y	68	68	73	73	75.5
BOILER CONNECTIONS						
Feedwater	AA	0.75	0.75	1	1	1
Drain / Blowdown	BB	1	1	1	1	1
Surface Blowoff	CC	0.75	0.75	0.75	0.75	0.75
Steam Outlet (150# Only)	DD	2	2	2	2	2
Steam Outlet (15# Only)	EE	3	3	4	4	4
Combustion Air Inlet	FF	4 Nom	4 Nom	4 Nom	4 Nom	6 Nom
Gas Train Inlet	GG	1	1	1	1	1.25
Stack O.D.	HH	6 OD	6 OD	6 OD	6 OD	8 OD
WEIGHTS - LBS						
Water Weight (150# Normal Level)		450	450	1190	1190	1515
Water Weight (15# Normal Level)		475	475	1135	1135	1475
Approx. Dry Weight (150#)		2,350	2,350	3850	3850	4350
Approx. Dry Weight (15#)		2,150	2,150	3675	3675	4175

CLEARANCES inches	
FRONT	36
BACK	18
SIDES	18
ABOVE BOILER	18

Table 2: CBT Steam Boiler Ratings

Boiler H.P.	10	15	20	25	30
Ratings					
Rated Capacity - Steam (lbs-steam/hr from & at 212°F)	345	518	690	863	1,035
Output (1000 Btu/hr)	335	502	669	837	1,004
Approximate Fuel Consumption At Rated Capacity					
Natural Gas Input (cfh) - 15# Steam ^A	398	598	797	996	1,195
Natural Gas Input (cfh) - 150# Steam ^B	413	620	826	1,033	1,240
Power Requirements - 60Hz			(Single Phase, 115 VAC)		
Blower Motor Size (Watts) ^C	335	335	335	335	335
Heating Surface					
Total Water side (ft2)	43	43	65	65	78
Total Water side (m2)	4.0	4.0	6.0	6.0	7.2
Total Fireside (ft2)	59	59	93	93	107
Total Fireside (m2)	5.5	5.5	8.6	8.6	9.9

Notes:

A. Input calculated at nominal 84% efficiency for 1000 Btu gas content

B. Input calculated at nominal 81% efficiency for 1000 Btu gas content

C. For altitudes above 1500 ft, contact your local C-B authorized representative for verification of blower motor size.

Table 3: CBT Steam Boiler Safety Valve Outlet Size

BOILER HP	VALVE SETTING			
	15 PSIG STEAM		150 PSIG STEAM	
	NO. OF VALVES	OUTLET SIZE (IN.)	NO. OF VALVES	OUTLET SIZE (IN.)
10	1	1.5	1	.75
15	1	1.5	1	.75
20	1	1.5	1	.75
25	1	2.0	1	1.0
30	1	2.0	1	1.0

Valve manufacturers are Kunkle, Consolidated, or Conbraco, depending on availability.

